# NEVADA STATE BOARD OF MEDICAL EXAMINERS



### IN THE MATTER OF CHARGES AND COMPLAINT AGAINST

## JASON HOWARD LASRY, M.D.

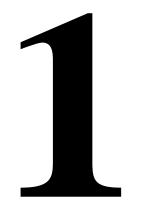
# **ADJUDICATION**

Case No: 23-29251-1

Date: December 1, 2023

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	<b>BEFORE THE BOARD OF</b>	F MEDICAL EXAMINERS
		E OF NEVADA
	* * *	* * *
In	the Matter of Charges and Complaint	Case No. 23-29251-1
	gainst:	FILED
<b>J</b> A	ASON HOWARD LASRY, M.D.,	MAR - 8 2023
R	espondent.	NEVADA STATE BOARD OF
		By:
	COMP	PLAINT
	The Investigative Committee <sup>1</sup> (IC) of t	the Nevada State Board of Medical Examiners
(E	Board), by and through William P. Shogren, D	Deputy General Counsel and attorney for the IC,
ha	aving a reasonable basis to believe that Jason	Howard Lasry, M.D. (Respondent) violated the
pr	ovisions of Nevada Revised Statutes (NRS) Cha	apter 630 and Nevada Administrative Code (NAC)
	hapter 630 (collectively, the Medical Practice A	Act), hereby issues its Complaint, stating the IC's
ch	narges and allegations as follows:	
	1. Respondent was at all times relation	ive to this Complaint a medical doctor holding an
ac	ctive license to practice medicine in the State of	of Nevada (License No. 10970). Respondent was
or	riginally licensed by the Board on June 7, 2004.	
	2. Patient $A^2$ was a three (3) year-old	d female at the time of the events at issue.
	3. On May 9, 2020, Patient A presen	nted to Respondent for medical care at Humboldt
G	eneral Hospital in Winnemucca, Nevada, after	being bitten by a snake on her left knee earlier in
h th	ie day.	
	4. Upon arrival at Humboldt Generation	al Hospital, Patient A had an elevated heart rate,
in	ndicating tachycardia. Patient A also had pro	ogressive swelling of her left leg, where two (2)
Co M	omplaint was authorized for filing, was composed of E I.D., and Col. Eric D. Wade, USAF (Ret.).	State Board of Medical Examiners, at the time this formal Board members Bret W. Frey, M.D., Carl N. Williams, Jr.,
D	<sup>2</sup> Patient A's true identity is not disclosed here esignation served upon Respondent along with a copy of	ein to protect her privacy, but is disclosed in the Patient f this Complaint.
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puncture marks were observed on her left knee and had muscle weakness in her left leg, including
 the inability to move the affected leg on her own.

5. Patient A's stay at Humboldt General Hospital totaled close to three (3) hours. During this time, Patient A's heart rate measured from 149 beats per minute to 154 beats per minute, indicating continued tachycardia.

6. Respondent documented Patient A's vital signs but did not document Patient A's blood pressure measurements. Respondent's notes during Patient's A presentation did not discuss a recognition of Patient A's continued tachycardia.

7. Respondent spoke with the hospitalist at Humboldt General Hospital, who expressed preference to have Patient A transferred to another facility with a higher level of care.

8. Respondent then spoke with a physician at Renown Regional Medical Center (Renown) in Reno, Nevada. It was then arranged to have Patient A transferred from Humboldt General Hospital to Renown. Initially, it was decided to transport Patient A via helicopter, but then the decision was made to transport Patient A via ground ambulance.

9. Respondent did not document that he spoke with any other physicians regarding Patient A's snake bite.

10. During Patient A's entire time at Humboldt General Hospital on May 9, 2020,
Respondent elected not to provide an antivenom injection to Patient A, although the appropriate
antivenom was available at Humboldt General Hospital on the day of Patient A's arrival.

11. The first documented blood pressure measurement on May 9, 2020, was taken by
Emergency Medical Services prior to Patient A's departure from Humboldt General Hospital.
Patient A's blood pressure reading was 59/40, indicating low blood pressure (hypotension).

12. Prior to transferring Patient A by ambulance, Respondent failed to administer the
appropriate antivenom, despite clear evidence of Patient A's critical life signs and uncompensated
shock.

26 13. Despite clear evidence of Patient A's medical instability, Respondent transferred
27 Patient A from Humboldt General Hospital to Renown via ground ambulance, whereupon
28 Patient A expired on May 13, 2020, as a result of the snake bite.

1	<u>COUNT I</u>
2	NRS 630.301(4) - Malpractice
3	14. All of the allegations contained in the above paragraphs are hereby incorporated by
4	reference as though fully set forth herein.
5	15. NRS 630.301(4) provides that malpractice of a physician is grounds for initiating
6	disciplinary action against a licensee.
7	16. NAC 630.040 defines malpractice as "the failure of a physician, in treating a
8	patient, to use the reasonable care, skill, or knowledge ordinarily used under similar
9	circumstances."
10	17. As demonstrated by, but not limited to, the above-outlined facts, Respondent failed
11	to use the reasonable care, skill or knowledge ordinarily used under similar circumstances when
12	rendering medical services to Patient A, by failing to recognize hypotension and tachycardia in a
13	patient who had been bitten by a snake, and by failing to treat her diminishing condition, failure of
14	which led to Patient A's expiration.
15	18. By reason of the foregoing, Respondent is subject to discipline by the Board as
16	provided in NRS 630.352.
17	<u>COUNT II</u>
18	NRS 630.306(1)(b)(2) - Violation of Standards of Practice Established by Regulation –
19	Failure to Consult
20	19. All of the allegations contained in the above paragraphs are hereby incorporated by
21	reference as though fully set forth herein.
22	20. Violation of a standard of practice adopted by the Board is grounds for disciplinary
23	action pursuant to NRS 630.306(1)(b)(2).
24	21. NAC 630.210 requires a physician to "seek consultation with another provider of
25	health care in doubtful or difficult cases whenever it appears that consultation may enhance the
26	quality of medical services."
27	22. Respondent failed to timely seek consultation with regard to Patient A's medical
28	condition on May 9, 2020 and Respondent should have consulted with a medical toxicologist to
	3 of 6

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address the doubtfulness of the diagnosis of Patient A's medical condition and such a timely 1 consultation would have confirmed or denied such a diagnosis and may have enhanced the quality 2 3 of medical care provided to Patient A with regard to the need for antivenom and other therapies.

By reason of the foregoing, Respondent is subject to discipline by the Nevada State 23. Board of Medical Examiners as provided in NRS 630.352.

#### **COUNT III**

#### NRS 630.3062(1)(a) - Failure to Maintain Appropriate Medical Records

All of the allegations contained in the above paragraphs are hereby incorporated by 24. reference as though fully set forth herein.

NRS 630.3062(1)(a) provides that the "failure to maintain timely, legible, accurate 25. and complete medical records relating to the diagnosis, treatment and care of a patient" constitute grounds for initiating discipline against a licensee.

Respondent failed to maintain complete and proper medical records relating to the 26. diagnosis, treatment and care of Patient A, by failing to document his actions when he treated Patient A, whose medical records were not timely, legible, accurate, and complete. Respondent's 15 medical records were not accurate and complete by failing, on May 9, 2020, to note a recognition of Patient A's elevated heart rate (tachycardia), or a recognition of Patient A's continued tachycardia, despite treatment with IV fluids, or a recognition of Patient A's low blood pressure 18 (hypotension). 19

By reason of the foregoing, Respondent is subject to discipline by the Board as 27. 20 provided in NRS 630.352. 21

WHEREFORE, the Investigative Committee prays: 22

That the Board give Respondent notice of the charges herein against him and give 1. 23 him notice that he may file an answer to the Complaint herein as set forth in 24 NRS 630.339(2) within twenty (20) days of service of the Complaint; 25

That the Board set a time and place for a formal hearing after holding an Early 2. 26 Case Conference pursuant to NRS 630.339(3); 27

1	3. That the Board determine what sanctions to impose if it determines there has been
2	a violation or violations of the Medical Practice Act committed by Respondent;
3	4. That the Board award fees and costs for the investigation and prosecution of this
4	case as outlined in NRS 622.400;
5	5. That the Board make, issue and serve on Respondent its findings of fact,
6	conclusions of law and order, in writing, that includes the sanctions imposed; and
7	6. That the Board take such other and further action as may be just and proper in these
8	premises.
9	DATED this 8th day of March, 2023.
10	INVESTIGATIVE COMMITTEE OF THE NEVADA STATE BOARD OF MEDICAL EXAMINERS
11	
12	By: William P. SHOGREN
13	Deputy General Counsel
14	9600 Gateway Drive Reno, NV 89521
15	Tel: (775) 688-2559 Email: shogrenw@medboard.nv.gov
16	Attorney for the Investigative Committee
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# OFFICE OF THE GENERAL COUNSEL Nevada State Board of Medical Examiners 9600 Gateway Drive Reno, Nevada 89521 (775) 688-2559

OFFICE OF THE GENERAL COUNSEL Nevada State Board of Medical Examiners 9600 Gateway Drive Reno, Nevada 89521 (775) 688-2559	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	VERIFICATION         STATE OF NEVADA       )         COUNTY OF WASHOE       )         Bret W. Frey, M.D., having been duly sworn, hereby deposes and states under penalty of perjury that he is the Chairman of the Investigative Committee of the Nevada State Board of Medical Examiners that authorized the Complaint against the Respondent herein; that he has read the foregoing Complaint; and that based upon information discovered in the course of the investigation into a complaint against Respondent, he believes that the allegations and charges in the foregoing Complaint against Respondent are true, accurate and correct.         DATED this <u>8th</u> day of March, 2023.         INVESTIGATIVE COMMITTEE OF THE NEVADA STATE BOARD OF MEDICAL EXAMINERS         By:         Bret W. REY, M.D.         Chairman of the Investigative Committee	
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1	CERTIFICATE OF SERVICE	
2	I hereby certify that I am employed by the Nevada State Board of Medical Examiners and	
3	that on the 8th day of March, 2023, I served a file-stamped copy of the foregoing COMPLAINT	
4	and PATIENT DESIGNATION, with accompanying required fingerprinting materials via	
5	U.S. Certified Mail, to the following parties:	
6	JASON HOWARD LASRY, M.D.	
7		
8	Las Vegas, NV 89138 Tracking No.: 9171 9690 0935 0254 7667 97	
9	DATED this day of March, 2023.	
10	$\left( 2\right)$	
11	MERCEDES FUENTES	
12	Legal Assistant Nevada State Board of Medical Examiners	
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1	<b>BEFORE THE BOARD OF MEDICAL EXAMINERS</b>
2	OF THE STATE OF NEVADA
3	* * * * *
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5	In the Matter of Charges and Case No. 23-29251-1
6	Complaint Against FILED
7	JASON HOWARD LASRY, M.D.,
8	MEDICAL EXAMINERS
9	Respondent.
10	FINDINGS AND RECOMMENDATION <sup>1</sup>
11	1. Introduction
12	This matter was heard on September 21-22, 2023. Present in the Reno office of the
13	Nevada State Board of Medical Examiners (the "Board") were William P. Shogron on behalf of
14	the Investigative Committee of the Nevada State Board of Medical Examiners (the "IC") and the
15	undersigned hearing officer. Appearing and present on behalf of Respondent in the Las Vegas
16	office of the Board were Chelsea R. Hueth, Esq. on behalf of Respondent and Respondent Jason
17	Howard Lasry, M.D. IC witness Kristi Barbieri appeared in person at the Reno office of the
18	Board. IC witness Eric Glissmeyer, M.D. appeared remotely, as did Respondent witness John
19	Levin, M.D. All witnesses were sworn. The rule of exclusion was not invoked by either party.
20	IC Exhibits 1-15 were admitted, as were Respondent Exhibits 1-8.
21	2. <u>Allegations</u>
22	The Complaint alleges Count I, NRS 630.301(4), Malpractice; Count II, NRS
23	630.306(1)(b)(2), Violation of Standards of Practice Established by Regulation – Failure to
24	Consult; and Count III, NRS 630.3062(1)(a), Failure to Maintain Proper Medical Records. See
25	Complaint, filed on March 8, 2023. The Complaint centers upon the treatment of a three year old
26	
27 28	<sup>1</sup> Incorporated herein by reference are the full Hearing Transcripts, Volume I and II, dated September 21, 2023 and September 22, 2023, respectively, and which are referred to herein under the designation "TR" and "TR2," as well as the exhibits admitted at the hearing.
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	patient who suffered a rattlesnake bite, in relation to which antivenom was not administered by
2	Respondent. Id. Count I, the Malpractice claim, is premised upon Respondent's alleged failure to
3	"recognize hypotension and tachycardia" and Respondent's failure to treat the patient's
4	"diminishing condition." Id. Count II, the Failure to Consult Claim, is premised upon
5	Respondent's alleged failure to consult with a "medical toxicologist" to address Respondent's
6	diagnosis, which would have "enhanced the quality of medical care" provided as to the need for
7	antivenom and other therapies. Id. Count III, the Failure to Maintain Appropriate Medical
8	Records, is premised upon the alleged failure to note the patient's tachycardia and hypotension.
9	<u>Id</u> .
10	3. Witnesses and Testimony
11	In relation to the IC's case, the undersigned hearing officer heard from Kristi Barbieri, a
12	Board Investigator (TR 18-39) and expert witness Eric Glissmeyer, M.D. (TR 40-147). In relation
13	to Respondent's case, the undersigned hearing officer heard from Respondent Jason Howard
14	Lasry, M.D. (TR 152-239) and expert witness John Levin, M.D. (TR2 5-43).
15	On behalf of the IC, Ms. Barbieri authenticated IC exhibits and cross-examination of her
16	was utilized primarily to demonstrate her limited knowledge of the medical matters at issue in the
17	case and the fact that the medical records were limited to twenty-one pages, although no other
18	medical records were ever addressed and Ms. Barbieri testified on re-direct that she believed the
19	medical records provided were complete (TR 38). The only other witness called by the IC was
20	Dr. Glissmeyer, a pediatric emergency physician and the IC's expert, who testified to his
21	background and opined that Respondent failed to meet the standard of care required for treatment
22	of the patient. TR 40-48. Dr. Glissmeyer then established a timeline from the medical records as
23	follows:
24	Rattlesnake bite occurred on May 9, 2020 at approximately 14:57 (2:57 p.m.) (TR 92)
25	EMS arrived on scene at 15:56 hours (3:56 p.m.) (TR 50)
26	EMS departed the scene at 16:07 hours (4:07 p.m.) (TR 50)
27	EMS arrived with the patient at Humboldt General Hospital in Winnemucca, Nevada, at
28	16:16 hours (4:16 p.m.) (TR 51)
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1	Patient was seen by Respondent at 16:24 hours (4:24 p.m.), and Respondent assessed patient as having been bitten by a rattlesnake on her left knee with a 25%
2	increase in swelling since EMS marked the initial swelling (the medical term for which is edema) (TR 51)
3 4	For approximately 35 minutes Respondent delivered care and assessment, which would bring the time to approximately 17:00 hours (5:00 p.m.) (TR 52)
5	Renown Hospital ("Renown") in Reno, Nevada, accepted the patient for transfer at 17:56 hours (5:56 p.m.) (TR 52)
7	Patient was discharged from Humboldt General Hospital at 18:32 hours (6:32 p.m.) (TR 53)
8 9	Patient departed Humbolt General Hospital by ground transport at 18:52 hours (6:52 p.m.)
10	(TR 53)
11	Patient arrived at Renown at 21:29 hours (9:29 p.m.) (TR 53)
12	Patient was pronounced deceased on May 13, 2020 at 17:27 hours (5:27 p.m.). Cause of death was permanent cessation of cardiac function, secondary to MOS (Multiple Organ
13 14	Dysfunction Syndrome), secondary to cardiac arrest, secondary to rattlesnake bite. (TR 54- 55)
15	The Renown medical records provided as IC Exhibit 8 establish that the patient started to
16	decompensate (failed to maintain adequate circulation) in route to Renown and was being bagged
17	upon arrival (being subject to manual resuscitation for forced ventilation, meaning the patient was
18	in respiratory failure/arrest). <sup>2</sup> Efforts to treat the patient through defibrillation and otherwise were
19	made but at 21:46 hours (9:48 p.m.) and the patient was deemed not to have a pulse. Id. The
20	patient was intubated and kept on life support until the family made the decision to cease care. Id.
21	At the time the decision was made, the patient's prognosis was "poor" from a "neurologic
22	standpoint." Id. The Renown records further reiterate that the patient was not administered
23	antivenom per Respondent but antivenom was started at Renown ("Antivenom had not been
24	received at the outside hospital and was started here"). Id.
25	///
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27 28	<sup>2</sup> The timeline of the patient's deteriorating condition during transport was not specifically testified to but the Renown records (IC Exhibit 8, NSBME 100) indicate that "bag-mask ventilation" took place for the "last 'few minutes' of transport" per the patient's mother who was in the ambulance.
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1 To summarize Dr. Glissmeyer's opinions of the charges faced by Respondent, Dr. Glissmeyer opined that Respondent committed malpractice by failing to recognize the signs of 2 envenomization and failing to timely administer the antivenom. See, e.g. TR 57.<sup>3</sup> As to failure to 3 consult, Dr. Glissmeyer concluded that the conversation with the Renown physician, Dr. Gassen, 4 was a hand-off versus an actual consultation (TR 85), and that Respondent failed to consult with a 5 medical toxicologist through an emergency telephone number made available to health care 6 providers since 2011. TR 65-66. As to failure to properly maintain medical records, Dr. 7 Glissmeyer opined that the patient's blood pressure was not notated while the patient was under 8 Respondent's direct care, which is relevant to the signs of envenomization - such signs being 9 hypotension (low blood pressure); systematic bleeding; and neurotoxicity (as evidenced by vital 10 sign abnormalities such as tachycardia). TR 64; 70-72; 75-76; 120; 136. Dr. Glissmeyer also 11 takes issue with Respondent's failure to recognize and note the patient's increased heart rate 12 (tachycardia), having instead noted that the patient's heart rate was normal as to rate on rhythm. 13 TR 71; 100. 14

Respondent addressed Dr. Glissmeyer's opinions by and through documentation, cross-15 examination, and/or testimony, arguing that while Respondent did not personally note the 16 tachycardia, the patient was tachycardic as was reflected in the medical records documenting the 17 patient's vital signs, and that the high heart rate was deemed attributed to the stress of the 18 situation. TR 100; 159-162; 209-210. The patient's relevant labs came back within acceptable 19 ranges, which was not contested. TR109-112; 170-174. Although the edema had increased by 20 25% per Respondent, Respondent deemed it negligible going so far as to deem it "minuscule." 21 TR 116; 167-169; 194; 210. The patient's hypotension as later noted in the ambulance stabilized 22 for a period. TR 126-127. Respondent further argued that the patient's blood pressure was not 23 recorded prior to transport but it was monitored and the failure to document it in the patient's 24 record was the nurse's fault, which Respondent's expert witness John Levin, M.D. supported. TR 25

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&</sup>lt;sup>3</sup> In particular, Dr. Glissmeyer testified that Respondent should have obtained full vital signs including blood pressure, recognized the patient's elevated heart rate (tachycardia), recognized the progression of swelling, and for any of those conditions, administered the antivenom before transferring the patient via the "fastest mode possible." TR 82.

162; 204-205; 208; TR2 41. Respondent also maintained that the patient was not hypotensive or
 would have been treated for such. TR 163; 195. Respondent further testified that he has been
 educated about, and has experience with, snakebites, having treated 15-20 snakebite patients prior.
 TR 226. Therefore, according to Respondent, consultation with a medical toxicologist was not
 necessary. TR 184.

John Levin, M.D. ("Dr. Levin"), an emergency medical specialist, testified on behalf of
Respondent and indicated that upon arrival at Humboldt General Hospital, the patient had normal
perfusion, meaning normal blood flow (TR2 11);<sup>4</sup> normal respiratory rate (TR2 12); acceptable
temperature and oxygen saturation (Id.); and a heart rate of 149, which was high and, therefore,
tachycardic, but which was attributable to the patient being young and enduring a traumatic event
that was ongoing through the visit to the emergency room (TR2 12-13).

As to the patient's blood pressure, Dr. Levin testified that he did not see it recorded on the
patient's records from Humboldt General Hospital but that was not unusual because blood
pressure is not normally taken for toddlers. TR2 14-15.

Per Dr. Levin, the normal labs, the lack of an indication of muscle weakness, and the
patient's ability to move her leg, all indicated that "there was no significant envenomization at
that time." TR2 17-19.

Dr. Levin further testified that he did not believe that the decision to transfer the patient by
ground was inappropriate, stating that ground transport is routine; the difference in timing was
"maybe a half hour or an hour;" and that ground transport was the easiest and fastest option even
though air transport was available.<sup>5</sup> TR2 19-22. In subsequent testimony, Dr. Levin admitted to
not being familiar with the travel distance relative to this matter and opined that an hour
difference in travel time would not have been impactful. TR2 42-43.

As to the patient's blood pressure, Dr. Levin testified that it was "a little hypotensive"
when it was measured during transport but that it became normal within an hour. TR2 22-23.
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27 TR2 = Transcript Volume II

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<sup>5</sup> This is inaccurate as addressed further herein.

1	Dr. Levin also testified that in his experience, which he later testified was the treatment of
2	two snakebites in forty years (TR2 31), the vast majority of snakebites are non-lethal and that it is
3	very rare to die from a snakebite but clarified that in a study he relied upon "some got
4	antivenoms" and noted other resulting problems absent death. TR2 23-25; 37-38. As to this
5	patient in particular, Dr. Levin noted the patient's death as "[u]nusual and unfortunate" and
6	opined that it was a judgment call for Respondent not to administer the antivenom and
7	Respondent's failure to do so was reasonable based upon the low mortality rate affiliated with
8	snakebites. TR2 25; 28.
9	On cross-examination, Dr. Levin testified that a single symptom of envenomization,
10	hypotension in particular, is insufficient to justify administering antivenom, particularly here
11	when it was noted as temporary (TR2 33-34), and that it is reasonable not to take a toddler's blood
12	pressure in snakebite situations (TR2 34-35). Dr. Levin also indicated that it was reasonable for
13	Respondent not to have administered antivenom but that in the same or similar situation he
14	himself "might have given it." TR2 35-36.
15	4. Further Dispositive Testimony/Evidence.
16	Dr. Glissmeyer by and through the IC submitted three articles on envenomization that,
17	other than one potentially post-dating the incident, <sup>6</sup> were addressed by both parties and that were
18	deemed to establish the standard of care for the treatment of snakebites and envenomization.
19	In particular, IC Exhibit 11 is titled How Should Native Crotalid Evnenomation Be
20	Managed in the Emergency Department, Clinical Practice Statement (September 14, 2020 and
21	updated on April 26, 2021 and September 16, 2021) [authors omitted].
22	IC Exhibit 12 is titled Wilderness Medical Society Practice Guidelines for the Treatment
23	of Pitviper Envenomations in the United States and Canada, Wilderness and Environmental
24	Medicine, 26, 472-487 (2015) [authors omitted].
25	IC Exhibit 13 is titled Bites by Crotalinae Snakes (Rattlesnakes, Water Moccasins
26	[Cottonmouths], or Copperheads) in the United States: Management, UpToDate (current through
27	
28	<sup>6</sup> The 2022 year referenced for such was a review and update reference, so it is not clear when the article was first written and the standards stated therein were not challenged despite whether the article did or did not post-date the incident at issue.
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1	October 2022) [author omitted].
2	Exhibit 11 plainly states that antivenom should be administered for any of the following:
3	- Significant or progressive local tissue damage, e.g. tenderness, swelling,
4	hemorrhagic bleb, described as being more than minimal and having extended past a major joint of, if not having extended past a major joint, then if there is significant local tissue injury;
6	<ul> <li>Systemic toxicity, e.g. hypotension (low blood pressure), airway swelling, neurological toxicity (here tachycardia as relied upon by the IC); and</li> </ul>
8	- Significant or progressive hematologic toxicity, particularly identified fibrinogen or platelet levels.
9	Exhibit 11 also indicates that if a limb was bitten, it should be elevated to keep tissue swelling
10	from exacerbating. In this instance, no testimony was sought nor provided as to whether the
11 12	patient's leg (the bite was on her knee) was elevated, and undersigned did not find such a
12	reference in the Humbolt General Hospital Records submitted as IC Exhibit 6.
13 14	IC Exhibit 12 establishes that "more severe" envenomization systemic symptoms include
14 15	hypotension, bleeding, angioedema, vomiting, and neurotoxicity (also noting that the vomiting
15	can arise from an autonomic response to fear and anxiety). The article defines "minor
17	envenomization" as swelling and local pain at the envenomization site. Antivenom is
17	recommended for patients with moderate to severe envenomization; thus, any time symptoms of
	envenomization progress, which includes swelling progressing past tissue local to the bite site and
19	any signs of systemic toxicity, common signs of which are hypotension, systemic bleeding, or
20	neurotoxicity, antivenom should be administered. If a patient is suspected of having minor
21	envenomization, which is what Respondent relied upon by way of his testimony, one of the
22	factors influencing the standard of care as it relates to observation includes healthcare access.
23	IC Exhibit 13 likewise recommends the administration of antivenom as soon as possible
24	when there is progressive swelling or signs of systemic toxicity, clarifying that antivenom is
25	appropriate when there are any symptoms beyond minor localized swelling. IC Exhibit 13
26	further states that antivenom administration "is the mainstay for treatment," and that some patients
27	may be asymptomatic at presentation but go on to develop signs of severe envenomization over
28	time.
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1 All three articles recommend consultation with a medical toxicologist or other physician with expertise in managing snakebites. IC Exhibit 11 did not address potential negative impacts 2 of administering antivenom but IC Exhibit 12 indicated that antivenom induced hypersensitivity 3 reactions and serum sickness occur in approximately 8% to 13%, respectively, of patients, and 4 that providers should be prepared to treat the same with epinephrine, steroids, antihistamines, or 5 emergency airway management. IC Exhibit 13 notes that serum sickness occurs in about 2-3% 6 of patients (or up to 8% per IC Exhibit 12), and that the risk of an allergic reaction is less than 7 1% (or up to 13% per IC Exhibit 12). See TR 218. 8

5. Findings

9 10

Count 1, NRS 630.301(4) - Malpractice

Undersigned finds that Respondent committed malpractice, primarily for Respondent's 11 failure to treat the patient's diminishing condition, but also based upon Respondent's failure to 12 recognize tachycardia in a patient suffering from a snakebite. While the malpractice claim was 13 also based upon Respondent's failure to recognize hypotension in conjunction with the snakebite 14 as a sign of systemic toxicity, because there were no records of hypotension from Humboldt 15 General Hospital (as addressed further below), the only testimony as to such was Respondent's 16 testimony that it was monitored, not present, and would have been treated had it occurred. TR 17 162-163; 205-06. Given the inability to address recognition of hypotension in relation to the 18 snakebite outside of Respondent's testimony because of the lack of documentation or other 19 testimony, giving Respondent the benefit of the doubt, this factor is not deemed to support the 20 malpractice count; however, remaining factors do.7

Starting with the tachycardia, tachycardia was noted in the Humboldt General Hospital
medical records and was indicated as a potential consequence of the traumatic circumstances,
which alone and without the impact of a snakebite could excuse concern, but in conjunction with
the snakebite, and in consideration of Respondent's own observations that that patient was calm
and did not appear to be in distress, the tachycardia was a legitimate concern and should have

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<sup>28 &</sup>lt;sup>7</sup> Respondent acknowledged that both the tachycardia and hypotension would have been cause for concern with regard to envenomization. TR 210

been considered in evaluation of systemic toxicity. TR 105-106; 165; 176.

Even more concerning was Respondent's failure to administer antivenom, which is
attributable to the Complaint allegation of failure to treat the patient's diminishing condition.
While Respondent and his expert Dr. Levin attempted to minimize the impact of the failure to
administer the antivenom by relying on the labs and deeming the patient's condition stable, the
articles that outline the standard of care, which were consistent with Dr. Glissmeyer's testimony,
plainly indicate that any sign of swelling beyond the bite site or any sign of systemic toxicity,
should be treated as soon as possible with antivenom.<sup>8</sup>

Here, even by Respondent's own testimony, the patient was tachycardic; the swelling at 9 the bite site increased by 25% (TR 168; 211); and, even though he denied it, the cross-10 examination and the records show that there was mottling at the bite site (TR 193; 211-212; 11 Exhibit 6 NSBME 079). In attempting to minimize the importance of the increased swelling and 12 tissue damage, Respondent testified that the swelling never extended past the patient's knee and 13 much was made about whether the swelling was sufficient to pass through the ankle (see, e.g., TR 14 124; 193), but that is not the standard for administration of antivenom. The standard is whether 15 swelling increases past the bite site and that occurred. Moreover, contrary to Respondent's 16 testimony, the swelling increased past the knee and extended through the patient's thigh and lower 17 leg. TR 124 (Dr. Glissmeyer addressing the relevant patient record from Humboldt General 18 Hospital) versus TR 169 (Respondent testifying to substantially less swelling than noted on the 19 records). Notably, Humboldt General Hospital records read as follows:

Patient had two puncture marks on the anterior left knee. A circle was drawn on the area indicating initial swelling and ecchymosis upon arrival to the ER. There was a small amount of ecchymosis around the wound as well as extending past the circle approximately one inch. Current swelling was extended to the entire extremity. The patient's leg was approximately three times the size of the opposite leg. The knee had swollen to the same extent. Streaking was noted on the medial thigh. CMS was noted in all extremities, although the patient's left leg was weak and she was unable to move it without assistance. Providers limited the movement of the extremity.

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<sup>&</sup>lt;sup>8</sup> Dr. Levin testified to having only ever treated two snakebites and, in doing so, had transferred the patients to nearby hospitals for the administration of antivenom. TR2 31; 42.

Exhibit 6 NSBME 084 (emphasis added).

The time of the assessment quoted above is referenced as 19:00 hours (7:00 p.m.), with the 2 patient having been discharged from Humboldt General Hospital at 18:32 hours (6:32 p.m.), and 3 departing at 18:52 hours (6:52 p.m.), only eight minutes prior to the notation of the patient's 4 condition as quoted. Given the timing, such symptoms would have manifested under 5 Respondent's care (TR 169-170; 193-194), particularly where the patient did not initially present 6 with any such findings. TR 167; Exhibit 6 NSBME 034) (As noted by Respondent at 16:24 hours 7 (4:24 p.m.): "On the anterior left knee there are 2 puncture wounds which are likely the site of 8 envenomation and there is just a small amount of ecchymosis noted in that generalized area. No 9 significant edema, no streaking, no skin necrosis, no peripheral edema, no petechiae, no vesicles 10 ulcers or pustules"). To emphasize this, Respondent stated in his transfer call to Renown 11 physician Dr. Gassen that the swelling was visually increasing - such call being placed at 12 approximately 17:56 hours (5:56 p.m.) (TR 52), which was 36 minutes prior to discharge (18:32 13 hours or 6:32 p.m.) and 56 minutes prior to the patient's departure (18:52 hours or 6:52 p.m.). TR 14 53. 15

Furthermore, in failing to treat the patient's diminishing condition, Respondent failed to 16 account for the travel time that the patient was required to endure prior to arriving at Renown. 17 Even though Respondent acknowledged the chance that the patient's condition could deteriorate 18 during transport (TR 192-193), Respondent had the patient transported by ground even though air 19 transport was readily available. TR 184-186. Respondent initially indicated it was the patient's 20 mother's preference that the patient be transported by ground given that the mother could not ride 21 with the patient if the patient was transported by air, but Respondent made clear that it was his 22 decision and he felt that the patient was stable enough to go by ground despite the time difference 23 in transport by air. Id. 24

Undersigned takes notice that the mileage between Humboldt General Hospital and Renown is 166.9 miles. Per the patient's records, the ground travel took approximately 2 hours 26 and 37 minutes. Comparatively, air transport, as was estimated by Respondent, would have taken one hour. TR 222. Although Respondent deemed ground transport appropriate, Respondent

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1 acknowledged that if the mode of transport was determinative he would have insisted on air transport. TR 187; 221-222. 2 The administration of antivenom sooner rather than later for anything more than minor 3 envenomization, which can present hours after an initial assessment, is the crux of the applicable 4 standard of care for a snakebite. See, e.g. Exhibits 11-13. Respondent was aware of the 5 importance of monitoring the patient, which was the basis for transfer when the admitting 6 physician for Humboldt General Hospital, Dr. Thorpe, would not permit admission. TR 177-178; 7 181-182; 192; 224-225. 8 With respect to transfer versus mode of transport in particular, Dr. Glissmeyer, 9 Respondent, and Dr. Levin all seemed to agree that the decision to transfer a minor patient was up 10 to the parent but the mode of transport was up to the treating physician. TR 144 (Dr. Glissmeyer: 11 "How the patient is transferred regardless of what parents want is what - - is in the decision-12 making ability of the physician."); TR 187 (Respondent: "if I thought that the decision between 13 helicopter or ambulance was going to make a critical difference in the patient's outcome, I would 14 have insisted that she go by helicopter with or without the mother"); TR2 19; 42-43 (Dr. Levin: 15 "In general, you need parental consent for some procedure or transfer, et cetera, but you do what's 16 in the best interests of the patient if you are unable to get parental consent," and also testifying 17 that it would be appropriate to factor in travel time for treatment). 18 Here, given the tachycardia, increased swelling, and the prior documented vomiting (see 19 IC Exhibit 6 NSBME 034; Exhibit 12), transporting the patient by ground when air transport was 20 available and time was of the essence to administer antivenom additionally fell below the 21 reasonable standard of care.<sup>9</sup> 22 Respondent attempted to justify not administering the antivenom prior to transport by 23 claiming that antivenom needed to be administered in a hospital setting for continued monitoring, 24 which could not be provided at Humboldt General Hospital given that admission was denied by 25 Dr. Thorpe. TR 178-182; 187-191. Respondent also attempted to justify not administering the 26 27 <sup>9</sup> Dr. Levin was particularly ineffective in refuting this finding in that Dr. Levin had no idea of the distance at issue nor the timing as between ground and air transport and surmised that ground transport in this situation would have 28 been "the easiest and fastest." TR2 22; 42.

antivenom prior to transport by claiming concern for an adverse reaction and weighing that risk against the administration. Id. Both purported bases are unsupported.

When Respondent was asked about whether antivenom was available to administer, his 3 answer was "I cannot say for sure." TR 216. Respondent also testified that the administration of 4 antivenom required preparation and takes approximately an hour or two to administer, and that 5 out of 15 to 20 prior snakebite patients Respondent had treated, he had administered antivenom to 6 approximately two-thirds; thus, Respondent was familiar with its administration. TR 155; 188. 7 Respondent was also clear that Humboldt General Hospital had the medications necessary to treat 8 any severe allergic reaction to antivenom had he chosen to administer it and an adverse reaction 9 took place. TR 216. 10

When asked about the availability of antivenom by undersigned, Respondent indicated that 11 he assumed it was available and that, if it was not available, antivenom could have been retrieved 12 from another health care facility. TR 231. Respondent also testified that despite a lead time of 15 13 to 30 minutes prior to the patient's arrival, he never checked to confirm whether any antivenom 14 was available. Id. When additionally inquired of by IC counsel if the first dose of antivenom 15 could have been administered and then the patient transported, Respondent's answer was 16 "[e]verything is possible. I mean, sure, that is within the realm of possibility, yes." TR 227. 17

Per the literature submitted as IC Exhibits 11-13, as well as indicated by Respondent's 18 own testimony, an initial dose of antivenom could have been administered while the patient was 19 in Respondent's care, and Respondent had available all the resources necessary to deal with an 20 adverse reaction, the chances of which were low, contrary to Respondent's testimony of them 21 being much higher than the submitted literature supported (a variation as to which Respondent 22 presented no authority to substantiate). See TR 190, whereat Respondent claims there is "a 23 significant risk of adverse reactions with antivenom" and claiming it could be as high as twenty 24 percent; but see TR 58; 60, whereby Dr. Glissmeyer testifies that there are no "absolutc" 25 contraindications to antivenom and that the biggest consideration is whether a patient has received 26 antivenom prior and had an allergic reaction, a scenario not at issue in the present matter, and 27 testifying that the chances of an initial allergic reaction are small and that any medication poses

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the risk of an allergic reaction. Per Dr. Glissmeyer, there were no contraindications that should have been concerning with respect to administering antivenom for this particular patient. TR 79. 2 Dr. Glissmeyer also made it clear, and such testimony was uncontroverted, that antivenom could 3 be administered at locations even outside of a hospital but certainly in emergency departments and emergency centers. TR 57. 5

Upon an initial dose of antivenom, maintenance dosing is to be undertaken every six hours 6 if necessary. IC Exhibits 11-13. To that end, an initial dose of antivenom could have been 7 administered and the patient could have been monitored for any adverse reaction and, assuming 8 none, transport could have been completed before any maintenance dosing was to take place. 9 Alternatively, had there been an adverse reaction, Respondent could have addressed it by his own 10 account, TR 216. 11

Given the progressive swelling and tissue damage in addition to a known and recognized 12 sign of systematic envenomization as indicated herein (specifically tachycardia), Respondent's 13 failure to administer the antivenom was below the required standard of care and that conclusion 14 cannot be overcome by a false claim of an inability to monitor the patient or a claim that the 15 failure to administer the antivenom was properly weighed against the risk of an adverse reaction, 16 particularly given the travel time and the known risk of the patient's condition deteriorating in 17 transit. TR 193; 224-225; 227. The patient's symptoms made it clear that the bite was not a "dry 18 bite" and that envenomization was occurring. There was even sufficient concern by another 19 health care professional, specifically a nurse, to suggest to Respondent that the antivenom be 20 administered. TR 232-233. 21

Given that the applicable standard of care for a snakebite contemplates the administration 22 of antivenom for progressive swelling or tissue damage beyond the bite location or where a 23 patient demonstrates any sign of systemic envenomization, and the sooner the antivenom is 24 administered, the better, it was incumbent upon Respondent to have administered the antivenom. 25 Respondent's failure to timely administer the antivenom was then compounded by his failure to 26 transport the patient by the fastest means possible, which was by air.

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1 The fact that Respondent was "on the fence" indicates that he could have benefited from consulting a toxicologist, as to which all three articles on the standard of care admitted as IC 2 Exhibits 11-13 advise. IC Exhibit 11 ("Early medical toxicology consultation is encouraged"); 3 IC Exhibit 12 ("Consultation with a local toxicologist familiar with envenomations or poison 4 control center is recommended to assist in patient management."); IC Exhibit 13 ("Consultation 5 with a medical toxicologist or other physician with expertise and prior experience treating 6 venomous snakebites is strongly encouraged before initiating antivenom therapy" and 7 recommending antivenom for patients with progressive swelling or signs of systemic toxicity). 8

9 To attempt to avoid the conclusion that Respondent failed to consult, Respondent offers
10 that he consulted with Dr. Gassen of Renown as reflected in Respondent's Exhibit 7. According
11 to Respondent, his discussion of the background of the patient's medical condition, and Dr.
12 Gassen's silence about possible concerns regarding Respondent's treatment to that point, was
13 implicit accord as to Respondent's care. TR 183-184. Dr. Glissmeyer, in interpreting the same
14

Relevant to this contention, there is nothing in the record to indicate Dr. Gassen's
experience, if any, with envenomization.<sup>10</sup> While the applicable NAC provision only provides to
"consultation with another provider of health care," it is axiomatic that consulting with another
health care provider who cannot lend any expertise to "enhance the quality of medical services"
defeats the point of the regulation. In that respect, each of the articles regarding the issue of
consultation recommend consulting a medical toxicologist or a resource of equivalent value.

Consultation also implicates asking for advice or an opinion. See Black's Law Dictionary
(11<sup>th</sup> ed. 2019), defining consultation as the act of asking the advice or opinion of someone or a
meeting in which parties consult or confer. Consultation as defined by the Oxford Languages
Dictionary defines consultation as a meeting with an expert or professional to seek advice. The
Cambridge Dictionary defines consultation as "the act of exchanging information and opinions
about something in order to reach a better understanding of it or to make a decision, or a meeting

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<sup>&</sup>lt;sup>10</sup> Dr. Gassen is apparently an ER pediatric physician per Respondent's Exhibit 6, which is the recording of a nurse's call to the Renown Transfer Center.

for this purpose."

As the recording of the conversation with Respondent and Dr. Gassen reflects (Respondent's Exhibit 7), the only query posed by Respondent other than asking Dr. Gassen to repeat his name was "I was wondering if I could send her to you to be watched?" Respondent also stated that he was "on the fence" about administering antivenom but that "I don't think there's any emergency to give her antivenom at this point." Respondent also definitively stated "she is coming by ground." None of which sought consultation about administering antivenom or the mode of transport.

Respondent also testified that he gave Dr. Gassen "a good and complete report of the 9 patient's presentation" (TR 183) but, as to the patient's vitals, Respondent only indicated that 10 "vital signs are good," thus failing to address the tachycardia and giving no indication of blood 11 pressure, which was known to be low during transport and which was not documented while the 12 patient was at Humboldt General Hospital. With that, Respondent testified that Dr. Gassen 13 "agree[d] that antivenom wasn't indicated at this moment but we were considering it." TR 183. 14 However, there was no such agreement and, when Respondent's testimony was clarified, 15 Respondent testified that Dr. Gassen had the opportunity to ask Respondent to do something and 16 Dr. Gassen did not do so. Id. 17

I find that Respondent called Dr. Gassen to facilitate a transfer of the patient and that is 18 what took place. At no time did Respondent seek advice as to the administration of antivenom or 19 transport and instead made conclusory statements about both. Respondent's Exhibit 7. Nor did 20 Dr. Gassen "agree" with Respondent's decision not to administer antivenom. TR 183. 21 Respondent took silence as agreement. TR 184. Silence, however, does not equal agreement -22 that was an assumption not supported by the actual conversation. Had Respondent truly intended 23 to seek to enhance the quality of the medical services he sought to provide via consultation, it was 24 incumbent upon him to actually seek consult and not just provide background he found relevant to 25 the patient's transfer.11

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27 <sup>11</sup> Dr. Thorpe was only consulted regarding admission and had no experience to consult on envenomization. TR 177-28 178; 181-182.

1	Count III, NRS 630.3062 – Failure to Maintain Appropriate Medical Records
2	I find that the patient's increased heart rate, the medical term for which is tachycardia, was
3	properly reflected in the patient's medical records given that the patient's heart rate was recorded
4	and where it was high was noted with an "h." The use of the exact term "tachycardia" does not
5	preclude the fact it was recorded and that the patient being tachycardic is readily apparent to a
6	medical professional able to interpret such records. TR 69-71.
7	Turning to blood pressure, which was not noted in relation to the treatment records related
8	to Respondent (see TR 204), Respondent places blame upon the nurses for failing to record it. TR
9	162; 204-205; 208. However, NRS 630.3062 requires Respondent to be responsible for
10	maintaining complete medical records "relating to the diagnosis, treatment and care of a patient."
11	To the extent blood pressure is relevant to the care and treatment of a snakebite patient,
12	which it is given concerns regarding hypotension (see TR 210, whereby Respondent
13	acknowledges low blood pressure and a high heart rate would be a cause for concern), it was
14	incumbent upon Respondent to have recorded the patient's blood pressure and, to the extent he
15	relied upon blood pressure readings, which he indicates he did and that they were normal, it was
16	necessary for him to maintain a record of such himself so that the veracity of his representation
17	could be substantiated.
18	6. <u>Recommendation</u>
19	Based upon the foregoing, I respectfully submit that the IC has met its burden by a
20	preponderance of the evidence and that Respondent, Jason Howard Lasry, M.D., be found by the
21	Board to have committed malpractice; failed to have consulted; and failed to have maintained
22	complete records for the reasons set forth herein. I defer to the Board as to the appropriate
23	sanction.
24	DATED this 7 <sup>th</sup> day of November 2023.
25	By: Patricia Halstead, Esq.
26	Hearing Officer (775) 322-2244
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1	CERTIFICATE OF <u>SERVICE</u>			
2	I certify that on this day, I personally delivered or mailed, postage pre-paid, at Reno,			
3	Nevada, a true file-stamped copy of the foregoing FINDINGS AND RECOMMENDATION			
4	addressed as follows:			
5	William P. Shogren			
6	Deputy General Counsel Nevada State Board of Medical Examiners			
7	9600 Gateway Drive Reno, Nevada 89521			
8	Jason Howard Lasry, M.D.			
9	c/o Robert C. McBride, Esq. and			
10 11	Chelsea R. Hueth, Esq. McBride Hall			
12	8329 West Sunset Road, Ste 260 Las Vegas, NV 89113			
13	DATED this the day of November 2023.			
14	DATED this day of 2023.			
15	Signature			
16	Mercedes Fuentes			
17	Print			
18 19	Leggel Assistant Title			
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1 BEFORE THE BOARD OF MEDICAL EXAMINERS 2 FILED 3 OF THE STATE OF NEVADA OCT - 4 20234 NEVADA STATE BOARD OF MEDICAL EXAMINERS 5 Bv: 6 7 8 9 In the Matter of the Case No. 23-29251-1 Charges and Complaint 10 Against: 11 JASON HOWARD LASRY, M.D., 12 Respondent. 13 14 15 TRANSCRIPT OF HEARING PROCEEDINGS 16 VIA ZOOM 17 Nevada State Board of Medical Examiners 18 9600 Gateway Drive 19 Reno, Nevada 20 21 VOLUME I 22 Thursday, September 21, 2023 23 24 Reported by: Brandi Ann Vianney Smith 25 Number: 986059

Page 2 1 APPEARANCES: 2 THE HEARING OFFICER: PATRICIA HALSTEAD, ESQ. 3 4 5 FOR THE INVESTIGATIVE WILLIAM SHOGREN, ESQ. COMMITTEE OF THE NEVADA Deputy General Counsel Nevada State Board of 6 STATE BOARD OF MEDICAL EXAMINERS: Medical Examiners 7 9600 Gateway Drive Reno, NV 89521 8 9 FOR DR. JASON LASRY: CHELSEA R. HUETH, ESQ. MCBRIDE HALL 10 8329 W. Sunset Road Suite 260 11 Las Vegas, Nevada 89113 12 13 ALSO PRESENT: 14 Mercedes Fuentes, Legal Assistant 15 -000-16 17 18 19 20 21 22 23 24 25

Page 3 1 INDEX 2 PAGE **3** OPENING STATEMENTS 8 4 by Mr. Shoqren 11 by Ms. Hueth 5 WITNESSES 6 On behalf of the Investigative Committee: 7 Kristi Barbieri 8 Direct Examination by Mr. Shogren 18 Cross-Examination by Ms. Hueth 29 9 Redirect Examination by Mr. Shogren 37 10 Eric Glissmeyer, M.D. Direct Examination by Mr. Shogren 40 11 Cross-Examination by Ms. Hueth 85 Redirect Examination by Mr. Shogren 136 12 Recross-Examination by Ms. Hueth 142 Examination by the Hearing Officer 144 13 Follow-up by Ms. Hueth 146 14 On behalf of the Respondent: 15 Jason Lasry, M.D. Direct Examination by Ms. Hueth 152 16 Cross-Examination by Mr. Shogren 202 Redirect Examination by Ms. Hueth 228 17 Examination by the Hearing Officer 229 \* \* \* 18 19 EHXIBITS 20 21 (Admitted but not attached) PAGE 22 On behalf of the Investigative Committee: 23 Exhibit 1 - Complaint 8 24 Exhibit 2 - Proof of Service 8 25 Exhibit 3 - Allegation letter 8

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Page 5 RENO, NEVADA -- SEPTEMBER 21, 2023 -- 8:36 A.M. 1 2 -000-3 4 HEARING OFFICER HALSTEAD: I'm going to 5 6 call the case. We're on the record In the Matter of 7 Charges and Complaint Against Jason Howard Lasry, 8 M.D., case number 23-29251-1. 9 I'm Patricia Halstead. I'm the hearing 10 officer. I'm a licensed attorney. I've been doing 11 these hearings for a few years now. 12 We're doing via Zoom, which is a little 13 unusual compared to how we've done in past. So 14 you'll note that I am staring at the sky because my 15 camera on my laptop happens to be at the bottom of 16 the screen and not the top. I am looking at you, it 17 just doesn't like I'm looking at you. 18 Then we also have appearances from the 19 Las Vegas office and the Reno office, and the court 20 reporter is also remote. We were scheduled to start 21 today at 8:30, but we are scheduling a little late 22 because of some issues we had with everyone getting 23 into Zoom and different appearance locations. 24 Everyone has indicated they are settled in. 25 If there's nothing further with regard to

Page 6 1 setup, I've called the case, and I'll go ahead and 2 have counsel state their appearances and identify 3 their clients. 4 Anything further before we do that? MR. SHOGREN: No, nothing further on my 5 6 end. MS. HUETH: Nothing from me. 7 8 HEARING OFFICER HALSTEAD: Okay. Go 9 ahead. We'll start with you, Mr. Shogren. MR. SHOGREN: Good morning. This is 10 11 William Shogren, Deputy General Counsel on behalf of 12 the Investigative Committee of the Nevada State 13 Board of Medical Examiners. MS. HUETH: Good morning. This is Chelsea 14 15 Hueth, bar number 10904, and with me is Dr. Jason 16 Lasry. HEARING OFFICER HALSTEAD: Thank you. 17 Okay. So I'll note that I have all the 18 19 filings in front of me. In addition, I have all the 20 exhibits. I'll be looking to the bottom side 21 periodically because the camera doesn't catch that 22 I'm looking at them, but that's where they are. 23 We will go ahead and start with opening 24 statements. 25 Mr. Shogren, do you have an opening

Page 7 1 statement you would like to give? 2 MR. SHOGREN: T do. HEARING OFFICER HALSTEAD: If not, that's 3 4 okay. You can go straight to your case. MR. SHOGREN: Well, there is a preliminary 5 6 matter I forgot to mention. I don't know if the 7 parties would want to stipulate to any of the 8 exhibits for admission at this point? Such as -- I 9 mean, both parties -- primarily, there's Exhibit 1 10 for the IC, the formal Complaint, Proof of Service, 11 allegation letter, etc., just to expedite things, 12 and see if we could possibly stipulate to admission? 13 HEARING OFFICER HALSTEAD: Ms. Hueth? 14 MS. HUETH: I am comfortable stipulating 15 to the admission of the Investigative Committee's 16 exhibits, with the exception of number 9. 17 And would, likewise, request admission of 18 Dr. Lasry's proposed exhibits. 19 HEARING OFFICER HALSTEAD: Mr. Shogren? 20 MR. SHOGREN: Just to be clear, the only 21 one that is being objected to is number 9, so 22 numbers 10 through 15 are being stipulated to as 23 well. And I have no objection to stipulating to 24 25 the admission respondent's exhibits.

Page 8 HEARING OFFICER HALSTEAD: Okay. Based 1 2 upon the agreement of parties, I will admit IC 3 Exhibits 1 through 8, and IC Exhibits 10 through 15. 4 Respondent's Exhibits 1 through 8. (Investigative Committees' Exhibits 1 5 through 8 and 10 through 15 were 6 admitted.) 7 (Respondent's Exhibits 1 through 8 8 9 were admitted.) 10 HEARING OFFICER HALSTEAD: Any other 11 preliminary matters? 12 MR. SHOGREN: No other preliminary 13 matters. 14 MS. HUETH: None from us, Your Honor. 15 Thank you. 16 HEARING OFFICER HALSTEAD: Thank you. 17 Go ahead, Mr. Shogren. OPENING STATEMENT 18 19 MR. SHOGREN: I'd like to say first, good 20 morning. This is William Shogren. I would like to 21 thank everyone here for participating in today's 22 hearing. 23 This hearing is to hear -- we're here to 24 present evidence to determine if Dr. Lasry, the 25 respondent in this case, violated three separate

Page 9 1 provisions of Medical Practice Act as alleged in 2 Counts I through III in the complaint filed on 3 March 8, 2023, by the Investigative Committee of the 4 Nevada State Board of Medical Examiners. First, Count I, alleging that Dr. Lasry 5 6 committed malpractice in violation of NRS 630.301, 7 subsection 4. Count II alleges that Dr. Lasry failed to 8 9 seek consultation with another provider, in 10 violation of NRS 630.306 (1)(b)(2). 11 And finally, Count III alleging that 12 Dr. Lasry failed to maintain appropriate medical 13 records in violation of NRS 630.3062 (1)(a). Throughout this hearing, you'll -- the 14 15 parties will hear testimony from various witnesses, 16 and the evidence will show that a three-year-old 17 patient presented to Dr. Lasry in the emergency 18 department of Humboldt General Hospital on May 9th, 19 2020, after being bitten by a rattlesnake. 20 The evidence will also show that Dr. Lasry 21 failed to recognize serious signs of envenomization 22 in the patient, such as hypotension and tachycardia, 23 and failed to treat the patient's diminishing 24 condition. Most importantly, Dr. Lasry failed to 25 administer antivenom, despite clear signs of severe

1 envenomization.

2 The evidence will also show that, although 3 Dr. Lasry did speak with an emergency room doctor 4 over the phone regarding the patient, he did not 5 properly seek consultation regarding the patient's 6 condition and treatment.

7 And lastly, evidence will show that 8 Dr. Lasry did not keep accurate medical records of 9 patient when he -- primarily when he failed to note 10 a recognition of the patient's continued 11 tachycardia, and when he completely failed to note 12 the patient's low blood pressure or hypotension.

In summation, the testimony and evidence I4 that will be presented today will establish by a I5 preponderance of the evidence that Dr. Lasry 6 committed malpractice by his failure to address and 17 manage a patient who had been bitten by -- who had 18 been bitten by a venomous snake. This represents a 19 failure to meet the standard of care.

The evidence will also show that Dr. Lasry 21 failed to seek proper consultation with another 22 provider regarding the patient's condition, and that 23 he failed to maintain appropriate medical records 24 concerning the patient's vital signs.

25 All three counts, if established, are

Page 11 1 violations of the Medical Practice Act. 2 On behalf of the Investigative Committee, 3 we ask the Board to consider the record that will be 4 presented here and render the appropriate findings 5 and discipline. 6 Once again, thank you, and I want to thank 7 everyone here today for being here. 8 HEARING OFFICER HALSTEAD: Thank you, 9 Mr. Shoqren. 10 Ms. Hueth? 11 MS. HUETH: Thank you. 12 OPENING STATEMENT 13 MS. HUETH: I have the privilege of 14 representing Jason Lasry, a board-certificated 15 emergency medicine physician who has been 16 board-certified for almost 25 years. 17 The evidence will show that on May 9th, 18 2020, at approximately 2:30 P.M., three-year-old 19 Patient A was bit on the anterior left knee by a 20 snake. Her parents reported to paramedics that at 21 first she vomited, but by the time she's evaluated 22 by paramedics who ultimately transferred Patient A 23 to the emergency department at Humboldt General 24 Hospital, she was alert and acting and talking 25 normally for a child of her age.

Page 12 Once she arrived to the emergency department at Humboldt General Hospital, the evidence will show that a nurse assessed Patient A, took her vitals, which were appropriate for her age and the situation, her skin was normal temperature, normal color, and her breathing was unlabored.

7 Throughout the two and a half hours that 8 Patient A remained at the emergency department at 9 Humboldt General Hospital, she remained stable. Her 10 vital signs were stabled, her breathing was 11 unlabored, she only received Tylenol for minimal 12 discomfort, she was alert and acting normally for 13 her age throughout to entirety of her stay at the 14 emergency department.

15 There was swelling around the bite, and 16 Dr. Lasry will testify that that is not unusual, 17 that you would expect to see some swelling as result 18 of a snakebite. The evidence will also show that 19 there was some progression of the swelling. That 20 also was expected.

However, the evidence will ultimately show that whether or not to administer antivenom is based upon the medical judgment of the physician evaluating the patient. It may be warranted in patients that show signs or symptoms of systemic Page 13 1 envenomization, but the evidence will demonstrate 2 that while Patient A was in the emergency 3 department, she did not show signs of system 4 envenomization that warranted administration of the 5 antivenom at that time.

6 While in the emergency department, 7 Dr. Lasry appropriately ordered labs, and those labs 8 that would be expected to show signs of systemic 9 envenomization, such as the INR, the fibrinogen, and 10 platelets, they were all normal. Just because 11 Dr. Lasry did not think antivenom was warranted at 12 that time, the evidence will show that that didn't 13 mean it may not be warranted in the future.

14 What the evidence will show is that 15 Dr. Lasry contacted the pediatrician, Dr. Thorp, and 16 requested that Dr. Thorp accept admission of Patient 17 A.

18 The evidence will further demonstrate that 19 Dr. Thorp did not feel comfortable accepting Patient 20 A's admission because she had never cared for a 21 patient with a snakebite before. Accordingly, 22 Dr. Thorp would not accept admission of Patient A, 23 and requested that she be transfer to a different 24 facility that could provide a higher level of care. 25 So, Dr. Lasry contacted the emergency Page 14 1 department physician at Renown, in Reno, a level II 2 trama center. He spoke with that emergency 3 department physician and gave him the history of how 4 Patient A presented to the emergency department, his 5 evaluation of Patient A, the current findings, 6 including the lab results, as a result the fact that 7 Dr. Lasry did not feel antivenom was needed at that 8 time before transferring Patient A to Renown.

9 The evidence will further demonstrate that 10 emergency department physician at Renown did not 11 express any concern with respect to the fact that 12 Patient A had not received antivenom or would not 13 receive antivenom prior to being transferred.

14 The evidence throughout this hearing will 15 further demonstrate that initially the plan was to 16 transfer Patient A via air ambulance. However, in 17 consultation with Patient A's mother, it was 18 determined that Patient A's mother would not consent 19 to air ambulance because she wouldn't be able to 20 ride with Patient A to Renown. Because Patient A 21 remained stable, and we are now three-plus hours 22 after the snakebite, Dr. Lasry determined that it 23 was appropriate and acceptable to transfer Patient A 24 via ground ambulance.

25 MR. SHOGREN: Sorry. I really hate to

Page 15 1 interrupt here. I forgot to mention -- this is 2 partially my fault -- but for the furtherance of the 3 hearing, could we refer to the patient as 4 "Patient A" just for confidentiality reasons, rather 5 than by her name? I'm sorry. I should have 6 mentioned this. I hate to interrupt you at this 7 point. I don't want to derail your opening 8 statement. I just want to mention that. 9 MS. HUETH: Sure. I will try to do that. 10 Thank you for jumping in, though. So the evidence will further demonstrate 11 12 that even if Dr. Lasry felt that antivenom was 13 indicated at the time, he did not have the resources 14 to do so safely at Humboldt General Hospital. The 15 evidence will demonstrate that antivenom 16 administration requires close monitoring over an 17 extended period of time, of at least 20 hours, and 18 in May of 2020, Humboldt General Hospital could not 19 have kept the patient in the emergency department 20 for that amount of time with the close monitoring 21 that would be needed for the administration of 22 antivenom. 23 So based upon his education, training, and

24 experience, Dr. Lasry appropriately used his medical 25 judgment and determined that it would be better to transfer the patient to Renown for admission and
 further monitoring and potentially the
 administration of antivenom if the situation
 warranted.

Page 16

5 Dr. Lasry could not have reasonably 6 predicted that the patient would have the 7 precipitous decline that she ultimately suffered 8 about 30 minutes prior her arrival to Renown. While 9 she was in the emergency department Humboldt, the 10 patient never needed supplemental oxygen, her vital 11 signs remained stable, her swelling increased 12 minimally and was not unexpected, and by the time 13 the patient left Humboldt General Hospital, it had 14 four hours at least since the bite, and there was 15 sill to signs of systemic envenomization to warrant 16 keeping the patient and administering antivenom at 17 that time.

18 The evidence will further demonstrate that 19 if Dr. Lasry had any indication that the patient's 20 condition was instable or showed signs of systemic 21 envenomization, he would have made sure she did not 22 get in the ambulance, and would have made sure that 23 she was safely transferred to Renown or made her --24 attempts to administer antivenom in Humboldt.

25 However, the evidence will show that the

Page 17 1 standard of care is determined prospectively, not 2 with the benefit of hindsight, but is based upon 3 what a reasonable physician would you do in similar 4 circumstances. And ultimately in this case, the evidence 5 6 will show that Dr. Lasry appropriately exercised his 7 medical judgment in evaluating the patient and 8 determining antivenom should not be administered at 9 the time, and transferring the patient to Renown, a 10 level II trauma center. 11 Thank you. 12 HEARING OFFICER HALSTEAD: Thank you. 13 Ms. Smith, is it possible to, wherever the 14 name of the patient has been eluded to, to replace 15 that with Patient A in the transcript? 16 THE REPORTER: If I have your permission 17 to do so, I can certainly do that.

18 HEARING OFFICER HALSTEAD: Yes, please do 19 so.

20 All right. Anything further before 21 Mr. Shogren calls his first witness?

MR. SHOGREN: Nothing further at this23 time.

MS. HUETH: Nothing from me. Thank you.HEARING OFFICER HALSTEAD: Okay.

Page 18 1 Mr. Shogren, who is your first witness? 2 MR. SHOGREN: The first witness I am 3 calling is Kristi Barbieri, investigator for the 4 Board. HEARING OFFICER HALSTEAD: Thank you. 5 Go 6 ahead and call her. Ms. Barbieri, normally if we were sitting 7 8 in the room all together, Mr. Shogren would say 9 something to the effect of "I call my first witness, 10 Kristi Barbieri." He did that. I don't know if you 11 were on when he did that. 12 If you could please state your name and 13 spell your name for the record, and then I will have 14 you sworn in. 15 THE WITNESS: Sure. My name is Kristi 16 Barbieri, first name is K-R-I-S-T-I, last name is 17 B-A-R-B-T-E-R-T. 18 HEARING OFFICER HALSTEAD: Okay. And 19 could you please raise your right hand to be sworn 20 in. 21 (The oath was administered.) 2.2 THE WITNESS: T do. 23 DIRECT EXAMINATION 24 BY MR. SHOGREN: 25 Q. Good morning, Ms. Barbieri.

Page 19 1 Good morning. Α. 2 First of all, who is your employer? Q. Nevada State Board of Medical Examiners. 3 Α. 4 What is your job title? Q. 5 Α. Investigator. How long have you had this position? 6 Q. Since February of 2022. 7 Α. And as an investigator for the Nevada 8 Q. 9 State Board of Medical Examiners, what are your 10 duties? 11 My duties are assign cases, complaints Α. 12 that are filed from the public and to investigate 13 those, get all the facts together, and then pass it 14 along the chain for decisions. 15 So, specifically, when a complaint comes Q. 16 in, what happens? 17 A complaint comes in, it's assigned to an Α. 18 investigator, the complaint is reviewed. If there's 19 additional questions, we reach out to the 20 complainant. 21 And then an allegation letter goes out to 22 the licensee with a Board order for records. Once 23 we get a response, if there's anybody else we need 24 records from, we sent out a subpoena or a letter. 25 And when that's all -- when that comes

Page 20 1 back, it's reviewed by an investigator, and then 2 it's passed on for medical review. Q. Just to be clear, when an investigation is 3 4 opened, does the Board create a file for that 5 matter? 6 Α. Yes. Okay. And we're here today for a hearing 0. 7 8 to present evidence so that the Board can determine 9 if Dr. Lasry violated the Medical Practice Act. And are you familiar with investigation 10 11 number 21-20403, regarding Dr. Lasry? 12 Α. Yes. 13 Q. Is that this case we're here today for? 14 Α. Yes. And just for the record, were you the 15 Q. 16 original investigator on this case? 17 Α. No. Do you know who was? 18 Q. Kim Friedman. 19 Α. 20 Did you take over for this case? Q. 21 Α. Yes. 22 Q. When did you take over? 23 Α. I took over February 17th of 2022. Okay. Have you reviewed the file for this 24 Q. 25 case?

Page 21 1 Α. Yes. 2 Q. Based on your review, does this case 3 appear to be similar to other investigations handled 4 by the Board? Α. 5 Yes. Now, for the record I'm going to ask you 6 Q. 7 about the Board's exhibits in this case. 8 Α. Okay. And as part of your investigation for this 9 Q. 10 case, were you required to obtain medical records? 11 Α. Medical records were obtained prior to 12 when the case was assigned to me. 13 Q. Okay. I'm going to ask you questions 14 directed toward each exhibit. If you could open the 15 binder in front of you and have that. Can you 16 please turn to what's been premarked as Board's 17 Exhibit 1? 18 Α. Okay. 19 Q. Do you recognize this document? 20 Yes. It's a Complaint issued by the Α. 21 Board. 22 Q. Okay. And who's named as a respondent 23 here? 24 Α. Jason Howard Lasry, M.D. Okay. Thank you. 25 Q.

Page 22 I'd like to now move to what's been 1 2 premarked as the Board's Exhibit 2. Quickly, do you 3 recognize this document? 4 Α. Yes. Q. And what is it? 5 A. A proof of Service. 6 7 Q. Okay. Thank you. Now I'd like you to turn to what's been 8 9 premarked as the Board's Exhibit 3. It's been 10 previously admitted. And what is this document? 11 Α. This would be the initial allegation 12 letter sent to the respondent. 13 Do you recognize this document? Q. 14 Α. Yes. What is the date of this letter? 15 Q. 16 A. July 19th, 2021. 17 Okay. And what were the allegations in Q. 18 this allegation letter? 19 Α. The first one was the patient presented to 20 Dr. Lasry on or around May 9th, 2020, at Humboldt 21 General Hospital, by ambulance, after being bitten 22 by a rattlesnake on her left knee. The second is he failed to administer 23 24 antivenom to the patient instead of agreeing to 25 transfer the patient to Renown Regional Medical

Page 23 1 Center without first stabilizing the patient. 2 Number three is Life Flight was canceled, 3 and a decision was made to transport the patient via 4 ambulance in Renown Regional Medical Center in Reno, 5 even though the patient was in poor condition and 6 near death. It is further alleged on or around 7 8 May 13th, 2020, the patient succumbed as a result of 9 the rattlesnake bite. And there is a further allegation that 10 11 Dr. Lasry may have been deceptive with the Nevada 12 State Board of Medical Examiners on his renewal for 13 failing to answer "yes" to being named a defendant, 14 respond to legal action regarding Washoe County 15 Second Judicial Court case CV21 00866, filed 16 May 7th, 2021. 17 Thank you. Q. Now if we can move to what's been 18 19 premarked as the Board's Exhibit 4, previously 20 admitted. Do you recognize this document? 21 Α. Yes. 22 Q. And what is it? 23 Α. It's the response from Dr. Lasry to the 24 allegation letter. 25 What is the date of this letter? 0.

Page 24 1 August 18th, 2021. Α. 2 Okay. Now if we can move to exhibit --Q. 3 what's been premarked as the Board's Exhibit 5, 4 previously admitted. Do you recognize these 5 documents? 6 Α. Yes. And what are they? 7 0. This is the standard letter to goes out to 8 Α. 9 a medical facility, requesting records for a certain 10 time period, signed by the previous investigator. 11 HEARING OFFICER HALSTEAD: Mr. Shogren, 12 you mentioned earlier concern about that patient's 13 name being part of the record, and it's in the 14 record in your Exhibit 4, it hasn't been redacted. I don't know if you're concerned about 15 16 that, but I'm pointing that out to you if you want 17 the opportunity to redact that, I will grant that. 18 But the name is listed in there, so it's part of the 19 record. 20 MR. SHOGREN: Okay. Thank you for 21 bringing that up. I don't think we need to redact 22 it at this time. 23 BY MR. SHOGREN: Okay. Ms. Barbieri, for Exhibit 5, who is 24 ο. 25 the letter addressed to?

Page 25 It's address to Humboldt General Hospital, 1 Α. 2 attention health care records. And then the third page of Exhibit 5, 3 Q. 4 which is Bates stamp 20 here, what is this document? That is the certificate of custodian of 5 Α. 6 records that is sent out with the request, that 7 comes back with the record that needs to be 8 notarized by the facility. 9 Q. Thank you. Now if we can move to what's been 10 11 premarked as Exhibit 6. Do you recognize these 12 documents? 13 Α. Yes. 14 0. What are they? 15 Records from Humboldt General Hospital in Α. 16 response to the letter. Thank you. 17 Q. If you could move to Exhibit 7. 18 Do you 19 recognize this document? 20 Α. Yes. Q. And what is it? 21 2.2 A. It is a letter to Renown Regional Medical 23 Center, attention health records, requesting records 24 for a certain time period for the patient. 25 And what else does this exhibit contain? 0.

Page 26 A. The exhibit also has a notarized 1 2 certificate of custodian of records. Q. Okay. Thank you. 3 4 If -- moving to what's been premarked as 5 Exhibit 8, what is this document? These are records from Renown Health -- or 6 Α. 7 Renown. Sorry. 8 Q. Okay. Thank you. Moving to Exhibit 9, that's been premarked 9 10 as Exhibit 9, do you recognize this document? 11 A. Yes. Q. What is this document? 12 13 A. Certificate of Death from vital 14 statistics. Q. What how was this document obtained? 15 A. An investigator will send a letter with a 16 17 check for \$25 to vital statistics to get a certified 18 copy returned to us. 19 Q. Okay. Thank you. 20 HEARING OFFICER HALSTEAD: I know that 21 Exhibit 9 hasn't been admitted. Do you want to seek 22 to admit it at this time, or are you going to wait 23 to do that? MR. SHOGREN: I'll seek to admit it at 24 25 this time.

Page 27 HEARING OFFICER HALSTEAD: Ms. Hueth, you 1 2 had an objection to that exhibit? MS. HUETH: Yes, I have a couple of 3 4 objections. One is being relevance that the Death 5 6 Certificate is not relevant to establishing whether 7 or not Dr. Lasry complied with the Nevada 8 Malpractice Act, or whether he complied with the 9 standard of care. Further object to foundation and 10 11 authenticity, as Ms. Barbieri just testified that 12 typically a letter would be sent requesting this 13 document, and there's no such letter contained 14 within the file. 15 HEARING OFFICER HALSTEAD: Okay. 16 Mr. Shogren, do you have a response? 17 MR. SHOGREN: Well, I'd say, first, we 18 would argue that it is relevant, showing the 19 patient's condition at the time. 20 As far as foundation, I acknowledge that 21 there isn't a letter, but I would argue that 22 Ms. Barbieri still established how this letter was 23 obtained through her testimony. 24 HEARING OFFICER HALSTEAD: Okav. So as 25 you both know, the rules of evidence formally don't

Page 28 1 apply, so it's within my discretion. 2 I do find that is it relevant, and it is a 3 public record. So even if the rules did apply, it 4 would come in under public record exception. Exhibit 9 is admitted. 5 (Investigative Committee's Exhibit 9 6 was admitted.) 7 8 MR. SHOGREN: Thank you. 9 BY MR. SHOGREN: Q. And lastly, Ms. Barbieri, I'd would like 10 11 you to briefly turn to -- these are exhibit that are 12 premarked as 10 through 13. I'm just going to treat 13 these Exhibit s together here. What are they? Those are the articles that were returned 14 Α. 15 with the peer reviewer's report. Is it unusual for the Board to receive 16 0. 17 articles when there's a peer review? 18 Α. No. 19 Q. And do these appear to be true and correct 20 copies? 21 Α. Yes. 22 Q. Thank you. 23 MR. SHOGREN: No further questions for 24 Ms. Barbieri. 25 HEARING OFFICER HALSTEAD: Ms. Heuth?

Page 29 1 MS. HUETH: Thank you. 2 CROSS-EXAMINATION 3 BY MS. HUETH: Good morning, Ms. Barbieri. 4 Q. A. Good morning. 5 Q. Are you a medical doctor? 6 A. I am not. 7 Have you attended medical school? 8 Q. 9 A. I have not. And I believe you testified -- please 10 0. 11 correct me if I'm wrong -- you were not the original 12 investigator on this file; is that right? 13 A. Correct. Q. And that you were assigned to this file 14 15 February 17th, 2022; is that right? 16 Α. Yes. 17 Okay. And so you were not the person who Q. 18 requested records from Humboldt General Hospital; is 19 that correct? 20 A. Correct. 21 0. You were not the person who requested 22 records from Renown; is that right? 23 A. Correct. In your experience, do to investigators 24 Q. 25 primarily take the allegations that are written in

Page 30 1 underlying consumer complaint and use them as the 2 allegations in the letter of inquiry that is sent by 3 the Board? 4 Α. Yes. If you could turn to, what's already been 5 0. 6 admitted, Exhibit 3 of the Investigative Committee's 7 Exhibit s? 8 Α. Okay. Is this the July 19th, 2021, letter of 9 Q. 10 inquiry that was sent to Dr. Lasry? 11 Α. Yes. 12 Q. Okay. And this is before you were 13 assigned to the case; right? 14 Α. Correct. And you did not write this letter? 15 Q. 16 Correct. Α. Number 5, which you read into the record, 17 Q. 18 regarding the allegation that Dr. Lasry may have 19 been deceptive with the Nevada State Board of 20 Medical Examiners on his license renewal? 21 Α. Yes. 22 Q. That's not contained within the formal 23 complaint that's been filed in this matter, that 24 allegation; true? 25 I would have to go look at the complaint. Α.

Page 31 Okay. Well, if you could turn to 1 0. 2 Exhibit 1, which is the formal complaint. And on 3 what's Bates stamped NSBME 3, Count I is for 4 malpractice; true? Α. 5 Yes. Count II is for violation of standards of 6 Q. 7 practice established by regulation, failure to 8 consult; correct? 9 Α. Yes. Count III, failure to maintain appropriate 10 0. 11 medical records; correct? 12 Α. Yes. 13 Q. There's no count regarding fraud or 14 deception in obtaining a license renewal; true? 15 Α. Correct. 16 Okay. If you can turn to what's already Q. 17 been admitted, Exhibit 5, please. Specifically 18 Bates stamped NSBME 20. 19 Α. Okay. 20 And this is the Certificate of Custodian Q. 21 of Records that says "for Humboldt General 22 Hospital," but I'm guessing that means to be "of 23 Humboldt General Hospital"; is that fair? 24 Α. Yes. Okay. And the Certificate of Records for 25 Q.

Page 32 1 Humboldt General Hospital was signed by Kathy 2 Patterson; is that right? 3 Α. Yes. 4 Q. It was not signed by Jason Lasry, was it? 5 Α. No. 6 Q. And if you can turn to what's already been 7 admitted, Exhibit 4, please. And exhibit 4 is 8 Dr. Lasry's response letter; correct? 9 Α. Yes. And in the first paragraph, Dr. Lasry 10 0. 11 indicates: I am not the custodian of records, as 12 Humboldt General Hospital maintains the patient's 13 records. Did I read that correctly? 14 15 Yes. Α. 16 Okay. If you can please turn to Q. 17 Exhibit 7? 18 Α. Okay. 19 Q. And this is the request for Patient A's 20 medical records from Renown Regional Medical Center; 21 correct? 2.2 Α. Yes. 23 Q. And this letter requests all of Patient 24 A's medical records, beginning May 9, 2020, through 25 present; true?

1 A. Yes.

2 Q. Okay. And if you turn to Bates stamp 3 NSBME 90. Do you have that in front of you? 4 Α. Yes. Okay. And is this the Certificate of 5 0. 6 Custodian of Record for Renown? 7 Α. Yes. And to your knowledge, does this 8 Q. 9 certificate verify that all of Patient A's medical 10 records from Renown Regional were provided to the 11 Nevada Board? 12 Α. I'm checking. One moment. All of 13 patient's records? No. Patient's record for 14 specific set period of time, yes. Okay. And that period of time was? 15 Q. A. May 9th, 2020, to October 12th, 2021. 16 17 Okay. At least for that time period, this Q. 18 is certifying that a complete copy of those records 19 were provided to the Board? 20 A. Correct. 21 0. Okay. If you can turn to Exhibit 8, 22 please. 23 It looks like this is approximately 21 24 pages of Patient A's medical records from Renown; is 25 that right?

Page 34 Let's see, 91 to 111, so, yes. 1 Α. 2 Q. Is it your understanding that Patient A's 3 medical chart from Renown is only 21 pages? 4 A. According to this, yes. Q. Okay. Well, Patient A -- do you have an 5 6 understanding that Patient A was admitted to Renown 7 on May 9, 2020? 8 A. Yes -- no. I'm sorry. May 9th was to 9 Humboldt. Sure. But if you turn to Bates stamp, so 10 0. 11 still in Exhibit 8, which has already been admitted, 12 NSBME 91. Let me know when you have that in front 13 of you. 14 A. Okay. Q. And if you go down about half way, under 15 16 "events." 17 Α. Yes. It says "admission at 5/9/2020." Do you 18 Q. 19 see that? 20 Yes. Α. 21 Q. Okay. And if you go to the next, NSBME 22 92, half way down above "allergies." 23 Α. Yes. Q. It says "discharge at 5/13/2020." Do you 24 25 see that?

1 A. Yes.

5

2 Q. Okay. Would that indicate to you that she 3 was admitted on May 9, 2020, and discharged May 13, 4 2020?

A. According to these documents, yes.

6 Q. In your experience, having been an 7 investigator, would it be unusual for a patient who 8 had been admitted to the hospital for four days to 9 only have 21 pages of medical records?

10 MR. SHOGREN: I'd object, one, just for 11 relevance. I don't see where we're going with this. 12 MS. HUETH: The relevance is that 13 Ms. Barbieri testified that this is the entirety of 14 the Renown Health medical records, and I'm trying to 15 establish that that may not be correct, given the 16 length of patient's stay it. That it would be a 17 mischaracterization to suggest that this is the 18 entirety of the patient's chart from Renown.

HEARING OFFICER HALSTEAD: Ms. Barbieri, Ms. Barbieri, Ws. Barbieri, Hearing officer hashed been an objection as to your qualifications to testify to that. She did establish that you were a Board investigator and asked if it was in your experience.

24 So given that qualification, I'll allow 25 her to proceed with this line of questioning.

Page 36 THE WITNESS: Okay. It depends on what 1 2 the patient has gone for. It can be something as 3 little as 21 records or something as voluminous as 4 300. 5 BY MS. HUETH: Okay. On NSBME 92, do you still have that 6 Q. 7 page in front of you? 8 Α. Yes. And toward the bottom, under ED notes, it 9 0. 10 says "patient transferred with PICU, RN, on monitor 11 up to four." Do you see that? 12 Α. Yes. 13 Does that suggest to you, given your Q. 14 experience, that this patient was admitted to the 15 pediatric ICU on May 9, 2020? 16 Α. Yes. Okay. And she remained at Renown until 17 Q. 18 May 13th, 2020; correct? Α. 19 Yes. Okay. So given that, in this case, 20 Q. 21 specifically, does it seem unusual to you, given 22 your experience as an investigator, that this 23 patient's four-day stay, part of it being in the 24 PICU, would only be 21 pages? 25 I would assume there would be more. Α.

Page 37 If you can turn now to Exhibit 9, which 1 0. 2 has been admitted, do you know when this Certificate 3 of Death was requested? 4 A. I do not. Q. And you testified earlier that typically a 5 6 letter would be sent with the request for a 7 certificate of death; is that right? A. Correct. 8 Q. And when Mr. Shogren going through these 9 10 Exhibit s with you, did you see any such letter 11 requesting the certificate? 12 A. In the Exhibit s, no. 13 MS. HUETH: Those are all my questions. 14 Thank you. 15 HEARING OFFICER HALSTEAD: Any redirect, 16 Mr. Shogren? 17 MR. SHOGREN: Yes. Thank you. Just a 18 couple question for Ms. Barbieri. REDIRECT EXAMINATION 19 20 BY MR. SHOGREN: 21 Is it common that you received files --0. 22 investigative files that were previously worked on 23 by other investigators? 2.4 A. It is common? It's happened once since 25 I've been here. I replaced Ms. Friedman, so I

Q. Okay. And -- okay. I'm just going to 2 3 Exhibit number -- what's been premarked as 4 Exhibit 7, Bates stamp number 88, just to be clear, 5 this is requesting records from a certain period of 6 time, all records; correct? 7 Α. Yes. Is that typical, you request all records 8 Q. 9 when you send out such a letter to a facility or a 10 provider? It depends. If they've gone -- if it's an 11 Α. 12 ER visit, and they go to the ER quite frequently and 13 we're looking at a specific case, then we set a 14 date, time set. Otherwise, we go back, typically, 15 two or three years. 16 But if you're looking for specific, we try 17 and narrow it down. Q. And to your knowledge, the records that 18 19 were provided by Renown, were those complete as your 20 predecessor requested? 21 Α. According to notes from the predecessor, 22 it was complete. Otherwise, another request would 23 have been sent. Q. If you could turn to what's been premarked 24 25 as Exhibit 8?

1 assumed most, if not all, of her files.

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Page 39 1 Α. Yes. 2 Q. As an investigator, do you have say in 3 what's prepared for in Exhibit s to be used at a 4 hearing? Α. 5 No. 6 MR. SHOGREN: No further questions. HEARING OFFICER HALSTEAD: Thank you. Do 7 8 you have witness after Ms. Barbieri? MR. SHOGREN: Yes, I do. The next witness 9 10 I would like to call is Eric Glissmeyer, M.D. 11 HEARING OFFICER HALSTEAD: Would you like 12 to excuse Ms. Barbieri? 13 MR. SHOGREN: Yes. No further questions. 14 HEARING OFFICER HALSTEAD: Ms. Barbieri, 15 you are excused. Thank you for your time and your 16 testimony today. Thank you. 17 THE WITNESS: 18 HEARING OFFICER HALSTEAD: Mr. Shogren, 19 please state name of your next witness again. 20 MR. SHOGREN: Yes. We would like to call 21 Eric Glissmeyer, M.D. 2.2 HEARING OFFICER HALSTEAD: Thank you. Good morning, Dr. Glissmeyer. I'm 23 24 Patrician Halstead. I'm the hearing officer for 25 this matter. I don't know if you've been attending

Page 40 1 up this point, but I'll have you please state your 2 name and spell your name for the record and then 3 I'll have you raise your right hand to be sworn. THE WITNESS: Thank you. And have been on 4 5 the Zoom, but just let in the meeting now. My name is Eric Wallace Glissmeyer, 6 7 physician, and thank you. 8 HEARING OFFICER HALSTEAD: Can you spell 9 your name, please? 10 THE WITNESS: Eric, E-R-I-C, W. 11 Glissmeyer, G-L-I-S-S-M-E-Y-E-R. HEARING OFFICER HALSTEAD: Thank you. 12 Go 13 ahead and raise your right hand. (The oath was administered.) 14 15 THE WITNESS: I do. 16 HEARING OFFICER HALSTEAD: Go ahead, 17 Mr. Shogren. 18 MR. SHOGREN: Thank you. 19 DIRECT EXAMINATION 20 BY MR. SHOGREN: 21 Q. Good morning, Dr. Glissmeyer. 2.2 A. Good morning. 23 Q. Okay. Let's start off, what is your 24 profession? 25 A. I am a pediatric emergency physician.

Page 41 1 And where are you located? 0. 2 A. I work in Salt Lake City, Utah, for the 3 University of Utah, and Primary Children's Hospital 4 is my practice location. And are you licensed in Nevada to practice 5 0. 6 medicine? Not to practice in person, but to provide 7 Α. 8 Telehealth consultation if requested. 9 Q. And where else are you licensed? Just to practice in the State of Utah, and Α. 10 11 Telehealth consultation licensed other 12 inter-mountain west states, like Idaho, Montana, 13 Colorado, Wyoming. 14 Q. Okay. Thank you. How long have you been licensed? 15 Since 2014, as an attending physician, and 16 Α. 17 for the six years prior to that during residency and 18 fellowship. 19 Q. Where did you go to medical school? 20 A. The University of Utah. 21 Q. And what was your residency in? A. Pediatrics. 2.2 23 Q. And did you do any fellowships? Yes, fellowship in pediatric emergency 24 Α. 25 medicine.

Page 42 What board certifications do you have? 1 0. 2 I am board-certified with the American Α. 3 Board of Pediatrics, in pediatrics. I'm 4 board-certified with the American Board of 5 Pediatrics in pediatric emergency medicine. And 6 with the American Board of Preventative Medicine in 7 clinical informatics. Okay. What licenses do you hold? 8 Q. 9 Α. I hold a physician and surgeon license 10 with the State of Utah, as well as a controlled 11 substances prescription license. 12 Q. Okay. And do you hold any other positions 13 currently? 14Α. I'm sorry, any other positions? Yes. 15 Q. 16 No. Α. Can you briefly describe your training and 17 Q. 18 experience, specifically with emergency pediatric 19 medicine? 20 I spent about seven months in my Α. Yes. 21 residency between 2008 and 2011, in the emergency 22 department. I spent three years in fellowship in 23 the emergency department and in pediatric critical 24 care rotations with that fellowship. And then since 25 2014, I am full-time faculty in the pediatric

1 emergency department, seeing patients in that 2 emergency setting. 3 Q. Thank you. 4 I'd like to turn your attention to what's 5 been premarked as Board's Exhibit 15. Do you have 6 that in front of you? Have you seen this document 7 before? Yes. This is my curriculum vitae that I 8 Α. 9 personally prepared. 10 Does this document accurately summarize 0. 11 your experience and education? 12 Α. Yes. 13 Q. Did you prepare this document? 14 Α. Yes. Did you provide this document to the 15 Q. 16 Board? 17 Α. Yes. Okay. Is there anything else you would 18 Q.

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19 like to add, or is this document complete?
20 A. I'll just add that this doesn't include
21 all of the continuing medical education or other
22 lectures or trainings that I've attended, as that
23 would make this document excessively long.

24 Q. Okay. Thank you.

25 Have you served as a peer reviewer for the

1 Board before?

5

2 A. I have.

3 Q. Do you recall how many cases you may have 4 reviewed for the Board?

A. For the Nevada Board, three.

6 Q. Okay. And how long have you been7 reviewing cases for the Nevada Board?

8 A. Since 2020.

9 Q. Okay. Are you familiar with investigation 10 number 21-20403, regarding Dr. Jason Lasry?

11 A. Yes.

12 Q. Based on your training and experience, do 13 you feel you are familiar with standards of care to 14 which medical practitioners are held regarding the 15 facts in this case?

16 A. Yes.

Q. And do you have experience in the subject 18 matter you've asked to review regarding the facts of 19 this case?

20 A. Yes.

Q. Okay. Can you describe your training and 22 experience specifically with treating patients with 23 envenomization?

A. Yes. Envenomization is a complaint that 25 we see in the emergency department. Over the course 1 of my career, which I described earlier, I have 2 treated approximately seven patients with 3 snakebites. Page 45

And my experiences in managing them as patients that we hear about, often, before they come to our referral center as a major pediatric specialty hospital, and in speaking -- so in speaking with referring providers and arranging their transport and managing their care once they referring for them emergency department and dispositioning them to an appropriate location thereafter.

13 Q. Thank you.

14 You mentioned you've treated approximately 15 seven patients?

16 A. That's right. Approximately seven17 patients with snakebite injuries.

Q. And what was the most-recent patient?
A. Most-recent patient as about 18 months
ago.

Q. What was the age range of your patients?
A. Those range from about one year old, I
think it was one and a half year old, specifically,
the youngest, to teenagers.

25 Q. For your patients, did you administer

1 antivenom?

2 A. I did, yes.

3 Q. To your knowledge, what was the outcome 4 after administering antivenom?

5 A. All patients survived, and their wounds 6 around the site of the bite, some required some 7 local wound specialty care. I believe one of them 8 required a wound graft. All survived.

9 HEARING OFFICER HALSTEAD: Mr. Shogren, I 10 just want to clarify for the record because it 11 wasn't exactly clear to me. You asked if he 12 administered antivenom to his patients. I want to 13 clarify that your question meant to convey whether 14 he administered antivenom to each of those seven 15 patients, so all of patients.

16 MR. SHOGREN: Correct. Yes. I should 17 have specified. I'm talking about the seven 18 patients that Dr. Glissmeyer mentioned.

HEARING OFFICER HALSTEAD: Dr. Glissmeyer, 20 was my understanding correct, that it was all the 21 patients that administer to?

22 THE WITNESS: Thank you for that23 clarification.

Yes, these seven patients all receivedantivenom.

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Page 47 HEARING OFFICER HALSTEAD: 1 Thank you. 2 I'm sorry, Mr. Shogren. Go ahead. MR. SHOGREN: No problem. 3 4 BY MR. SHOGREN: Moving on here, were you provided with 5 0. 6 materials by the Board in your review of this 7 matter? Α. Materials from the case, case records, 8 9 yes. 10 Do you remember what was included in those 0. 11 materials? 12 Α. Yeah. Generally, they included 13 information from the Emergency Medical Services 14 transferring the patient to Humboldt General 15 Hospital. Records from Humboldt General Hospital, 16 and records from the hospital to which the patient 17 was transferred from Humboldt. Okay. And were you asked at the time the 18 0. 19 materials were provided to review them and make an 20 objective determination whether, in your 21 professional opinion, there was any departure from 22 the proper standards of medical care by Dr. Lasry? Yes, that was what I was asked to do. 23 Α. Did you come to a determination? 24 Q. 25 Yes. Α.

Page 48 1 And what was your opinion? 0. 2 My opinion was that the care of the Α. 3 patient by Dr. Lasry did not meet appropriate 4 medical standards, and per the Nevada Board 5 definition, met the definition of malpractice. 6 Q. Okay. Thank you. And now I'd like to discuss how you 7 8 arrived as this determination. And might be easiest 9 to go through the records that you've previously 10 been provided. I'm going to ask you some more 11 specific questions regarding the facts of this case. 12 So, if you could, could you turn to what's 13 been premarked as Board's Exhibit 6? I'm there. 14 Α. And do you recognize this document? 15 Q. 16 Yes. Α. Are these the records from Humboldt 17 Q. 18 General Hospital that you were asked to review? 19 Α. Yes. Okay. Also just as a sort of a 20 Q. 21 preliminary or an aside matter, I'm going to refer 22 to the patient as "Patient A," or otherwise as the 23 "patient," and I would ask that you do so as well, 24 so we can keep the transcript free of confidential 25 information about the patient.

Page 49 First, I just wanted to establish a 1 2 timeline here. If you can turn to what's been --3 the Bates stamp number s pages 21 through --4 actually not 21 -- 83 through -- I'm sorry. Ι 5 apologize. I was correct the first time. I was 6 looking at the wrong ones. I apologize for any 7 confusion. 8 Pages starting at Bates number 21. 9 Α. Yes. Okay. And so pages 21 through 24, what is 10 0. 11 this document here? 12 Α. This is a patient care record of the -- of 13 Patient A, that is from Emergency Medical Services, 14 responded to the patient in the field or out in the 15 community, and transported them to the hospital. Okay. I have a couple of questions here. 16 0. 17 We're going to jump back to this at a later point, 18 but just for right now, what is date of this 19 document? 20 It is dated May 9, 2020. Α. 21 0. Okay. And when did Emergency Medical 22 Services arrive on the scene? 23 Α. They documented that -- give me just a 24 moment. I want to make sure that I state it 25 correctly.

Page 50 1 0. Okay. 2 They -- I'm sorry. Can you restate your Α. 3 question, Mr. Shogren? 4 ο. I asked: When did EMS arrive on the scene 5 on May 9th? 6 Α. That's documented on page 23, that they 7 arrived on scene at 15:56 hours on May 9. When did they depart the scene? 8 Q. At 16:07 hours. 9 Α. 10 Okay. And just quickly here, what --0. 11 based on these records for the EMS, what was the 12 impression of the patient? 13 Α. The impression was that the patient was 14 bitten by a rattlesnake on the left knee, about an 15 hour before EMS arrived. And that the patient had 16 vomited, had been incontinent of urine. And that 17 was calm and talking normally, and they drew around 18 the wound to monitor for changes around the wound. 19 Q. Thank you. Now if you could turn to page number --20 21 starting at page 30 of Exhibit 6? 2.2 Α. Yes. And what is this document titled here? 23 0. 24 This is the Humboldt General Hospital Α. 25 emergency documentation or ED clinical summary.

Page 51 And who was the attending physician at 1 0. 2 Humboldt for the patient? 3 Α. Jason Lasry. What was the admit date? 4 ο. A. May 9, 2020. 5 6 Q. Thank you. 7 When did the patient arrive at Humboldt 8 General Hospital? Arrived May 9, 2020, at 16:16 hours. 9 Α. 10 If you turn to page number 32, when was 0. 11 Dr. Lasry assigned to this patient? 12 Α. At 16:24 hours on May 9. 13 Now turning to pages 34 and 35 of 0. 14 Exhibit 6. If you could read, what is Dr. Lasry's 15 assessment at the bottom of page 34? That the patient is a three year old with 16 Α. 17 rattlesnake envenomization, or bites, to the left 18 knee. That the patient had increasing edema and 19 swelling. And there's about 25 percent more 20 swelling in the radius of the circle and swelling 21 has increased in size from when she first presented. 22 She's noted as doing well, watching a movie, awake 23 and talking. And no abnormalities in the 24 coagulation tests. 25 Q. And based on this record, what medication

Page 52 1 was administered to the patient? 2 Α. The patient received IV fluid, along with 3 potassium chloride. ο. Okay. Now, towards the bottom of page 34, 4 5 there's that section entitled "Procedure," what does 6 this section state? This is states that Dr. Lasry delivered Α. 7 8 critical care to this patient for 35 minutes or 9 more, for multiple reassessments, medical 10 decision-making, and consultation. 11 Just based off your experience and Q. 12 knowledge, what is critical care time? 13 Α. It is a documentation attestation that 14 emergency physicians and others make in their notes 15 to indicate the severity of a patient's illness 16 and/or the complexity of the care provided. 17 Okay. Now if you could turn to page 27. ο. 18 What is this document? Α. This is the Authorization of Transfer for 19 20 the patient from Humboldt General Hospital to the 21 Renown Hospital. 22 Q. When was the transfer approved? Let's see. It's documented here that on 23 Α. 24 May 9, the Renown Hospital accepted the patient for 25 transfer at 17:56 hours.

Page 53 And according to this document, on page 1 0. 2 27, what was the discharge time? Α. Patient was discharged at 18:24 hours. 3 4 Rather -- sorry -- discharged vital signs timed at 5 18:24. Discharge time was 18:32. 6 Q. Thank you. Can we just quickly -- we're going to come 7 8 back to this, but if you could turn to 9 pages starting at 83, what's been Bates stamped as 10 83, Board's Exhibit 6? 11 Α. Yes. 12 Q. What is this document? A. This is, again, an Emergency Medical 13 14 Services' documentation of the patient's care and 15 assessment by them when they picked up the patient 16 from Humboldt to transfer them to Renown. If you could turn to page 86 specifically 17 Q. 18 here. When did the EMS depart Humboldt? They departed Humboldt at 18:52 hours. 19 Α. When did they arrive at Renown Hospital in 20 Q. 21 Reno? A. At 21:29 hours. 22 Q. Thank you. 23 For now, if you could go to what's been 24 25 premarked and admitted as Exhibit 8. Do you

Page 54 1 recognize these records? 2 Α. Yes. 3 Q. Are these records from Renown that you 4 were asked to review? Α. 5 Yes. Okay. I just want to focus on when the 6 Q. 7 patient arrived at Renown, was she given antivenom? Α. 8 Yes. 9 Q. And do you know when she was given 10 antivenom? 11 A. It was that same evening of arrival. I 12 need a moment to look for the exact place that the 13 time is documented. Q. I think that answers my question. We can 14 15 move on to the next one. 16 Could you turn to pages that's been 17 premarked as 98 and 99? 18 Α. Yes. 19 Q. Specifically on what's marked as -- of 20 what's labeled as "Death Certification Note." 21 Α. Um-hum. 22 Q. And according to this, on pages 98 and 99, 23 when was the patient pronounced dead? 24 A. May 13, 5:27 P.M. 25 Q. And what's listed as the cause of death?

Page 55 A. Permanent cessation of cardiac function, 2 secondary to MODS, secondary to cardiac arrest, 3 secondary to rattlesnake bite.

Q. And what does MODS stand for?
A. In my experience, it stands for multiple
6 organ dysfunction syndrome.

7 Q. Thank you.

8 Okay. Now we're going to step back a 9 little bit. I'm going to ask you about treatment of 10 snakebites in general, now that we've established a 11 timeline here for the patient's care.

12 In your experience, you to your knowledge,13 how are snakebite patients initially assessed?

A. The initial assessment includes
measurement of patient's vital signs, examination of
the bite area, and then ensuing, a period of
observation to determine if the patient's clinical
status, as measured by vital signs and symptoms, is
remaining stable or changing or any abnormalities,
and monitoring the bite site for any progression of
swelling, development of or progression of swelling.
Q. And when you say "vital signs," what vital
signs are typically measured?

A. Vital signs measured in this situation and 25 in any emergency situation include temperature,

Page 56 1 heart rate, respiratory rate, blood pressure 2 measurement, oxygen saturation measurement. Okay. And based on your experience and 3 0. 4 knowledge, and you said you've seven patient that 5 have been bitten by snakes, what are typical signs 6 of envenomization from a snakebite? Early, typical signs include swelling at 7 Α. 8 the bite site and pain. After time begins to go by 9 and about an hour or two hours goes by from the time 10 of injury, if there was venom injected, swelling 11 tends to continue to increase around the bite site. 12 Changes -- visible changes, other than 13 swelling, such as redness or bruising are really 14 variable, and may take multiple hours to develop. Monitoring of those vital signs, I 15 16 described, is critical also determine if the patient 17 is experiencing systemic or whole body affects from 18 venom.

19 Q. And what are common systemic symptoms?
20 A. Fast heart rate. And as the body
21 initially starts to respond to venom, and if there
22 is a significant amount of venom injected, the body
23 may enter various stages of shock, including a
24 persistence of an elevated heart rate, and/or low
25 blood pressure.

Q. Based on your experience and knowledge,
 when should patients receive antivenom?

Page 57

A. Once they're is any criteria met to 4 receive antivenom, and that would include that the 5 patient's vital signs are out of range and persist 6 out of range. That would include that the patient 7 has development of progression of swelling at a bite 8 site. That would also include signs of laboratory 9 abnormalities that could occur over time.

10 Q. And in what setting should antivenom 11 usually be administered?

12 A. As soon as possible. So that could 13 include settings -- if the patient is far from 14 medical care, and it's something, even outside of a 15 hospital, can be directed by a physician. Certainly 16 in emergency departments, emergency centers, as well 17 as within hospitals.

18 Q. In your experience, how are emergency 19 departments typically equipped to deal with any 20 adverse affects to antivenom?

A. They are probably to best place for a 22 patient to be treated for adverse affects of 23 antivenom that could occur. They're well equipped 24 to handle that by immediate physician and nurse 25 presence caring for the patients. And with the Page 58 1 immediate availability of medications to be -- to 2 include, but not limited to, IV fluids, agents to 3 increase blood pressure or epinephrine medications 4 if an allergic reaction were to occur.

5 Q. What are the contraindications for using 6 antivenom on a patient?

7 A. There are no absolute contraindications to 8 using antivenom on a patient.

9 The relative contraindications or things 10 that could be considered to not use antivenom, but 11 are not an absolute no, are that if a patient has 12 received antivenom before and had a severe allergic 13 reaction.

14 Q. Thank you.

15 And what resources are there, to your
16 knowledge, for consultation in snakebite cases?
17 A. There is generally available resources to
18 physicians in various articles and clinical practice
19 statements available online. But what's most
20 immediately available to emergency physicians, and
21 really any physician, is contact with a poison
22 control center. The same phone number is available
23 anywhere in the United States.

Q. And in snakebite cases, how are pediatric25 patients different than adult patients?

1 A. They are not.

2 Q. And how is the patient's weight considered 3 in treating snakebite cases?

A. As with most medications in children,
5 there is a weight-based dosing to give a smaller
6 human an appropriate amount of medication. After a
7 certain weight, that is irrelevant, and they receive
8 the adult dose.

9 Q. And then, to your knowledge, what --10 dealing with snakebites, what's the possibility that 11 the snake delivered a dry bite?

12 A. That's a possibility. It's been reported 13 through the literature that a certain number of 14 snakebites are dry bites or where venom is not 15 injected.

And either systemic, whole body changes I And either systemic, whole body changes I described in vital signs or changes in the skin, such as swelling at site or the laboratory changes I mentioned, don't occur, where none of those occur under a period of observation, and that's what could constitute a dry bite. Yeah.

There's a variability in reporting of how many snakebites are dry. Numbers that I have seen reported in the literature are anywhere between for the literature are anywhere between for the literature of bites that are not

Page 59

venom injected. I, personally, never seen such a
 one where there was no venom injected.

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3 Q. And backing up here, I'm moving back to a 4 previous topic here, but I forgot to ask here. What 5 are the risks of antivenom usage?

A. They're small. Really, any medication has the risk of allergic reaction. There are multiple different types of antivenom available to hospitals, and they generally stock one or the other; one called "CroFab," and one called "ANAVIP," are two common types.

12 And from my recollection, they have, 13 maybe, somewhere between a ten percent and a less 14 than five percent, respectively, rate of severe 15 allergic reaction when administered.

16 Q. Okay. Thank you.

Now, just addressing what's been premarked as Board's Exhibit 10, starting there. Actually, I'm just going to address Exhibits 10 through 13, which have all been previously admitted. Have you seen these documents before?

22 A. Yes.

23 Q. And what are these documents?

A. They are literature documents I provided25 in review of this case.

Page 61 Document 10 is a study of what normal 1 2 vital signs ranges are in children. Document 11 is from the Journal of 3 4 Emergency Medicine, statement on managing pit viper 5 or crotalid envenomization in emergency departments. Document 12 is another clinical practice 6 7 statement from Wilderness Medical Society on 8 treatment of pit viper envenomizations. 9 And document 13 is a summary document from 10 the UpToDate organization on management --11 evaluation and management of patients with 12 Crotalinae pit viper bites. 13 In your opinion, do these articles Q. 14 articulate that standard of care that would have 15 been in effect as of May 9th, 2020, when Dr. Lasry 16 saw the patient in this case? 17 Yes. Α. And noticed -- so Exhibit 10 was published 18 0. 19 in 2011. Exhibit 11 was published in 2020 and 20 updated in 2021. Exhibit 12 was published in 2015. 21 And Exhibit 13 was published in 2022. 22 So, some of those were published after 23 May 9th, 2020, but are the standards identified in 24 these articles different than what they would have 25 been on May 9th, 2020?

Page 62 No. The last document -- no. No, they're 1 Α. 2 not. No substantive change in the standard of care 3 in that time. And were these articles peer reviewed, all 4 ο. 5 of them? 6 Α. Yes, these are all peer-reviewed articles. And why did you rely on these articles? 7 0. These articles are from the kind of places 8 Α. 9 that might look when looking for guidance in 10 managing snakebite envenomizations. 11 Q. Okay. 12 Α. And I guess to be more clear, Exhibit 10, 13 it just established what normal vital sign ranges 14 are for children. Okay. Just briefly, if we could turn to 15 Q. 16 Exhibit -- what's been premarked as Exhibit 12, 17 starting on page 132. Specifically, what is this 18 document? This is from the Wilderness Medical 19 Α. 20 Society on practice guidelines for treatment of pit 21 viper bites in the United States and Canada. 22 ο. Okay. And this is a document relied on 23 -- correct? -- in forming your opinion. One of them. 24 Α. 25 If you could just turn to page 138 here. Q.

1 If you could just, perhaps, briefly summarize what's
2 titled "Section 4," subsection "initial patient
3 assessment."

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A. This is just details routine assessment 5 that should occur of the patient, including vital 6 signs, specifically included blood pressure, as 7 initial assessment of the patient.

8 And then history of the circumstances of 9 the bite, and then removing anything that swelling 10 could then lead to problem with, such as jewelry or 11 clothing on the body.

12 It talks about monitoring the patient 13 repeatedly.

Q. What is recommendation for after a patient is placed on initial assessment and vital signs? A. Repeat it every 15 to 30 minutes until local tissue effects have stabilized, which means until there's no further progression of the patient's local tissue affects.

Q. And if you could turn to page 140. If you 21 could just read the first sentence of the first 22 paragraph there?

A. This is indication for antivenom section, And it says "Patients with progressive local tissue finings or any systemic toxicity, such as signs, 1 symptoms, or acute laboratory abnormalities, should
2 receive antivenom."

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3 Q. Okay. In this section, what is described 4 as common systemic symptoms.

5 A. Hypotension or low blood pressure,6 systemic bleeding or neurotoxicity.

7 Q. Thank you.

8 HEARING OFFICER HALSTEAD: Sorry. Can you 9 repeat that for me, please? You said "low blood 10 pressure, neurotoxicity."

11 THE WITNESS: Hypotension, systemic12 bleeding, or neurotoxicity.

13 BY MR. SHOGREN:

14 Q. In your experience and knowledge, what is 15 defined as neurotoxicity?

16 A. So that can be any number of signs or 17 symptoms of weakness, particularly. It could also 18 include abnormal muscle functions, such as something 19 termed as "muscle fasciculation," which is kind of 20 uncontrollable writhing movements of muscles as 21 driven by nerves that aren't working right.

But the one in any sort of envenomization But the one in any sort of envenomization any venom-containing animal of neurotoxicity that is most concerning is -- or that one of the most concerning things is weakness in your breathing

Page 65 1 and ability to effectively breathe. 2 Q. Thank you. Now if we can turn to exhibit -- what's 3 4 been premarked as Exhibit 13, previously admitted. 5 Dr. Glissmeyer, what is this Exhibit? 6 Α. This is the UpToDate article on snakebite 7 envenomizations. Just to be clear, what are Crotalinae 8 Q. 9 snakes? 10 Crotalinae snakes are pit vipers, which Α. 11 are venomous snakes. 12 Q. And rattlesnakes fall under this category? 13 Α. Correct. 14 0. If you could turn to page 149 of this 15 article of this exhibit. If you could just describe 16 here at bottom, antivenom therapy, what's the 17 recommended initial treatment? Consultation with a medical toxicologist 18 Α. 19 or other physician with expertise or prior 20 experience treating venomous snakebites is 21 encouraged before giving antivenom. 2.2 And describes this phone number that's the 23 same throughout the United States, that has been 24 for -- I know for a fact it's been that case at 25 least since 2014 -- I'm sorry -- since 2011, there

were emergency consultation with a medical
 toxicologist is always available.

3 Q. And then going on to the next page, 4 page 150, what does the top paragraph there 5 describe?

6 A. Recommends when antivenom therapy should 7 be given, and says "For patients with Crotalinae 8 snakebites and progressive swelling or signs of 9 systemic toxicity."

**10 Q.** And what's recommended for those patients? 11 A. That if there is progressive swelling or 12 signs of systemic toxicity, that antivenom should be 13 administered as soon as possible once any of those 14 manifestations are evident. And that is done both 15 to treat the effects that are already happening, and 16 to prevent progression of venom affects.

Q. And if you go down to the section entitled 18 "Dose and Administration," on page 150, the second 19 paragraph, what does that state?

A. That antivenom therapy can be associated with potentially severe allergic reactions, but it appears -- the risk appears to be low, less than one percent.

Q. Okay. And to your knowledge, what are --25 what is FabAV?

Page 66

Page 67 The FabAV is the CroFab, and Fab2AV is the 1 Α. 2 ANAVIP. Both of those are pit viper antivenom. And if you go down to the next section 3 0. 4 titled "Treatment of Acute Antivenom Reactions," on 5 page 150, what does the first sentence state there? That on -- based on a comparative trial 6 Α. 7 between FabAV and Fab2AV, the rate of acute serum 8 reaction and serum sickness for patients receiving 9 either of those is approximately two to 10 three percent. 11 Okay. And moving on to page 153, on the Q. 12 last section of page 153, which is titled 13 "Supportive Care," what does that state? That antivenom administration is the 14 Α. 15 mainstay or the most important piece of treatment 16 for envenomization by North American Crotalidae 17 snakes. And other treatments, such as pain control 18 and monitoring for hypotension or low blood 19 pressure, bleeding, rhabdomyolysis, elevated tissue 20 or other compartment pressures, and, rarely, 21 respiratory failure could occur after administration 22 of antivenom. 23 Ο. Okay. Now we're going to move on to

24 Patient A's medical records. We kind of touched 25 upon them initially, but now we're going to back to

## 1 them in more detail.

2 MS. HUETH: Excuse me. I'm sorry to 3 interrupt, but when it's convenient for everybody, 4 could be take a comfort break? HEARING OFFICER HALSTEAD: 5 Yeah. 6 I was going to ask, Mr. Shogren, how much 7 longer do you think you have to go? 8 MR. SHOGREN: Probably another 9 thirty minutes or so. We can take break now, 10 though. 11 HEARING OFFICER HALSTEAD: Okay. It's 12 10:21. Do you all want to -- let's be back by 13 10:35. Is that going to work for everyone? 14 MS. HUETH: Yes. Thank you. 15 HEARING OFFICER HALSTEAD: Okay. Thank 16 you, everyone. 17 (Recess from 10:21 A.M. to 10:35 A.M.) HEARING OFFICER HALSTEAD: We're on the 18 19 record and remain on the record in matter number 20 23-29251-1, In the Matter of the Charges and 21 Complaint Against Jason Howard Lasry, M.D. We took 22 a break amongst the direct of Dr. Glissmeyer, who is 23 testifying on behalf of the IC. 24 Dr. Glissmeyer, I remind you that you're 25 under oath.

Page 69 Mr. Shogren, you may continue with your 1 2 direction examination. 3 MR. SHOGREN: Thank you. 4 BY MR. SHOGREN: Dr. Glissmeyer, I was now going to focus 5 0. 6 of Patient A's medical records. If you could turn 7 back to Exhibit 6, and let's start with page 34 of 8 Exhibit 6. Dr. Glissmeyer, again, what is this 9 section? 10 Α. This is the Dr. Lasry's emergency record 11 of the patient. 12 0. Okay. And we went over this a little bit 13 before, but just to refresh here, what is the 14 initial assessment? 15 That since the patient was bit on the left Α. 16 knee, has developed increasing edema and swelling at 17 the site, and about 25 percent more swelling in the 18 circle drawn and the swelling has increased in size 19 from when she first presented. That the patient was 20 doing well. Noted no coagulation abnormalities. 21 0. What do these notes say about the 22 patient's heart rate? 23 Α. I don't think the note says anything about 24 the patient's heart rate, other than the number. 25 And what is the heart rate number listed? 0.

Page 70 149. 1 Α. 2 Q. And what's the normal heart rate range for 3 a three year old? 4 Α. Less than 140. So what does a heart rate of 149 indicate? 5 0. In this situation, it indicates to me 6 Α. 7 concern for significant envenomization and systemic 8 toxicity. And from what you can see here, how did 9 Q. 10 Dr. Lasry address the heart rate? 11 Α. He did not. 12 Q. And I'd like to turn now to page --13 starting at page 171 -- sorry -- 71 one Exhibit 6. 14 Α. Yes. Under the section starting -- actually, 15 Q. 16 it's on 171 and 172, starting under the section 17 "Vital Signs," and what is this section here? These are vital signs recorded zeroly or 18 Α. 19 repeatedly at Humboldt General Hospital. 20 And what vital signs are recorded here? Q. 21 Α. The patient's temperature, pulse rate or 22 heart rate, and respiratory rate. And what's the time range of these vital 23 0. 24 signs? 25 From 18:24 hours -- I guess they move Α.

Page 71 1 backward here, so from 16:30 hours to 18:24 hours. 2 Q. And what are the heart rate measurements, 3 what's the range recorded here? 4 Α. Between 149 and 155. 5 0. If you go on page 72. 6 Α. Thank you. So, yeah, there's two columns 7 of data here. And the earliest is from 16:17, the 8 latest 18:24, the range being 146 to 156. And I notice all of these heart rate 9 0. 10 measurements have a little "h" next to them. What 11 was that "h" stand for? 12 Α. That's a marker from the electronic 13 medical record recognizing that these are out of 14 range for the patient's age, rather elevated or 15 high. 16 Q. Okay. Thank you. 17 And what does this section, the vitals 18 signs section, state about the patient's blood 19 pressure? 20 Nothing. Α. 21 0. Okay. Now going back to Dr. Lasry's notes 22 starting on page 34. I notice there's a section 23 titled "Physical Exam," what does it say about the 24 patient's cardiac status? 25 A. Heart has regular rate on rhythm.

Page 72 And is a heart rate of 149, is that a 1 0. 2 regular rate? 3 That's tachycardic, or fast. Α. No. ο. In this section, what does Dr. Lasry state 4 5 about the patient's blood pressure? He doesn't state anything about it. 6 Α. Actually, if we could quickly go back to 7 0. What is this document again? 8 page 27. This is the certification of transfer 9 Α. 10 form, with the parent of the patient signing 11 permission, and document ing the patient's 12 acceptance of the Renown Hospital for transfer from 13 Humboldt Hospital. And what are the discharge vital signs? 14 0. Document ed at 18:24 hours, no blood 15 Α. 16 pressure document ed. Pulse 150. Respiratory rate 17 24. Temperature 36.6. Oxygen saturation 18 96 percent. One second. Now jumping back -- I 19 ο. 20 apologize for jumping back and forth here, but going 21 back to page 34 and 35, what does Dr. Lasry state --22 I may have brought this up before, but just to 23 refresh, what does Dr. Lasry note about the 24 swelling?

25 A. In the physical exam section, he notes no

Page 73 1 significant edema, which is another word for 2 swelling. And then in the assessment on page 35, 3 document s increasing edema and swelling. 4 ο. Um-hum. If you could go to -- now to 5 page 79 of Exhibit 6, under the section titled 6 "Emergency document ation," what is this section? This is the document ation by the patient Α. 7 8 care nurse and Humboldt General Hospital. What do the textual results state? 9 ο. On May 9 at 18:24, the nurse document ed 10 Α. 11 that Emergency Medical Services here with the 12 patient. Patient care turned over to them. Noted 13 left knee swelling continues to increase, and noted 14 mottling, which are color changes, around left knee 15 radiating up and down from the left knee. M.D. or 16 physician aware. 17 What time was this note entered? Q. 18:24 hours. 18 Α. 19 Q. Could you read the next note? So, that's going on backward in time at 20 Α. 21 17:29 hours, "Noted swelling to left knee increasing 22 more. M.D. notified." 23 0. And then can you just read the last note 24 there? 25 That's at 17:08 hours, "Noted left knee Α.

Page 74 1 swelling increased. Also noted by M.D." 2 Q. And you can stop there. Okay. I want to shift your attention now 3 4 to page 83 starting there, of Exhibit 6, paged 83 5 through 87. We briefly touched on this section of 6 Exhibit 6 before, but just to refresh, what is this 7 section? Is the Emergency Medical Services' record, 8 Α. 9 who came to pick up the patient from Humboldt and 10 transfer them to Renown. 11 Could you briefly describe under "Vital Q. 12 Signs," what this all this states? 13 Α. So, this vital signs section is a table of 14 vital signs taken from before they departed the 15 Humboldt General Hospital until they arrived at the 16 Renown Hospital. What does it state under column labeled 17 Q. 18 "BP"? 19 Α. This is the blood pressure repeated 20 measurements. At 18:49 hours, the blood pressure 21 was measured at 59 over 40. 22 Q. And what's the time range for the blood 23 pressure measurements? 24 Beginning at 18:49 hours until 21:28. Α. Q. What does the blood pressure reading of 59 25

Page 75 1 over 40, what does that indicate? 2 Hypotension, or low blood pressure. Α. And what -- when does hypotension start? 3 0. 4 Under what range? So blood pressure is normalized by age of 5 Α. 6 patient. A -- the systolic number, or the first 7 number, is the most reliable and most important to 8 use decision-making, as to whether a patient needs 9 treatment for low blood pressure or high blood 10 pressure. 11 That is considered to be low for a 12 three- year-old child, because we use the algorithm 13 of 70 plus two times the age. So a number less than 14 76 in that first number would be considered low. 15 What time range was the blood pressure Q. 16 less than 76? 17 The time range between 18:49 and 19:38. Α. 18 So I guess between 18:49 and 19:23. Then, again, 19 just before arrival at the Renown Hospital. 20 In your opinion in the context of these Q. 21 facts, what would this hypotension indicate for the 22 patient? 23 Α. Systemic symptoms of envenomization and 24 severe toxicity from that. 25 Based on your review of all the records Q.

1 here provided, is blood pressure mentioned anywhere
2 else?

3 A. It is -- not outside of this record from4 Humboldt General Hospital until arrival at Renown.

5 Q. If we could just go now to page 84. 6 Actually, I apologize. Backing up. Going back to 7 page 83, under the section titled "ECG," what does 8 this section indicate?

9 A. This is an interpretation of the 10 electrocardiogram electrode leads they had on the 11 patient's chest. And it indicates that from before 12 they left Humboldt General Hospital until just 13 before arriving at Renown, the patient had sinus 14 tachycardia, which means a fast heart rate, with a 15 normal electrographic tracing.

16 Q. Given, in your opinion and the context of 17 the facts here, what does the tachycardia indicates? 18 A. It indicates systemic toxicity from 19 envenomization.

20 Q. Okay. Now moving to page 84, under 21 "Initial Assessment," can you read the section 22 titled "Extremities"?

23 A. Yes.

24"Patient had two puncture marks on25the anterior left know. A circle

Page 76

1	was drawn on the area indicating	Page	77
2	initial swelling ecchymosis, or		
3	bruising, upon arrival to the ER.		
4	There was a small amount of		
5	ecchymosis around the wound, as		
6	well as extending past the circle		
7	approximately one inch. Her		
8	swelling was extended to the		
9	entire extremity. The patient's		
10	upper leg was approximately three		
11	times the size of the opposite		
12	leg. The knee had swollen to the		
13	same extent. Streaking was noted		
14	on the medial thigh. CMS was		
15	noted on all extremities, although		
16	the patient's left leg was weak,		
17	and she was unable to move it		
18	without assistance. Providers		
19	limited the movement of the		
20	extremity."		
21	Q. In your opinion, what does the patient'	s	
22	inability to move her leg, what does that indicat	e?	
23	A. That indicates a weakness. It also cou	lld	
24	indicate a pain from the swelling and the bite, b	out	
25	it also could indicate a neuromuscular weakness.		

Page 78 Okay. Then moving to page 85, under the 1 0. 2 section "Narrative," can you just describe what this 3 narrative states about the swelling of the leg? 4 Α. Yes. One moment. 5 I notes in the third paragraph ER RN noted 6 the patient's leg had swollen to three times the 7 size while in the ER. The EMS asked about the 8 administration of the antivenom and was informed 9 that Dr. Lasry advised against the administration. That's it. 10 11 THE WITNESS: I don't know if it's just 12 me, but I can't hear Mr. Shogren now. 13 HEARING OFFICER HALSTEAD: I think they 14 are working on it. We'll give them a minute. Okay. It's eleven o'clock right now. 15 16 I'll check back in at -- well, I quess we will just 17 go until 11:10, and then we will reconvene. 18 MS. HUETH: Thank you. (Recess 11:00 A.M. TO 11:11 A.M.) 19 20 HEARING OFFICER HALSTEAD: We're back on 21 the record in case 23-29251-1, In the Matter of 22 Charges and Complaint Against Jason Howard Lasry, 23 M.D. We stopped for some technical difficulties, 24 but we seem to back on track now. 25 We were still within the direct of

Page 79 1 Dr. Glissmeyer, who remains under oath. 2 Go ahead, Mr. Shogren. 3 BY MR. SHOGREN: ο. Okay. Dr. Glissmeyer, in your opinion, 4 5 what does the combination of the tachycardia and 6 hypotension, what could that possibly indicate? A. That indicates systemic toxicity from the 7 8 venom. Okay. Based on your reviews of records 9 Q. 10 here, what were the contraindications for using 11 antivenom in this case? 12 Α. None. 13 ο. Would the patient's weight have had any 14 sort of consideration? Would that have changed 15 anything? 16 Α. No. 17 Okay. Next, I want to go back to page 85. Q. 18 Could you read that last entry there, the last 19 paragraph on page 35? 20 A. Page 35; is that correct? 21 0. Yes, 35. 2.2 A. Last entry here at 5:45 P.M.: "I discussed the full history and 23 24 physical examination with 25 Dr. Gassen from the emergency room

Page 80 at Renown Hospital, and he agrees 1 2 to accept the patient to transfer 3 to his facility and agrees that 4 antivenom is not required or indicated at this time. Patient 5 will be transferred for a higher 6 level of care and for close 7 observation and possible later ICU 8 admission, depending on 9 condition." 10 11 Next I wanted to play -- this is Q. 12 respondent's exhibit, and this is Exhibit 7, which 13 is audio of transfer center call number two. And 14 I'm going play this right now. (Audio played.) 15 16 BY MR. SHOGREN: 17 Okay. Just to make sure, Dr. Glissmeyer Q. 18 did you hear that recording? 19 Α. Yes. And in preparation for this hearing, did 20 Q. 21 you previously hear that recording? 2.2 Α. Yes. 23 0. Can you briefly summarize what Dr. Lasry 24 stated about the patient's condition? 25 That the patient was bitten by a snake, Α.

Page 81 1 had some swelling on the left leg, that it was 2 increasing, that he didn't think antivenom should be 3 administered. And in your opinion, if you were given 4 ο. 5 that call, what would you convey to the other 6 doctor? A. I would convey the patient's vital signs. 7 Is there anything else you would convey? 8 Q. Probably a little bit more about how the 9 Α. 10 patient was doing, how they had vomited. But 11 that's, really, the critical things. 12 Q. Based off what you heard here, can you 13 summarized what the other provider, Dr. Gassen, what 14 he said about the use of antivenom? 15 A. I don't recall him saying anything about 16 it. 17 HEARING OFFICER HALSTEAD: I have a 18 question: Has this call been transcribed? 19 MR. SHOGREN: Not to my knowledge. 20 HEARING OFFICER HALSTEAD: Ms. Hueth, have 21 you had the call transcribed? 2.2 MS. HUETH: No, I have not. 23 BY MR. SHOGREN: Okay. Dr. Glissmeyer, I wanted to wrap up 24 ο. 25 here.

1 In your reasoned professional opinion, 2 after reviewing all of the facts in this case, the 3 medical records, in your own experience at the very 4 last, what should Dr. Lasry have done after the 5 patient presented to Humboldt General Hospital with 6 a snakebite?

A. Obtain full vital signs, including blood
8 pressure, recognize the elevated heart rate,
9 recognize the progression of swelling. And
10 because -- and for reason of either of those being
11 true, administer antivenom before transferring the
12 patient.

13 Q. Also in your opinion, how should the 14 patient have been transferred?

15 A. I think that -- I think that's less16 important in this case in the care of the patient.

17 Any patient should be transferred using 18 the fastest mode possible, especially in a setting 19 of the patient's systemic symptoms of illness with 20 tachycardia that were not addressed and fixed. 21 That's my answer.

22 Q. In your opinion, when should have the 23 antivenom been administered?

A. I believe that the presentation -- so, in25 short, at the Humboldt Hospital.

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1 Q. Thank you.

2 And would you opine that Dr. Lasry 3 committed malpractice?

4 A. Yes.

5 Q. And what's your opinion about Dr. Lasry, 6 his maintaining records regarding the patient's 7 condition?

8 A. I have concerns about the accuracy of the 9 physical exam stating a regular rate with the 10 patient having tachycardia. And concern with not 11 measuring the blood pressure in the patient during 12 the entirety of their stay.

13 Q. Would you opine that Dr. Lasry failed to 14 properly consult with another physician regarding 15 the patient's condition?

16 A. Yes.

17 Q. Thank you, Dr. Glissmeyer. No further 18 questions.

HEARING OFFICER HALSTEAD: Thank you.
So I'll pass to Ms. Hueth, but I have a
couple follow-up questions, and I don't want to step
on anybody's toes, but there are things we covered,
and I don't them to get skipped.

24 Since the call is not transcribed and I 25 had trouble hearing parts of it and we're asking

Page 84 1 Dr. Glissmeyer about it, I thought I heard that 2 transport was addressed. I didn't hear if the mode 3 of transport was addressed. 4 Can someone clarify that for me? MS. HUETH: It says -- I think Dr. Gassen 5 6 says, "How is she going to be transferred?" And Dr. Lasry says, "Via ground." 7 8 HEARING OFFICER HALSTEAD: Okay. Thank 9 you. And then what was the basis for concluding 10 11 that there was a failure to consult regarding the 12 patient's condition? There was a conclusion, but 13 there was no basis stated for that. MR. SHOGREN: Well, I had elicited through 14 15 Dr. Glissmeyer's testimony that based on records, 16 the audio call, there's no mention of patient's 17 vital signs. 18 HEARING OFFICER HALSTEAD: Okay. I would 19 like Dr. Glissmeyer to respond. 20 MR. SHOGREN: I apologize. 21 THE WITNESS: Thank you, Ms. Halstead. 22 Can you repeat the question? 23 HEARING OFFICER HALSTEAD: There was a 24 conclusion that Dr. Lasry failed to properly consult 25 regarding the patient's condition, and I wanted to

Page 85 1 know what your basis for that conclusion was. 2 THE WITNESS: The basis is failure to 3 provide the vital signs of the patient. As in the 4 transcript, there is mention of this increasing 5 swelling. But no -- and a declaration that he 6 didn't think that antivenom should be administered. But I didn't think that the phone call to 7 8 the Renown Hospital physician, through their 9 transfer center, was really one of consulting and a 10 back and forth discussion about should we administer 11 antivenom to this patient, but rather a handoff or 12 statement of what was done. 13 And I don't think that the referring 14 physician was really specifically asked the 15 question: Would you recommend administering 16 antivenom to this patient? 17 HEARING OFFICER HALSTEAD: Thank you. 18 Go ahead, Ms. Hueth, you can commence your 19 cross-examination. 20 MS. HUETH: Thank you. 21 CROSS-EXAMINATION 22 BY MS. HUETH: 23 0. Good morning, Dr. Glissmeyer. 24 A. Good morning. I have in my notes -- please correct me if 25 Q.

Page 86 1 I'm wrong -- that you currently practice at Primary 2 Children's Hospital in Salt Lake City? 3 A. Correct. 4 ο. Okay. And is that a rural critical access 5 hospital? Could you define what you mean by "rural 6 Α. 7 critical access hospital"? Are you familiar with the JCo definition 8 Q. 9 for accreditation of a rural critical access 10 hospital? 11 Not specifically, no. Α. 12 Q. Where is Primary Children's Hospital 13 located? 14 Α. In Salt Lake City. How many beds is your emergency 15 Q. 16 department? 17 Α. It's 33. Q. Just in the ED? 18 19 A. Correct. And do you know how many beds there are in 20 Q. 21 total at Primary Children's Hospital? 2.2 Α. I believe over 300. In the low 300s. 23 0. At Primary Children's Hospital, as an ER 24 provider, do you have on-call specialists? 25 Α. Yes.

Page 87 And typically what sorts of on-call 1 0. 2 specialists do you have? 3 Α. We have the full array of medical and 4 surgical specialties. Were you working at Primary Children's 5 0. 6 Hospital in Salt Lake City in May of 2020? Α. Yes. 7 And according to your CV, from 2021 to 8 Q. 9 2023, you were also working on your MBA; is that 10 right? 11 A. Correct. 12 Q. In October of 2020, you became 13 board-certified in preventive medicine? No. That's in clinical informatics 14 Α. 15 through the board of -- the American Board of 16 Preventive Medicine. 17 Did you have to take an exam to receive ο. 18 that certification? 19 Α. Yes. 20 When did you take that exam? Q. 21 Α. I took that exam in the fall of 2020. 22 Q. You testified earlier that the most-recent 23 patient that you treated as a result of a snakebite 24 was 18 months ago; is that right? 25 Α. Yes.

Page 88 So prior to May 9, 2020, how many patients 1 0. 2 had you personally administered antivenom to? 3 Approximately six before that patient. Α. ο. The patients that you administered 4 5 antivenom to, were they ultimately admitted to the 6 hospital? 7 All of them, yes. Α. To what department in the hospital? 8 Q. Some to the inpatient, regular medical 9 Α. 10 surgical floor. And I believe at least one of those 11 total seven was admitted to the intensive care unit. 12 Q. One of those patients, you testified, 13 required a skin graft; is that right? That's right. 14 Α. Were there any other of those seven 15 Q. 16 patients that required, whether surgery or 17 additional intervention beyond the antivenom? 18 Not surgery, no. Α. But some other intervention? 19 ο. Additional doses of antivenom after the 20 Α. 21 initial ones were required by most of the patients. 22 Q. Those additional doses, did you provide 23 those in the ER? 24 Α. No. They were provided to the patient after 25 Q.

1 the patient's admitted either to the ICU or the 2 general medicine floor?

3 A. Correct.

Q. Earlier you were testifying regarding the two types of antivenom, and you testify that most hospitals will stock one of two antivenoms, either 7 CroFab or ANAVIP; is that right?

8 A. Yes.

9 Q. And when you were explaining that, were
10 you talking generally, or were you taking
11 specifically about Humboldt General Hospital?
12 A. I was talking generally. Yet in my review

13 of the records for this case, I requested
14 information as whether on the date of patient's
15 presentation, antivenom was available in the
16 hospital.

17 Q. And did you see that information contained 18 within the Exhibit s presented by the Investigative 19 Committee?

20 A. I would need reread all of them to be21 absolutely sure. I don't know.

Q. Do you recall Mr. Shogren bringing that information to your attention when he was asking you questions?

25 A. Not today, no.

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Page 90 Q. Okay. When you received the materials for 1 2 this case, did you receive the records from Humboldt 3 and the records from Renown? 4 Α. Yes. When you initially received the materials 5 0. 6 for this case, what else did you get? MR. SHOGREN: I object to that. I believe 7 8 that's confidential. 9 HEARING OFFICER HALSTEAD: Ms. Hueth, do 10 you have a response? 11 MS. HUETH: I'll rephrase it. 12 BY MS. HUETH: 13 Q. When you initially received materials 14 related to this case, you received records from 15 Humboldt General Hospital; is that right? 16 Α. Yes. 17 Renown? Q. 18 A. Yes. 19 Q. Did you receive the death certificate? 20 A. Yes. 21 0. Okay. When you first received the 22 materials, you knew that this is patient passed; 23 true? 24 Α. Yes. Q. When hindsight bias? 25

Page 91 It is the outcome after an event changing 1 Α. 2 the -- one's perception of the circumstances of an 3 event. 0. If you can turn, please, to Exhibit 9, 4 5 which are the medical records from Humboldt General 6 Hospital, and specifically page -- Bates stamp page 7 23? Which Exhibit number? 8 Α. 9 Q. Nine. Do you have that in front of you? I'm sorry. What do I have in front of me? 10 Α. Exhibit 6, page 23? 11 Q. 12 HEARING OFFICER HALSTEAD: And just to be 13 clear, there's two Exhibit 6 because one is 14 respondent's and is the IC's, and so the reference 15 is to the IC's Exhibit 6. 16 MS. HUETH: Okay. And for, I think, all 17 of my questions, but if not, they're from the 18 Investigative Committee's Exhibit s. 19 HEARING OFFICER HALSTEAD: Thank you. 20 MS. HUETH: Thank you. I should have 21 clarified. 2.2 THE WITNESS: I have Exhibit 6. Which 23 page? 24 BY MS. HUETH: 25 Bates stamp NSBME 023? Q.

Page 92 I have it. 1 Α. 2 Q. Okay. And according to this document, the 3 paramedics got to the patient at 15:57; correct? 4 Α. Yes. That's 3:57? 5 0. 6 Α. Yes. And the parents -- the patient's parents 7 0. 8 reported that the patient was bit about an hour ago; 9 true? 10 Yes. Α. 11 Q. So around 2:57? 12 Α. Yes. 13 Q. The paramedics also document that the 14 patient's vitals were obtained and monitored during 15 transport to Humboldt General Hospital; correct? 16 Α. Yes. 17 Is there any document ation of the blood Q. 18 pressure taken by the paramedics on route to 19 Humboldt General Hospital? 20 Α. No. 21 0. However, the paramedics do document that 22 the patient's condition upon arrival to the 23 emergency department was improved; correct? 24 I'm reading. Α. 25 Sure. And it's in the middle -- still on Q.

Page 93 1 page 23, in the middle of the page, there's a box 2 entitled "Condition at Destination." 3 Α. Yes, I see that. 4 Q. And it says "improved"? 5 Α. Yes. 6 Q. If you can turn to page 76, please, still 7 within that same Exhibit? Α. 8 Yes. 9 Q. The nurse's triage assessment, which, by 10 the way, what is a triage? 11 Α. That's an initial assessment of the 12 patient upon arrival to a setting of care, intended 13 to identify problems and address them in a fashion 14 expedited appropriate for the patient's illness. Q. And the nurse's triage assessment states 15 16 that the patient's skin color is normal for 17 ethnicity; true? 18 Α. Yes. 19 Q. It says that the temperature is warm; 20 correct? 21 Α. Yes. 22 Q. If you go to page 78. There's the a 23 pediatric coma assessment, do you see that? 24 Yes. Α. Q. And then above that, there's a 25

Page 94 1 neurological assessment, do you see that? 2 Α. Yes. The patient is noted to be alert? 3 Q. 4 Α. Yes. Okay. Earlier, you testified that you 5 0. 6 provided a number of articles to the Investigative 7 Committee in support of your opinions in this case; 8 is that true? 9 Α. Yes. And if you turn to Exhibit 11, is this one 10 0. 11 of those article that you provided? 12 Α. Yes. 13 Q. And you testified earlier, did you not, 14 that this article establishes the standard of care? It is an article that addresses the 15 Α. 16 standard of care, not the only. 17 Okay. And this article was published Q. 18 September 14, 2020; is that right? 19 Α. Yes. Okay. But you testified earlier, did you 20 Q. 21 not, that it's your belief that earlier versions 22 were essentially identical to this one? In the major ways that affects this 23 Α. 24 patient's treatment, yes. 25 Okay. Then why didn't you provide a copy Q.

Page 95 1 of the article that would have been applicable at 2 the time of this patient's treatment? 3 Α. I did through the Wilderness Medical 4 Society article published in 2015. We're not taking about that article, 5 0. 6 Doctor. We're on Exhibit 11, which is a clinical 7 practice statement. A. I don't have an article -- I don't have a 8 9 previous version of this article, nor do I know if a 10 previous version of this article was published prior 11 to the -- May 9 of 2020. 12 Q. Well, do you know if a previous version 13 was published before September 14, 2020? I don't know that. 14 Α. Okay. Then how do you know that -- wait, 15 Q. 16 let me take a step back. 17 You don't even know if there was a prior 18 version; true? Α. That's correct. 19 Okay. But in any event, number one, under 20 Q. 21 the executive summary entitled "How should patients 22 with potential snake envenomation be assessed?" Do 23 you see that? 2.4 Α. Yes. And it goes on to say "All patients with 25 Q.

Page 96 1 possible snakebite envenomization should have the 2 following laboratory tests performed." Do you see 3 that? 4 Α. Yes. The first one is a complete blood count; 5 0. 6 is that right? 7 Α. Yes. Dr. Lasry ordered a complete blood count, 8 Q. 9 didn't he? A. I'm going to look back at his notes and 10 11 make sure I answer your question accurately. 12 Yes. 13 Okay. It also says "A basic metabolic Q. 14 profile," and on page 55, Dr. Lasry actually ordered 15 a comprehensive metabolic panel; true? 16 A. True. 17 So just more tests than would be done in a Q. 18 base metabolic profile; is that right? That's right. 19 Α. Okay. The next test that should be 20 Q. 21 ordered is the PT, the prothrombin time, and 22 Dr. Lasry ordered that, did he not? 23 Α. Yes. The next one fibrinogen. Dr. Lasry 24 0. 25 ordered a fibrinogen; true?

Page 97 I don't see it document ed in his note. 1 Α. 2 I'm looking through other records right now to see 3 if it's was drawn but just not document ed in his 4 physician note. 5 0. Sure. Why don't you turn to page 53, 6 which is the orders. Yeah, that was drawn. 7 Α. 8 So a fibrinogen was ordered and drawn; Q. 9 true? 10 Yes. Α. 11 And then creatin kinase, CK --Q. 12 Α. Yes. -- that was also ordered and drawn; true? 13 Q. 14 Α. Yes. So Dr. Lasry ordered the appropriate labs, 15 Q. 16 at least according to this article; correct? 17 Α. Yes. Another article that you produced, and 18 Q. 19 it's in Exhibit 10, and you talked a little bit 20 about this earlier, entitled "Normal Ranges of Heart 21 Rate and Respiratory Rate in Children from Birth to 22 18 years. A Systemic Review of Observational 23 Studies"; true? 24 Yes. Α. Okay. And at least according to this 25 Q.

Page 98 1 article, the mean respiratory rate of a child of the 2 same age Patient A, so three years old, the mean 3 respiratory rate is about 26; is that right? 4 Α. I'm looking. 5 Yes, that's right. And --6 Q. I'm sorry. "Median" not the "mean." 7 Α. Thank you. The median. I apologize. 8 Q. 9 Median being the middle, the fiftieth 10 percentile? 11 Α. Correct. 12 Q. And there's a number of vital signs 13 document ed within the patient's medical records, in 14 which her respiratory rate is between 24 to 26; 15 true? I believe that's true, but I'm not looking 16 Α. 17 at that Exhibit we were looking at earlier right now 18 that had the various respiratory rates document ed, 19 but I believe that is accurate. Sounds about right. 20 Q. 21 It still with this article, a heart rate 22 of 150 in a patient that is three years old would be 23 in what percentile? 24 A. Greater than the ninety-ninth percentile. Do you have the table in front of you? 25 Q.

Page 99 Yeah. That's referencing -- let's see 1 Α. 2 here, figure 4 on page 127 of Exhibit 10. Q. When you provided this article to the 3 4 Investigative Committee, was it your goal -- or did 5 you feel like the article was helpful in 6 establishing a normal range of heart rate, 7 respiratory rate and other vitals of a patient of 8 three years old? My intent was to establish what is normal 9 Α. 10 and what is outside normal range for heart rate in 11 proving this article. 12 Q. Okay. For a patient such as the patient 13 we're talking about in this case, Patient A? 14 Α. Correct. On page -- the same article, if you can 15 Q. 16 turn to page 122? 17 Α. Um-hum. 18 Q. And excluded from this study, though, were 19 measurements taken at elevation greater than 1,000 20 meters above sea level; true? 21 Α. Yes. 22 Q. How many meters above sea level is 23 Winnemucca where Humboldt General Hospital is 24 located? A. I don't know. 25

Page 100 Would you have any reason to dispute that 1 0. 2 it's over 1,300 meters above sea level? 3 Α. No. ο. And at least based upon this criteria, if 4 5 I'm correct that Winnemucca is situated at more than 6 1,300 meters above sea level, a patient would be 7 excluded, at least under this study? Α. 8 Yes. Do you find it to be surprising that a 9 ο. 10 child who is in the emergency department after a 11 stressful event has an elevated heart rate? 12 Α. No. 13 ο. Am I understanding your criticisms 14 correctly that one of your criticism is that 15 Dr. Lasry did not document that the heart rate was 16 tachycardic? 17 Α. One of them. Okay. But it is documented -- is it not? 18 0. 19 -- in the medical records that the heart rate was 20 tachycardic. 21 Α. Not in his physician note. 22 Q. That wasn't my question. 23 My question was: Is it document ed in 24 patient's medical records from Humboldt General 25 Hospital emergency department that the heart rate

Page 101 1 was tachycardic? 2 A. I would have to review them entirely to 3 see if there is a Humboldt nurse or other assessment 4 that made such a distinction. 5 0. Sure. Turn to page 74. A. Page 74. Tachycardia under the general 6 7 subjective vital signs, document ed by Cristal 8 Fimbre Espinosa. Okay. So you see that it's document ed in 9 Q. 10 tachycardia? 11 Α. Yes. 12 Q. If you can turn back to page 72, which you 13 were discussing with Mr. Shogren? Let me know when 14 you're at that page. 15 A. I'm at that page. 16 Next to the peripheral pulse rate and the Q. 17 BPM, there's a reference range. Do you see that? 18 Α. Yes. 19 Q. The reference range is 70 to 100. Do you 20 see that? 21 Α. Yes. 2.2 HEARING OFFICER HALSTEAD: Sorry. Can you 23 redirect to that page again, please. MS. HUETH: Yep. 72. 24 25 HEARING OFFICER HALSTEAD: Thank you.

1 BY MS. HUETH:

2 Q. And the reference range is 70 to 100. Do 3 you see that?

4 A. Yes.

5 Q. But, based upon your testimony for a 6 three year old, the, I guess, reference range goes 7 up to 140; is that true?

8 A. Reference range and percentiles are not9 the same thing.

10 Q. Do you have any information to indicate 11 that this reference range if for a pediatric patient 12 and not an adult patient?

13 A. I don't have any information on that14 either way.

Q. When you told Mr. Shogren that the little h was indicating that this pulse rate was high for a patient of this age, do you have any information to high is actually adjusted for a pediatric patient?

20 A. No.

21 Q. Okay.

THE REPORTER: Ma'am. I'm so sorry to interrupt. I just got a prompt that says I am now the host. And I -- yeah. I'm not sure if something -- I didn't touch anything, but apparently I'm the

Page 103 1 host now. And the investigator wants to be let in. 2 HEARING OFFICER HALSTEAD: You better let 3 her in and see what happens. 4 THE REPORTER: Okav. 5 HEARING OFFICER HALSTEAD: Maybe she'll 6 take it back from you. We may have to log out and 7 log back in. 8 Mr. Shogren, just let us know when that's 9 resolved, please. 10 While we're waiting, Ms. Hueth, I'll just 11 note that it's your cross-examination, and so I will 12 let you direct the flow that works for you. It's 13 nearly lunchtime, and I don't want to direct that on 14 your behalf, so you let us know when a good time 15 would be to break. 16 I mean, I'm happy to break any MS. HUETH: 17 time. The only thing is -- I don't know if the 18 doctor has time limitations that he needs to be done 19 by a certain time. Otherwise, I'm happy to defer to 20 the group about when to take a break. 21 HEARING OFFICER HALSTEAD: Well, and 22 Mr. Shogren, I don't know if you're planning to 23 retain Dr. Glissmeyer for potential rebuttal and not 24 release him. I don't know what all your 25 considerations are.

Page 104 THE WITNESS: I can just speak for myself 1 2 and say that I do not any obligations on the rest of 3 this working day today. 4 MR. SHOGREN: Yes. And I just want to say 5 it looks like the technical difficult is fixed. HEARING OFFICER HALSTEAD: Okay. So, 6 7 Ms. Hueth, again, I'm going to defer you because I 8 don't want you to stop in a spot that works for you, 9 given you're in the middle of your cross. 10 MS. HUETH: We've had a brief break, and 11 this is good as a time as any, if everyone is ready 12 for a lunch break, I'm happy to do so now. 13 HEARING OFFICER HALSTEAD: If you had to 14 go to another break point, how long do you think you 15 would be? 16 MS. HUETH: Maybe 30 minutes. HEARING OFFICER HALSTEAD: Dr. Glissmeyer, 17 18 would you be fine going another 30 minutes. 19 THE WITNESS: Yes. 20 HEARING OFFICER HALSTEAD: Okay. And 21 Ms. Court Reporter? 2.2 THE REPORTER: Yes. 23 HEARING OFFICER HALSTEAD: Okay. I just 24 want to get as much under our belt as possible. 25 It's still -- it's not quite noon. And then we

Page 105 1 didn't start at 8:30, and we started later than 2 that. 3 So with that, Ms. Court Reporter, could 4 you please read the last question and answer and we 5 will go from there. THE REPORTER: I was afraid you were going 6 7 to ask me that. I was distracted by all the 8 prompts. So what I am going to do is play them for 9 you. If you could just stand by one second. (Audio played.) 10 11 HEARING OFFICER HALSTEAD: Go ahead, Ms. 12 Hueth. 13 MS. HUETH: Thank you. 14 BY MS. HUETH: Dr. Glissmeyer, turning now to Dr. Lasry's 15 Q. 16 documented physician exam, which is on Bates stamp 17 NSBME 034. 18 Α. Yes. 19 Q. Dr. Lasry did perform a physician exam of 20 the patient; true? 21 Α. It's document ed. 22 Q. And at least according to his 23 document ation of time of his examination, the 24 patient did not appear to be in distress, and she 25 was asking for juice?

1 A. Yes.

2 Q. Dr. Lasry also documented his examination 3 of left knee; true?

4 A. Yes.

Q. And it was noted that there was no
6 significant edema, no streaking, no skin necrosis,
7 no peripheral edema, and then goes on to describe
8 other negative findings; true?

9 A. At that time, yes.

10 Q. Did you see anything in the medical 11 records to indicate that upon arrival to the 12 emergency department at Humboldt General Hospital 13 that the patient had muscle weakness?

14 A. No.

15 Q. Did you see anything in the medical 16 records to indicate that upon arrival to Humboldt 17 General Hospital that the patient was unable to move 18 her left leg?

19 A. No.

20 Q. Do you feel like the records were legible?
21 A. Yes.

Q. At any time while the patient was in the
emergency department at Humboldt General Hospital is
it documented that she had muscle weakness?
A. No.

Page 107 It's also not document ed that did not, 1 2 such as any measurement of her negative inspiratory 3 force or assessment of her strength. ο. And that's true of the documentation by 5 the nurses as well? A. I don't -- I'm looking right now. I don't 6 7 recall if the document ation about the patient's leg 8 movement was by nurses or by other providers, such 9 as the EMS providers later or someone else. While the patient was in the emergency 10 0. 11 department at Humboldt General Hospital, did you see 12 any document ation by anyone that the patient was 13 unable to move the leg? 14 Α. I don't think so, no. In a patient with systemic envenomization, 15 Q. 16 would you expect to see low platelets? 17 A. It is all depends when the labs were 18 drawn. It's a time-dependent thing. 19 Q. Can we please turn to Exhibit 11, which is 20 another one of the articles you provided. 21 Specifically, Bates stamp page 130? 2.2 A. I'm there. Q. And under --23 A. -- clarifying question? 24 25 Excuse me? Q.

Page 108 Can I just ask a clarifying question? 1 Α. 2 Q. Sure. You're referring to this exhibit, yet 3 Α. 4 earlier, you pointed out that document was written 5 after the evaluation by Dr. Lasry. HEARING OFFICER HALSTEAD: I imagine she 6 7 will put that in context in her question. 8 Otherwise, can be an argument as to weight that 9 Mr. Shoqren can raise. 10 THE WITNESS: Okay. Thank you. 11 Go ahead. 12 BY MS. HUETH: 13 And, Doctor, let me try and ask a Q. 14 clarifying question: Was this an article that you 15 found and you provided to the Investigative 16 Committee? 17 Α. Yes. And why did you do that? 18 Q. 19 Α. To support my recommendation 20 that antivenom should have been administered. 21 0. All right. So you felt like this article 22 and the opinions contained therein support your 23 opinions with respect to this patient's care; true? 24 Yes. Α. Okay. And so it's says "Administer 25 Q.

Page 109 1 antivenom for any of the following," and then the 2 third bullet point says "Significant or progressive 3 hematologic toxicity, abnormalities that are 4 particularly worrisome, include fibrinogen of less 5 than 50 milligrams or platelets less than 50,000." 6 Did I read that correctly? 7 Α. Yes. And this patient's platelets were normal; 8 Q. 9 true? 10 Α. True. Her creatinine level was also normal? 11 Q. 12 Α. Yes. 13 And her CK, which was another one of the Q. 14 labs, the creatin kinase, that was also normal? 15 Yes. Α. There was no evidence rhabdomyolysis? 16 Q. 17 Not at that time of the lab, no. Α. Q. When it has the lab sample collected? 18 Let's see. The creatin kinase was 19 Α. 20 collected -- I know it was ordered at 16:31 hours on 21 May 9. It's not entirely clear to me exactly when 22 it was collected, but sometime after that order. 23 0. If you turn to Exhibit 6, page 68, Bates 24 stamp page 68. 25 Thank you. Α.

Page 110 So, yeah, so all these labs, the CBC, the comprehensive metabolic panel, the coagulation test, PTINR, PTT, collected at 17:00.

4 Q. So five o'clock?

A. Yes.

5

6 Q. Several hours after the snakebite; true? 7 A. I wouldn't say several. The snakebite --8 let's see. 3:56 was when the EMS providers arrived 9 on the scene. 2:56 was the time estimated the 10 patient was bit. So between 2:56 and 5:00 P.M., so 11 two hours and four minutes.

12 Q. Okay. And going back to Exhibit 11, the 13 article that you provided because you felt it 14 supported you opinions, on page 130. If you can let 15 me know when you have that in front of you.

16 A. I have it.

Q. Under what I just read, it goes on to say Minimal hematologic" -- excuse me. "Lab abnormalities, e.g., isolated fibrinogen levels between 100 and 150, in an otherwise well-appearing patient, warrant serial testing, but not treatment with antivenom." Did I read that correctly?

23 A. Yes.

Q. If we can turn, please, to Exhibit 12?
A. Yes.

Page 111 Q. Is that an article that you also provided 2 to the Investigative Committee?

3 A. Yes.

Q. Did you provide this article because you
5 felt like it supported your opinions in this case?
A. Yes.

Q. The Wilderness Medical Society practice
8 guidelines, do they establish the standard of care
9 for an emergency medicine doctor, in your opinion?
10 A. They are one of the resources that
11 establish the standard of care.

12 Q. Within this document, on page 139, there 13 is the table, table 3 is entitled "Laboratory and 14 Diagnostic Testing for Snakebite Evaluation." Do 15 you see that?

16 A. Yes.

Q. And it says "Fibrinogen most specific for l8 coagulopathy. Important to obtain measured, but not l9 calculated level." Did I read that correctly?

20 A. Yes.

21 Q. What's coagulopathy?

A. That's the blood either not clotting or23 clotting too readily.

Q. And what is the significance of that when
25 evaluating a patient after a snakebite?

Page 112 Oh, it's one of many ways in which their 1 Α. 2 body systems can be deranged? And what significance, if any, does 3 Q. 4 whether or not a patient has signs of coagulopathy 5 have after a snakebite? Whether they have it or not doesn't mean 6 Α. 7 they were bitten or not bitten. Does it give you any information as to 8 Q. 9 whether there's systemic envenomization occurring? A. Could be one of the indications, but it's 10 11 not the only indication of systemic envenomization? 12 Q. Sure. Did you think I was asking if it 13 was the only indication of systemic envenomization? I wanted to be clear of what my answer 14 Α. 15 was. 16 This patient's fibrinogen level was Q. 17 normal; was it not? 18 Α. Yes. 19 Q. Okay. Right above that, with respect to 20 the PTINR, PTT is says "Evaluate for coagulopathy 21 (INR is most useful)." Did I read that correctly? 2.2 Α. Yes. 23 Q. And this patient's INR was also normal; 24 true? 25 Α. Yes.

Page 113 Just before, maybe, we break for lunch, if 1 0. 2 you turn to the next page, which is NSBME 140, and 3 on the right side of that page, the right column, 4 maybe about half way down in this article that you 5 provided because you felt it was helpful, it says 6 "All patients receiving antivenom should be admitted 7 to the hospital for further observation, maintenance 8 antivenom dosing, and repeat laboratory testing 9 until abnormalities resolved"; true? 10 Α. Yes. 11 Q. "Manufacturer recommended maintenance 12 dosing includes two vials of antivenom every 13 six hours for three consecutive doses"; true? 14 Α. Yes. So that would be over the course of 15 Q. 16 18 hours; true? 17 Α. Yes. 18 Okay. Q. 19 MS. HUETH: For me, this is a good time to 20 break. 21 HEARING OFFICER HALSTEAD: Okay. Is 22 everyone fine with that? 23 MR. SHOGREN: Yes. 24 HEARING OFFICER HALSTEAD: Okay. And how 25 long would everyone like to break? At least an

1 hour? Do you need more?

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7

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14

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MS. HUETH: I don't need more, but I was 3 going to request that I can -- my client and I can 4 rejoin the Zoom, but from my office. I'm just 5 having a little trouble hearing with the laptop here 6 that the Board generously set up for us. HEARING OFFICER HALSTEAD: I want to make 8 sure that you get lunch, that you get refreshed, and 9 that you have travel time. So what works for you 10 for a time to reconvene? MS. HUETH: No more than an hour and a 12 half would be needed more me. And I could even do 13 less, if that's everyone's preference. HEARING OFFICER HALSTEAD: So right now 15 an hour would be -- a little more than an hour would 16 be 1:15. Would 1:30 be more helpful? MS. HUETH: It would for me, as long as 18 it's okay with everybody. HEARING OFFICER HALSTEAD: Okay. I see 20 it's good with Dr. Glissmeyer. Mr. Shoqren? MR. SHOGREN: That's fine.

23 HEARING OFFICER HALSTEAD: Okay.

Ms. Smith? 24

25 THE REPORTER: Just tell me when to be 1 back, and I'll be here.

2 HEARING OFFICER HALSTEAD: Okay. We'll3 back at 1:30, everyone. Thank you.

4 (Lunch recess from 12:08 P.M. to 1:30

5 P.M.)

6 HEARING OFFICER HALSTEAD: We're going 7 back on the record. This is case number 23-29251-1, 8 In the Matter of Charges and Complaint Against Jason 9 Howard Lasry, M.D. We have left off with the 10 cross-examination of Dr. Glissmeyer, who is present 11 and remains under oath. All parties are present. 12 We've had a lunch break. It is now 1:31, and we 13 will the proceedings.

14 Ms. Heuth, you may continue.

15 MS. HUETH: Thank you.

16 BY MS. HUETH:

Q. Doctor, over the lunch break, did you have an opportunity to speak with Mr. Shogren regarding your testimony?

20 A. I have not had any communication with him. 21 Q. If we can turn back to Exhibit 6, which is 22 the Humboldt General Hospital medical records, and 23 specifically page 35, please. Let me know when 24 you're there.

25 A. I'm there.

Page 116 Dr. Lasry, you would agree, assessed the 1 0. 2 patient on multiple occasions, at least as far as 3 his document ation; true? 4 Α. Yes. 5 0. And when he reassessed the patient, he 6 noted that there was increasing edema and swelling 7 at the site of her envenomization, and there's 8 approximately 25 percent more edema in the radius of 9 circle of swelling; true? 10 Α. Yes. The patient remained -- excuse me. Let me 11 Q. 12 take a step back. 13 Dr. Lasry notes that the patient is doing 14 well, she's watching a movie, she is awake and 15 talking; true? 16 That's what's stated. Α. Okay. You're not aware of any information 17 Q. 18 to suggestion that that's false, are you? 19 Α. No. On the same page, it's document ed that 20 Q. 21 Dr. Lasry had a conversation with Dr. Thorp 22 regarding admitting the patient; true? 23 Α. Yes. And that Dr. Thorp was not comfortable 24 ο. 25 accepting admission and preferred that the patient

Page 117 1 be transferred to a facility with a higher level of 2 care; true? 3 Α. Yes. 4 ο. Okay. You're not of the opinion -- are 5 you? -- that Dr. Lasry didn't think this patient 6 would ever need antivenom. 7 Α. No. Because Dr. Lasry document that, while he 8 Q. 9 did not think antivenom indicated at that time, it 10 may be required or indicated at a future time; 11 correct? 12 Α. Correct. 13 Ultimately, it's Dr. Thorp's decision Q. 14 whether or not to accept admission of this patient; 15 true? 16 A. Yes. Once Dr. Thorp declines the admission, 17 Q. 18 Dr. Lasry then calls the emergency department 19 physician a Renown; correct? 20 Yes. Α. 21 0. And we heard the recording earlier, and 22 Dr. Lasry told the ER physician at Renown that he 23 was on the fence regarding the administration of 24 antivenom. Do you recall that? 25 Α. Yes.

Page 118 But that he did not think the 1 0. 2 administration of antivenom was an emergency at that 3 time; true? 4 Α. Yes. And during that conversation between what 5 0. 6 we heard via the audio recording and what's 7 document ed at least, the ER physician at Renown did 8 not battery express any concern or suggest that 9 antivenom be started before the patient's transfer; 10 true? 11 With the information that physician was Α. 12 presented, true. 13 Well, did you hear in that recording the Q. 14 physician ask for more information? 15 Α. No. 16 Did the ER physician at Renown ask for the Q. 17 patient's vital signs? 18 Α. No. 19 Q. Did the ER physician at Renown express 20 concern about transferring the patient via ground 21 ambulance as opposed to air? 2.2 Α. No. 23 0. So, at least based upon the document ation 24 as well as what we've heard, there's evidence that 25 Dr. Lasry spoke with two other physicians regarding

Page 119 1 this patient while she was in the emergency 2 department at Humboldt General Hospital; true? 3 Α. True. 4 ο. Ultimately, consent to transfer the 5 patient via air belonged to the patient's mother, 6 given her age; is that true? 7 Α. Yes. 8 If you can please turn to page 27. Let me Q. 9 know when you're there. Α. Yes, I'm there. 10 11 This is the Physician's Certification and Q. 12 Patient Transfer Form; correct? 13 Α. Yes. And on the left side, maybe a third of the 14 0. 15 way down, do you see the box where it says "Family 16 notified"? 17 Α. Yes. And then below that, it says "Family 18 Q. 19 going," and "Y" is circled. Do you see that? 20 Yes. Α. 21 0. Does that indicate to you that the family 22 was going to go in the ambulance with the patient 23 during transfer? 24 Yes. Α. The box underneath, that the first line is 25 Q.

Page 120 1 "allergies." Do you see that? 2 Α. Yes. 3 Q. And then at the bottom of the box, it's 4 signed by a nurse; true? Α. 5 Yes. Would this indicate to you that the nurse 6 Q. 7 fills out at least this portion of the form? 8 A. I don't know about filling it out. 9 Responsible for its content, I would say yes. 10 That the nurse is responsible for the 0. 11 content of this box of the form? 12 Α. Yes. 13 Q. Okay. And there's no blood pressure 14 noted? 15 A. Yes, there's not. Temperature, 36.6, is that normal? 16 Q. 17 Yes. Α. Her oxygen saturation of 96 percent, 18 Q. 19 normal? 20 A. Yes, normal. 21 Q. And what was that patient's pain scale? 2.2 A. Zero. 23 Q. On a scale of zero to ten, ten being the 24 highest? 25 Α. Yes.

Page 121 Q. If you can turn to Exhibit 12, page 139, 2 and let me when you're there.

3 A. I am there.

Q. On the left column of that page at the 5 bottom, the last sentence in the paragraph states 6 "From minor envenomization, patients should be 7 observed for 12 to 24 hours, and have repeat 8 laboratory studies every four to six hours." Did I 9 read that correctly?

10 A. Yes.

11 Q. Then it goes on to state "Patients with 12 moderate to severe envenomization should receive 13 antivenom, be admitted to the hospital, and have 14 repeat laboratory studies within four hours hours of 15 the initial set." Did I read that correctly?

16 A. Yes.

Q. But at the time -- and the reason that the 18 patient had to be transferred, in part at least, was 19 because Dr. Thorp did not accept admission of 20 patient; true?

A. I think that's part of the reason, yes. Q. Well, and at least according to what we just read, even if Dr. Lasry felt antivenom was indicated, the patient would need to be admitted; true? A. Yes.

1

2 Q. Do you have an understanding or any 3 information to suggest that Humboldt General 4 Hospital had the capability or the resources to keep 5 this patient in the emergency department for 6 24 hours to monitor her and re-dose antivenom, if 7 necessary? 8 Α. No. 9 ο. And, Doctor, you're not offering the 10 opinion that if a toxicologist was consulted, it 11 would have led to a different result in this case, 12 are you? 13 Α. I am offering that opinion. Q. And what do you base that on? 14 Based on the criteria to give antivenom in 15 Α. 16 patients with evidence of systemic toxicity and 17 local swelling. And earlier you, in answering questions by 18 0. 19 Mr. Shogren, testified that the evidence of systemic 20 envenomization in this case was the tachycardia; is 21 that right? 2.2 Α. Yes. The hypotension? 23 Q. 24 Yes. Α. And the progression of the swelling? 25 Q.

1	Α.	Yes. Page 123
2	Q.	Okay. While the patient was in the
3	emergency	department at Humboldt General Hospital,
4	there's no	o evidence of airway swelling, was there?
5	Α.	No.
6	Q.	No evidence of respiratory depression?
7	Α.	No.
8	Q.	No evidence of respiratory compromise?
9	Α.	No.
10	Q.	No evidence of weakness in breathing?
11	Α.	It was not tested.
12	Q.	And the test for that was called what,
13	again?	
14	Α.	Negative inspiratory force.
15	Q.	And how's that tested?
16	Α.	With a simple hand-held device that you
17	suck in wh	nile putting your mouth around. And if you
18	can suck :	in about 20 centimeters of water, you have
19	normal st	rength of inspiration.
20	Q.	Do you have any information to suggest
21	whether or	r not in the emergency department at
22	Humboldt (	General Hospital on May 9th, 2020, that
23	they had t	the device to test the negative inspiratory
24	force?	
25	Α.	No.

Page 124 No document ation that the patient was 1 0. 2 having to use her accessory muscles to breathe, is 3 there? 4 Α. No. I will point out that patients with 5 6 respiratory weakness don't have evidence of working 7 hard to breathe. In the medical records from the emergency 8 0. 9 department at Humboldt General Hospital, there's no 10 evidence that the swelling progressed past the 11 patient's ankle, is there? 12 Α. So it progressed on to the thigh and lower 13 leg. I'm not sure what you mean by past their 14 ankle. Do you mean on to their foot? Going down past that ankle? 15 Q. No. No, I don't think there is. 16 Α. Okay. Earlier you testified -- correct me 17 Q. 18 if I'm wrong -- that the development of redness or 19 bruising can vary among patients? 20 A. Correct. 21 0. And it can take hours after a snakebite 22 for that bruising to develop? 23 A. Correct. And earlier you testified that mottling is 24 ο. 25 color changes to the skin; true?

Page 125 1 Α. Correct. 2 Q. Turning back to the medical records 3 contained within Exhibit 6, and specifically 4 page 79. 5 Α. Okay. 6 Q. According to this note, the patient's care 7 was turned over to paramedics at 18:24; true? 8 Α. Yes. 9 Q. And if you go to page 84. Are you there? Yes. 10 Α. 11 Q. Okay. Thank you. 12 The paramedics document that the patient 13 was alert and acting normal for her age; correct? 14 Α. Yes. That she was speed to her mother with 15 Q. 16 clear sentences, with no signs of respiratory 17 distress; true? 18 Α. Yes. The skin assessment, it says "skin," and 19 Q. 20 there's a negative sign. Do you see that? 21 Α. Yes, I see that. 22 Q. Okay. Do you understand that to mean that 23 there was no signs, with respect to the skin 24 assessment, that it was cold or cyanotic? 25 So, that indicates to me that, except for Α.

Page 126 1 what is document ed in the extremities, that is 2 true. Okay. Well, the subcategory specifically 3 0. 4 relates to skin; true? 5 Α. Yes. And then there's a negative sign, and then 6 Q. 7 it goes on to say "negative, hot, jaundice, 8 lividity, mottled, pale"; correct? Yes, that's what it says. 9 Α. Earlier you testified that hypotension in 10 0. 11 a patient of this age, three years old, looking at 12 top number is when the top number is below 70; is 13 that right? In a child this age, below 76. 14 Α. Below 76. 15 Q. At least according to paramedics, the 16 17 potassium was discontinued due to hypotension; true? 18 Α. Yes. 19 Q. And then on page 83, three we see in the 20 blood pressure goes up at 19:38. Do you see that? 21 Α. Yes. 22 Q. Now the top number is above 76, so it's no 23 longer hypotensive; true? 24 That's right. Α. And remains above 76 for almost two hours 25 Q.

1 until 21:17; true?

2 A. Yes.

3 Q. Okay. You mentioned that your 4 interpretation at least of the paramedics' skin 5 assessment is it's negative, except for what's 6 document ed in the extremities portion; is that 7 right?

8 A. Yes.

9 Q. Okay. And you read this into the record 10 earlier, but in the extremities, it starts with 11 "Patient had two puncture marks on the anterior left 12 knee." Do you see that?

13 A. Yes.

Q. Okay. And then it goes on, skipping a few sentences ahead, to say "Currently, swelling was extended to the entire extremity. The patient's rupper leg was approximately three times the size of sopposite leg." Did I read that correctly?

19 A. Yes.

Q. The fact that the upper leg was
20 Q. The fact that the upper leg was
21 document ed as being three times the size of the
22 opposite leg by the paramedics, did you see anything
23 document ed by the nurses at Humboldt General
24 Hospital that reflected that?
25 A. I saw it document ed by the nurses --

Page 128 1 well, increasing swelling. Nothing specifically by 2 the nurses as three times the size of the opposite 3 leg, but increasing swelling is document ed by the 4 nurses. As also by Dr. Lasry's note. 5 0. On the next page, page 85, you were asked 6 to read into the record, in the third paragraph 7 under the narrative, "ER RN noted that the patient's 8 leg had swollen to three times the size while in the 9 ER." Do you recall reading that into the record? Yes. This is from the EMS note. 10 Α. Right. And as we just discussed, there's 11 Q. 12 nowhere where an ER nurse document s that leg had 13 swollen to three times the size; true? 14 Α. In those words, true. Would you agree that the standard of care 15 Q. 16 is what a reasonable physician would do in similar 17 circumstances? 18 Α. Yes. 19 Q. Would you agree that whether or not a 20 doctor complied with the standard of care is 21 determined prospectively, not retrospectively? 2.2 Α. That question doesn't make sense to me 23 because you can't determine what someone's actions 24 were before those actions happen. 25 That's fair enough. Q.

Page 129 Would you right agree that the standard of 1 2 care should be determined without using hindsight? I think that the actions of a physician 3 Α. 4 should be judged independent of the final outcome. And the actions of the physician should be 5 0. 6 judged based upon the information that the physician 7 had available to him or her at the time of their 8 care? Yes. Yes, with a caveat, if I could add 9 Α. 10 that caveat, that you actually obtain the 11 information you should on a patient you care for. 12 0. Sure. My point, though, is that the fact 13 that this patient had a terrible result, that the 14 patient -- it was devastating, we'd all agree, that 15 the patient died, that the fact that the patient 16 died, alone, does establish that Dr. Lasry breached 17 the standard of care; would you agree with that? 18 Α. Absolutely. 19 Q. Okay. If you could turn to Exhibit 12? 20 Yes. Α. 21 This is the article you provided from 0. 22 Wilderness Medical Society; correct? 23 Α. Yes. And this was published in 2015; correct? 24 Q. 25 Correct. Α.

Page 130 Has there been any updates or revisions to 1 0. 2 this since 2015? 3 Α. There wasn't at the time that I looked 4 when reviewing this case. I don't know about since 5 then. So, not at least through 2021, I think, or 6 2022. Had you ever seen this article before you 0. 7 8 were working on this case? I had, yeah. This is one of the articles 9 Α. 10 reviewed in some teaching that I did, just informal 11 teaching with our fellows about pit viper 12 envenomization in our emergency department. 13 Are you member of the Wilderness Medical ο. 14 Society? 15 Α. No. On page 132, under the introduction, about 16 0. 17 half way through, it states "These guidelines should 18 assist in clinical decision-making, but a cookbook 19 approach is often insufficient, as each patient is 20 unique and may respond differently to therapeutics." 21 Do you agree with that? 2.2 Α. Yes. 23 0. It goes on to say "Physicians must use 24 their experience and frequently clinical assessments

25 to apply these recommendations to their individual

1 patients." Did I read that correctly?
2 A. Yes.

3 Q. If you can please turn to Exhibit 8, and 4 specifically page 100. Let me know when you're 5 there.

6 A. I'm there.

7 Q. The second to last full paragraph on that 8 page states: "In the ambulance, her mental status 9 worsened. She became obtended and was snoring, 10 which is unusual for her." Did I read that 11 correctly?

12 A. Yes.

Q. Did you see anywhere in the paramedics'
14 records reflecting that the patient was snoring?
15 A. Not in those words, specifically, but in
16 patients who are snoring when there's a possibility
17 of them having ineffective breathing, ineffective
18 breathing is an example of snoring breathing, or
19 rather snoring breathing is an example of
20 ineffective breathing.

And that's document ed on page 85 of 22 Exhibit 6, in the EMS records. So the exact same 23 word isn't used, but I think that's an immaterial 24 differentiator. Yeah.

25 Q. So -- do I understand you correctly? --

1 what you're saying is that snoring is a type of 2 effect ineffective breathing. 3 Α. Yes. 4 0. And ---- talking about -- to be really clear, 5 Α. 6 almost everyone snores -- right? -- and they snore 7 when they sleep. That's -- when you're talking about a 8 9 patient become obtended and was snoring, that's not 10 talking about a sleeping patient that can be 11 aroused. Obtended is unarousable, not any level of 12 restorable consciousness through stimulation. 13 So, it's imprecise language here, but this 14 is not referring to normal sleeping snoring. And, 15 therefore, that's why I'm concluding that. But I --16 yeah. Enough said. 17 The next sentence "Transport team Q. 18 initiated bag-mask ventilation for the last few 19 minutes" -- which is in quotation marks -- "of 20 transport." Do you see that? 21 Α. Yes. 22 Q. Do you have any reason to dispute that? 23 Α. No. You were asked a bit about Exhibit 9, 24 0. 25 which is the Certificate of Death?

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Page 133 When we referred to it earlier, we weren't 1 Α. 2 referring to Exhibit 9; we were referring to the 3 transcript of it in the Renown record in Exhibit 8, 4 but go ahead. Well, did I understand you correctly when 5 0. 6 you testified earlier that this was one of the 7 documents that you reviewed when you received 8 materials for this case? 9 Α. Yes. 10 Okay. And on the bottom right, box 0. 11 number 26, do you see that? 12 Α. Yes. 13 Q. It says "autopsy, yes"; correct? 14 Α. Yes. And then the next box "Was case referred 15 Q. 16 to coroner," it says "yes"; correct? 17 Α. Yes. 18 Q. Okay. The autopsy report, that is not 19 contained within any of the Exhibit s in front of 20 you, is it? 21 Α. No. 22 Q. Can you please turn the Exhibit 13, page 23 153, and let me know when you're there? 24 HEARING OFFICER HALSTEAD: Can you repeat 25 that again, please.

1			Page 134 MS. HUETH: Sure. Exhibit 13, page 153.
2			HEARING OFFICER HALSTEAD: Thank you.
3			THE WITNESS: I am there now.
4	BY MS	. HUI	STH:
5		Q.	And this is another one of the articles
6	that	you p	provided because you felt like it supported
7	your	opin	ions?
8		Α.	Yes.
9		Q.	This particular article by UpToDate
10	indic	ates	the literature review was current through
11	11 October of 2022; is that right?		
12		Α.	Yes.
13		Q.	And this topic was last updated August 1,
14	2022; true?		
15		A.	Yes.
16		Q.	So it was updated two years after
17	Patie	ent A	's care; correct?
18		A.	Yes.
19		Q.	But on page 153, it maybe the second to
20	last	full	paragraph, starts with "Additional
21	l observation experience suggests that untreated		
22	Crota	linae	e envenomization is rarely fatal in regions
23	where	cooj	perhead bites predominate, but can be life
24	or li	mb th	nreatening," and this it goes on to say
25	"For	exam	ple, an observational study of 81 adult and

Page 135 1 pediatric patients who were managed without 2 antivenom therapy after snakebite, 45 copperhead, 12 3 water moccasin, 10 rattlesnake, and 14 unknown, 4 reported no fatalities or long term morbidity"; 5 correct? I -- that is what it says. 6 Α. And, again, this was an article that you 7 0. 8 provided because you felt like it was helpful and 9 supported you opinions? Yes. The region where this occurred is 10 Α. 11 not a region where copperhead snakebites 12 predominate. 13 Sure. And I wasn't trying to suggest that ο. 14 it was, but that observational study at least 15 included ten rattlesnake bits, and the patient's 16 were managed without antivenom and none of them 17 died; correct? Yes. In that study, that's representing 18 Α. 19 about 15 percent or so percent of all the snakes, 20 but yes. 21 MS. HUETH: Just one moment. Those are 22 all the questions I have for now. Thank you. 23 HEARING OFFICER HALSTEAD: Mr. Shogren, 24 redirect? 25 MR. SHOGREN: Yes, just a couple follow-up

Page 136 1 questions. 2 REDIRECT EXAMINATION 3 BY MR. SHOGREN: Dr. Glissmeyer, your experience and 4 0. 5 knowledge, when should antivenom be administered to 6 snakebite victims? As early as the patient demonstrates one 7 Α. 8 of three things: evidence of systemic toxicity as 9 defined by abnormalities in vital signs that 10 persist, evidence of --11 HEARING OFFICER HALSTEAD: Just go slowly 12 because I want to -- it's hard for me to write all 13 these medical terms quickly. 14 THE WITNESS: I can stop and wait. 15 HEARING OFFICER HALSTEAD: Okay. So, 16 you're saying antivenom should be administered --17 THE WITNESS: As soon as possible. 18 HEARING OFFICER HALSTEAD: Okay. As soon 19 as possible when there are signs of? 20 THE WITNESS: Of one of three things. The 21 first being signs of systemic toxicity as evidence 22 by vital -- persistent vital sign abnormalities. 23 Number two -- this is any one of these three. 24 Number two, signs of progressive swelling as it 25 monitored progressively in the patient or over time.

Page 137 Four, the laboratory abnormalities that 1 2 we've discussed, particularly the things like the 3 low platelets, elevated INR, abnormal fibrinogen 4 level. There's others too. 5 BY MR. SHOGREN: And why should antivenom be administered 6 Q. 7 as soon as possible if one of those three things 8 presents itself? To prevent local tissue damage and 9 Α. 10 mortality. And just to be clear, could you turn to 11 Q. 12 page 153, which is Exhibit 13 of the Board's 13 Exhibit s here? 14 Α. Yes. First, could you read the very last 15 Q. 16 sentence of -- on page 153? This is the article 17 that you relied on; correct? One of them. 18 Α. 19 Q. Yes. In addition, the clinician should provide 20 Α. 21 pain control and monitor for and be ready to manage 22 hypotension, bleeding, rhabdomyolysis, elevated 23 tissue, and/or compartment pressures, and, rarely, 24 respiratory failure. In your opinion, why should the clinician 25 Q.

## 1 monitor for hypotension?

A. It's one of the cardinal vital signs that all patients should have monitored in the emergency department, measured at least once. Low blood pressure, especially in this setting, is a sign of shock and a sign of systemic toxicity.

7 Q. Just in general, in your experience, what 8 are some signs of shock or symptoms of shock?

9 A. So the earliest and most sensitive or the 10 ones that appear most early are elevated heart rate. 11 A later vital sign that becomes abnormal more later 12 is a low blood pressure.

Other clinical signs or examination Other clinical signs or examination finding signs of shock include poor profusion, which is measured multiple ways, including by how strong a patient's pulses are. If they're weak, that's concerning for poor profusion. Or their capillary refill, which is a physical exam measurement of how guickly the normal skin color returns after using the examiner's finger or thumb to push on the skin, have it turn a little lighter color because you're pushing the blood out of the skin, and then watching that come back. If that is prolonged longer than three or so seconds, that's concerning for poor profusion. And then other findings, such as -- would 2 be caused by poor blood flow through the body, such 3 as a patient being confused or sleepy. Such as a 4 patient having poor urine output and other findings 5 that would be found later on over monitoring of a 6 longer period of time than is usually done in the 7 emergency department.

8 And then other laboratory findings too 9 that are not usually abnormal at first, but become 10 more abnormal with time in settings of shock, like 11 the ones we reviewed in this case, like signs of 12 liver damage with liver enzyme elevations and many 13 other laboratory abnormalities that can only really 14 present over time.

15 Q. Thank you.

During the cross-examination there, there During the cross-examination there, there was mention of -- I think it was called "hindsight bias," which was discussed. In your own personal experience, your had mentioned previously during the direct examination you had administered antivenom to to multiple patients. When did you administer it -or how soon after from being bitten did you administer it?

A. That's fairly variable because some of these patients came to me within an hour of being bit, some it was multiple hours, but it was always
 within about an hour of the arrival at the emergency
 department in my care.

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Q. And in your own experience, to what extent 5 do, I guess, the setup of the emergency department, 6 how does that play into your consideration to 7 administer antivenom?

8 A. Antivenom can be administered in the most 9 rural critical access hospital, as well as it can in 10 a cursorary referral or botany referral medical 11 center like the one I practice in.

12 Q. Okay. And just to be clear, based on your 13 review of the records, while at Humboldt, who was 14 the patient's physician?

15 A. Jason Lasry.

16 Q. Is there any mention of any other 17 attending physicians?

18 A. I don't believe so.

19 Q. And what -- in your view of the records 20 here, what mention is there of the availability of 21 antivenom?

A. I don't believe that's mentioned in theserecords here.

Q. Based on your review of the records, how 25 is that -- sorry. I take that back, the question.

Page 141 And just to be clear, you touched on this 1 2 before, but if you turn to page 79 of the Board's 3 exhibits. 4 Α. I'm sorry. Which exhibit? 5 0. Page 79. In which exhibit number? Sorry? 6 Α. Q. I'm sorry. This is Exhibit 6. 7 8 Α. Thank you. I'm there. 9 Just in general, what are these notes 10 0. 11 here? These are --12 Α. These are notes of the patient from the 13 emergency department at Humboldt General Hospital, 14 on the date of visit May 9, that were document ed on 15 this page here by the nurse. 16 What do these notes say about the Q. 17 swelling? That it was increasing more and the 18 Α. 19 physician was notified of that. On three occasions. 20 Um-hum. And -- give me one second here. Q. 21 MR. SHOGREN: I have no further questions. 2.2 MS. HUETH: I just have a few follow-up. 23 HEARING OFFICER HALSTEAD: Go ahead, 24 Ms. Heuth. 25 Thank you. MS. HUETH:

1	Page 142 RECROSS-EXAMINATION				
2	BY MS. HUETH:				
3	Q. Doctor, you testified a few moments ago				
4	that a couple of the signs of shock or a sign of				
5	shock is poor profusion as demonstrated by how				
6	strong that pulses are as well as capillary refill;				
7	is that right?				
8	A. Yes. Other ways profusion can be				
9	measured.				
10	Q. And with respect capillary refill, you				
11	said "If it takes longer than three seconds, that				
12	could suggest poor profusion"; is that right?				
13	A. Yes.				
14	Q. And if you can turn to page 84?				
15	A. Um-hum.				
16	Q. And the capillary refill of left lower				
17	extremity is document as less than two seconds;				
18	correct?				
19	A. That's what's document ed in EMS notes,				
20	yes.				
21	Q. And where and pulse is document ed as				
22	brachial two plus normal, and brachial is where?				
23	A. I'm just looking to see where that's				
24	document ed. Is that on that same page?				
25	Q. Yep, right above it.				

Page 143 I'm sorry. Is that in the chest row, or 1 Α. 2 what row is that in? Right above to capillary refill we were 3 Q. 4 just looking at. 5 Α. Thank you. 6 Yeah, brachial the upper arm. 7 Q. Okay "pedal" refers to where? The foot. 8 Α. And that pulse, it's documented "pedal, 9 Q. 10 two plus normal"; is that right? 11 Α. Yes. 12 Q. Would you agree that the standard of care 13 is objective not subjective? For signs of systemic toxicity for vital 14 Α. 15 signs abnormalities, it's objective. 16 When you were testifying in response to Q. 17 Mr. Shogren's questions about what you've done at 18 your facility, were you intending to suggest that 19 what you do establishes the standard of care? 20 I do my best to follow published standards Α. 21 of care. I don't think that my testimony of what I 22 individually do is the standard of care. 23 MS. HUETH: That's all I have. Thank you. HEARING OFFICER HALSTEAD: Thank you. 24 I have some follow-up questions. 25

Page 144 EXAMINATION BY THE HEARING OFFICER 1 2 BY HEARING OFFICER HALSTEAD: Of the three things you mentioned for the 3 0. 4 basis for the administration of the antivenom -- and 5 I just want to clear what your testimony is -- are 6 you relying on persistent vital signs abnormalities? 7 Α. Yes. And are you relying on signs of 8 Q. 9 progressive swelling as monitored? 10 Α. Yes. 11 And are you replying upon laboratory Q. 12 abnormalities? 13 Α. Yes. And then who -- you touched upon this 14 0. 15 earlier. I believe Ms. Heuth asked you this, and 16 you said that it was the parent's decision, ultimate 17 decision about transport? It's what was document ed in the transfer 18 Α. 19 form signing release -- or rather, parental consent 20 for transfer. 21 How the patient is transferred regardless 22 of what parents want is what -- is in the 23 decision-making ability of the physician. So 24 whether the patient transferred by ambulance or 25 ground ambulance or air is not the parents'

1 decision, but rather the physician's ultimate
2 responsibility to determine what's best for the
3 patient.

All physicians, including myself, do take 5 into account parent wishes, yet we must, and are 6 obligated to, do what's best for the patient, 7 regardless of what parents' wishes are about mode of 8 transport to another facility.

9 Q. Okay. And I don't know that this was 10 specifically touched upon, but can you expand to me 11 on the timing of administration of antivenom?

12 I know there's a window and heard -- it 13 eluded to that the administration was not precluded, 14 but obviously it was not given sooner rather than 15 potentially later.

16 And what is the impact of waiting to 17 administer antivenom?

A. The longer venom in the body and is not neutralized by antivenom, the more damage it does. And so once there are one of criteria met, systemic symptoms, progress swelling, laboratory abnormalities, antivenom should be administered as soon as one of three criteria are met. HEARING OFFICER HALSTEAD: Did my

25 questions prompt any questions from counsel?

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Page 146 Mr. Shogren, I'll start with you? 1 2 MR. SHOGREN: No questions. HEARING OFFICER HALSTEAD: Ms. Heuth, do 3 4 you want to follow-up. MS. HUETH: Yeah. 5 FOLLOW-UP EXAMINATION 6 7 BY MS. HUETH: I just wanted to clarify, Doctor, are you 8 Q. 9 saying that a physician can transfer a minor without 10 the patient consent? 11 Α. Absolutely. 12 Q. Okay. 13 HEARING OFFICER HALSTEAD: I do have 14 another question. I'm sorry. I wanted to follow-up 15 on this too. I think I was -- and it was, perhaps, 16 the questioning and not so much the answers that --17 I'm sure it will get flushed out. It's implied that there was antivenom 18 19 available, although no one seems to have said that 20 specifically. Correct me if I'm wrong. 21 And then also I don't hear -- I heard that 22 a patient would have to be admitted to administer 23 the antivenom, but then I heard that the antivenom 24 could be administered in any rural facility 25 without -- I mean, do you see what I'm getting at?

1 Can you clarify that for me, please.

2 THE WITNESS: I think the first question 3 is not one I should be speaking to.

HEARING OFFICER HALSTEAD: Okay. Fair
enough. But that is a concern, so I'm hoping that
will get flushed out.

7 And then what about the location of 8 administration and the need to be admitted into a 9 hospital setting for administration of the 10 antivenom?

11 THE WITNESS: The emergency department is 12 a perfectly appropriate place to administer 13 antivenom. Patients should be observed and 14 admitted. That can happen in a variety of settings. 15 Perfectly appropriate to admit them into the 16 hospital, to the regular floor for continued 17 monitoring, but they should be continued to be 18 monitored in some setting after administration of 19 antivenom.

20 But they should not wait to receive
21 antivenom until they are admitted to a hospital.
22 HEARING OFFICER HALSTEAD: Does anyone

23 want to follow-up on that?

24 MR. SHOGREN: No questions on my end.25 MS. HUETH: Nothing from me.

Page 148 HEARING OFFICER HALSTEAD: 1 Okay. 2 Mr. Shogren, do you want to dismiss Dr. Glissmeyer, 3 or do you want to have him remain for potential 4 rebuttal? MR. SHOGREN: I'm okay with having him 5 6 dismissed now. Well, actually, I believe 7 Dr. Glissmeyer stated he's set aside today, so he 8 can, I quess, remain still, just in case to reserve 9 him. THE WITNESS: I would much rather remain 10 11 available this evening -- this afternoon and early 12 evening here than be called back for some reason 13 tomorrow. 14 MS. HUETH: As a practical matter, I'm not 15 going to be able to finish mine today. My expert is 16 planning on appearing first thing tomorrow morning. 17 Not that I anticipate that we even get to him today. 18 That's all I would have to, I guess, add, but, 19 obviously, it's up to Mr. Shogren Dr. Glissmeyer 20 whether he wants to stick around on the Zoom. 21 HEARING OFFICER HALSTEAD: All right. 22 Dr. Glissmeyer, you have not been released, so 23 you're subject to being recalled. You can either 24 stay and continue to watch the proceedings, or you 25 can choose not to. We will leave that Mr. Shogren

Page 149 1 as to how he wishes to direct you, because I don't 2 know if he wants you to hear the other testimony so 3 that you can respond appropriately to it. 4 THE WITNESS: I'll do what I'm asked to 5 do. 6 HEARING OFFICER HALSTEAD: Thank you, 7 Dr. Glissmeyer. We appreciate your time. 8 Mr. Shogren, do you have another witness? 9 MR. SHOGREN: No further witnesses. 10 HEARING OFFICER HALSTEAD: Are you resting 11 you case? 12 MR. SHOGREN: Yes. 13 HEARING OFFICER HALSTEAD: Okay. So, 14 Ms. Hueth, it's your turn to present your case. Do 15 you have a witness you can call or a certain order 16 you were going to do it and it's disrupted by the IC 17 resting? 18 MS. HUETH: No disruption. I am happy to 19 call Dr. Lasry. Would it be possible to take 20 five minutes to get organize and then proceed? 21 HEARING OFFICER HALSTEAD: Yes. It is 22 2:22 right now, we'll come back at 2:30. Thank you. 23 MS. HUETH: 24 (Recess from 2:22 P.M. to 2:31 P.M.) 25 HEARING OFFICER HALSTEAD: We're back on

Page 150 1 the record in case number 23-29251-1, In the Matter 2 of the Charges and Complaint Against Jason Howard 3 Lasry, M.D.

We ended with Mr. Shogren closing his case on behalf of IC, subject to rebuttal, and so it's respondent's opportunity to put his case. And when we went off the record, Ms. Hueth said she was going to call Dr. Lasry.

9 So if that remain it is case, Dr. Lasry,
10 I'll have you raise your right hand to be sworn.
11 MR. SHOGREN: Ms. Halstead, sorry to
12 interrupt. There is one housekeeping matter I want
13 to address. I apologize for interjecting now.
14 After further review, we could dismiss
15 Dr. Glissmeyer. I don't think he needs to be here
16 for the remainder of today.

17 HEARING OFFICER HALSTEAD: Okay. Thank18 you.

19Dr. Glissmeyer, you are excused. Thank20 you, again, for time your time and your testimony.

DR. GLISSMEYER: Thank you.

21

22 Can someone tell me what time the 23 proceedings start in the morning, and if I should be 24 on, and, I guess, essentially, what time I should be 25 on?

Page 151 HEARING OFFICER HALSTEAD: 1 Well, 2 Mr. Shogren, my understanding was you're releasing 3 him. Are you just releasing him for the day, or are 4 you releasing him as a witness? MR. SHOGREN: I'm releasing him as a 5 6 witness. 7 So, Dr. Glissmeyer, you don't have to 8 appear tomorrow. DR. GLISSMEYER: Okay. That's fine. 9 10 Thank you. If that were to change, you know how to 11 reach me. 12 MR. SHOGREN: Thank you. 13 HEARING OFFICER HALSTEAD: Thank you. 14 Okay are we good to go back to Ms. Hueth 15 and Dr. Lasry? 16 DR. LASRY: Yes. 17 HEARING OFFICER HALSTEAD: Okav. 18 Dr. Lasry, please raise your right hand. (The oath was administered.) 19 20 THE WITNESS: Yes, I do. 21 HEARING OFFICER HALSTEAD: I didn't have 22 him state his name and spell his name for the 23 record, but because he's the respondent, I believe 24 we have that information. 25 With that, go ahead, Ms. Hueth.

Page 152 1 MS. HUETH: Thank you. 2 DIRECT EXAMINATION 3 BY MS. HUETH: Dr. Lasry, when did you decide that you 4 0. 5 wanted to go to medical school? I think that was 1993 or so, around that 6 Α. 7 time. And why did you want to go to medical 8 Q. 9 school? A. I enjoyed the art of helping people. I 10 11 have a younger brother who had entered medical 12 school before me, and he told me about his 13 experiences and how much he was enjoying it, and 14 that also helped prompt me to go medical school. 15 Lastly, I was always most interested in the 16 biological sciences, that was my specialty for my 17 undergraduate. So, those are the things that motivated me 18 19 to go to medical school. 20 Q. Where did you medical school? 21 Α. Sackler School of Medicine, in Tel Aviv 22 University. 23 Q. When tell you graduate? A. 2000. May 2000. 24 25 Q. After medical school, what did you do next

1	in terms o	Page 153 of medical education or training?
2	A.	I did my undergraduate, or my residency in
3	emergency	medicine at the Orlando Regional Medical
4	Center in	Orlando.
5	Q.	And how long was the emergency medicine
6	residency?	
7	A.	Three years.
8	Q.	Are you board-certified?
9	A.	Yes, I am.
10	Q.	When did you first become board-certified?
11	Α.	2004.
12	Q.	Have you had to recertify since then?
13	Α.	Yes, I have.
14	Q.	How frequently do you have to recertify?
15	Α.	It was every ten years. I believe now
16	6 it's every five years.	
17	Q.	When did you first become licensed to
18	18 practice medicine in Nevada?	
19	Α.	I believe I originally got my license at
20	the end of 2004.	
21	Q.	And what brought you to Nevada?
22	Α.	I had been living in California, in
23	Pasadena.	I was just I had just graduated
24	residency	, and the cost of living there was
25	extremely	expensive and traffic was a big pain, and

Page 154 1 I heard about an opportunity in Las Vegas. We came 2 up for an interview, we visited the city, we enjoyed 3 it, and we decided to give it a try. 4 Q. When you say "we" --A. Oh, me and my wife. 5 If your wife in the medical field? 6 Q. A. She is. 7 Are you member of any professional 8 Q. 9 organizations? 10 Α. Yes. 11 Q. Which ones? 12 Α. The American Academy of Emergency 13 Medicine, and Physicians for Human Rights. What is the American Academy of Emergency 14 ο. 15 Medicine? It is an organization that works for 16 Α. 17 supporting the rights of emergency physicians, as 18 well as supporting outreach programs to improve the 19 care of emergency patients. 20 In May of 2020, were you working at Q. 21 Humboldt General Hospital? 2.2 Α. Yes, I was. 23 0. And what type of hospital is Humboldt 24 General? 25 It's considered a critical access Α.

Page 155 1 hospital. 2 Q. Humboldt General Hospital, where is that 3 located? In the town of Winnemucca. 4 Α. And in your experience, is Humboldt 5 0. 6 General Hospital a rural hospital? Yes, it is. 7 Α. Prior to May of 2020, had you had occasion 8 Q. 9 to treat a patient who suffered a snakebite? Yes, I had. 10 Α. 11 Can you estimate on how many occasions Q. 12 prior to May 9, 2020, you had treated a patient 13 after a snakebite? Approximately 20, 15 to 20 patients. 14 Α. Prior to May 9, 2020, of the patients you 15 Q. 16 treated after a snakebite, had you had occasion to 17 administer antivenom? A. Yes, I have. 18 19 Q. And on approximately how many occasions? 20 A. The majority of them, perhaps two-thirds. 21 0. Do you believe that your care of Patient A 22 complied with the standard of care? Yes, I do. 23 Α. Do you believe that your care was 24 ο. 25 reasonable?

Page 156 1 Absolutely. Α. 2 Q. Now, I want to talk specifically about 3 your care of Patient A. And if you need to refer to 4 the records, please do. It's contained within 5 Exhibit 6. Turning to Exhibit 6, page 34. 6 Yes. 7 Α. Is this your document ation? 8 Q. Yes, it is. 9 Α. Okay. When you first evaluated the 10 0. 11 patient, did you get a history or what brought her 12 emergency department? 13 Α. Yes, I did. And from whom? 14 0. I think the history was obtained from 15 Α. 16 multiple sources. There was likely an EMS call that 17 announced that the patient was coming to the ER. 18 There was the reports that I would have obtained 19 from the EMS providers, who gave us additional 20 history. There's the history that I obtained from 21 the mother. 2.2 And so I, most likely, gathered the 23 history from multiple sources, whatever was 24 available. And on May 9th, 2020, 9th, 2020, was there 25 Q.

Page 157 1 any limitation at Humboldt General Hospital 2 emergency department of how many people could be in 3 the ER with a patient? Α. So this was COVID time, I believe. This 4 5 was the beginning of COVID, and so we had to -- we 6 did have limitations on visitors being allowed into 7 the patient rooms. What were where you told about the history 8 0. 9 prior to your evaluation of the patient? Α --10 Α. 11 And I think -- let me back up. That did Q. 12 not come out articulately. What were you told about the events that 13 14 took place leading up to the patient's presentation 15 to the emergency department? That the father had taken Patient A out to 16 Α. 17 somewhere in the wilderness or the desert for an 18 outing. He had -- he was carrying the patient, he 19 had tried or attempted to put down his daughter, the 20 daughter was bitten on her left knee by the snake. 21 Following that, the father tried to suck out some 22 venom from the wound on his own. And then I imagine 23 he tried to reach a medical facility. 24 But we were told there was an hour up to 25 an hour and a half between the time of the bite and

1 the time of EMS arrival.

Q. The History Of Present Illness section of your document ation, is that a correct recitation of the information that you obtained from EMS and from the mom?

6 A. Yes.

Q. Did you, at the time of your initial
8 evaluation of the patient, either obtain yourself or
9 review the patient's vital signs?

10 A. Of course.

11 Q. Typically in the emergency department, who 12 obtains the patient's vital signs?

13 A. The nurses obtain the vital signs.14 Always.

15 Q. At Humboldt General Hospital in the 16 emergency department, were patients put on 17 continuous monitoring?

A. While often, they were. In patients that 19 are potentially critically ill, they would usually 20 continuously be monitored throughout the stay. The 21 majority of patients do get continuous monitoring 22 once we figure out their stay. Not always because 23 they're critical, but sometimes just for the ease of 24 document ing.

25 For example, if the nurse needs to

Page 159 1 document vital signs every hour, it's easier for her 2 to just leave a patient on the monitor, and just 3 look at the monitor to see what the vital signs, 4 rather than removing all of the leads to determine 5 the vital signs, rather than replying the leads 6 every hour to repeat the vital signs.

7 Q. The continuous monitoring, what exactly 8 would it be monitoring?

9 A. So continuous monitoring would include 10 heart rates, blood pressure, respirations, and 11 oxygen saturation.

12 Q. Do you believe that Patient A was on a 13 continuous monitor when she was in the emergency 14 department at Humboldt General?

15 A. Yes, I do. I know she was.

16 Q. When you first evaluated the patient, was 17 she tachycardic?

18 A. Yes.

19 Q. And what was her heart rate at the time of 20 your initial evaluation?

A. In my note, it's 149 beats per minute.
Q. Now did you, on page 34 in your note,
document specifically the word "tachycardia" or
"tachycardic"?

25 A. I don't believe so.

Page 160 Why not? 1 0. 2 A. It's obvious. I mean, if the heart rate's 3 fast, it's tachycardic. It's not some special 4 interpretation that needs to be made. It's 5 something that's just simple and obvious at its 6 face. In your experience, what is a normal heart 7 0. 8 rate for a three year old? Oh, in the range of about 110 to 130, or 9 Α. 10 as Dr. Glissmeyer said, 140 beats per minute. 11 Q. Does this page 34 also contain your 12 Physician Exam of the patient? 13 Α. Yes, it does. Under the Cardiac section, you documented: 14 0. 15 Heart has a regular rate and rhythm. Why did you document that the heart has a 16 17 regular rate if she was tachycardic? Because tachycardia does not talk about if 18 Α. 19 the rate is regular or irregular. 20 Regular means that there's regular 21 intervals. It does not mean that it's below 100 or 22 below 140. It just means that there's regular 23 intervals, and it's not irregular. Intervals of what? 24 0. Intervals, beat-to-beat intervals, from 25 Α.

Page 161 1 one beat to another. 2 If it -- do you want me to explain? 3 0. Sure. Α. If you have an irregular heartbeat, the 4 5 beat-to-beat variation varies. Meaning there may 6 be -- for example, somebody with an irregular 7 heartbeat may have a beat and then a three-second 8 pause, and then a beat and then a one-second pause, 9 and then a beat and then a five-second pause, and 10 then a beat. 11 Whereas somebody with a regular rate will 12 have a regular -- or will have the same interval 13 between each beat. So, every one second or every 14 two seconds, they'll have a beat. Regardless of how fast the beat is? 15 Q. A. Regardless of how fast. 16 The fact that the patient's heart rate was 17 Q. 18 149, was that surprising to you? Not in this setting. 19 Α. What do you mean by that? 20 Q. 21 Α. Well, there's a lot of things that can 22 cause a heart rate to be artificially evaluated. 23 And conditions like pain or fear or worry or anxiety 24 are all things that can make you fearful or worried 25 to make the heart rate elevated.

Page 162 Other things that I can think of would be, 1 2 you know, she's a three-year-old girl, she's being 3 put in an ambulance, she was just bitten by a snake, 4 she had a painful and fearful experience, and now 5 she's in an ambulance and there's all these adults 6 around and they're drawing blood and taking her 7 vital signs, then she's brought to the ER with 8 unpleasant lighting and no privacy and a bunch of 9 nurses approaching her to get her vital signs. So I can understand why a three year old 10 11 would be fearful or tachycardic in this situation. 12 Q. Did you see anywhere in the document ation 13 where the patient's blood pressure was noted? 14 Α. No. But did you obtain the patient's blood 15 Q. 16 work? 17 The nurses did. Α. Why this not recorded? 18 Q. 19 Α. I can't speak that. The nurses are 20 responsible for obtaining the vital signs and 21 document ing them. 22 Q. Was knowing the patient's blood pressure 23 important to you? 24 Α. Yes. 25 Why is that? Q.

A. It's a cardio vital sign, just as
 Dr. Glissmeyer said. It's something that is
 important and can reveal if a patient -- or how ill
 a patient is.

5 Q. Was the patient hypotensive while she was 6 in the emergency department at Humboldt General?

A. No, she was not.

Q. How do you know that?

9 A. Because we would have addressed it, and we 10 would have documented it, and it would have changed 11 our management.

12 Q. In what way?

7

8

13 A. If we thought or if she was hypotensive, 14 it would change our calculation. And we talked 15 about earlier, there are several factors that we 16 look at when deciding to treat a rattlesnake 17 envenomization patient. Like, we look at the vital 18 signs, and we look at the coagulation studies, and 19 we look at the progression of the swelling of the 20 wound.

21 And so --

HEARING OFFICER HALSTEAD: I'm, Doctor.
You look at the vital signs, and the what?
THE WITNESS: Coagulation factors.
HEARING OFFICER HALSTEAD: And what was

Page 164 1 the third one? 2 THE WITNESS: Progression of wound 3 swelling. 4 HEARING OFFICER HALSTEAD: Thank you. 5 BY MS. HUETH: Q. At the time that you evaluated the 6 7 patient, was her respiratory rate normal? 8 Α. Yes. Q. And for a patient of this age, three years 9 10 old, what is generally considered to a normal 11 respiratory rate? 12 A. Somewhere between 18 and 26 or 28. 13 Q. And what was her oxygen saturation? There was normal. The exact number was 14 Α. 15 96 percent. 16 Q. Was that on -- was she receiving any 17 supplemental oxygen? She didn't need any, but the nurses 18 Α. 19 applied it anyway. 20 Q. When you first evaluated the patient, what 21 was her demeanor? 2.2 Α. So, she was well-appearing, in general. 23 She had good color. She had good profusion. She 24 did not seem like she was in any pain or distress or 25 discomfort. She was not sweaty, she was not

Page 165 1 restless, and she did not appear to be suffering in 2 any way. She actually was quite calm and well 3 appearing, especially with all the drama that was 4 going on around her.

5 And I say that because when a potentially 6 critically patient arrives, they get, in a way, 7 attacked by the staff. Everybody jumps on her 8 remove her clothing, put them in a gown, start an 9 IV, get the leads put on, take vital signs, obtain a 10 history. So there's a lot going when a person first 11 arrives in the emergency department, and it could be 12 daunting and scary.

13 Q. Did you perform a physical examination of 14 the patient?

15 A. Yes, I did.

16 Q. Earlier you testify that the patient came 17 in with a snakebite to the knee, can you describe 18 for us where on the knee the bite was?

19 A. Yes.

20 Q. And where was that?

21 A. Directly over the left patella.

22 Q. Is that the front of the knee?

23 A. That's the front of the knee.

Q. Is it sometimes referred to as the25 kneecap?

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1 A. Exactly right.

2 Q. Can you describe your examination findings 3 of the patient's left knee?

A. Absolutely. From -- would you prefer that 5 I read from the record or give my own description of 6 it?

Q. Well, and specifically I'm asking about 8 your first evaluation of the patient. And you're 9 welcome to either read from the record, although we 10 all have it, or just describe your first evaluation 11 of the patient's left knee.

12 A. Yeah. Let me read what I wrote so I can 13 expand upon it.

14 "On the anterior left knee, there were two 15 puncture wounds, which are likely the site of 16 envenomization, and there is just a small amount" --17 THE REPORTER: I'm so sorry once again,

18 Ms. Hearing Officer.

19 I'm having a really hard time keep up with 20 you, Doctor. Could you slow down just a little bit. 21 Thank you so much.

HEARING OFFICER HALSTEAD: Yeah. Just as 23 a point of procedure, always, usually when you read 24 on a record, you tend to read fast.

25 So just when you read, make sure you slow

Page 167 1 it down. It's common. It's just what happens when 2 you're recording testimony when people read it. 3 THE WITNESS: No problem. 4 "On the anterior left knee, there are two 5 puncture wounds, which are likely the sites of 6 envenomization, and there is just a small amount of 7 ecchymosis noted in that generalized area. No 8 significant edema, no streaking, no skin necrosis, 9 no peripheral edema, no petechiae, no vesicles, 10 ulcers or pustules." 11 And what is ecchymosis? Q. 12 Α. Bruising. The swelling that you would see 13 when a bruise develops. 14 0. Okay. Thank you. Was there a swelling at the time of your 15 16 initial evaluation? Yes, there was. 17 Α. 18 0. Were you surprised to see some swelling at 19 that time? 20 No. Α. 21 0. And why not? 2.2 Α. Any injury, if it was a puncture wound 23 from a pen or if you got stabbed with a knife, or if 24 you got smashed really hard with a first, you would 25 develop a bruise in the area of the injury. That's

Page 168 1 a normal body reaction. That's how to body 2 responds, and that's how the body repairs itself. 3 The reason why you get swelling is the 4 blood vessels become leaky in that area, and that 5 allows the white blood cells to migrate to the area 6 of injury, and it allows them to do the repair. So swelling, localized swelling right at 7 8 the site of the injury is common, normal, and 9 expected. Can you describe -- because this will 10 0. 11 ultimately be transferred to a written form, can you 12 describe the size of the swelling or quantify it in 13 any way as it existed at the time of your initial 14 evaluation? 15 The way I described it in my note Α. Sure. 16 is it increased in size from -- about 25 percent. 17 And that 25 percent, I'm not sure how lay people see 18 that, but that's a really minuscule amount of 19 increase of swelling. 20 The way I've told people previously, and I 21 believe in deposition that I did before, was 22 swelling increased in size from the size of a 23 quarter to the size of a silver dollar. And so that

24 is the amount of increase of swelling that we're 25 discussing. Well circumscribed, circular, directly

\_\_\_\_

Page 169 1 over the kneecap. If I could just demonstrate, 2 other my kneecap, going to the size of a quarter to 3 the size silver dollar (indicating.) That is the 4 edema that we're talking about in this particular 5 case. And sticking with your initial exam --6 Q. 7 Α. Yes. 8 HEARING OFFICER HALSTEAD: I'm sorry. 9 Over what period of time from the quarter to the 10 silver dollar? 11 THE WITNESS: From the time of arrival 12 until she departed the emergency department. 13 HEARING OFFICER HALSTEAD: Thank you. 14 BY MS. HUETH: 15 At the time of your initial exam, was the Q. 16 patient having any muscle weakness in the left leg? 17 Α. Not at all. Was she unable to move the left leg? 18 Q. 19 Α. No. At any point while she was in the 20 Q. 21 emergency department did she develop muscle weakness 22 in the left leg? 23 Α. No. At any point while the patient was in the 24 Q. 25 emergency department did she become unable to move

Page 170 1 her left leq? 2 Α. No. 3 Did you order any labs for this patient? Q. Yes, I did. 4 Α. 5 0. Why? It's part of the workup of this snakebite 6 Α. 7 envenomization. I want to go through those lab results 8 Q. 9 with you. And specifically if you can turn to 10 page 67. 11 Α. Yes. 12 Q. The prothrombin time, my first question is 13 what is prothrombin time? 14 Prothrombin time is a laboratory value Α. 15 that we obtain to look at the clotting cascade. 16 When the body forms a clot, it goes through numerous 17 chemical reactions in order for the clot to form. 18 And so we require multiple factors and proteins that 19 help that clot form. 20 When we check for PT and PTT, we're 21 looking at two different clotting cascades to see if 22 there's a problem with them; either a problem where 23 they clot too easily or they don't clot well enough. What is INR? 24 ο. The prothrombin time, the PT, is always 25 Α.

Page 171 1 converted into an INR. The reason that is done is 2 so -- the INR is a number that will be consistent 3 throughout different laboratories. Because if they 4 draw prothrombin time, the laboratory value in one 5 hospital may not be the exact same in another 6 hospital.

7 So, universally, everyone uses the INR 8 because that value will remain the same regardless 9 of the laboratory where it's being drawn, and that's 10 the number that's actually use to determine whether 11 or not there is coagulopathy, or whether or not the 12 patient requires any kind of treatment.

13 Q. And was her INR normal?

14 A. It was normal.

15 Q. And you mentioned coagulopathy, what is 16 that?

17 A. That's a problem of the clotting cascade. 18 It can go either way. It can either cause a problem 19 where the body forms too many clots, or it can be a 20 problem where the body does not form clots, and this 21 causes you to bleed more than you should.

Q. Was there any indication at any time the
patient was in the emergency department Humboldt
General that she was having ongoing bleeding?
A. Not at all.

Page 172 The fact that the patient's INR was 1 0. 2 normal, was did that signify to you, if anything? Α. It's a laboratory value that was done at 3 4 one moment in time. At the moment, it was 5 reassuring that the patient had a less serious 6 envenomization. With a more serious envenomization, 7 you would expect more laboratory abnormalities, such 8 elevation of the INR, elevation of the PTT, a drop 9 in platelets or a drop of fibrinogen. She didn't 10 have any of those changes. 11 So, it doesn't give us the whole story. 12 It doesn't -- you can't just decide the entire 13 management of the patient based on the one 14 laboratory value. But taken in combination with the 15 other factors, it was reassuring that it was a minor 16 type of an issue. 17 In a patient who has been bitten by a Q. 18 snake and your concern for systemic envenomization, 19 would you expect to see decreased or evaluated 20 platelets? 21 Α. Decreased platelets. 22 Q. And what were this patient's platelets? 23 Α. 240,000. And is that normal? 24 Q. 25 That is totally normal. Α.

Page 173 Is the platelets part of -- this is my 1 0. 2 term, not yours, but one piece of the puzzle that 3 you were just describing? Α. Yes. They are important for clotting or 4 5 essential for clotting. 6 Q. Did the patient have any significant lab 7 abnormalities? Not really. The only thing that was 8 Α. 9 significantly abnormal was the potassium level of 10 2.7. 11 What did you do in response to that Q. 12 abnormal potassium level? 13 We replaced it intravenously. Α. Q. And why did you order a fibrinogen level? 14 That is also a factor that we look at to 15 Α. 16 determine their ability to form clots. If the 17 number was very low, it would indicate that she was 18 prone to bleeding, and that could indicate a more 19 systemic envenomization. 20 Her value was normal. 21 Q. Well, if you can turn to page 42? 2.2 Α. Yes. 23 0. Does this appear to be the fibrinogen 24 result? Yes, it does. 25 Α.

Page 174 Okay. Now it's says it was collected 1 0. 2 May 9, 2020 9, 2020, do you see that? 3 Α. T do. 4 But not reported until May 12, 2020. ο. Do 5 you understand that to mean that's when the 6 fibrinogen lab results were available? 7 Α. Correct. So this lab wasn't available to you while 8 0. 9 the patient was in the emergency department? 10 Α. Correct. However, after the fact, you have had an 11 Q. 12 opportunity the look at this, and do you say her 13 fibrinogen level was normal? Yes, I did. 14 Α. The fact that the patient's INR was normal 15 Q. 16 and platelets were normal, did that give you any 17 clue as to whether you would expect a normal 18 fibrinogen? Not necessarily. We just -- I check all. 19 Α. 20 I don't know -- I don't necessarily expect one or 21 the other. We test to see if there are any 22 coagulation defects, and then we decide what to do 23 from there. 24 I didn't have -- I don't recall having any 25 expectations of there being normal or high.

Page 175 **Q.** Did you assess the patient on more than **2 one occasion?** 

3 A. Yes, I did.

Q. Okay. After your initial assessment --5 you've already described for us a little bit about 6 the change in swelling, where there any other 7 changes to your evaluation after your initial 8 assessment?

9 A. No. The only change that is the change 10 that we talked about with the limited, localized, 11 circular swelling that was limited to the kneecap 12 area only. Otherwise, her condition was really 13 good. She was awake, she was alert, she was 14 talking. She didn't seem to be in any distress. 15 She didn't seem like she was suffering or in agony 16 or complaining, and she appeared well.

17 Q. If you turn to page 35.

18 A. Yes.

Q. And it says "assessment," do you see that?
A. Yes.

Q. Okay. Does this document ation contain 22 information regarding your reassessment of the 23 patient?

A. Yes, it does.

25 Q. Okay. And upon you reassessment, was the

Page 176 1 patient awake? 2 Α. Yes. Absolutely. 3 Was she alert? 0. 4 Α. She was. And how was she acting? 5 0. She seemed very comfortable. She seemed 6 Α. 7 well appearing. She did not seem to be in any 8 distress. Did you have a conversation with the 9 ο. 10 patient's mother regarding the potassium level? 11 I certainly did. Α. 12 Q. And what do you recall about that 13 discussion? That conversation actually came up in the 14 Α. 15 telephone call I had with Dr. Gassen. Ι 16 mentioned -- well, on one of my reevaluations of the 17 patient, I -- whenever I went for a reevaluation, I 18 spoke to mother because mother was with her, with 19 Patient A at the bedside. And so I was always 20 updating the mother as to what was happening, what 21 the findings were, what our plan of action was going 22 to be. When I informed Patient A's mother about 23 24 the low potassium level, she informed me that there 25 was a strong family history of hypokalemia, which is

a low potassium level, where mother had that problem
 and other family members in her family suffered from
 that problem.

And so I gathered that it's likely a 5 genetic abnormality that causes her family to suffer 6 low potassium levels.

7 Q. And did the low potassium level cause any 8 alarm to you that the patient was having a systemic 9 envenomization?

10 A. No, not at all. That potassium -- the 11 potassium -- you wouldn't expect the potassium to 12 change as a result of the envenomization.

Q. Did you discuss this patient with any14 other physicians?

15 A. I discussed the patient with Dr. Thorp and 16 with Dr. Gassen.

17 Q. Why did you contact Dr. Thorp?

A. Being a critical access hospital, our resources were limited, and so the hospital -- the hospital recommended or preferred that I consult with the hospital in-patient doctors prior to to transferring any patients to be sure that we were and able to care for them at our -- at that facility. The facility's desire was to keep as many of the patients as possible.

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1 And so I contacted Dr. Thorp, going 2 through the process, and to see if she was 3 comfortable with taking care of the rattlesnake 4 patient.

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5 Q. From a medical standpoint, why did you 6 contact Dr. Thorp as opposed to discharging the 7 patient?

A. Well, it was clear that the patient should 9 not be discharged. It was clear and obvious to me 10 that the patient needed a longer period of 11 monitoring and needed to have a period of 12 observation to look at all the parameters we spoke 13 of: the swelling, coagulation defects, and vital 14 sign abnormalities.

And so hospital admission was indicated,16 regardless of our decision to give antivenom or not.

Q. The closer monitoring that you just 18 described, is that something that you thought could 19 be performed in the emergency department over a 20 prolonged period of time?

A. No. That's not the function of theemergency department.

Q. And what do you mean by that?
A. The emergency department isn't designed to
take care of patients for longer terms. We're

Page 179 1 designed to take care of patients that are acutely 2 ill, stabilize them, and then transfer them out or 3 admit them for the appropriate level of care.

We're not designed to provide meals and to provide regular medicine intervals and to do some of the regular things that a floor nurse or ICU nurse would do. Our nurses are limited in that they're able to care emergency patients, and they're not yery good at taking care of in patient.

10 The other thing is that we limited 11 resources. We can't afford -- usually I'll work, 12 like there will one doctor and two nurses working. 13 And one nurse has to do triage, and other nurse has 14 to monitor all the other patients. If there was a 15 critical patient that stayed with us for 24 hours, 16 that would really take up that nurse, and it would 17 be incredibly difficult to run the emergency 18 department with the additional needs to care for 19 that critical patient.

20 Q. So when you said "we can't afford," were 21 you referring to money or resources?

A. I'm talking about resources. It has nothing to do with actual dollars. We have limited resources at the hospital. I am the only -- or there is only one emergency doctor that is working 1 at a time, and there is only two nurses that are on 2 during at time.

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And one nurse needs to be available to 4 take care of whoever walks through the door. And 5 the other nurse is there to help or to provide 6 medications or to give the other patients the care 7 they need.

8 Q. Approximately how many beds did the 9 Humboldt General Hospital ER have on May 9, 2020? 10 A. Five.

11 Q. And you were present for Dr. Glissmeyer's 12 testimony. Did you hear when he described how many 13 beds were in the ER that he works at?

14 A. I believe he counted about 34.

Q. And did Dr. Glissmeyer's ER, as he described it, sound comparable as far as resources go as Humboldt General Hospital ER?

A. They sounds like very different
facilities. His facility is way bigger than ours.
I think he said there was 350 beds at his facility,
whereas ours probably had ten to 15 beds.

We don't have consultants for every We don't have consultants for every specialty for vascular or for a lot of specialties we would such as nephralgy, neurology, urology. We would have one surgeon one, one orthopaedic doctor, and

Page 181 1 one -- either a pediatrician or a nurse-practitioner 2 that took care of pediatric patients. And then 3 there was usually also a gynecologist for 4 obstetrical emergencies. Was Dr. Thorp willing to accept admission 5 0. 6 of this patient? 7 Α. No, she was not. What was your understanding of why not? 8 Q. She wasn't comfortable with it, and she 9 Α. 10 didn't have experience with taking care of snakebite 11 patients. 12 Q. And did you document in the medical 13 records a summary of your conversation with 14 Dr. Thorp? Yes, I did. 15 Α. Can you please read that into the record? 16 Q. 17 Sure. Α. "At 5:30 P.M., I discussed the 18 19 full history and physical exam 20 with Dr. Thorp, and she explains 21 that she has never cared for a 2.2 patient with a rattlesnake 23 envenomization, and thus would not 24 be comfortable with this patient 25 being admitted at this facility.

Page 182 And prefers that we transfer this 1 2 patient to another facility with a 3 higher level of care." 4 ο. At Humboldt General Hospital in May of 5 2020, did you have admitting privileges? 6 Α. No. Does that mean you couldn't admit the 7 0. 8 patient, it had to be another doctor who accepts 9 admission? That is correct. 10 Α. 11 Once Dr. Thorp indicated she was not Q. 12 comfortable accepting admission, did you contact any 13 other doctors? 14 Α. Yes. 15 Q. And who did you contact? 16 A. Dr. Gassen at the Renown emergency 17 department. Did you hear earlier Dr. Glissmeyer's 18 Q. 19 testimony wherein he said your conversation with 20 Dr. Gassen was just a handoff? 21 Α. Yes. 22 Q. And do you agree with that? 23 Α. No. And what -- and why not? 24 Q. 25 Well, having worked in rural ERs, I have Α.

Page 183 1 had to transfer many patients. Since Dr. Glissmeyer 2 works at a tertiary or quaternary higher-level 3 facility where he has all the resources available, 4 he doesn't commonly transfer patients. So I am very 5 familiar with the calls that we make to receiving 6 hospitals.

7 Oftentimes when I transfer a patient, the 8 receiving physician will ask me questions, and 9 sometimes ask me to do additional tests or 10 additional imaging prior to transferring the patient 11 to satisfy what they think is necessary.

Dr. Gassen -- I had a conversation with Dr. Gassen, where believe I gave him a good and d complete report of the patient's presentation, laboratory results, evaluation of the wound, and f progress through her ER stay. And he agree that antivenom wasn't indicated at this moment, but we were considering it.

19 Q. Well, and let me clarify, because we all 20 heard the audio recording, and at no time did 21 Dr. Gassen say the words "I agree, antivenom is not 22 indicated at this time"; right?

A. Correct. But he had the opportunity and A. Correct. But he had the opportunity and he knows it's within his rights or ability to ask me to do something if he thinks it's indicated.

Page 184 Q. Did you take his silence with respect to 1 2 not administering antivenom to be an agreement with 3 that? Α. My understanding was that he was in 4 5 agreement with our care, because he was happy to 6 receive the patient, given the story that I provided 7 him with. Did you call Poison Control at any time 8 0. 9 while the patient was in the ER? I did not. 10 Α. 11 Q. Why? 12 Α. I did not think it would affect the care 13 of the patient. I -- I am experienced in treating 14 rattlesnake victims. I've been educated. I've 15 followed up. I've done CME units. I think I'm 16 knowledgeable about treating rattlesnake patients, 17 and I didn't think it was going impact our care of 18 the patient. Did Humboldt General Hospital have an 19 ο. 20 on-call toxicologist? 21 Α. No. 22 Q. Did you initially consider transferring 23 the patient via air ambulance? 2.4 Yes. We originally made plans to go via Α. 25 helicopter.

Page 185 And earlier, did you hear Dr. Glissmeyer 1 0. 2 testify that you don't need a minor patient's 3 parents' consent to transfer a patient? 4 Α. I heard what he said, yes. Do you agree with that? 5 0. 6 Α. I totally disagree. I cannot understand 7 how anybody can take a child away from a parent and 8 send them wherever they want without the parents' 9 consent. That makes no sense to me whatsoever. 10 Now, did you have a discussion with the 0. 11 patient's mom about transferring the patient via air 12 ambulance versus ground ambulance? 13 I did. And I -- I mean, I regret that Α. 14 it's not in medical records. I didn't think at the 15 time this was important to document. But we 16 originally -- let me go back a step. 17 From Huntington or HGH has its own 18 ambulance helicopter. So there is usually a crew 19 available to help us with transfers most of the time 20 when weather permitted. 21 We did originally make plans for patient 22 to be flown by helicopter. Mother, turns out, she 23 is morbidly obese. I'm talking in the ballpark of 24 300 pounds. The helicopter could not accommodate 25 her weight. When mother was told that she would not

1 be able to fly with her daughter to go to the 2 receiving hospital, she refused transport by 3 helicopter.

And for that reason, we decided to go by 5 ground because of mother's insistence that she 6 needed to be transported with her daughter.

Q. Well, did you think it was, from a medical 8 standpoint, safe to send the patient via ground 9 transport?

10 A. I thought it was okay. She was stable. 11 She -- vital signs did not change. There was 12 minimal progression of the wound. She was not in 13 pain. She had excellent color and excellent 14 profusion. She looked really well. I thought that 15 she was stable, and I didn't think it was a big deal 16 that she would go by ground in that moment.

17 Q. Okay. So you're not trying to suggest 18 that the patient's mother was dictating or forcing 19 you to make unsafe medical decisions?

20 MR. SHOGREN: Objection. I believe that's 21 a leading question.

22 HEARING OFFICER HALSTEAD: Ms. Hueth, do 23 you want to respond?

24 MS. HUETH: Sure. I'm just happy to 25 rephrase it. Page 186

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1 BY MS. HUETH:

2 Q. Did you -- was your medical 3 decision-making -- let me take a step back. 4 Who was making the medical decisions for 5 the patient, you or the patient's mom? 6 Α. Me. Okay. If you had felt it unsafe for the 0. 7 8 patient to be transferred via ground ambulance, 9 would you have discussed that with the patient's 10 mother? 11 Absolutely. If it was -- if I thought Α. 12 that that decision between helicopter or ambulance 13 was going to make a critical difference in the 14 patient's outcome, I would have insisted that she go 15 by helicopter with or without the mother, and we 16 would have had a different conversation about it. 17 And I would have tried to convince her more 18 forcefully that transfer by air ambulance was 19 important rather than going by ground. 20 But I really did think that difference in 21 time savings wouldn't make much of a difference in 22 her care, especially given how stable she was for 23 the last four hours that she was -- last four hours 24 since the envenomization. Can you turn, please, to Exhibit 11. 25 Q.

Page 188 1 We've been discussing this document over the course 2 of today. 3 My question is, on this document, it 4 indicates the initial dosing of CroFab is four to 12 5 vials. Is that consist with your understanding? Yes, it is. 6 Α. Okay. Do you have an estimate of how long 7 0. 8 it would take for that initial dose to be 9 administered? A. So, the actual medication, I think it 10 11 comes frozen. It needs to be thawed, and it's 12 extremely viscous, meaning it's a very thick, thick 13 substance. So it takes awhile to prepare it, it 14 takes awhile to thaw, it takes awhile to mix it with 15 saline before it can be administered in the patient 16 intravenously. And then it's given in over about a 17 period of about an hour or two hours, depending on 18 the patient and if they're having any reactions to 19 it. 20 So it's typically hours. 21 0. And are you familiar with maintenance 22 dosing? 23 Α. Yes. What is that? 24 Q. Sometimes if the patient still has signs 25 Α.

Page 189 1 of systemic toxicity or laboratory abnormalities 2 after the initial dose of antivenom was provided, 3 then we can re-dose the antivenom to further address 4 the patient's needs.

5 Q. This document that Dr. Glissmeyer provided 6 indicates that maintenance dosing consisting of two 7 vials of every six hours for three doses is 8 recommended starting six hours after the initial 9 dose. Is that consistent with your understanding? 10 A. That sounds about right, yes.

Q. So at least according to this and your 2 experience, the first dose of a maintenance dose is 3 given how long after you start antivenom?

A. You know, so with this one, it's really for going to depend. Every patient is going to depend because even with the vial dosing, some patients vill end up just receiving four vials. Some patients may end up receiving 20 vials. It really just depends on their response to treatment and how bad or how toxic they are from the envenomization. And everyone is different.

And so it's hard to say because there's no as set protocol where it has to be one way or another, just like we discussed earlier, it's not a cookbook practice or approach that we're taking to treatment Page 190 1 of a patient. We're tailoring each patient's 2 treatment to their toxicity or the signs that they 3 develop, and deciding to give additional doses 4 whether or not they need it based on if they are 5 still appearing toxic, if they're still having 6 worsening edema, or if they still are developing 7 coagulopathy.

8 Q. And in deciding not to give the antivenom 9 before the patient left the ER, was part of your 10 decision-making process the length of time in which 11 the patient needs to be monitored or receive 12 maintenance dosing?

13 A. Absolutely. It would be safer for the 14 patient to receive the antivenom while in the 15 hospital setting. I don't think this has come up 16 yet, but there is a significant risk of adverse 17 reactions with antivenom envenomization.

18 I read in one of the articles -- should I 19 find the page?

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20 Q. Well, --
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21 A. Well, I read there could be as high as 22 20 percent adverse reactions. Some serum sickness, 23 some hypersensitivity reactions, and these are not 24 mild or benign reactions; these are potentially 25 life-threatening anaphylactic reactions that have to Page 191 1 be treated with adrenaline, Benadryl, steroids, and 2 fluids.

And we have to balance the risks A associated with giving the medicine as well as the risks of not treating the patient. And we have to balance. And each patient is going different, and reach patient will have different needs based on a whole variety of factors: their presentation, how sick they appear, their coagulation studies, how old they are, their comorbidity. So, there are numerous factors that we

MS. HUETH: I apologize. I know it's only MS. HUETH: I apologize. I know it's only been about an hour since our last break, but I have been drinking way too much water. Would it be okay if we took a very quick confront bake?

17 HEARING OFFICER HALSTEAD: Yeah. Why 18 don't we come back at 3:30.

12 take into account.

19

HEARING OFFICER HALSTEAD: We're back on the record in case number 23-29251-1, In the Matter of the Charges and Complaint Against Jason Howard Lasry, M.D. We were proceeding with Dr. Lasry's testimony, he remains under oath, and we're on the by his counsel, Ms. Hueth.

(Recess from 3:22 P.M to 3:30 P.M.)

Page 192 1 MS. HUETH: Thank you. 2 BY MS. HUETH: Dr. Lasry, did you make a determination as 3 Q. 4 to whether or not the patient needed antivenom while 5 she was at Humboldt? Yes. 6 Α. Q. And what was your determination? 7 It was my determination that this was a 8 Α. 9 minor envenomization on the scale of 10 envenomizations, and that, for the time being, the 11 envenomization was mild enough that we could 12 withhold antivenom. 13 However, she still needed to be admitted 14 so that she could be watched in case her condition 15 deteriorated, and there was anticipation that she 16 may require antivenom in the future. 17 Q. While the patient --18 HEARING OFFICER HALSTEAD: Before you're 19 asking that -- just hold on before ask another one. 20 MS. HUETH: Of course. 21 HEARING OFFICER HALSTEAD: Thank you. 2.2 Okay. Thank you. 23 BY MS. HUETH: You mentioned that you wanted her admitted 24 ο. 25 for close monitoring in case she deteriorated. Did

Page 193 1 you anticipate, or did you expect that patient was 2 going to deteriorate? I don't think I had an expectation that 3 Α. 4 she was going to deteriorate, but it was a 5 possibility. 6 Q. While the patient was in the emergency 7 department at Humboldt General, did you observe her 8 to have mottling to the left leg? 9 Α. No. Never. 10 What is mottling? 0. Mottling is a marble-like appearance of 11 Α. 12 the skin that gives the skin a bluish/purplish 13 discoloration pattern. 14 ο. While the patient was in the emergency 15 department at Humboldt General, did her swelling 16 from the snakebite ever extend past her ankle? 17 It never extended past her knee. It never Α. 18 extended beyond the size of a silver dollar. Was her left leg, while she was in the 19 Q. 20 emergency department at Humboldt General, swollen to 21 three times the size of the other leg? 2.2 Α. Absolutely not. 23 0. And the swelling on the knee although it 24 increased; is that fair? 25 The knee swelling increased, there's no Α.

1 doubt about it, I do agree with that, but by a 2 minuscule amount.

3 Typically, when we see envenomizations, we 4 can watch the edema progressing in front of our eyes 5 as it slowly creeps up the leq. It will start 6 usually in the feet or in the tips of the extremity, 7 and the edema will develop centrally, it will come 8 towards the core, and we mark it at different 9 intervals to show the progression of the swelling. In this case, the swelling was circular, 10 11 it was not circumferential around the extremity, and 12 it was minimal increase in the few hours or so that 13 she was in our care. Was her left knee ever swollen to 14 ο. 15 three times the size of her right knee? Absolutely not. 16 Α. While the patient in the emergency at 17 Q. 18 Humboldt, was she ever hypotensive? Α. 19 No. And we've talked about the fact that there 20 0. 21 is no blood pressure document ed, are there other 22 clinical signs to suggest whether or not a patient 23 is hypotensive? 2.4 Certainly. Α. And can give us an example of some of 25 Q.

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1 those? 2 Certainly. Hypotensive patients are Α. 3 typically -- the patients that we would see in the 4 ER that sometimes pass out or have syncope. So, the 5 symptoms would be weakness, being lightheaded, being 6 dizzy, having trouble staying awake, and, perhaps, 7 looking ill or pale. And did Patient A, while she was in the 8 Q. 9 emergency department at Humboldt General, ever show 10 any of those signs or symptoms of hypotension? 11 Not at all. Α. 12 Q. At the time of the patient's transfer when 13 she's leaving Humboldt to go to Renown, did you feel 14 like she was stable? 15 Α. Yes. 16 And what do you base that on? 0. On multiple factors. She looked really 17 Α. 18 well. She didn't complain of pain. She had minimal 19 swelling of her bite site. She had a pulse that was 20 a little bit elevated, but it was stable, it was 21 staying between 150 and, let's say, 160 beats 22 per minute, and that's how I gauge stability. There 23 was no coagulation abnormalities. 24 And we did the medical screening exam 25 sufficiently to determine the antivenom wasn't

1 indicated at this time.

2 Q. If the patient appeared to you unstable, 3 would you have transferred her?

A. Yes, I still would have transferred her. 5 She still needed to be admitted to a fatality with a 6 higher level of care where she could be admitted and 7 closely monitored. That wouldn't change.

8 Q. Would it potentially change the method of 9 transport, assuming mom agreed?

10 A. If it was a more severe envenomization, 11 that we would categorize as moderate or severe, yes, 12 then I would insist that she go by a faster means of 13 transport.

14 Q. Did you see anything in the medical 15 records that document ed that the patient was stable 16 at the time of transfer?

17 A. Yes, I did.

18 Q. What did you see?

19 A. Nurse's notes. I will have to flip 20 through. But the nurse's note at the time of 21 transfer, she document ed the patient's condition, 22 and let's see, on page 81, one there's a shape 23 that's title "Admit Transfer Discharge Information," 24 at 18:32, Nurse Espinosa, she documents: "Patient's 25 condition for transfer, stable." 1 And that is about in the first paragraph 2 of the page .

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3 Q. While the patient was at the emergency 4 department at Humboldt General, do you believe that 5 she showed signs or symptoms of systemic 6 envenomization?

7 A. No.

8 Q. And why not?

9 A. She was stable from the vital signs 10 standpoint, she did not have any coagulation defects 11 on her laboratory testing, and the progression of 12 wound swelling was guite minimal.

Q. We've talked throughout the day regarding 14 various articles that Dr. Glissmeyer provided to the 15 Investigative Committee. My question is is there 16 any one article that establishes the standard of 17 care for an emergency medicine physician?

18 A. No, there is not.

19 Q. Okay. In making the decision to not give 20 the patient antivenom, did you use your medical 21 judgment?

22 A. Absolutely.

23 Q. As we were looking through these articles 24 over to course of day, did you see indication in any 25 of them where, if the swelling progresses minimally,

Page 198 1 you should still give antivenom? 2 Α. No, I did not see it. Did you see anything to the converse of 3 Q. 4 that, that if the swelling progressed minimally, you 5 don't need to necessarily give antivenom? 6 Α. I'm sorry. There's too many negatives. 7 Can you please --Q. Yeah. I'm sorry. It's becoming late in 8 9 the day and my questions are deteriorating. In the articles that have been provided by 10 11 Dr. Glissmeyer, did you see anything that supported 12 your opinion that minimal progression of swelling 13 does not necessarily warrant antivenom? 14 Α. Yes. And are there any examples you can give 15 Q. 16 us? 17 Yes. Α. Just tell us what exhibit you're looking 18 Q. 19 at. A. On Exhibit 12, page 132, the first column, 20 21 about half way through, it starts with "these 22 guidelines." Should I read it out loud? Is this the section that was read when I 23 0. 24 was talking to Dr. Glissmeyer? A. Yes, it is. And there are other ones. 25 Do

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1 you want me to read that?

2 Q. It's okay. I think we read into the 3 record.

A. The other one, this one is also section 5 12, page 139. Let's see. At bottom of the second 6 column, in the last paragraph, where it starts with 7 "Patients with dry bite or who have not been bitten 8 by a pit viper should not receive antivenom."

9 And then it reads "Patients with minor 10 envenomization, defined as swelling and localized 11 pain at the envenomization site, should be closely 12 observed and not be given antivenom unless local 13 tissue affects progress."

Q. Did this patient at any time while she was in the emergency department at Humboldt General have hemorrhagic bleb?

17 A. No.

18 Q. And what is that?

19 A. It's a blood-filled blister.

20 Q. While patient was in the emergency

21 department at Humboldt General, did she demonstrate 22 any airway swelling?

23 A. Not at all.

Q. Did she demonstrate anything to suggest to25 you that she was having difficulty breathing?

Page 200 Not at all. 1 Α. 2 Q. Earlier, Dr. Glissmeyer described a test, 3 the negative inspiratory force. Do you recall that 4 testimony? Α. I do. 5 6 Q. Is that a test that you routinely perform 7 in the emergency department? I have never performed it in the emergency 8 Α. 9 department. It is not a common ER procedure. HEARING OFFICER HALSTEAD: Can you repeat 10 11 the name of that procedure, please? 12 MS. HUETH: The negative inspiratory, 13 I-N-S-P-I-R-A-T-O-R-Y, force. 14 HEARING OFFICER HALSTEAD: Thank you. 15 THE WITNESS: I would also add something, 16 just that I wouldn't see a good reason to do that 17 test if there was no breathing abnormalities. She 18 wasn't hypoxic, she wasn't in respiratory distress, 19 she wasn't -- her breathing wasn't labored, and she 20 was speaking freely. So, it just didn't seem like 21 there was any indication to do such a test. 22 BY MS. HUETH: 23 Q. We also have talked about today the 24 patient's vitals while she was on route to Renown. 25 And if you can turn to page 83.

Page 201 1 Α. Yes. And is there a period of time during which 2 Q. 3 the patient was not hypotensive while she's on route 4 to Renown? 5 Α. Yes. 6 Q. And approximately how long? Between 19:38 and to 21:17, so that's 7 Α. 8 about an hour and a half. So, an hour and 9 45 minutes that she was normal tensive, not 10 hypotensive. 11 And, Doctor, do you have an opinion, to a Q. 12 reasonable degree medical probability, whether you 13 complied with the applicable standard of care of 14 while you were taking care of this patient? Α. I definitely feel that I met the standard 15 16 of care. The patient's ultimate outcome, you're 17 Q. 18 aware that the patient ultimately passed; is that 19 right? 20 Yes. Α. 21 Do you have opinion of whether that 0. 22 outcome was predictable? On my side, it was completely unexpected. 23 Α. 24 I expected that she had been stable during her ER 25 stay, she seemed quite well, she had zero pain, she

Page 202 1 had minimal swelling, she had no coagulation 2 deficits, and she had been stable for the three or 3 four hours since the envenomization had occurred. 4 So, I believed that she would be perfectly 5 safe for the one- or two- hour trip that it would 6 take to get to Renown. I really didn't expect her 7 to decline or deteriorate as quickly as she did. 8 MS. HUETH: Those are all my questions. 9 Thank you. HEARING OFFICER HALSTEAD: Thank you. 10 11 Mr. Shoqren? 12 MR. SHOGREN: Yes. Thank you. 13 CROSS-EXAMINATION 14 BY MR. SHOGREN: 15 Q. Good afternoon, Dr. Lasry. A. Good afternoon. 16 17 Thank you. Q. First off, you had mentioned that you had 18 19 treated previous snakebite patients. Did you treat 20 any at Humboldt General Hospital with snakebites? 21 Α. I don't believe so. Other patients, other 22 than Patient A, no, I can't recall. 23 0. How long did you work at Humboldt General 24 Hospital for? 25 Α. One or two years.

Page 203 Okay. And you mentioned that you had 1 0. 2 administered antivenom in with two-thirds of 3 patients that you treated with that issue. When --4 at what point after the snakebite did you normally 5 administer the antivenom? So as we discussed, it's going to vary. 6 Α. 7 Some people, they come in so systemically ill, 8 they'll present with low blood pressure or massive 9 swelling of their extremities or some other 10 abnormality that we decide, from the time that they 11 stepped through the ER doors, that patient warrants 12 antivenom. 13 Other patients, we need a workup. We need 14 to watch them period of time, we need to see how the 15 swelling is progressing, we need to monitor their 16 vital signs, we need to check for coagulation 17 deficits, and then we decide. 18 So, it's really a case-by-case. It is not 19 cookbook treatment of patients, just as described in 20 the article. 21 0. But did you administer antivenom there in 22 the emergency department? In Humboldt General, I don't recall if I 23 Α. 24 did. I don't think I did. How about in other hospitals settings? 25 Q.

Page 204 1 Other hospitals, yes. Α. 2 And do you recall, what's the youngest Q. 3 patient you've treated with an envenomization? 4 Α. I think it was a five year old. Okay. So mentioned that Patient A's blood 5 0. 6 pressure was monitored while at Humboldt on May 9th? 7 Α. Correct. And is there any reference of it in any of 8 Q. 9 the Humboldt General Hospital records we've 10 reviewed? 11 No. Α. 12 Q. So how do you know that it was measured? 13 Α. I know this because it's our normal 14 practice that we do with every patient that comes to 15 through the emergency doors. New patients has leads 16 put on them, every patient has a pulse oximeter put 17 on them, every patient has EKG leads put on them, 18 every patient has a blood pressure cuff put on them. All off of those recording devices are 19 20 connected to the bedside monitor, which can 21 interpret and show those vital signs to us. 22 Q. So why wasn't it included in, like say, 23 the vitals section? 2.4 I can't speak to that. It's the nurses Α. 25 who obtain the vital signs and document the vital

Page 205 1 signs. And I don't have control over that part of 2 the patient care. 0. And why wasn't it mentioned on your notes 3 4 regarding the patient? Because the blood pressure was normal, so 5 Α. 6 it didn't need to be addressed. And moving on to page 83 of Exhibit 6. 7 0. Α. Yes. 8 So the vital signs are listed here. 9 ο. What 10 are the first three blood pressure readings? 11 There are recorded -- you're talking about Α. 12 where it starts at time 18:49? 13 Q. Yes. Yes. The first three readings are 59 over 14 Α. 15 40, and then 58 over 42, and then 59 over 41. Does that indicate hypotension? 16 Q. 17 Those numbers are slightly low. Α. Yes. 18 Q. What is the threshold for a young child, a 19 three year old, for hypotension? 20 Α. So there's a formula that we use to 21 determine what makes that normal blood pressure to 22 be for a certain age when we're talking about 23 pediatrics. The formula is two times the patient's 24 age, plus the number 65. 25 And so for her, an expected blood pressure

Page 206 1 would be about 70. And so, you know, 60 is not too 2 far from 72, but it is lower. So she does --3 according to these values, she does demonstrate 4 hypotension on the first three reads. 5 HEARING OFFICER HALSTEAD: Dr. Lasry, can 6 you correct me if I'm wrong, I'm just trying to keep 7 everyone's testimony, compare apples to apples. I think you said two times the patient's 8 9 age, plus 65. Is that what Dr. Glissmeyer said, or 10 did he say plus 70, I thought? 11 THE WITNESS: He said plus 70. But my 12 Google search showed plus 65. 13 HEARING OFFICER HALSTEAD: Okay. Thank 14 you. I just wanted to make sure I understood that 15 correctly. 16 THE WITNESS: Sure. HEARING OFFICER HALSTEAD: Sorry, 17 18 Mr. Shogren. MR. SHOGREN: That's fine. Thank you. 19 20 BY MR. SHOGREN: 21 0. And there on page 83, when was the 22 patient's blood pressure first measured? At 18:49. That's when they first 23 Α. 24 documented it. Q. And when did the patient depart Humboldt? 25

A. I would have to check specifically. I 2 would say it's hard to tell. Somewhere between 3 18:30 and 18:50.

Q. So you said the patient did not exhibit -5 or did not have hypotension during her stay at
6 Humboldt?

7 A. Correct.

8 Q. How would you explain that dip in the 9 blood pressure there at --

10 A. These are -- I don't know how to explain 11 it. These are numbers that the EMS crew obtained. 12 They did not inform me about these about 13 abnormalities, because I only saw normal blood 14 pressures while the patient was in the ER.

And so I do not know why those numbers are 16 low. As we can clearly see, they normalized soon 17 afterwards.

18 Q. And you mentioned the blood pressure for 19 patients is normally document ed in the patient 20 records?

21 A. Yes.

Q. Do you look at the patient records, such
as vital signs, before seeing a patient or during?
A. Well, the care in the ER is really -25 we'll go in and out. Sometimes I'll see the patient

Page 208 1 before they have vital signs taken. Sometimes I'll 2 see them a half hour after they've been there, and 3 the vital signs are already available. 4 It just varies depending on how sick an 5 individual patient is or how busy we are. You looked at this patient's vital signs 6 Q. 7 during her stay there; correct? Α. Correct. 8 And did you note the lack of any record of 9 ο. 10 blood pressure? So, when I look at the vital signs, I look 11 Α. 12 at the monitor. I don't have to flip through a 13 chart to see what the vital signs are. They're just 14 available visually for me on the monitor. So if I see the results or if I see the 15 16 vital signs on the monitor, I'm not really flipping 17 through the nurse's note to see what she document ed 18 or whether or not she document ed it. In fact, I 19 leave that alone. It's -- the nurse's 20 document ation is separate from the physician's 21 document ation. 22 Q. So you're going off the signs you saw 23 there at the time. How do you remember what her 24 signs -- this was -- what? -- three years ago. Ι 25 mean, is this how --

Page 209 A. This was a critically ill patient. I 2 don't see hundreds of snakebite patients. This one 3 was a young child, and this one died. So my memory 4 of this patient's case has stayed with me.

5 Q. So despite the lack of any record of the 6 blood pressure in the notes provided from Humboldt, 7 you remember what her blood pressure was from 8 three years ago?

9 A. I don't remember an exact number, but I
10 remember her blood pressure was in the normal range.
11 Q. And you mentioned that there is record of
12 the patient having tachycardia; correct?

13 A. Yes.

Q. And I believe you said in your direct that it possibly was because the patient was fearful or excited, given the circumstances. That is your reason why the patient's heart rate was elevated? A. I gave that as a possible reason. It's not really meant to be the sole reason. A lot of times, I don't know why a patient's vital signs are abnormal, but those are contributing factors that could have possible contributed to her having tachycardia.

24 Q. So, the vital signs are abnormal, you 25 said?

Page 210 1 The heart rate was elevated, yes. Α. 2 What is another -- what could be another Q. 3 realistic reason for the tachycardia? Α. Dehydration, low volume, the 4 5 envenomization, of course. The envenomization. 6 Q. Okav. And in your experiences, is the 7 8 combination of low blood pressure and heart rate, 9 high elevated heart rate is that cause for concern? Α. Absolutely. 10 And that combination, what could be the 11 Q. 12 reason for that? 13 Again, there is many possible causes, but Α. 14 during the ER stay, the patient had mildly elevated 15 heart rate and had a normal blood pressure. 16 0. And during your testimony, you said 17 hypotension or low blood pressure, that is one of 18 the cardinal signs of severe envenomization? Yes, it could be. 19 Α. Is that, in itself, a serious sign? 20 Q. 21 Α. We take the whole picture. Low blood 22 pressure is a serious sign, for sure. 23 So, we look whole picture of the patient's 24 presentation, and how they appear and other vital 25 signs and other parameters.

Page 211 But you don't need multiple signs to 1 0. 2 determine if there's been severe envenomization? Α. So, I think my answer goes back to what we 3 4 talked about earlier. It's not cookbook medicine. 5 It's not whereas we have one vital signs that's 6 abnormal, and we decide that person needs to be 7 treated. It's not like we have one lab abnormality 8 and for sure that patient has to be treated. 9 We look at the patient as a whole. It's 10 can't be a cookbook. We're going to take into

11 account their age, their comorbidity, the event, 12 where the envenomization occurred, the progression 13 of the swelling, the coagulation deficits that 14 occur, how the patient appears, and the vital signs. 15 So I'm sorry, but it's not just one simple 16 parameter that you could look at where you make the

17 decision to treat or not treat. We look at the 18 whole picture.

19 Q. Okay. And so you talked about in your
20 testimony about swelling of the patient's knee area.
21 Just to be clear, there was increased swelling?
22 A. No doubt, there was increased swelling.
23 Q. Was there any mottling around the left
24 knee?

25 A. I did not see any mottling.

Page 212 1 Okay. Can you turn to page 79? 0. 2 A. Yes. 3 Q. Can you focus on the section titled 4 "Emergency document ation" here? Α. 5 Yes. There's these textual results listed. 6 Q. 7 What are these? 8 Α. These are the nurse's progress notes, is 9 what they look like. Q. So on the note dated May 9th, 2020, it's 10 11 6:24 P.M., does it say that there was noted mottling 12 around left knee? 13 A. It sure does. Yes, it does. Q. And does it say M.D. and where? 14 Yes, it does. 15 Α. 16 Q. And is that M.D., is that referring to 17 you? 18 Α. Yes. 19 Q. So just to be clear, you were the 20 admitting physician? 21 A. I was the treating physician. 22 Q. The treating physician. Was the 23 responsibility of the patient's care in your hands? 24 Α. Yes. Q. Was it any other physician's 25

Page 213 1 responsibility to take of the patient at Humboldt? 2 Α. No. 3 Q. Thank you. 4 Did you -- so you mentioned that you 5 talked to a Dr. Thorp at Humboldt? A. Correct. 6 Q. What was Dr. Thorp's position? 7 She is a pediatrician. 8 Α. 9 Q. And was she responsible for the care of 10 the patient here? 11 Α. She was not responsible for Patient A. 12 She would be responsible for patients that I 13 admitted to her service. Would she be the one to determine if 14 Ο. 15 antivenom was necessary? She couldn't be because she wasn't 16 Α. 17 comfortable with it and wasn't experienced with it. But you were ultimately the one that 18 Q. 19 decided whether or not to administer antivenom? 20 A. That's right. 21 Q. Did you make that determination before you 22 spoke with Dr. Thorp? I can't recall for sure. I believe so. 23 Α. Ι 24 can't be sure, but I believe so. I believe that I 25 spoke to the consulting physicians once I had most

Page 214 1 of the results back from testing. 2 Q. And then you note, and you've testified, 3 it says in your notes at 5:45 P.M. you spoke with a 4 Dr. Gaffen, it says here in the notes. And just for 5 the record, was it Gassen or Gaffen? Gassen. SS like Sam. 6 Α. Okay. When you spoke with Dr. Gassen, was 0. 7 8 he responsible for the care of the patient at that 9 time? 10 No. I was responsible care of the patient Α. 11 while she was in our emergency department. 12 Q. And when you spoke with him -- well, first 13 of all, were you present when there was -- we played 14 respondent's Exhibit number 7, which was an audio 15 recording? 16 A. What's the question? Were you present and did you hear the 17 Q. 18 audio recording that was played earlier? Yes, I was. 19 Α. Do you recall the contents of that 20 Q. 21 conversation? 2.2 A. Yes, I do. 23 0. And that was a conversation between you 24 and Dr. Gassen? 25 Α. Correct.

Page 215 Okay. Did you convey to Dr. Gassen the 1 0. 2 patient's vital signs? 3 Α. I believe I told him the vital signs were 4 stable. Did you convey to him the patient's blood 5 0. 6 pressure? 7 The blood pressure was normal, so I did Α. 8 not convey --So you didn't convey that to him? 9 Q. I didn't relay that specifically, no. 10 Α. 11 And did you convey the patient's heart Q. 12 rate? 13 A. I did not hear it on the conversation. 14 0. But you said the patient's heart rate was 15 abnormal? 16 The patient's heart rate was fast, a Α. 17 little bit fast, but it was also stable, meaning it 18 wasn't fluctuating, it wasn't going up and down. So 19 there was stability with the heart rate. 20 ο. You didn't think it was necessary to 21 explain to this Dr. Gassen the tachycardia of the 22 patient? 23 Α. You know, when I give a report, I gave the 24 information that I thought was most relevant at the 25 time. If I forgot to give the exact number of the

Page 216 1 heart rate, it's my mistake, but I try to convey as 2 well as possible the correct and -- the correct 3 story of how the patient presented, how she 4 appeared, how her workup went, and how she 5 progressed during the ER stay. And if I left out some exact number, it's 6 7 on me. I apologize. But I thought I have a very 8 fair representation of the patient's ER evaluation 9 and assessment on that date. 10 Okay. And so do you believe that Humboldt 0. 11 was not equipped to deal with adverse reactions to, 12 you know, if you were to administer antivenom? 13 No. We -- Humboldt General Hospital, I Α. 14 believe, had the medications necessary to treat 15 severe allergic reactions. 16 Okay. You got in -- do you recall, did 0. 17 Humboldt have antivenom on hand on about May 9th, 18 2020? 19 Α. I cannot say for sure. Do you recall, does Humboldt typically 20 Q. 21 have antivenom available? 2.2 Α. I don't know. I'm not at all involved in 23 what the pharmacy stocks or what they keep or what's 24 available, so I really don't know. Is it typical, in your experience, for 25 Q.

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1 emergency departments to have antivenom on hand?
2 A. Yes. A majority of emergency departments
3 will have. However, some of the smaller, more rural
4 hospitals won't because they can't afford it, and
5 it's very expensive medication.
6 Q. Was the availability antivenom, was that a

Q. was the availability antivenom, was that a
7 consideration into whether or not to administer it
8 here?

9 A. Not really. My main consideration was to 10 treat or not to treat. To give the antivenom or not 11 to give the antivenom.

12 Q. So you mentioned that antivenom has --13 that administration of antivenom may have adverse 14 affects?

15 A. Correct.

16 Q. What would those adverse affects be, 17 typically?

18 A. Well, the common and serious ones that we 19 typically see in about 20 percent of patients given 20 antivenom would be either hypersensitivity reaction 21 or serum sickness. And both of those are allergic 22 type of reactions.

Q. Could you turn to Exhibit 13, and page on24 150.

25 A. I'm there.

Page 218 So if you go to the section titled "Dose 1 0. 2 and Administration," could you read the beginning of 3 the second paragraph of that section, the first 4 sentence? 5 Α. Yes. It starts with "Antivenom Therapy"? 6 Q. Yes. 7 Yes. Α. "Antivenom therapy with FabAV or 8 Fab2AV, can be associated with 9 potentially severe allergic 10 11 reactions, but the risk appears to 12 low. Less than one percent. 13 Nevertheless, antivenom should only be administered in a 14 continuously monitored emergency 15 or intensitive care unit setting." 16 Okay. Thank you. Just the beginning 17 Q. 18 there. Thank you. And what is the second section here, 19 20 "Treatment of acute antivenom reactions." What does 21 this section, the first paragraph, say about the 22 rate of acute serum reaction and sickness? 23 Α. I don't know. Where do you want me to 24 read from? Well, does this section say that patients 25 Q.

Page 219 1 receiving either FabAV or Fab2AV is approximately 2 two to three percent of the rate of acute serum 3 reaction in sickness? Α. If you don't mind, I'll read it myself, if 4 5 you want my interpretation. Yeah. That makes it clear. 6 ο. Yes, I see it says that the rate of 7 Α. 8 reaction is two or three percent in previously 9 treated patients. Meaning patients that received 10 antivenom before, have a two to three percent. 11 However, there's another article that 12 shows completely different numbers. 13 Okay. That was just my question just on ο. 14 this here. 15 And you mentioned HGH at the time was 16 equipped to deal with reactions to antivenom? 17 As we read in the paragraph you had me Α. 18 read, the patient needs to be either in an ER or ICU 19 setting. 20 And the patient needed to be transferred 21 to a higher level of care. It wasn't something we 22 want the patient to have while being transported 23 with EMS with limited resources, with limited 24 ability to care for adverse reactions. 25 Q. Okay. And so what was the risk, then, of

1 not administering antivenom in this situation?

2 A. The risk was of a severe life-threatening 3 hypersensitivity reaction, to which could be as high 4 as 20 percent.

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5 So, yes, if antivenom is indicated, we 6 should give it and I would give it and I have given 7 it. But if it's a questionable case or if it's 8 strongly indicated, then you have make the decision: 9 Is the risk of severe hypersensitivity or allergic 10 reaction worth the chance taking?

And my first oath as a doctor was to cause 12 no harm. So, if it was indicated, if it was 13 strongly indicated, I would give it. If she was 14 more ill or ill appearing or had other parameters 15 that indicated that she needed to have antivenom, I 16 would give it.

17 But short of that, it is not a benign 18 medicine that you can just freely to anybody. It's 19 not like tap water. It is something that has --

20 Q. Okay.

A. -- a significant risk associated with it.
Q. Okay. But according to this article, I
23 decided the risk appears to be low for potentially
24 severe allergic reactions?

25 A. That's true. But another article that

1 Dr. Glissmeyer provided said that it was as high as 2 20 percent. Q. I'm referring to this article, and it 3 4 appears to be a peer-reviewed article; correct? 5 Α. Okay. 6 Q. Okay. 7 I thought they were all peer-reviewed Α. 8 articles. 9 Q. Correct. And I just wanted to move here -- the 10 11 transfer -- the mode of transportation, whose 12 decision was that? 13 Ultimately, it was mother's choice to go Α. 14 by ground. Q. So you had no say in this? 15 A. Again, mother has to consent to me 16 17 transferring the patient anywhere. I cannot simply 18 take a child away from a parent and send them to 19 another hospital where the parent isn't allowing me 20 to send. 21 So your question is hard so answer because 22 I can't send a child anywhere without the mother's 23 consent. 24 And so since as the mother refused, yes, I 25 would prefer to go by air ambulance, yes, I would

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Page 222 1 have preferred the fastest means possible, but if 2 she refused, I have to negotiate with mother. And 3 if mother was adamant that she wasn't willing to go 4 as she was by -- to allow the child to go by 5 helicopter, then I gave into her request. And I 6 thought it was okay to go by ground transport 7 because I thought we had a period of time of safety 8 and because the patient has been stable in our ER 9 for the last three to four hours. And all the other 10 issues I've already discussed. 11 Okay. And roughly how long did it take Q. 12 for the patient to get from Humboldt General 13 Hospital to Renown in Reno? I think it's about two and a half hours. 14 Α. Two and a half hours. 15 Q. Would that time have been shorter if she 16 17 were to take air transport? 18 Α. Yes. 19 Q. Do you know roughly how much shorter or 20 how much longer it would have taken? 21 Α. Oh, I think -- I think it would have been 22 just an hour by helicopter. HEARING OFFICER HALSTEAD: Do you know or 23 24 are you guessing? 25 I'm approximating. THE WITNESS: I'm

Page 223 1 guessing. I don't know the exact times. 2 BY MR. SHOGREN: Q. Okay. Can you -- actually, going back to 3 4 page 34, this is Exhibit 6. Α. 5 Yes. Q. Under the section "Procedure." 6 7 A. Yes. Q. Was this patient listed under critical 8 9 care? A. I document ed that I provided critical 10 11 care for this patient. 12 Q. Did you bill for critical care of the 13 patient? Yes. I don't actually billing myself. I 14 Α. 15 just document my care. So I didn't -- I don't get 16 any remuneration from any particular patient I've 17 seen. 18 Q. Sure. 19 To your knowledge, was this patient billed 20 for critical care? 21 A. It depends on the billing companies, 22 whether or not they billed for it. Q. And why was this critical care in this 23 24 instance? 25 A. Snakebite envenomization are classified as

Page 224 1 critical care cases. And then there's also the care 2 that I provided, multiple reassessments, the 3 multiple reevaluations of the patient, the 4 discussion with the consulting physicians, the 5 medical decision-making time, all of those 6 categories count towards critical care time.

7 Q. And despite this being critical care, you 8 didn't think antivenom was necessary?

9 A. Critical -- you could have critical care 10 without a patient being critical. So, patients can 11 be potentially critical care, critically ill, and we 12 could bill for critical care for them. And they may 13 be able to walk home without having any critical 14 abnormalities.

15 So, critical care does not mean that the 16 patient was critically ill; it means they were 17 potentially critical.

Q. You also mentioned in your testimony there
was a possibility of deterioration for the patient?
A. Correct.

21 Q. Can you elaborate on that? What do you 22 mean by that?

A. Well, with snake envenomizations, the A. Well, with snake envenomizations, Page 225 1 could develop over time. Even if she didn't have 2 signs of toxicity at the onset or after the first 3 few hours, she, or any snakebite patient, may 4 develop signs of toxicity 12, 24, even 72 hours 5 after the envenomization.

6 So that's why I could not predict -- I 7 don't see the future, I wasn't certain if need meet, 8 but that possibility did exist. And the only way to 9 know would be to continuously monitor her, watch the 10 progression of the swelling, repeat the coagulation 11 studies and the laboratory tests, and based on those 12 findings, you would determine if antivenom is 13 indicated at that time.

14 Q. Okay. So do you believe you did 15 everything you could do at that time for the 16 patient?

17 A. Yes. I believe that I gave her very good 18 care, and I believe I treated her well and 19 appropriately and I followed the standard of care. 20 And I did my best to give her the best care 21 possible.

22 Q. So why do you think she needed to be 23 transferred?

A. Because we didn't have a physician that 25 could care for a rattlesnake patient at our

Page 226 1 hospital. I had to transfer her to a facility where 2 they did have such specialists. 0. And you mentioned that you've treated how 3 4 many patients with --5 Α. Twenty. 6 Q. Twenty? Fifteen to 20. 7 Α. So just to sum, what did you do for the 8 Q. What -- how did you benefit the patient? 9 patient? We did multiple things to help stabilize 10 Α. 11 this patient. We started off with a medical 12 screening examination. We obtained a history. Ι 13 performed a physical exam. I ordered laboratory 14 testing. I provided her with IV fluids for 15 additional hydration. I provided her with pain 16 medications. I provided her with potassium 17 replacement because her potassium was extremely low. I updated the mother with what was 18 19 happening, with our decision-making, our decision 20 not to treat now, but the fact that we may need to 21 treat in future. 2.2 And I consulted with admitting physicians 23 in order to get the patient to the appropriate level 24 of care where she could be watched and where 25 antivenom could be administered, if it was needed in

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1 the future.

2 Q. Okay. And just to be clear, is it 3 possible to give the patient antivenom and then 4 transfer her to another facility? Everything is possible. I mean, sure, 5 Α. 6 that is within the realm of possibility. Yes. But you didn't think that was necessary to 0. 7 8 give the antivenom and transfer her? Well, there is a couple of points I'd like 9 Α. 10 to make. 11 One is I thought that we could withhold, 12 and I thought that we had some time before making 13 the decision to give antivenom. The patient had a 14 period of being stable, she had no lab 15 abnormalities, she had minimal progression of the 16 swelling of the wound, she had no pain, and 17 everybody document ed that she was well profused and 18 had good color and looked well and was comfortable. On top of that, I did not want the patient 19 20 receiving antivenom while being transported by EMS. 21 EMS is not very well suited to severe anaphylactic 22 reactions or to intubate a pediatric child. If she 23 had lost her airway, if she had developed swelling 24 of airway over time or of her mouth or lips and she 25 needed a tube put in her airway, EMS wouldn't be

Page 228 1 able to do for her. So it wouldn't a safe transfer. 2 Yes, it's within the realm of possibility, 3 but it wasn't something I deemed to be safe. 4 MR. SHOGREN: I have no further questions 5 right now. Thank you. MS. HUETH: I just have a brief follow-up. 6 HEARING OFFICER HALSTEAD: 7 Sure. 8 REDIRECT EXAMINATION 9 BY MS. HUETH: 10 Can you turn, please, to Exhibit 1, 0. 11 specifically page 3. 12 Α. Yes. 13 Q. Paragraph 16, the one that starts with 14 "NAC 630.040 defines malpractice." Can you read 15 what is in quotation marks as the definition of 16 malpractice? A. Certainly. 17 "The failure of a physician in 18 19 treating a patient to use the 20 reasonable care, skill, or 21 knowledge ordinarily used under 2.2 similar circumstances." 23 0. Does it define malpractice as not doing 24 everything you could? No, it does not. 25 Α.

Page 229 1 0. Okay. 2 MS. HUETH: That's all I have. 3 HEARING OFFICER HALSTEAD: Thank you. Do 4 you guys all mind if I ask a few questions? MS. HUETH: Of course not. 5 EXAMINATION BY THE HEARING OFFICER 6 7 BY HEARING OFFICER HALSTEAD: Dr. Lasry, is it possible for a physician 8 Q. 9 to go on the transfer with the patient? No, that's not possible. There's only one 10 Α. 11 ER physician. I work -- in those shifts, we did 12 24 hours. There is no other physician that could 13 cover the emergency department. There's no other 14 physician in the hospital that's skilled or trained 15 or credentialed or certified to do that duty. So, no, it was not possible for me to 16 17 travel with the patient. Based on staffing only? 18 Q. 19 Α. I think the answer is yes, based -- yes, 20 because there's nobody to -- there's nobody to cover 21 it. There's nobody to cover the ER. It would be 22 illegal for me to leave the ER without medical 23 coverage. I guess -- I'm not asking -- I guess I'm 24 ο. 25 asking if there had been other coverage, is it ever

Page 230 1 a situation where physicians travel with patients on 2 transport? They -- not in this country. I've seen it 3 Α. 4 happen in France, that's commonly done. In some 5 countries, it's common that the EMS system has 6 physicians, but not in this country. 7 0. Okay. Thank you. I appreciate your indulgence because I'm a 8 9 lawyer, I'm not a physician, so I might ask some 10 questions that you might find strange, but it's just 11 so I can understand. 12 Α. I'm happy to answer them. 13 Thank you. I appreciate that. Q. How much lead time did you have to know 14 15 that you had a patient coming in with a snakebite? I can't recall exactly. Maybe 15 or 16 Α. 17 30 minutes. Okay. And did you think to check if there 18 0. 19 was any --20 A. That's a guess. 21 Q. You said maybe 15 or 20 minutes? 2.2 Α. Fifteen or 30 minutes, correct. 23 0. Okay. And did you think to check if there 24 was any antivenom available within that time, 25 knowing that there was someone coming in and you

Page 231 1 wouldn't know their condition until they got there 2 and there was preparation needed for the serum if it 3 needed to be administered? A. I didn't think in those terms. In my mind 4 5 at the time, I just assumed that we had it. I did 6 not check beforehand. 0. Okay. So you weren't worried about it not 7 8 being available? No. And if it wasn't available, then we 9 Α. 10 would send the ambulance to go find some from 11 another ER. 12 Q. Okay. How -- okay. Okay. And then the other snakebites 13 14 you've treated, were those in this area, this area 15 being Northern Nevada, or were those in different 16 locations? A. Different locations. 17 Q. 18 Okay. So have you ever dealt with a 19 rattlesnake bite in particular? A. Of course, yes. 20 21 0. Okay. And how many of the bites that you 22 dealt with previously were rattlesnake bites? A. So, you know, we're talking about 23 24 Crotalidae, it's a genius of snakes. And so I think 25 it encompasses rattlesnakes and water moccasins and

1 pit vipers, they're all of the same category. And 2 the antivenom is made from a combination of those 3 snakes.

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4 Oftentimes, a person who is bitten by the 5 snake doesn't know exactly what type of snake bit 6 them. They are not knowledgeable about the 7 different types of snakes. Sometimes they give us a 8 description, sometimes not.

9 So in reality, we don't worry too much 10 about the exact description of the type of snake 11 that bit the patient, but it seemed like it was of 12 the rattlesnake family, then we'll give the 13 antivenom that usually has the venom of a whole host 14 of the snakes.

15 Q. That was helpful. Thank you.

16 Where there any other medical
17 professionals there, nurses or physicians assistants
18 or anybody who tried to encourage you to give the
19 antivenom?

A. They didn't encourage me. They asked if 21 we should give it. I wouldn't say they encouraged 22 me.

There was just the two nurses there I was working with. So, Cristal was one. I don't recall the name of the other nurse. But it was just me and

Page 233 1 two nurses that were caring for all of the patients 2 coming through the emergency department. And when you said that they talked to you 3 0. 4 about that antivenom, what was the nature of their 5 inquiry to you? 6 Α. They asked if they thought we should give They asked if we thought it was indicated. 7 it. And 8 I was the one making the medical decision-making, 9 and I had come to the judgment that I didn't believe 10 that it was indicated at this time. 11 Okay. Did both nurses inquire of you or Q. 12 just one? I only recall one asking. 13 Α. And which one was that? 14 ο. Cristal. 15 Α. And then just because I'm not familiar 16 0. 17 with how -- I've heard talk about how you checked 18 the vital and why and the indication of the vitals, 19 but I don't have an understanding of how a snakebite 20 impacts a person's system, and so what you would 21 look for to see that bite. 22 Can you explain that to me, please? 23 Α. For sure. So we talked about the swelling 24 that develops. What happens is -- maybe I'll just 25 give you just a brief rundown of snakebites, of what

Page 234

1 they are.

Basically, when you get bitten by a snake or envenomated by a snake, you're getting a soup of different toxins, lots of different proteins and peptides, it's organic materials, some metals, but it's a whole soup. It's a concoction of different things that are toxic to us.

8 The effects on the body are various 9 because there's so many different toxins within the 10 venom. There are toxins that make the blood vessels 11 leaky, and by making them leaky, that can make the 12 blood pressure drop, and that's what causes the 13 swelling to develop. So when you have swelling, 14 it's because the blood vessels are leaky, and the 15 fluid or blood within them is leaking out of the 16 blood vessels causing the edema to form.

17 There are other symptoms that develop like 18 metallic taste in the mouth, or we talked about 19 abnormal muscle movement or muscle weakness or 20 respiratory failure or changes in mental status or 21 pain, you know, shooting pains, pains, pain is 22 usually one of the hallmark symptoms of a snakebite. 23 Usually when patients comes with a snake 24 envenomization, usually they're in severe pain. 25 Usually they're suffering. Usually they're crying Page 235 1 and screaming and complaining of pain, and usually 2 we're giving them morphine or some kind of narcotic 3 to treat the pain.

If you don't mind, can you go back and ask me again. I know I was talking about the snakebites, but you wanted to know details about why or why --

8 Q. I'm trying -- and you were answering me. 9 I was just wondering -- no one's explained 10 to me how the venom -- I know what you look for, but 11 I don't know why you look for it because I don't 12 know how the venom works.

13 So when you were explaining it to me with 14 regard to the leaky vessels, that's sort of the 15 inquiry I was looking at.

A. And that's just one of the factors. A. And that's just one of the factors. Because it also will effect the coagulation profile that makes you bleed more easily. And then it depends -- of course, if you imagine that your blood vessels are very leaky and you're developing a lot of swelling or edema in your leg, that's fluid that was in your vascular system that's not no longer in the vascular system, and that's what will make you tachycardic, hypotensive, or having signs of shock, which Patient A did not demonstrate. Q. So, for instance, her death certificate
2 says she died by a snakebite. And I believe it's,
3 you know, it says "rattlesnake bite." And then it
4 says "complications of toxic envenomization."

5 And I guess what I'm hearing from you is 6 that could be various things. I guess -- I guess 7 I'm wondering: How does it get to you? Does it get 8 to respiratory failure, does it get organ shutdown, 9 or could it be a combination of things because of 10 all the different toxins?

11 A. It's more of a combination. And you can't 12 predict what a single envenomization is going to do 13 to a particular person. We don't know if it's going 14 to cause airway problems. We don't know if it's 15 going to cause fistulation. We don't know -- it 16 could be any combination of them because every 17 patient is different.

Different snakes have different soups in 19 their venom or soups of toxins in their venom. We 20 don't know how much venom the patient received. We 21 don't know if the venom was injected, let's say, 22 into a blood vessel, which would make it extremely 23 toxic and much more fatal or much more critical. 24 There's a lot of parameters we don't know. We don't 25 know if it's a dry bite. We don't know if it's a

Page 237

1 toxic bite.

So we can't know much about the bite, So we can't know much about the bite, So ther than there's been a bite. And that's why we have to look at all those other parameters to help us figure out whether or not we thought this was a toxic bite, indicating antivenom, or if it's a minor or a more-minor envenomization or a dry bite that doesn't require any antivenom.

9 Q. And did you read from the report from when 10 she was brought into EMS how the father had reported 11 that he set her down, and then the mother screamed 12 when he picked her back up that the snake was still 13 attached to her leg, and that they then got it off? 14 A. I read that.

Q. Okay. And so was it impactful for you -l6 I mean, I obviously haven't seen this child, but I 17 know she was three and I know that's little -- if 18 you have a snake, and I don't know how old the snake 19 was or how big the snake was, but was the impactful 20 that she was a tiny child and she had a snake 21 latching on to her for, you know, not just a strike, 22 but based on the snake attaching and the size of 23 child, I guess is what I'm getting at, if that was a 24 factor to you?

25 A. All those things are factors. Yes, I

1 would take that into consideration.

2 However, there's a couple of things that I 3 would say regarding that. Just as we talked about 4 earlier, when it comes to dosing the antivenom, we 5 don't chose different doses for pediatric patients 6 or for small patients because we have no way of 7 knowing exactly how much venom the patient was 8 envenomated with. That's why we give the standard 9 dose to everybody, adults or pediatric. On top of that, this particular 10 11 envenomization was right over her kneecap. What is 12 right under the skin of her kneecap? It's bone. Furthermore, the swelling that she had was 13 14 perfectly circular. It was limited to a very small 15 area, the size of a coin. This was not a big, fat 16 edema that was progressing quickly. This was not 17 circumferential swelling of the leq. There was none 18 of the blebs, blisters, that were formed. So there was a lot of features of her 19

20 presentation that told us that this was a more minor 21 envenomization, rather than a more serious 22 envenomization.

23 Could the fact that the snake hung on for 24 a period of time mean that she got more venom? For 25 sure. It's possible. There's no way for me to know

Page 238

Page 239 1 this. 2 Q. Okay. Thank you. HEARING OFFICER HALSTEAD: I just want to 3 4 make sure that I got all my questions answered, and 5 then I'll turn it back over counsel to follow up on 6 what I asked. I think that's all that I had. 7 Ms. Hueth, did you want to follow up on 8 9 any of my questions or ask questions to clarify 10 anything I may have asked? 11 MS. HUETH: No. I don't have anything 12 further. Thank you. 13 HEARING OFFICER HALSTEAD: Mr. Shogren? MR. SHOGREN: Nothing further. 14 HEARING OFFICER HALSTEAD: Okay. 15 16 Ms. Hueth, do you have other witnesses that you're 17 able to call today? 18 MS. HUETH: Not today, no. HEARING OFFICER HALSTEAD: Okay. And who 19 20 are your witnesses for tomorrow? 21 MS. HUETH: Tomorrow, I have my expert, 22 Dr. Levin. 23 HEARING OFFICER HALSTEAD: Any other 24 witnesses? 25 MS. HUETH: Nope. That's it.

Page 240 HEARING OFFICER HALSTEAD: Okay. And how long do you anticipate that testimony will last? MS. HUETH: Obviously I can only speak for 4 my questioning, so I anticipate an hour and a 5 half-ish.

6 HEARING OFFICER HALSTEAD: All right. Any 7 other housekeeping matters that we need to address 8 today?

9 MR. SHOGREN: Actually there is one. I 10 forgot to mention, I don't know if it's too late, 11 but earlier in the hearing today, there was an audio 12 recording played, respondent's Exhibit 7, and as I 13 recall, there was mention in that audio record of 14 the patient's name, specifically. I don't know if 15 there's a way that that could be redacted.

16 HEARING OFFICER HALSTEAD: Well, I mean, 17 the patient's name is all over the medical records. 18 Her name hasn't been redacted from any of them.

MR. SHOGREN: Right. But I'm just talking 20 specifically about the transcript that it would 21 generally appear.

HEARING OFFICER HALSTEAD: Well, I don't HEARING OFFICER HALSTEAD: Well, I don't think that that that was transcribed. That call has hot been transcribed. So the court reporter didn't transcribe that call. That would have to be

Page 241 1 separately transcribed and submitted as an exhibit 2 as a transcription of the call. 3 MR. SHOGREN: Okay. I just wanted to make 4 sure that the patient's name wouldn't be in the 5 transcription. That does not seem to be the case, 6 so okay. 7 HEARING OFFICER HALSTEAD: Anything else 8 anyone would like to address today before we 9 adjourn? Ms. Hueth, will your expert be available 10 11 by 8:30, the start time tomorrow? 12 MS. HUETH: Yep. 13 HEARING OFFICER HALSTEAD: Okay. And 14 everyone will be appearing from the locations 15 they're appearing from this afternoon? MS. HUETH: Yes. 16 17 HEARING OFFICER HALSTEAD: Okay. MS. HUETH: Well, obviously, except my 18 19 expert will be appearing remotely from a different 20 location. 21 HEARING OFFICER HALSTEAD: Okay. Thank 22 you. If there's nothing further, we'll adjourn for 23 the day, and we will reconvene tomorrow at 8:30 in 24 the morning. 25 (Hearing adjourned at 4:40 P.M.)

Page 242 1 STATE OF NEVADA ) ) ss. 2 COUNTY OF WASHOE ) 3 I, BRANDI ANN VIANNEY SMITH, do hereby 4 5 certify: That I was present on September 21, 2023, 6 7 for the herein entitled hearing via Zoom, and took 8 stenotype notes of the proceedings entitled herein, 9 and thereafter transcribed the same into typewriting 10 as herein appears. 11 That the foregoing transcript is a full, 12 true, and correct transcription of my stenotype 13 notes of said proceedings consisting of 242 pages, 14 inclusive. 15 DATED: At Reno, Nevada, this 3rd day of 16 October, 2023. 17 18 /s/ Brandi Ann Vianney Smith 19 20 BRANDI ANN VIANNEY SMITH 21 22 23 24 25

Page 243 HEALTH INFORMATION PRIVACY & SECURITY: CAUTIONARY NOTICE 1 2 Litigation Services is committed to compliance with applicable federal and state laws and regulations ("Privacy Laws") governing the 3 protection and security of patient health information. Notice is herebygiven to all parties that transcripts of depositions and legal 5 proceedings, and transcript exhibits, may contain patient health 6 information that is protected from unauthorized access, use and 7 disclosure by Privacy Laws. Litigation Services requires that access, 8 9 maintenance, use, and disclosure (including but not limited to electronic database maintenance and access, storage, distribution/ 10 11 dissemination and communication) of transcripts/exhibits containing patient information be performed in compliance with Privacy Laws. 12 13 No transcript or exhibit containing protected patient health information may be further disclosed except as permitted by Privacy 14 Laws. Litigation Services expects that all parties, parties' 15 attorneys, and their HIPAA Business Associates and Subcontractors will 16 17 make every reasonable effort to protect and secure patient health information, and to comply with applicable Privacy Law mandates, 18 including but not limited to restrictions on access, storage, use, and 19 disclosure (sharing) of transcripts and transcript exhibits, and 20 21 applying "minimum necessary" standards where appropriate. It is 22 recommended that your office review its policies regarding sharing of 23 transcripts and exhibits - including access, storage, use, and disclosure - for compliance with Privacy Laws. 24 25 © All Rights Reserved. Litigation Services (rev. 6/1/2019)

1	BEFORE THE BOARD OF MEDICAL EXAMINERS
2	
3	OF THE STATE OF NEVADA FILED
4	OCT - 4 2023
5	NEVADA STATE BOARD OF MEDICAL EXAMINERS
6	By:
7	
8	
9	In the Matter of the Case No. 23-29251-1
10	Charges and Complaint Against:
11	JASON HOWARD LASRY, M.D.,
12	Respondent.
13	/
14	
15	TRANSCRIPT OF HEARING PROCEEDINGS
16	VIA ZOOM
17	Nevada State Board of Medical Examiners
18	9600 Gateway Drive
19	Reno, Nevada
20	
21	VOLUME II
22	Friday, September 22, 2023
23	
24	Reported by: Brandi Ann Vianney Smith
25	Number: 986060

Page 2 1 APPEARANCES: 2 THE HEARING OFFICER: PATRICIA HALSTEAD, ESQ. 3 4 5 FOR THE INVESTIGATIVE WILLIAM SHOGREN, ESQ. COMMITTEE OF THE NEVADA Deputy General Counsel Nevada State Board of 6 STATE BOARD OF MEDICAL EXAMINERS: Medical Examiners 7 9600 Gateway Drive Reno, NV 89521 8 9 FOR DR. JASON LASRY: CHELSEA R. HUETH, ESQ. MCBRIDE HALL 10 8329 W. Sunset Road Suite 260 11 Las Vegas, Nevada 89113 12 13 ALSO PRESENT: 14 Mercedes Fuentes, Legal Assistant 15 -000-16 17 18 19 20 21 22 23 24 25

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Page 5 RENO, NEVADA -- SEPTEMBER 21, 2023 -- 8:36 A.M. 1 2 -000-3 4 5 HEARING OFFICER HALSTEAD: I'm going to 6 call the case. We're on the record In the Matter of 7 Charges and Complaint Against Jason Howard Lasry, 8 M.D., case number 23-29251-1. 9 I'm Patricia Halstead. I'm the hearing 10 officer. I'm a licensed attorney. I've been doing 11 these hearings for a few years now. 12 We're doing via Zoom, which is a little 13 unusual compared to how we've done in past. So 14 you'll note that I am staring at the sky because my 15 camera on my laptop happens to be at the bottom of 16 the screen and not the top. I am looking at you, it 17 just doesn't like I'm looking at you. 18 Then we also have appearances from the 19 Las Vegas office and the Reno office, and the court 20 reporter is also remote. We were scheduled to start 21 today at 8:30, but we are scheduling a little late 22 because of some issues we had with everyone getting 23 into Zoom and different appearance locations. 24 Everyone has indicated they are settled in. 25 If there's nothing further with regard to

Page 6 1 setup, I've called the case, and I'll go ahead and 2 have counsel state their appearances and identify 3 their clients. 4 Anything further before we do that? MR. SHOGREN: No, nothing further on my 5 6 end. MS. HUETH: Nothing from me. 7 8 HEARING OFFICER HALSTEAD: Okay. Go 9 ahead. We'll start with you, Mr. Shogren. MR. SHOGREN: Good morning. This is 10 11 William Shogren, Deputy General Counsel on behalf of 12 the Investigative Committee of the Nevada State 13 Board of Medical Examiners. MS. HUETH: Good morning. This is Chelsea 14 15 Hueth, bar number 10904, and with me is Dr. Jason 16 Lasry. HEARING OFFICER HALSTEAD: Thank you. 17 Okay. So I'll note that I have all the 18 19 filings in front of me. In addition, I have all the 20 exhibits. I'll be looking to the bottom side 21 periodically because the camera doesn't catch that 22 I'm looking at them, but that's where they are. 23 We will go ahead and start with opening 24 statements. 25 Mr. Shogren, do you have an opening

Page 7 1 statement you would like to give? 2 MR. SHOGREN: T do. HEARING OFFICER HALSTEAD: If not, that's 3 4 okay. You can go straight to your case. MR. SHOGREN: Well, there is a preliminary 5 6 matter I forgot to mention. I don't know if the 7 parties would want to stipulate to any of the 8 exhibits for admission at this point? Such as -- I 9 mean, both parties -- primarily, there's Exhibit 1 10 for the IC, the formal Complaint, Proof of Service, 11 allegation letter, etc., just to expedite things, 12 and see if we could possibly stipulate to admission? 13 HEARING OFFICER HALSTEAD: Ms. Hueth? 14 MS. HUETH: I am comfortable stipulating 15 to the admission of the Investigative Committee's 16 exhibits, with the exception of number 9. 17 And would, likewise, request admission of 18 Dr. Lasry's proposed exhibits. 19 HEARING OFFICER HALSTEAD: Mr. Shogren? 20 MR. SHOGREN: Just to be clear, the only 21 one that is being objected to is number 9, so 22 numbers 10 through 15 are being stipulated to as 23 well. And I have no objection to stipulating to 24 25 the admission respondent's exhibits.

Page 8 HEARING OFFICER HALSTEAD: Okay. Based 1 2 upon the agreement of parties, I will admit IC 3 Exhibits 1 through 8, and IC Exhibits 10 through 15. 4 Respondent's Exhibits 1 through 8. (Investigative Committees' Exhibits 1 5 through 8 and 10 through 15 were 6 admitted.) 7 (Respondent's Exhibits 1 through 8 8 9 were admitted.) 10 HEARING OFFICER HALSTEAD: Any other 11 preliminary matters? 12 MR. SHOGREN: No other preliminary 13 matters. 14 MS. HUETH: None from us, Your Honor. 15 Thank you. 16 HEARING OFFICER HALSTEAD: Thank you. 17 Go ahead, Mr. Shogren. OPENING STATEMENT 18 19 MR. SHOGREN: I'd like to say first, good 20 morning. This is William Shogren. I would like to 21 thank everyone here for participating in today's 22 hearing. 23 This hearing is to hear -- we're here to 24 present evidence to determine if Dr. Lasry, the 25 respondent in this case, violated three separate

Page 9 1 provisions of Medical Practice Act as alleged in 2 Counts I through III in the complaint filed on 3 March 8, 2023, by the Investigative Committee of the 4 Nevada State Board of Medical Examiners. First, Count I, alleging that Dr. Lasry 5 6 committed malpractice in violation of NRS 630.301, 7 subsection 4. Count II alleges that Dr. Lasry failed to 8 9 seek consultation with another provider, in 10 violation of NRS 630.306 (1)(b)(2). 11 And finally, Count III alleging that 12 Dr. Lasry failed to maintain appropriate medical 13 records in violation of NRS 630.3062 (1)(a). Throughout this hearing, you'll -- the 14 15 parties will hear testimony from various witnesses, 16 and the evidence will show that a three-year-old 17 patient presented to Dr. Lasry in the emergency 18 department of Humboldt General Hospital on May 9th, 19 2020, after being bitten by a rattlesnake. 20 The evidence will also show that Dr. Lasry 21 failed to recognize serious signs of envenomization 22 in the patient, such as hypotension and tachycardia, 23 and failed to treat the patient's diminishing 24 condition. Most importantly, Dr. Lasry failed to 25 administer antivenom, despite clear signs of severe

1 envenomization.

2 The evidence will also show that, although 3 Dr. Lasry did speak with an emergency room doctor 4 over the phone regarding the patient, he did not 5 properly seek consultation regarding the patient's 6 condition and treatment.

7 And lastly, evidence will show that 8 Dr. Lasry did not keep accurate medical records of 9 patient when he -- primarily when he failed to note 10 a recognition of the patient's continued 11 tachycardia, and when he completely failed to note 12 the patient's low blood pressure or hypotension.

In summation, the testimony and evidence I4 that will be presented today will establish by a I5 preponderance of the evidence that Dr. Lasry 6 committed malpractice by his failure to address and 17 manage a patient who had been bitten by -- who had 18 been bitten by a venomous snake. This represents a 19 failure to meet the standard of care.

The evidence will also show that Dr. Lasry 21 failed to seek proper consultation with another 22 provider regarding the patient's condition, and that 23 he failed to maintain appropriate medical records 24 concerning the patient's vital signs.

25 All three counts, if established, are

Page 11 1 violations of the Medical Practice Act. 2 On behalf of the Investigative Committee, 3 we ask the Board to consider the record that will be 4 presented here and render the appropriate findings 5 and discipline. 6 Once again, thank you, and I want to thank 7 everyone here today for being here. 8 HEARING OFFICER HALSTEAD: Thank you, 9 Mr. Shoqren. 10 Ms. Hueth? 11 MS. HUETH: Thank you. 12 OPENING STATEMENT 13 MS. HUETH: I have the privilege of 14 representing Jason Lasry, a board-certificated 15 emergency medicine physician who has been 16 board-certified for almost 25 years. 17 The evidence will show that on May 9th, 18 2020, at approximately 2:30 P.M., three-year-old 19 Patient A was bit on the anterior left knee by a 20 snake. Her parents reported to paramedics that at 21 first she vomited, but by the time she's evaluated 22 by paramedics who ultimately transferred Patient A 23 to the emergency department at Humboldt General 24 Hospital, she was alert and acting and talking 25 normally for a child of her age.

Page 12 Once she arrived to the emergency department at Humboldt General Hospital, the evidence will show that a nurse assessed Patient A, took her vitals, which were appropriate for her age and the situation, her skin was normal temperature, normal color, and her breathing was unlabored.

7 Throughout the two and a half hours that 8 Patient A remained at the emergency department at 9 Humboldt General Hospital, she remained stable. Her 10 vital signs were stabled, her breathing was 11 unlabored, she only received Tylenol for minimal 12 discomfort, she was alert and acting normally for 13 her age throughout to entirety of her stay at the 14 emergency department.

15 There was swelling around the bite, and 16 Dr. Lasry will testify that that is not unusual, 17 that you would expect to see some swelling as result 18 of a snakebite. The evidence will also show that 19 there was some progression of the swelling. That 20 also was expected.

However, the evidence will ultimately show that whether or not to administer antivenom is based upon the medical judgment of the physician evaluating the patient. It may be warranted in patients that show signs or symptoms of systemic Page 13 1 envenomization, but the evidence will demonstrate 2 that while Patient A was in the emergency 3 department, she did not show signs of system 4 envenomization that warranted administration of the 5 antivenom at that time.

6 While in the emergency department, 7 Dr. Lasry appropriately ordered labs, and those labs 8 that would be expected to show signs of systemic 9 envenomization, such as the INR, the fibrinogen, and 10 platelets, they were all normal. Just because 11 Dr. Lasry did not think antivenom was warranted at 12 that time, the evidence will show that that didn't 13 mean it may not be warranted in the future.

14 What the evidence will show is that 15 Dr. Lasry contacted the pediatrician, Dr. Thorp, and 16 requested that Dr. Thorp accept admission of Patient 17 A.

18 The evidence will further demonstrate that 19 Dr. Thorp did not feel comfortable accepting Patient 20 A's admission because she had never cared for a 21 patient with a snakebite before. Accordingly, 22 Dr. Thorp would not accept admission of Patient A, 23 and requested that she be transfer to a different 24 facility that could provide a higher level of care. 25 So, Dr. Lasry contacted the emergency Page 14 1 department physician at Renown, in Reno, a level II 2 trama center. He spoke with that emergency 3 department physician and gave him the history of how 4 Patient A presented to the emergency department, his 5 evaluation of Patient A, the current findings, 6 including the lab results, as a result the fact that 7 Dr. Lasry did not feel antivenom was needed at that 8 time before transferring Patient A to Renown.

9 The evidence will further demonstrate that 10 emergency department physician at Renown did not 11 express any concern with respect to the fact that 12 Patient A had not received antivenom or would not 13 receive antivenom prior to being transferred.

14 The evidence throughout this hearing will 15 further demonstrate that initially the plan was to 16 transfer Patient A via air ambulance. However, in 17 consultation with Patient A's mother, it was 18 determined that Patient A's mother would not consent 19 to air ambulance because she wouldn't be able to 20 ride with Patient A to Renown. Because Patient A 21 remained stable, and we are now three-plus hours 22 after the snakebite, Dr. Lasry determined that it 23 was appropriate and acceptable to transfer Patient A 24 via ground ambulance.

25 MR. SHOGREN: Sorry. I really hate to

Page 15 1 interrupt here. I forgot to mention -- this is 2 partially my fault -- but for the furtherance of the 3 hearing, could we refer to the patient as 4 "Patient A" just for confidentiality reasons, rather 5 than by her name? I'm sorry. I should have 6 mentioned this. I hate to interrupt you at this 7 point. I don't want to derail your opening 8 statement. I just want to mention that. 9 MS. HUETH: Sure. I will try to do that. 10 Thank you for jumping in, though. So the evidence will further demonstrate 11 12 that even if Dr. Lasry felt that antivenom was 13 indicated at the time, he did not have the resources 14 to do so safely at Humboldt General Hospital. The 15 evidence will demonstrate that antivenom 16 administration requires close monitoring over an 17 extended period of time, of at least 20 hours, and 18 in May of 2020, Humboldt General Hospital could not 19 have kept the patient in the emergency department 20 for that amount of time with the close monitoring 21 that would be needed for the administration of 22 antivenom. 23 So based upon his education, training, and

24 experience, Dr. Lasry appropriately used his medical 25 judgment and determined that it would be better to transfer the patient to Renown for admission and
 further monitoring and potentially the
 administration of antivenom if the situation
 warranted.

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5 Dr. Lasry could not have reasonably 6 predicted that the patient would have the 7 precipitous decline that she ultimately suffered 8 about 30 minutes prior her arrival to Renown. While 9 she was in the emergency department Humboldt, the 10 patient never needed supplemental oxygen, her vital 11 signs remained stable, her swelling increased 12 minimally and was not unexpected, and by the time 13 the patient left Humboldt General Hospital, it had 14 four hours at least since the bite, and there was 15 sill to signs of systemic envenomization to warrant 16 keeping the patient and administering antivenom at 17 that time.

18 The evidence will further demonstrate that 19 if Dr. Lasry had any indication that the patient's 20 condition was instable or showed signs of systemic 21 envenomization, he would have made sure she did not 22 get in the ambulance, and would have made sure that 23 she was safely transferred to Renown or made her --24 attempts to administer antivenom in Humboldt.

25 However, the evidence will show that the

Page 17 1 standard of care is determined prospectively, not 2 with the benefit of hindsight, but is based upon 3 what a reasonable physician would you do in similar 4 circumstances. And ultimately in this case, the evidence 5 6 will show that Dr. Lasry appropriately exercised his 7 medical judgment in evaluating the patient and 8 determining antivenom should not be administered at 9 the time, and transferring the patient to Renown, a 10 level II trauma center. 11 Thank you. 12 HEARING OFFICER HALSTEAD: Thank you. 13 Ms. Smith, is it possible to, wherever the 14 name of the patient has been eluded to, to replace 15 that with Patient A in the transcript? 16 THE REPORTER: If I have your permission 17 to do so, I can certainly do that.

18 HEARING OFFICER HALSTEAD: Yes, please do 19 so.

20 All right. Anything further before 21 Mr. Shogren calls his first witness?

MR. SHOGREN: Nothing further at this23 time.

MS. HUETH: Nothing from me. Thank you.HEARING OFFICER HALSTEAD: Okay.

Page 18 1 Mr. Shogren, who is your first witness? 2 MR. SHOGREN: The first witness I am 3 calling is Kristi Barbieri, investigator for the 4 Board. HEARING OFFICER HALSTEAD: Thank you. 5 Go 6 ahead and call her. Ms. Barbieri, normally if we were sitting 7 8 in the room all together, Mr. Shogren would say 9 something to the effect of "I call my first witness, 10 Kristi Barbieri." He did that. I don't know if you 11 were on when he did that. 12 If you could please state your name and 13 spell your name for the record, and then I will have 14 you sworn in. 15 THE WITNESS: Sure. My name is Kristi 16 Barbieri, first name is K-R-I-S-T-I, last name is 17 B-A-R-B-T-E-R-T. 18 HEARING OFFICER HALSTEAD: Okay. And 19 could you please raise your right hand to be sworn 20 in. 21 (The oath was administered.) 2.2 THE WITNESS: T do. 23 DIRECT EXAMINATION 24 BY MR. SHOGREN: 25 Q. Good morning, Ms. Barbieri.

Page 19 1 Good morning. Α. 2 First of all, who is your employer? Q. Nevada State Board of Medical Examiners. 3 Α. 4 What is your job title? Q. 5 Α. Investigator. How long have you had this position? 6 Q. Since February of 2022. 7 Α. And as an investigator for the Nevada 8 Q. 9 State Board of Medical Examiners, what are your 10 duties? 11 My duties are assign cases, complaints Α. 12 that are filed from the public and to investigate 13 those, get all the facts together, and then pass it 14 along the chain for decisions. 15 So, specifically, when a complaint comes Q. 16 in, what happens? 17 A complaint comes in, it's assigned to an Α. 18 investigator, the complaint is reviewed. If there's 19 additional questions, we reach out to the 20 complainant. 21 And then an allegation letter goes out to 22 the licensee with a Board order for records. Once 23 we get a response, if there's anybody else we need 24 records from, we sent out a subpoena or a letter. 25 And when that's all -- when that comes

Page 20 1 back, it's reviewed by an investigator, and then 2 it's passed on for medical review. Q. Just to be clear, when an investigation is 3 4 opened, does the Board create a file for that 5 matter? 6 Α. Yes. Okay. And we're here today for a hearing 0. 7 8 to present evidence so that the Board can determine 9 if Dr. Lasry violated the Medical Practice Act. And are you familiar with investigation 10 11 number 21-20403, regarding Dr. Lasry? 12 Α. Yes. 13 Q. Is that this case we're here today for? 14 Α. Yes. And just for the record, were you the 15 Q. 16 original investigator on this case? 17 Α. No. Do you know who was? 18 Q. Kim Friedman. 19 Α. 20 Did you take over for this case? Q. 21 Α. Yes. 22 Q. When did you take over? 23 Α. I took over February 17th of 2022. Okay. Have you reviewed the file for this 24 Q. 25 case?

Page 21 1 Α. Yes. 2 Q. Based on your review, does this case 3 appear to be similar to other investigations handled 4 by the Board? Α. 5 Yes. Now, for the record I'm going to ask you 6 Q. 7 about the Board's exhibits in this case. 8 Α. Okay. And as part of your investigation for this 9 Q. 10 case, were you required to obtain medical records? 11 Α. Medical records were obtained prior to 12 when the case was assigned to me. 13 Q. Okay. I'm going to ask you questions 14 directed toward each exhibit. If you could open the 15 binder in front of you and have that. Can you 16 please turn to what's been premarked as Board's 17 Exhibit 1? 18 Α. Okay. 19 Q. Do you recognize this document? 20 Yes. It's a Complaint issued by the Α. 21 Board. 22 Q. Okay. And who's named as a respondent 23 here? 24 Α. Jason Howard Lasry, M.D. Okay. Thank you. 25 Q.

Page 22 I'd like to now move to what's been 1 2 premarked as the Board's Exhibit 2. Quickly, do you 3 recognize this document? 4 Α. Yes. Q. And what is it? 5 A. A proof of Service. 6 7 Q. Okay. Thank you. Now I'd like you to turn to what's been 8 9 premarked as the Board's Exhibit 3. It's been 10 previously admitted. And what is this document? 11 Α. This would be the initial allegation 12 letter sent to the respondent. 13 Do you recognize this document? Q. 14 Α. Yes. What is the date of this letter? 15 Q. 16 A. July 19th, 2021. 17 Okay. And what were the allegations in Q. 18 this allegation letter? 19 Α. The first one was the patient presented to 20 Dr. Lasry on or around May 9th, 2020, at Humboldt 21 General Hospital, by ambulance, after being bitten 22 by a rattlesnake on her left knee. The second is he failed to administer 23 24 antivenom to the patient instead of agreeing to 25 transfer the patient to Renown Regional Medical

Page 23 1 Center without first stabilizing the patient. 2 Number three is Life Flight was canceled, 3 and a decision was made to transport the patient via 4 ambulance in Renown Regional Medical Center in Reno, 5 even though the patient was in poor condition and 6 near death. It is further alleged on or around 7 8 May 13th, 2020, the patient succumbed as a result of 9 the rattlesnake bite. And there is a further allegation that 10 11 Dr. Lasry may have been deceptive with the Nevada 12 State Board of Medical Examiners on his renewal for 13 failing to answer "yes" to being named a defendant, 14 respond to legal action regarding Washoe County 15 Second Judicial Court case CV21 00866, filed 16 May 7th, 2021. 17 Thank you. Q. Now if we can move to what's been 18 19 premarked as the Board's Exhibit 4, previously 20 admitted. Do you recognize this document? 21 Α. Yes. 22 Q. And what is it? 23 Α. It's the response from Dr. Lasry to the 24 allegation letter. 25 What is the date of this letter? 0.

Page 24 1 August 18th, 2021. Α. 2 Okay. Now if we can move to exhibit --Q. 3 what's been premarked as the Board's Exhibit 5, 4 previously admitted. Do you recognize these 5 documents? 6 Α. Yes. And what are they? 7 0. This is the standard letter to goes out to 8 Α. 9 a medical facility, requesting records for a certain 10 time period, signed by the previous investigator. 11 HEARING OFFICER HALSTEAD: Mr. Shogren, 12 you mentioned earlier concern about that patient's 13 name being part of the record, and it's in the 14 record in your Exhibit 4, it hasn't been redacted. I don't know if you're concerned about 15 16 that, but I'm pointing that out to you if you want 17 the opportunity to redact that, I will grant that. 18 But the name is listed in there, so it's part of the 19 record. 20 MR. SHOGREN: Okay. Thank you for 21 bringing that up. I don't think we need to redact 22 it at this time. 23 BY MR. SHOGREN: Okay. Ms. Barbieri, for Exhibit 5, who is 24 ο. 25 the letter addressed to?

Page 25 It's address to Humboldt General Hospital, 1 Α. 2 attention health care records. And then the third page of Exhibit 5, 3 Q. 4 which is Bates stamp 20 here, what is this document? That is the certificate of custodian of 5 Α. 6 records that is sent out with the request, that 7 comes back with the record that needs to be 8 notarized by the facility. 9 Q. Thank you. Now if we can move to what's been 10 11 premarked as Exhibit 6. Do you recognize these 12 documents? 13 Α. Yes. 14 0. What are they? 15 Records from Humboldt General Hospital in Α. 16 response to the letter. Thank you. 17 Q. If you could move to Exhibit 7. 18 Do you 19 recognize this document? 20 Α. Yes. Q. And what is it? 21 2.2 A. It is a letter to Renown Regional Medical 23 Center, attention health records, requesting records 24 for a certain time period for the patient. 25 And what else does this exhibit contain? 0.

Page 26 A. The exhibit also has a notarized 1 2 certificate of custodian of records. Q. Okay. Thank you. 3 4 If -- moving to what's been premarked as 5 Exhibit 8, what is this document? These are records from Renown Health -- or 6 Α. 7 Renown. Sorry. 8 Q. Okay. Thank you. Moving to Exhibit 9, that's been premarked 9 10 as Exhibit 9, do you recognize this document? 11 A. Yes. Q. What is this document? 12 13 A. Certificate of Death from vital 14 statistics. Q. What how was this document obtained? 15 A. An investigator will send a letter with a 16 17 check for \$25 to vital statistics to get a certified 18 copy returned to us. 19 Q. Okay. Thank you. 20 HEARING OFFICER HALSTEAD: I know that 21 Exhibit 9 hasn't been admitted. Do you want to seek 22 to admit it at this time, or are you going to wait 23 to do that? MR. SHOGREN: I'll seek to admit it at 24 25 this time.

Page 27 HEARING OFFICER HALSTEAD: Ms. Hueth, you 1 2 had an objection to that exhibit? MS. HUETH: Yes, I have a couple of 3 4 objections. One is being relevance that the Death 5 6 Certificate is not relevant to establishing whether 7 or not Dr. Lasry complied with the Nevada 8 Malpractice Act, or whether he complied with the 9 standard of care. Further object to foundation and 10 11 authenticity, as Ms. Barbieri just testified that 12 typically a letter would be sent requesting this 13 document, and there's no such letter contained 14 within the file. 15 HEARING OFFICER HALSTEAD: Okay. 16 Mr. Shogren, do you have a response? 17 MR. SHOGREN: Well, I'd say, first, we 18 would argue that it is relevant, showing the 19 patient's condition at the time. 20 As far as foundation, I acknowledge that 21 there isn't a letter, but I would argue that 22 Ms. Barbieri still established how this letter was 23 obtained through her testimony. 24 HEARING OFFICER HALSTEAD: Okav. So as 25 you both know, the rules of evidence formally don't

Page 28 1 apply, so it's within my discretion. 2 I do find that is it relevant, and it is a 3 public record. So even if the rules did apply, it 4 would come in under public record exception. Exhibit 9 is admitted. 5 (Investigative Committee's Exhibit 9 6 was admitted.) 7 8 MR. SHOGREN: Thank you. 9 BY MR. SHOGREN: Q. And lastly, Ms. Barbieri, I'd would like 10 11 you to briefly turn to -- these are exhibit that are 12 premarked as 10 through 13. I'm just going to treat 13 these Exhibit s together here. What are they? Those are the articles that were returned 14 Α. 15 with the peer reviewer's report. Is it unusual for the Board to receive 16 0. 17 articles when there's a peer review? 18 Α. No. 19 Q. And do these appear to be true and correct 20 copies? 21 Α. Yes. 22 Q. Thank you. 23 MR. SHOGREN: No further questions for 24 Ms. Barbieri. 25 HEARING OFFICER HALSTEAD: Ms. Heuth?

Page 29 1 MS. HUETH: Thank you. 2 CROSS-EXAMINATION 3 BY MS. HUETH: Good morning, Ms. Barbieri. 4 Q. A. Good morning. 5 Q. Are you a medical doctor? 6 A. I am not. 7 Have you attended medical school? 8 Q. 9 A. I have not. And I believe you testified -- please 10 0. 11 correct me if I'm wrong -- you were not the original 12 investigator on this file; is that right? 13 A. Correct. Q. And that you were assigned to this file 14 15 February 17th, 2022; is that right? 16 Α. Yes. 17 Okay. And so you were not the person who Q. 18 requested records from Humboldt General Hospital; is 19 that correct? 20 A. Correct. 21 0. You were not the person who requested 22 records from Renown; is that right? 23 A. Correct. In your experience, do to investigators 24 Q. 25 primarily take the allegations that are written in

Page 30 1 underlying consumer complaint and use them as the 2 allegations in the letter of inquiry that is sent by 3 the Board? 4 Α. Yes. If you could turn to, what's already been 5 0. 6 admitted, Exhibit 3 of the Investigative Committee's 7 Exhibit s? 8 Α. Okay. Is this the July 19th, 2021, letter of 9 Q. 10 inquiry that was sent to Dr. Lasry? 11 Α. Yes. 12 Q. Okay. And this is before you were 13 assigned to the case; right? 14 Α. Correct. And you did not write this letter? 15 Q. 16 Correct. Α. Number 5, which you read into the record, 17 Q. 18 regarding the allegation that Dr. Lasry may have 19 been deceptive with the Nevada State Board of 20 Medical Examiners on his license renewal? 21 Α. Yes. 22 Q. That's not contained within the formal 23 complaint that's been filed in this matter, that 24 allegation; true? 25 I would have to go look at the complaint. Α.

Page 31 Okay. Well, if you could turn to 1 0. 2 Exhibit 1, which is the formal complaint. And on 3 what's Bates stamped NSBME 3, Count I is for 4 malpractice; true? Α. 5 Yes. Count II is for violation of standards of 6 Q. 7 practice established by regulation, failure to 8 consult; correct? 9 Α. Yes. Count III, failure to maintain appropriate 10 0. 11 medical records; correct? 12 Α. Yes. 13 Q. There's no count regarding fraud or 14 deception in obtaining a license renewal; true? 15 Α. Correct. 16 Okay. If you can turn to what's already Q. 17 been admitted, Exhibit 5, please. Specifically 18 Bates stamped NSBME 20. 19 Α. Okay. 20 And this is the Certificate of Custodian Q. 21 of Records that says "for Humboldt General 22 Hospital," but I'm guessing that means to be "of 23 Humboldt General Hospital"; is that fair? 24 Α. Yes. Okay. And the Certificate of Records for 25 Q.

Page 32 1 Humboldt General Hospital was signed by Kathy 2 Patterson; is that right? 3 Α. Yes. 4 Q. It was not signed by Jason Lasry, was it? 5 Α. No. 6 Q. And if you can turn to what's already been 7 admitted, Exhibit 4, please. And exhibit 4 is 8 Dr. Lasry's response letter; correct? 9 Α. Yes. And in the first paragraph, Dr. Lasry 10 0. 11 indicates: I am not the custodian of records, as 12 Humboldt General Hospital maintains the patient's 13 records. Did I read that correctly? 14 15 Yes. Α. 16 Okay. If you can please turn to Q. 17 Exhibit 7? 18 Α. Okay. 19 Q. And this is the request for Patient A's 20 medical records from Renown Regional Medical Center; 21 correct? 2.2 Α. Yes. 23 Q. And this letter requests all of Patient 24 A's medical records, beginning May 9, 2020, through 25 present; true?

1 A. Yes.

2 Q. Okay. And if you turn to Bates stamp 3 NSBME 90. Do you have that in front of you? 4 Α. Yes. Okay. And is this the Certificate of 5 0. 6 Custodian of Record for Renown? 7 Α. Yes. And to your knowledge, does this 8 Q. 9 certificate verify that all of Patient A's medical 10 records from Renown Regional were provided to the 11 Nevada Board? 12 Α. I'm checking. One moment. All of 13 patient's records? No. Patient's record for 14 specific set period of time, yes. Okay. And that period of time was? 15 Q. A. May 9th, 2020, to October 12th, 2021. 16 17 Okay. At least for that time period, this Q. 18 is certifying that a complete copy of those records 19 were provided to the Board? 20 A. Correct. 21 0. Okay. If you can turn to Exhibit 8, 22 please. 23 It looks like this is approximately 21 24 pages of Patient A's medical records from Renown; is 25 that right?

Page 34 Let's see, 91 to 111, so, yes. 1 Α. 2 Q. Is it your understanding that Patient A's 3 medical chart from Renown is only 21 pages? 4 A. According to this, yes. Q. Okay. Well, Patient A -- do you have an 5 6 understanding that Patient A was admitted to Renown 7 on May 9, 2020? 8 A. Yes -- no. I'm sorry. May 9th was to 9 Humboldt. Sure. But if you turn to Bates stamp, so 10 0. 11 still in Exhibit 8, which has already been admitted, 12 NSBME 91. Let me know when you have that in front 13 of you. 14 A. Okay. Q. And if you go down about half way, under 15 16 "events." 17 Α. Yes. It says "admission at 5/9/2020." Do you 18 Q. 19 see that? 20 Yes. Α. 21 Q. Okay. And if you go to the next, NSBME 22 92, half way down above "allergies." 23 Α. Yes. Q. It says "discharge at 5/13/2020." Do you 24 25 see that?

1 A. Yes.

5

2 Q. Okay. Would that indicate to you that she 3 was admitted on May 9, 2020, and discharged May 13, 4 2020?

A. According to these documents, yes.

6 Q. In your experience, having been an 7 investigator, would it be unusual for a patient who 8 had been admitted to the hospital for four days to 9 only have 21 pages of medical records?

10 MR. SHOGREN: I'd object, one, just for 11 relevance. I don't see where we're going with this. 12 MS. HUETH: The relevance is that 13 Ms. Barbieri testified that this is the entirety of 14 the Renown Health medical records, and I'm trying to 15 establish that that may not be correct, given the 16 length of patient's stay it. That it would be a 17 mischaracterization to suggest that this is the 18 entirety of the patient's chart from Renown.

HEARING OFFICER HALSTEAD: Ms. Barbieri, Ms. Barbieri, Ws. Barbieri, Hearing officer hashed been an objection as to your qualifications to testify to that. She did establish that you were a Board investigator and asked if it was in your experience.

24 So given that qualification, I'll allow 25 her to proceed with this line of questioning.

Page 36 THE WITNESS: Okay. It depends on what 1 2 the patient has gone for. It can be something as 3 little as 21 records or something as voluminous as 4 300. 5 BY MS. HUETH: Okay. On NSBME 92, do you still have that 6 Q. 7 page in front of you? 8 Α. Yes. And toward the bottom, under ED notes, it 9 0. 10 says "patient transferred with PICU, RN, on monitor 11 up to four." Do you see that? 12 Α. Yes. 13 Does that suggest to you, given your Q. 14 experience, that this patient was admitted to the 15 pediatric ICU on May 9, 2020? 16 Α. Yes. Okay. And she remained at Renown until 17 Q. 18 May 13th, 2020; correct? Α. 19 Yes. Okay. So given that, in this case, 20 Q. 21 specifically, does it seem unusual to you, given 22 your experience as an investigator, that this 23 patient's four-day stay, part of it being in the 24 PICU, would only be 21 pages? 25 I would assume there would be more. Α.

Page 37 If you can turn now to Exhibit 9, which 1 0. 2 has been admitted, do you know when this Certificate 3 of Death was requested? 4 A. I do not. Q. And you testified earlier that typically a 5 6 letter would be sent with the request for a 7 certificate of death; is that right? A. Correct. 8 Q. And when Mr. Shogren going through these 9 10 Exhibit s with you, did you see any such letter 11 requesting the certificate? 12 A. In the Exhibit s, no. 13 MS. HUETH: Those are all my questions. 14 Thank you. 15 HEARING OFFICER HALSTEAD: Any redirect, 16 Mr. Shogren? 17 MR. SHOGREN: Yes. Thank you. Just a 18 couple question for Ms. Barbieri. REDIRECT EXAMINATION 19 20 BY MR. SHOGREN: 21 Is it common that you received files --0. 22 investigative files that were previously worked on 23 by other investigators? 24 A. It is common? It's happened once since 25 I've been here. I replaced Ms. Friedman, so I

Q. Okay. And -- okay. I'm just going to 2 3 Exhibit number -- what's been premarked as 4 Exhibit 7, Bates stamp number 88, just to be clear, 5 this is requesting records from a certain period of 6 time, all records; correct? 7 Α. Yes. Is that typical, you request all records 8 Q. 9 when you send out such a letter to a facility or a 10 provider? It depends. If they've gone -- if it's an 11 Α. 12 ER visit, and they go to the ER quite frequently and 13 we're looking at a specific case, then we set a 14 date, time set. Otherwise, we go back, typically, 15 two or three years. 16 But if you're looking for specific, we try 17 and narrow it down. Q. And to your knowledge, the records that 18 19 were provided by Renown, were those complete as your 20 predecessor requested? 21 Α. According to notes from the predecessor, 22 it was complete. Otherwise, another request would 23 have been sent. Q. If you could turn to what's been premarked 24 25 as Exhibit 8?

1 assumed most, if not all, of her files.

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Page 39 1 Α. Yes. 2 Q. As an investigator, do you have say in 3 what's prepared for in Exhibit s to be used at a 4 hearing? Α. 5 No. 6 MR. SHOGREN: No further questions. HEARING OFFICER HALSTEAD: Thank you. Do 7 8 you have witness after Ms. Barbieri? MR. SHOGREN: Yes, I do. The next witness 9 10 I would like to call is Eric Glissmeyer, M.D. 11 HEARING OFFICER HALSTEAD: Would you like 12 to excuse Ms. Barbieri? 13 MR. SHOGREN: Yes. No further questions. 14 HEARING OFFICER HALSTEAD: Ms. Barbieri, 15 you are excused. Thank you for your time and your 16 testimony today. Thank you. 17 THE WITNESS: 18 HEARING OFFICER HALSTEAD: Mr. Shogren, 19 please state name of your next witness again. 20 MR. SHOGREN: Yes. We would like to call 21 Eric Glissmeyer, M.D. 2.2 HEARING OFFICER HALSTEAD: Thank you. Good morning, Dr. Glissmeyer. I'm 23 24 Patrician Halstead. I'm the hearing officer for 25 this matter. I don't know if you've been attending

Page 40 1 up this point, but I'll have you please state your 2 name and spell your name for the record and then 3 I'll have you raise your right hand to be sworn. THE WITNESS: Thank you. And have been on 4 5 the Zoom, but just let in the meeting now. My name is Eric Wallace Glissmeyer, 6 7 physician, and thank you. 8 HEARING OFFICER HALSTEAD: Can you spell 9 your name, please? 10 THE WITNESS: Eric, E-R-I-C, W. 11 Glissmeyer, G-L-I-S-S-M-E-Y-E-R. HEARING OFFICER HALSTEAD: Thank you. 12 Go 13 ahead and raise your right hand. (The oath was administered.) 14 15 THE WITNESS: I do. 16 HEARING OFFICER HALSTEAD: Go ahead, 17 Mr. Shogren. 18 MR. SHOGREN: Thank you. 19 DIRECT EXAMINATION 20 BY MR. SHOGREN: 21 Q. Good morning, Dr. Glissmeyer. 2.2 A. Good morning. 23 Q. Okay. Let's start off, what is your 24 profession? 25 A. I am a pediatric emergency physician.

Page 41 1 And where are you located? 0. 2 A. I work in Salt Lake City, Utah, for the 3 University of Utah, and Primary Children's Hospital 4 is my practice location. And are you licensed in Nevada to practice 5 0. 6 medicine? Not to practice in person, but to provide 7 Α. 8 Telehealth consultation if requested. 9 Q. And where else are you licensed? Just to practice in the State of Utah, and Α. 10 11 Telehealth consultation licensed other 12 inter-mountain west states, like Idaho, Montana, 13 Colorado, Wyoming. 14 Q. Okay. Thank you. How long have you been licensed? 15 Since 2014, as an attending physician, and 16 Α. 17 for the six years prior to that during residency and 18 fellowship. 19 Q. Where did you go to medical school? 20 A. The University of Utah. 21 Q. And what was your residency in? A. Pediatrics. 2.2 23 Q. And did you do any fellowships? Yes, fellowship in pediatric emergency 24 Α. 25 medicine.

Page 42 What board certifications do you have? 1 0. 2 I am board-certified with the American Α. 3 Board of Pediatrics, in pediatrics. I'm 4 board-certified with the American Board of 5 Pediatrics in pediatric emergency medicine. And 6 with the American Board of Preventative Medicine in 7 clinical informatics. Okay. What licenses do you hold? 8 Q. 9 Α. I hold a physician and surgeon license 10 with the State of Utah, as well as a controlled 11 substances prescription license. 12 Q. Okay. And do you hold any other positions 13 currently? 14Α. I'm sorry, any other positions? Yes. 15 Q. 16 No. Α. Can you briefly describe your training and 17 Q. 18 experience, specifically with emergency pediatric 19 medicine? 20 I spent about seven months in my Α. Yes. 21 residency between 2008 and 2011, in the emergency 22 department. I spent three years in fellowship in 23 the emergency department and in pediatric critical 24 care rotations with that fellowship. And then since 25 2014, I am full-time faculty in the pediatric

1 emergency department, seeing patients in that 2 emergency setting. 3 Q. Thank you. 4 I'd like to turn your attention to what's 5 been premarked as Board's Exhibit 15. Do you have 6 that in front of you? Have you seen this document 7 before? Yes. This is my curriculum vitae that I 8 Α. 9 personally prepared. 10 Does this document accurately summarize 0. 11 your experience and education? 12 Α. Yes. 13 Q. Did you prepare this document? 14 Α. Yes. Did you provide this document to the 15 Q. 16 Board? 17 Α. Yes. Okay. Is there anything else you would 18 Q.

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19 like to add, or is this document complete?
20 A. I'll just add that this doesn't include
21 all of the continuing medical education or other
22 lectures or trainings that I've attended, as that
23 would make this document excessively long.

24 Q. Okay. Thank you.

25 Have you served as a peer reviewer for the

1 Board before?

5

2 A. I have.

3 Q. Do you recall how many cases you may have 4 reviewed for the Board?

A. For the Nevada Board, three.

6 Q. Okay. And how long have you been7 reviewing cases for the Nevada Board?

8 A. Since 2020.

9 Q. Okay. Are you familiar with investigation 10 number 21-20403, regarding Dr. Jason Lasry?

11 A. Yes.

12 Q. Based on your training and experience, do 13 you feel you are familiar with standards of care to 14 which medical practitioners are held regarding the 15 facts in this case?

16 A. Yes.

Q. And do you have experience in the subject 18 matter you've asked to review regarding the facts of 19 this case?

20 A. Yes.

Q. Okay. Can you describe your training and 22 experience specifically with treating patients with 23 envenomization?

A. Yes. Envenomization is a complaint that 25 we see in the emergency department. Over the course of my career, which I described earlier, I have
 treated approximately seven patients with
 snakebites.

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And my experiences in managing them as patients that we hear about, often, before they come to our referral center as a major pediatric specialty hospital, and in speaking -- so in speaking with referring providers and arranging their transport and managing their care once they referring for them emergency department and dispositioning them to an appropriate location thereafter.

13 Q. Thank you.

14 You mentioned you've treated approximately 15 seven patients?

16 A. That's right. Approximately seven17 patients with snakebite injuries.

Q. And what was the most-recent patient?
A. Most-recent patient as about 18 months
ago.

Q. What was the age range of your patients?
A. Those range from about one year old, I
think it was one and a half year old, specifically,
the youngest, to teenagers.

25 Q. For your patients, did you administer

1 antivenom?

2 A. I did, yes.

3 Q. To your knowledge, what was the outcome 4 after administering antivenom?

5 A. All patients survived, and their wounds 6 around the site of the bite, some required some 7 local wound specialty care. I believe one of them 8 required a wound graft. All survived.

9 HEARING OFFICER HALSTEAD: Mr. Shogren, I 10 just want to clarify for the record because it 11 wasn't exactly clear to me. You asked if he 12 administered antivenom to his patients. I want to 13 clarify that your question meant to convey whether 14 he administered antivenom to each of those seven 15 patients, so all of patients.

16 MR. SHOGREN: Correct. Yes. I should 17 have specified. I'm talking about the seven 18 patients that Dr. Glissmeyer mentioned.

HEARING OFFICER HALSTEAD: Dr. Glissmeyer, 20 was my understanding correct, that it was all the 21 patients that administer to?

22 THE WITNESS: Thank you for that23 clarification.

Yes, these seven patients all receivedantivenom.

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Page 47 HEARING OFFICER HALSTEAD: 1 Thank you. 2 I'm sorry, Mr. Shogren. Go ahead. MR. SHOGREN: No problem. 3 4 BY MR. SHOGREN: Moving on here, were you provided with 5 0. 6 materials by the Board in your review of this 7 matter? Α. Materials from the case, case records, 8 9 yes. 10 Do you remember what was included in those 0. 11 materials? 12 Α. Yeah. Generally, they included 13 information from the Emergency Medical Services 14 transferring the patient to Humboldt General 15 Hospital. Records from Humboldt General Hospital, 16 and records from the hospital to which the patient 17 was transferred from Humboldt. Okay. And were you asked at the time the 18 0. 19 materials were provided to review them and make an 20 objective determination whether, in your 21 professional opinion, there was any departure from 22 the proper standards of medical care by Dr. Lasry? Yes, that was what I was asked to do. 23 Α. Did you come to a determination? 24 Q. 25 Yes. Α.

Page 48 1 And what was your opinion? 0. 2 My opinion was that the care of the Α. 3 patient by Dr. Lasry did not meet appropriate 4 medical standards, and per the Nevada Board 5 definition, met the definition of malpractice. 6 Q. Okay. Thank you. And now I'd like to discuss how you 7 8 arrived as this determination. And might be easiest 9 to go through the records that you've previously 10 been provided. I'm going to ask you some more 11 specific questions regarding the facts of this case. 12 So, if you could, could you turn to what's 13 been premarked as Board's Exhibit 6? I'm there. 14 Α. And do you recognize this document? 15 Q. 16 Yes. Α. Are these the records from Humboldt 17 Q. 18 General Hospital that you were asked to review? 19 Α. Yes. Okay. Also just as a sort of a 20 Q. 21 preliminary or an aside matter, I'm going to refer 22 to the patient as "Patient A," or otherwise as the 23 "patient," and I would ask that you do so as well, 24 so we can keep the transcript free of confidential 25 information about the patient.

Page 49 First, I just wanted to establish a 1 2 timeline here. If you can turn to what's been --3 the Bates stamp number s pages 21 through --4 actually not 21 -- 83 through -- I'm sorry. Ι 5 apologize. I was correct the first time. I was 6 looking at the wrong ones. I apologize for any 7 confusion. 8 Pages starting at Bates number 21. 9 Α. Yes. Okay. And so pages 21 through 24, what is 10 0. 11 this document here? 12 Α. This is a patient care record of the -- of 13 Patient A, that is from Emergency Medical Services, 14 responded to the patient in the field or out in the 15 community, and transported them to the hospital. Okay. I have a couple of questions here. 16 0. 17 We're going to jump back to this at a later point, 18 but just for right now, what is date of this 19 document? 20 It is dated May 9, 2020. Α. 21 0. Okay. And when did Emergency Medical 22 Services arrive on the scene? 23 Α. They documented that -- give me just a 24 moment. I want to make sure that I state it 25 correctly.

Page 50 1 0. Okay. 2 They -- I'm sorry. Can you restate your Α. 3 question, Mr. Shogren? 4 ο. I asked: When did EMS arrive on the scene 5 on May 9th? 6 Α. That's documented on page 23, that they 7 arrived on scene at 15:56 hours on May 9. When did they depart the scene? 8 Q. At 16:07 hours. 9 Α. 10 Okay. And just quickly here, what --0. 11 based on these records for the EMS, what was the 12 impression of the patient? 13 Α. The impression was that the patient was 14 bitten by a rattlesnake on the left knee, about an 15 hour before EMS arrived. And that the patient had 16 vomited, had been incontinent of urine. And that 17 was calm and talking normally, and they drew around 18 the wound to monitor for changes around the wound. 19 Q. Thank you. Now if you could turn to page number --20 21 starting at page 30 of Exhibit 6? 2.2 Α. Yes. And what is this document titled here? 23 0. 24 This is the Humboldt General Hospital Α. 25 emergency documentation or ED clinical summary.

Page 51 And who was the attending physician at 1 0. 2 Humboldt for the patient? 3 Α. Jason Lasry. What was the admit date? 4 ο. A. May 9, 2020. 5 6 Q. Thank you. 7 When did the patient arrive at Humboldt 8 General Hospital? Arrived May 9, 2020, at 16:16 hours. 9 Α. 10 If you turn to page number 32, when was 0. 11 Dr. Lasry assigned to this patient? 12 Α. At 16:24 hours on May 9. 13 Now turning to pages 34 and 35 of 0. 14 Exhibit 6. If you could read, what is Dr. Lasry's 15 assessment at the bottom of page 34? That the patient is a three year old with 16 Α. 17 rattlesnake envenomization, or bites, to the left 18 knee. That the patient had increasing edema and 19 swelling. And there's about 25 percent more 20 swelling in the radius of the circle and swelling 21 has increased in size from when she first presented. 22 She's noted as doing well, watching a movie, awake 23 and talking. And no abnormalities in the 24 coagulation tests. 25 Q. And based on this record, what medication

Page 52 1 was administered to the patient? 2 Α. The patient received IV fluid, along with 3 potassium chloride. ο. Okay. Now, towards the bottom of page 34, 4 5 there's that section entitled "Procedure," what does 6 this section state? This is states that Dr. Lasry delivered Α. 7 8 critical care to this patient for 35 minutes or 9 more, for multiple reassessments, medical 10 decision-making, and consultation. 11 Just based off your experience and Q. 12 knowledge, what is critical care time? 13 Α. It is a documentation attestation that 14 emergency physicians and others make in their notes 15 to indicate the severity of a patient's illness 16 and/or the complexity of the care provided. 17 Okay. Now if you could turn to page 27. ο. 18 What is this document? Α. This is the Authorization of Transfer for 19 20 the patient from Humboldt General Hospital to the 21 Renown Hospital. 22 Q. When was the transfer approved? Let's see. It's documented here that on 23 Α. 24 May 9, the Renown Hospital accepted the patient for 25 transfer at 17:56 hours.

Page 53 And according to this document, on page 1 0. 2 27, what was the discharge time? Α. Patient was discharged at 18:24 hours. 3 4 Rather -- sorry -- discharged vital signs timed at 5 18:24. Discharge time was 18:32. 6 Q. Thank you. Can we just quickly -- we're going to come 7 8 back to this, but if you could turn to 9 pages starting at 83, what's been Bates stamped as 10 83, Board's Exhibit 6? 11 Α. Yes. 12 Q. What is this document? A. This is, again, an Emergency Medical 13 14 Services' documentation of the patient's care and 15 assessment by them when they picked up the patient 16 from Humboldt to transfer them to Renown. If you could turn to page 86 specifically 17 Q. 18 here. When did the EMS depart Humboldt? They departed Humboldt at 18:52 hours. 19 Α. When did they arrive at Renown Hospital in 20 Q. 21 Reno? A. At 21:29 hours. 22 Q. Thank you. 23 For now, if you could go to what's been 24 25 premarked and admitted as Exhibit 8. Do you

Page 54 1 recognize these records? 2 Α. Yes. 3 Q. Are these records from Renown that you 4 were asked to review? Α. 5 Yes. Okay. I just want to focus on when the 6 Q. 7 patient arrived at Renown, was she given antivenom? Α. 8 Yes. 9 Q. And do you know when she was given 10 antivenom? 11 A. It was that same evening of arrival. I 12 need a moment to look for the exact place that the 13 time is documented. Q. I think that answers my question. We can 14 15 move on to the next one. 16 Could you turn to pages that's been 17 premarked as 98 and 99? 18 Α. Yes. 19 Q. Specifically on what's marked as -- of 20 what's labeled as "Death Certification Note." 21 Α. Um-hum. 22 Q. And according to this, on pages 98 and 99, 23 when was the patient pronounced dead? 24 A. May 13, 5:27 P.M. 25 Q. And what's listed as the cause of death?

Page 55 A. Permanent cessation of cardiac function, 2 secondary to MODS, secondary to cardiac arrest, 3 secondary to rattlesnake bite.

Q. And what does MODS stand for?
A. In my experience, it stands for multiple
6 organ dysfunction syndrome.

7 Q. Thank you.

8 Okay. Now we're going to step back a 9 little bit. I'm going to ask you about treatment of 10 snakebites in general, now that we've established a 11 timeline here for the patient's care.

12 In your experience, you to your knowledge,13 how are snakebite patients initially assessed?

A. The initial assessment includes
measurement of patient's vital signs, examination of
the bite area, and then ensuing, a period of
observation to determine if the patient's clinical
status, as measured by vital signs and symptoms, is
remaining stable or changing or any abnormalities,
and monitoring the bite site for any progression of
swelling, development of or progression of swelling.
Q. And when you say "vital signs," what vital
signs are typically measured?

A. Vital signs measured in this situation and 25 in any emergency situation include temperature,

Page 56 1 heart rate, respiratory rate, blood pressure 2 measurement, oxygen saturation measurement. Okay. And based on your experience and 3 0. 4 knowledge, and you said you've seven patient that 5 have been bitten by snakes, what are typical signs 6 of envenomization from a snakebite? Early, typical signs include swelling at 7 Α. 8 the bite site and pain. After time begins to go by 9 and about an hour or two hours goes by from the time 10 of injury, if there was venom injected, swelling 11 tends to continue to increase around the bite site. 12 Changes -- visible changes, other than 13 swelling, such as redness or bruising are really 14 variable, and may take multiple hours to develop. Monitoring of those vital signs, I 15 16 described, is critical also determine if the patient 17 is experiencing systemic or whole body affects from 18 venom.

19 Q. And what are common systemic symptoms?
20 A. Fast heart rate. And as the body
21 initially starts to respond to venom, and if there
22 is a significant amount of venom injected, the body
23 may enter various stages of shock, including a
24 persistence of an elevated heart rate, and/or low
25 blood pressure.

Q. Based on your experience and knowledge,
 when should patients receive antivenom?

Page 57

A. Once they're is any criteria met to 4 receive antivenom, and that would include that the 5 patient's vital signs are out of range and persist 6 out of range. That would include that the patient 7 has development of progression of swelling at a bite 8 site. That would also include signs of laboratory 9 abnormalities that could occur over time.

10 Q. And in what setting should antivenom 11 usually be administered?

12 A. As soon as possible. So that could 13 include settings -- if the patient is far from 14 medical care, and it's something, even outside of a 15 hospital, can be directed by a physician. Certainly 16 in emergency departments, emergency centers, as well 17 as within hospitals.

18 Q. In your experience, how are emergency 19 departments typically equipped to deal with any 20 adverse affects to antivenom?

A. They are probably to best place for a 22 patient to be treated for adverse affects of 23 antivenom that could occur. They're well equipped 24 to handle that by immediate physician and nurse 25 presence caring for the patients. And with the Page 58 1 immediate availability of medications to be -- to 2 include, but not limited to, IV fluids, agents to 3 increase blood pressure or epinephrine medications 4 if an allergic reaction were to occur.

5 Q. What are the contraindications for using 6 antivenom on a patient?

7 A. There are no absolute contraindications to 8 using antivenom on a patient.

9 The relative contraindications or things 10 that could be considered to not use antivenom, but 11 are not an absolute no, are that if a patient has 12 received antivenom before and had a severe allergic 13 reaction.

14 Q. Thank you.

15 And what resources are there, to your
16 knowledge, for consultation in snakebite cases?
17 A. There is generally available resources to
18 physicians in various articles and clinical practice
19 statements available online. But what's most
20 immediately available to emergency physicians, and
21 really any physician, is contact with a poison
22 control center. The same phone number is available
23 anywhere in the United States.

Q. And in snakebite cases, how are pediatric25 patients different than adult patients?

1 A. They are not.

2 Q. And how is the patient's weight considered 3 in treating snakebite cases?

A. As with most medications in children,
5 there is a weight-based dosing to give a smaller
6 human an appropriate amount of medication. After a
7 certain weight, that is irrelevant, and they receive
8 the adult dose.

9 Q. And then, to your knowledge, what --10 dealing with snakebites, what's the possibility that 11 the snake delivered a dry bite?

12 A. That's a possibility. It's been reported 13 through the literature that a certain number of 14 snakebites are dry bites or where venom is not 15 injected.

And either systemic, whole body changes I And either systemic, whole body changes I described in vital signs or changes in the skin, such as swelling at site or the laboratory changes I mentioned, don't occur, where none of those occur under a period of observation, and that's what could constitute a dry bite. Yeah.

There's a variability in reporting of how many snakebites are dry. Numbers that I have seen reported in the literature are anywhere between for the literature are anywhere between for the literature of bites that are not

Page 59

venom injected. I, personally, never seen such a
 one where there was no venom injected.

Page 60

3 Q. And backing up here, I'm moving back to a 4 previous topic here, but I forgot to ask here. What 5 are the risks of antivenom usage?

A. They're small. Really, any medication has the risk of allergic reaction. There are multiple different types of antivenom available to hospitals, and they generally stock one or the other; one called "CroFab," and one called "ANAVIP," are two common types.

12 And from my recollection, they have, 13 maybe, somewhere between a ten percent and a less 14 than five percent, respectively, rate of severe 15 allergic reaction when administered.

16 Q. Okay. Thank you.

Now, just addressing what's been premarked as Board's Exhibit 10, starting there. Actually, I'm just going to address Exhibits 10 through 13, which have all been previously admitted. Have you seen these documents before?

22 A. Yes.

23 Q. And what are these documents?

A. They are literature documents I provided25 in review of this case.

Page 61 Document 10 is a study of what normal 1 2 vital signs ranges are in children. Document 11 is from the Journal of 3 4 Emergency Medicine, statement on managing pit viper 5 or crotalid envenomization in emergency departments. Document 12 is another clinical practice 6 7 statement from Wilderness Medical Society on 8 treatment of pit viper envenomizations. 9 And document 13 is a summary document from 10 the UpToDate organization on management --11 evaluation and management of patients with 12 Crotalinae pit viper bites. 13 In your opinion, do these articles Q. 14 articulate that standard of care that would have 15 been in effect as of May 9th, 2020, when Dr. Lasry 16 saw the patient in this case? 17 Yes. Α. And noticed -- so Exhibit 10 was published 18 0. 19 in 2011. Exhibit 11 was published in 2020 and 20 updated in 2021. Exhibit 12 was published in 2015. 21 And Exhibit 13 was published in 2022. 22 So, some of those were published after 23 May 9th, 2020, but are the standards identified in 24 these articles different than what they would have 25 been on May 9th, 2020?

Page 62 No. The last document -- no. No, they're 1 Α. 2 not. No substantive change in the standard of care 3 in that time. And were these articles peer reviewed, all 4 ο. 5 of them? 6 Α. Yes, these are all peer-reviewed articles. And why did you rely on these articles? 7 0. These articles are from the kind of places 8 Α. 9 that might look when looking for guidance in 10 managing snakebite envenomizations. 11 Q. Okay. 12 Α. And I guess to be more clear, Exhibit 10, 13 it just established what normal vital sign ranges 14 are for children. Okay. Just briefly, if we could turn to 15 Q. 16 Exhibit -- what's been premarked as Exhibit 12, 17 starting on page 132. Specifically, what is this 18 document? This is from the Wilderness Medical 19 Α. 20 Society on practice guidelines for treatment of pit 21 viper bites in the United States and Canada. 22 ο. Okay. And this is a document relied on 23 -- correct? -- in forming your opinion. One of them. 24 Α. 25 If you could just turn to page 138 here. Q.

1 If you could just, perhaps, briefly summarize what's
2 titled "Section 4," subsection "initial patient
3 assessment."

Page 63

A. This is just details routine assessment 5 that should occur of the patient, including vital 6 signs, specifically included blood pressure, as 7 initial assessment of the patient.

8 And then history of the circumstances of 9 the bite, and then removing anything that swelling 10 could then lead to problem with, such as jewelry or 11 clothing on the body.

12 It talks about monitoring the patient 13 repeatedly.

Q. What is recommendation for after a patient is placed on initial assessment and vital signs? A. Repeat it every 15 to 30 minutes until local tissue effects have stabilized, which means until there's no further progression of the patient's local tissue affects.

Q. And if you could turn to page 140. If you 21 could just read the first sentence of the first 22 paragraph there?

A. This is indication for antivenom section, And it says "Patients with progressive local tissue finings or any systemic toxicity, such as signs, 1 symptoms, or acute laboratory abnormalities, should
2 receive antivenom."

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3 Q. Okay. In this section, what is described 4 as common systemic symptoms.

5 A. Hypotension or low blood pressure,6 systemic bleeding or neurotoxicity.

7 Q. Thank you.

8 HEARING OFFICER HALSTEAD: Sorry. Can you 9 repeat that for me, please? You said "low blood 10 pressure, neurotoxicity."

11 THE WITNESS: Hypotension, systemic12 bleeding, or neurotoxicity.

13 BY MR. SHOGREN:

14 Q. In your experience and knowledge, what is 15 defined as neurotoxicity?

16 A. So that can be any number of signs or 17 symptoms of weakness, particularly. It could also 18 include abnormal muscle functions, such as something 19 termed as "muscle fasciculation," which is kind of 20 uncontrollable writhing movements of muscles as 21 driven by nerves that aren't working right.

But the one in any sort of envenomization But the one in any sort of envenomization any venom-containing animal of neurotoxicity that is most concerning is -- or that one of the most concerning things is weakness in your breathing

Page 65 1 and ability to effectively breathe. 2 Q. Thank you. Now if we can turn to exhibit -- what's 3 4 been premarked as Exhibit 13, previously admitted. 5 Dr. Glissmeyer, what is this Exhibit? 6 Α. This is the UpToDate article on snakebite 7 envenomizations. Just to be clear, what are Crotalinae 8 Q. 9 snakes? 10 Crotalinae snakes are pit vipers, which Α. 11 are venomous snakes. 12 Q. And rattlesnakes fall under this category? 13 Α. Correct. 14 0. If you could turn to page 149 of this 15 article of this exhibit. If you could just describe 16 here at bottom, antivenom therapy, what's the 17 recommended initial treatment? Consultation with a medical toxicologist 18 Α. 19 or other physician with expertise or prior 20 experience treating venomous snakebites is 21 encouraged before giving antivenom. 2.2 And describes this phone number that's the 23 same throughout the United States, that has been 24 for -- I know for a fact it's been that case at 25 least since 2014 -- I'm sorry -- since 2011, there

were emergency consultation with a medical
 toxicologist is always available.

3 Q. And then going on to the next page, 4 page 150, what does the top paragraph there 5 describe?

6 A. Recommends when antivenom therapy should 7 be given, and says "For patients with Crotalinae 8 snakebites and progressive swelling or signs of 9 systemic toxicity."

**10 Q.** And what's recommended for those patients? 11 A. That if there is progressive swelling or 12 signs of systemic toxicity, that antivenom should be 13 administered as soon as possible once any of those 14 manifestations are evident. And that is done both 15 to treat the effects that are already happening, and 16 to prevent progression of venom affects.

Q. And if you go down to the section entitled 18 "Dose and Administration," on page 150, the second 19 paragraph, what does that state?

A. That antivenom therapy can be associated with potentially severe allergic reactions, but it appears -- the risk appears to be low, less than one percent.

Q. Okay. And to your knowledge, what are --25 what is FabAV?

Page 66

Page 67 The FabAV is the CroFab, and Fab2AV is the 1 Α. 2 ANAVIP. Both of those are pit viper antivenom. And if you go down to the next section 3 0. 4 titled "Treatment of Acute Antivenom Reactions," on 5 page 150, what does the first sentence state there? That on -- based on a comparative trial 6 Α. 7 between FabAV and Fab2AV, the rate of acute serum 8 reaction and serum sickness for patients receiving 9 either of those is approximately two to 10 three percent. 11 Okay. And moving on to page 153, on the Q. 12 last section of page 153, which is titled 13 "Supportive Care," what does that state? That antivenom administration is the 14 Α. 15 mainstay or the most important piece of treatment 16 for envenomization by North American Crotalidae 17 snakes. And other treatments, such as pain control 18 and monitoring for hypotension or low blood 19 pressure, bleeding, rhabdomyolysis, elevated tissue 20 or other compartment pressures, and, rarely, 21 respiratory failure could occur after administration 22 of antivenom. 23 ο. Okay. Now we're going to move on to

24 Patient A's medical records. We kind of touched 25 upon them initially, but now we're going to back to

## 1 them in more detail.

2 MS. HUETH: Excuse me. I'm sorry to 3 interrupt, but when it's convenient for everybody, 4 could be take a comfort break? HEARING OFFICER HALSTEAD: 5 Yeah. 6 I was going to ask, Mr. Shogren, how much 7 longer do you think you have to go? 8 MR. SHOGREN: Probably another 9 thirty minutes or so. We can take break now, 10 though. 11 HEARING OFFICER HALSTEAD: Okay. It's 12 10:21. Do you all want to -- let's be back by 13 10:35. Is that going to work for everyone? 14 MS. HUETH: Yes. Thank you. 15 HEARING OFFICER HALSTEAD: Okay. Thank 16 you, everyone. 17 (Recess from 10:21 A.M. to 10:35 A.M.) HEARING OFFICER HALSTEAD: We're on the 18 19 record and remain on the record in matter number 20 23-29251-1, In the Matter of the Charges and 21 Complaint Against Jason Howard Lasry, M.D. We took 22 a break amongst the direct of Dr. Glissmeyer, who is 23 testifying on behalf of the IC. 24 Dr. Glissmeyer, I remind you that you're 25 under oath.

Page 69 Mr. Shogren, you may continue with your 1 2 direction examination. 3 MR. SHOGREN: Thank you. 4 BY MR. SHOGREN: Dr. Glissmeyer, I was now going to focus 5 0. 6 of Patient A's medical records. If you could turn 7 back to Exhibit 6, and let's start with page 34 of 8 Exhibit 6. Dr. Glissmeyer, again, what is this 9 section? 10 Α. This is the Dr. Lasry's emergency record 11 of the patient. 12 0. Okay. And we went over this a little bit 13 before, but just to refresh here, what is the 14 initial assessment? 15 That since the patient was bit on the left Α. 16 knee, has developed increasing edema and swelling at 17 the site, and about 25 percent more swelling in the 18 circle drawn and the swelling has increased in size 19 from when she first presented. That the patient was 20 doing well. Noted no coagulation abnormalities. 21 0. What do these notes say about the 22 patient's heart rate? 23 Α. I don't think the note says anything about 24 the patient's heart rate, other than the number. 25 And what is the heart rate number listed? 0.

Page 70 149. 1 Α. 2 Q. And what's the normal heart rate range for 3 a three year old? 4 Α. Less than 140. So what does a heart rate of 149 indicate? 5 0. In this situation, it indicates to me 6 Α. 7 concern for significant envenomization and systemic 8 toxicity. And from what you can see here, how did 9 Q. 10 Dr. Lasry address the heart rate? 11 Α. He did not. 12 Q. And I'd like to turn now to page --13 starting at page 171 -- sorry -- 71 one Exhibit 6. 14 Α. Yes. Under the section starting -- actually, 15 Q. 16 it's on 171 and 172, starting under the section 17 "Vital Signs," and what is this section here? These are vital signs recorded zeroly or 18 Α. 19 repeatedly at Humboldt General Hospital. 20 And what vital signs are recorded here? Q. 21 Α. The patient's temperature, pulse rate or 22 heart rate, and respiratory rate. And what's the time range of these vital 23 0. 24 signs? 25 From 18:24 hours -- I guess they move Α.

Page 71 1 backward here, so from 16:30 hours to 18:24 hours. 2 Q. And what are the heart rate measurements, 3 what's the range recorded here? 4 Α. Between 149 and 155. 5 0. If you go on page 72. 6 Α. Thank you. So, yeah, there's two columns 7 of data here. And the earliest is from 16:17, the 8 latest 18:24, the range being 146 to 156. And I notice all of these heart rate 9 0. 10 measurements have a little "h" next to them. What 11 was that "h" stand for? 12 Α. That's a marker from the electronic 13 medical record recognizing that these are out of 14 range for the patient's age, rather elevated or 15 high. 16 Q. Okay. Thank you. 17 And what does this section, the vitals 18 signs section, state about the patient's blood 19 pressure? 20 Nothing. Α. 21 0. Okay. Now going back to Dr. Lasry's notes 22 starting on page 34. I notice there's a section 23 titled "Physical Exam," what does it say about the 24 patient's cardiac status? 25 A. Heart has regular rate on rhythm.

Page 72 And is a heart rate of 149, is that a 1 0. 2 regular rate? 3 That's tachycardic, or fast. Α. No. ο. In this section, what does Dr. Lasry state 4 5 about the patient's blood pressure? He doesn't state anything about it. 6 Α. Actually, if we could quickly go back to 7 0. What is this document again? 8 page 27. This is the certification of transfer 9 Α. 10 form, with the parent of the patient signing 11 permission, and document ing the patient's 12 acceptance of the Renown Hospital for transfer from 13 Humboldt Hospital. And what are the discharge vital signs? 14 0. Document ed at 18:24 hours, no blood 15 Α. 16 pressure document ed. Pulse 150. Respiratory rate 17 24. Temperature 36.6. Oxygen saturation 18 96 percent. One second. Now jumping back -- I 19 ο. 20 apologize for jumping back and forth here, but going 21 back to page 34 and 35, what does Dr. Lasry state --22 I may have brought this up before, but just to 23 refresh, what does Dr. Lasry note about the 24 swelling?

25 A. In the physical exam section, he notes no

Page 73 1 significant edema, which is another word for 2 swelling. And then in the assessment on page 35, 3 document s increasing edema and swelling. 4 ο. Um-hum. If you could go to -- now to 5 page 79 of Exhibit 6, under the section titled 6 "Emergency document ation," what is this section? This is the document ation by the patient Α. 7 8 care nurse and Humboldt General Hospital. What do the textual results state? 9 ο. On May 9 at 18:24, the nurse document ed 10 Α. 11 that Emergency Medical Services here with the 12 patient. Patient care turned over to them. Noted 13 left knee swelling continues to increase, and noted 14 mottling, which are color changes, around left knee 15 radiating up and down from the left knee. M.D. or 16 physician aware. 17 What time was this note entered? Q. 18:24 hours. 18 Α. 19 Q. Could you read the next note? So, that's going on backward in time at 20 Α. 21 17:29 hours, "Noted swelling to left knee increasing 22 more. M.D. notified." 23 0. And then can you just read the last note 24 there? 25 That's at 17:08 hours, "Noted left knee Α.

Page 74 1 swelling increased. Also noted by M.D." 2 Q. And you can stop there. Okay. I want to shift your attention now 3 4 to page 83 starting there, of Exhibit 6, paged 83 5 through 87. We briefly touched on this section of 6 Exhibit 6 before, but just to refresh, what is this 7 section? Is the Emergency Medical Services' record, 8 Α. 9 who came to pick up the patient from Humboldt and 10 transfer them to Renown. 11 Could you briefly describe under "Vital Q. 12 Signs," what this all this states? 13 Α. So, this vital signs section is a table of 14 vital signs taken from before they departed the 15 Humboldt General Hospital until they arrived at the 16 Renown Hospital. What does it state under column labeled 17 Q. 18 "BP"? 19 Α. This is the blood pressure repeated 20 measurements. At 18:49 hours, the blood pressure 21 was measured at 59 over 40. 22 Q. And what's the time range for the blood 23 pressure measurements? 24 Beginning at 18:49 hours until 21:28. Α. Q. What does the blood pressure reading of 59 25

Page 75 1 over 40, what does that indicate? 2 Hypotension, or low blood pressure. Α. And what -- when does hypotension start? 3 0. 4 Under what range? So blood pressure is normalized by age of 5 Α. 6 patient. A -- the systolic number, or the first 7 number, is the most reliable and most important to 8 use decision-making, as to whether a patient needs 9 treatment for low blood pressure or high blood 10 pressure. 11 That is considered to be low for a 12 three- year-old child, because we use the algorithm 13 of 70 plus two times the age. So a number less than 14 76 in that first number would be considered low. 15 What time range was the blood pressure Q. 16 less than 76? 17 The time range between 18:49 and 19:38. Α. 18 So I guess between 18:49 and 19:23. Then, again, 19 just before arrival at the Renown Hospital. 20 In your opinion in the context of these Q. 21 facts, what would this hypotension indicate for the 22 patient? 23 Α. Systemic symptoms of envenomization and 24 severe toxicity from that. 25 Based on your review of all the records Q.

1 here provided, is blood pressure mentioned anywhere
2 else?

3 A. It is -- not outside of this record from4 Humboldt General Hospital until arrival at Renown.

5 Q. If we could just go now to page 84. 6 Actually, I apologize. Backing up. Going back to 7 page 83, under the section titled "ECG," what does 8 this section indicate?

9 A. This is an interpretation of the 10 electrocardiogram electrode leads they had on the 11 patient's chest. And it indicates that from before 12 they left Humboldt General Hospital until just 13 before arriving at Renown, the patient had sinus 14 tachycardia, which means a fast heart rate, with a 15 normal electrographic tracing.

16 Q. Given, in your opinion and the context of 17 the facts here, what does the tachycardia indicates? 18 A. It indicates systemic toxicity from 19 envenomization.

20 Q. Okay. Now moving to page 84, under 21 "Initial Assessment," can you read the section 22 titled "Extremities"?

23 A. Yes.

24"Patient had two puncture marks on25the anterior left know. A circle

Page 76

1	was drawn on the area indicating	Page	77
2	initial swelling ecchymosis, or		
3	bruising, upon arrival to the ER.		
4	There was a small amount of		
5	ecchymosis around the wound, as		
6	well as extending past the circle		
7	approximately one inch. Her		
8	swelling was extended to the		
9	entire extremity. The patient's		
10	upper leg was approximately three		
11	times the size of the opposite		
12	leg. The knee had swollen to the		
13	same extent. Streaking was noted		
14	on the medial thigh. CMS was		
15	noted on all extremities, although		
16	the patient's left leg was weak,		
17	and she was unable to move it		
18	without assistance. Providers		
19	limited the movement of the		
20	extremity."		
21	Q. In your opinion, what does the patient'	s	
22	inability to move her leg, what does that indicat	e?	
23	A. That indicates a weakness. It also cou	lld	
24	indicate a pain from the swelling and the bite, b	out	
25	it also could indicate a neuromuscular weakness.		

Page 78 Okay. Then moving to page 85, under the 1 0. 2 section "Narrative," can you just describe what this 3 narrative states about the swelling of the leg? 4 Α. Yes. One moment. 5 I notes in the third paragraph ER RN noted 6 the patient's leg had swollen to three times the 7 size while in the ER. The EMS asked about the 8 administration of the antivenom and was informed 9 that Dr. Lasry advised against the administration. That's it. 10 11 THE WITNESS: I don't know if it's just 12 me, but I can't hear Mr. Shogren now. 13 HEARING OFFICER HALSTEAD: I think they 14 are working on it. We'll give them a minute. Okay. It's eleven o'clock right now. 15 16 I'll check back in at -- well, I quess we will just 17 go until 11:10, and then we will reconvene. 18 MS. HUETH: Thank you. (Recess 11:00 A.M. TO 11:11 A.M.) 19 20 HEARING OFFICER HALSTEAD: We're back on 21 the record in case 23-29251-1, In the Matter of 22 Charges and Complaint Against Jason Howard Lasry, 23 M.D. We stopped for some technical difficulties, 24 but we seem to back on track now. 25 We were still within the direct of

Page 79 1 Dr. Glissmeyer, who remains under oath. 2 Go ahead, Mr. Shogren. 3 BY MR. SHOGREN: ο. Okay. Dr. Glissmeyer, in your opinion, 4 5 what does the combination of the tachycardia and 6 hypotension, what could that possibly indicate? A. That indicates systemic toxicity from the 7 8 venom. Okay. Based on your reviews of records 9 Q. 10 here, what were the contraindications for using 11 antivenom in this case? 12 Α. None. 13 ο. Would the patient's weight have had any 14 sort of consideration? Would that have changed 15 anything? 16 Α. No. 17 Okay. Next, I want to go back to page 85. Q. 18 Could you read that last entry there, the last 19 paragraph on page 35? 20 A. Page 35; is that correct? 21 0. Yes, 35. 2.2 A. Last entry here at 5:45 P.M.: "I discussed the full history and 23 24 physical examination with 25 Dr. Gassen from the emergency room

Page 80 at Renown Hospital, and he agrees 1 2 to accept the patient to transfer 3 to his facility and agrees that 4 antivenom is not required or indicated at this time. Patient 5 will be transferred for a higher 6 level of care and for close 7 observation and possible later ICU 8 admission, depending on 9 condition." 10 11 Next I wanted to play -- this is Q. 12 respondent's exhibit, and this is Exhibit 7, which 13 is audio of transfer center call number two. And 14 I'm going play this right now. (Audio played.) 15 16 BY MR. SHOGREN: 17 Okay. Just to make sure, Dr. Glissmeyer Q. 18 did you hear that recording? 19 Α. Yes. And in preparation for this hearing, did 20 Q. 21 you previously hear that recording? 2.2 Α. Yes. 23 0. Can you briefly summarize what Dr. Lasry 24 stated about the patient's condition? 25 That the patient was bitten by a snake, Α.

Page 81 1 had some swelling on the left leg, that it was 2 increasing, that he didn't think antivenom should be 3 administered. And in your opinion, if you were given 4 ο. 5 that call, what would you convey to the other 6 doctor? A. I would convey the patient's vital signs. 7 Is there anything else you would convey? 8 Q. Probably a little bit more about how the 9 Α. 10 patient was doing, how they had vomited. But 11 that's, really, the critical things. 12 Q. Based off what you heard here, can you 13 summarized what the other provider, Dr. Gassen, what 14 he said about the use of antivenom? 15 A. I don't recall him saying anything about 16 it. 17 HEARING OFFICER HALSTEAD: I have a 18 question: Has this call been transcribed? 19 MR. SHOGREN: Not to my knowledge. 20 HEARING OFFICER HALSTEAD: Ms. Hueth, have 21 you had the call transcribed? 2.2 MS. HUETH: No, I have not. 23 BY MR. SHOGREN: Okay. Dr. Glissmeyer, I wanted to wrap up 24 ο. 25 here.

1 In your reasoned professional opinion, 2 after reviewing all of the facts in this case, the 3 medical records, in your own experience at the very 4 last, what should Dr. Lasry have done after the 5 patient presented to Humboldt General Hospital with 6 a snakebite?

A. Obtain full vital signs, including blood
8 pressure, recognize the elevated heart rate,
9 recognize the progression of swelling. And
10 because -- and for reason of either of those being
11 true, administer antivenom before transferring the
12 patient.

13 Q. Also in your opinion, how should the 14 patient have been transferred?

15 A. I think that -- I think that's less16 important in this case in the care of the patient.

17 Any patient should be transferred using 18 the fastest mode possible, especially in a setting 19 of the patient's systemic symptoms of illness with 20 tachycardia that were not addressed and fixed. 21 That's my answer.

22 Q. In your opinion, when should have the 23 antivenom been administered?

A. I believe that the presentation -- so, in25 short, at the Humboldt Hospital.

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1 Q. Thank you.

2 And would you opine that Dr. Lasry 3 committed malpractice?

4 A. Yes.

5 Q. And what's your opinion about Dr. Lasry, 6 his maintaining records regarding the patient's 7 condition?

8 A. I have concerns about the accuracy of the 9 physical exam stating a regular rate with the 10 patient having tachycardia. And concern with not 11 measuring the blood pressure in the patient during 12 the entirety of their stay.

13 Q. Would you opine that Dr. Lasry failed to 14 properly consult with another physician regarding 15 the patient's condition?

16 A. Yes.

17 Q. Thank you, Dr. Glissmeyer. No further 18 questions.

HEARING OFFICER HALSTEAD: Thank you.
So I'll pass to Ms. Hueth, but I have a
couple follow-up questions, and I don't want to step
on anybody's toes, but there are things we covered,
and I don't them to get skipped.

24 Since the call is not transcribed and I 25 had trouble hearing parts of it and we're asking

Page 84 1 Dr. Glissmeyer about it, I thought I heard that 2 transport was addressed. I didn't hear if the mode 3 of transport was addressed. 4 Can someone clarify that for me? MS. HUETH: It says -- I think Dr. Gassen 5 6 says, "How is she going to be transferred?" And Dr. Lasry says, "Via ground." 7 8 HEARING OFFICER HALSTEAD: Okay. Thank 9 you. And then what was the basis for concluding 10 11 that there was a failure to consult regarding the 12 patient's condition? There was a conclusion, but 13 there was no basis stated for that. MR. SHOGREN: Well, I had elicited through 14 15 Dr. Glissmeyer's testimony that based on records, 16 the audio call, there's no mention of patient's 17 vital signs. 18 HEARING OFFICER HALSTEAD: Okay. I would 19 like Dr. Glissmeyer to respond. 20 MR. SHOGREN: I apologize. 21 THE WITNESS: Thank you, Ms. Halstead. 22 Can you repeat the question? 23 HEARING OFFICER HALSTEAD: There was a 24 conclusion that Dr. Lasry failed to properly consult 25 regarding the patient's condition, and I wanted to

Page 85 1 know what your basis for that conclusion was. 2 THE WITNESS: The basis is failure to 3 provide the vital signs of the patient. As in the 4 transcript, there is mention of this increasing 5 swelling. But no -- and a declaration that he 6 didn't think that antivenom should be administered. But I didn't think that the phone call to 7 8 the Renown Hospital physician, through their 9 transfer center, was really one of consulting and a 10 back and forth discussion about should we administer 11 antivenom to this patient, but rather a handoff or 12 statement of what was done. 13 And I don't think that the referring 14 physician was really specifically asked the 15 question: Would you recommend administering 16 antivenom to this patient? 17 HEARING OFFICER HALSTEAD: Thank you. 18 Go ahead, Ms. Hueth, you can commence your 19 cross-examination. 20 MS. HUETH: Thank you. 21 CROSS-EXAMINATION 22 BY MS. HUETH: 23 0. Good morning, Dr. Glissmeyer. 24 A. Good morning. I have in my notes -- please correct me if 25 Q.

Page 86 1 I'm wrong -- that you currently practice at Primary 2 Children's Hospital in Salt Lake City? 3 A. Correct. 4 ο. Okay. And is that a rural critical access 5 hospital? Could you define what you mean by "rural 6 Α. 7 critical access hospital"? Are you familiar with the JCo definition 8 Q. 9 for accreditation of a rural critical access 10 hospital? 11 Not specifically, no. Α. 12 Q. Where is Primary Children's Hospital 13 located? 14 Α. In Salt Lake City. How many beds is your emergency 15 Q. 16 department? 17 Α. It's 33. Q. Just in the ED? 18 19 A. Correct. And do you know how many beds there are in 20 Q. 21 total at Primary Children's Hospital? 2.2 Α. I believe over 300. In the low 300s. 23 0. At Primary Children's Hospital, as an ER 24 provider, do you have on-call specialists? 25 Α. Yes.

Page 87 And typically what sorts of on-call 1 0. 2 specialists do you have? 3 Α. We have the full array of medical and 4 surgical specialties. Were you working at Primary Children's 5 0. 6 Hospital in Salt Lake City in May of 2020? Α. Yes. 7 And according to your CV, from 2021 to 8 Q. 9 2023, you were also working on your MBA; is that 10 right? 11 A. Correct. 12 Q. In October of 2020, you became 13 board-certified in preventive medicine? No. That's in clinical informatics 14 Α. 15 through the board of -- the American Board of 16 Preventive Medicine. 17 Did you have to take an exam to receive ο. 18 that certification? 19 Α. Yes. 20 When did you take that exam? Q. 21 Α. I took that exam in the fall of 2020. 22 Q. You testified earlier that the most-recent 23 patient that you treated as a result of a snakebite 24 was 18 months ago; is that right? 25 Α. Yes.

Page 88 So prior to May 9, 2020, how many patients 1 0. 2 had you personally administered antivenom to? 3 Approximately six before that patient. Α. ο. The patients that you administered 4 5 antivenom to, were they ultimately admitted to the 6 hospital? 7 All of them, yes. Α. To what department in the hospital? 8 Q. Some to the inpatient, regular medical 9 Α. 10 surgical floor. And I believe at least one of those 11 total seven was admitted to the intensive care unit. 12 Q. One of those patients, you testified, 13 required a skin graft; is that right? That's right. 14 Α. Were there any other of those seven 15 Q. 16 patients that required, whether surgery or 17 additional intervention beyond the antivenom? 18 Not surgery, no. Α. But some other intervention? 19 ο. Additional doses of antivenom after the 20 Α. 21 initial ones were required by most of the patients. 22 Q. Those additional doses, did you provide 23 those in the ER? 24 Α. No. They were provided to the patient after 25 Q.

1 the patient's admitted either to the ICU or the 2 general medicine floor?

3 A. Correct.

Q. Earlier you were testifying regarding the two types of antivenom, and you testify that most hospitals will stock one of two antivenoms, either 7 CroFab or ANAVIP; is that right?

8 A. Yes.

9 Q. And when you were explaining that, were
10 you talking generally, or were you taking
11 specifically about Humboldt General Hospital?
12 A. I was talking generally. Yet in my review

13 of the records for this case, I requested
14 information as whether on the date of patient's
15 presentation, antivenom was available in the
16 hospital.

17 Q. And did you see that information contained 18 within the Exhibit s presented by the Investigative 19 Committee?

20 A. I would need reread all of them to be21 absolutely sure. I don't know.

Q. Do you recall Mr. Shogren bringing that information to your attention when he was asking you questions?

25 A. Not today, no.

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Page 90 Q. Okay. When you received the materials for 1 2 this case, did you receive the records from Humboldt 3 and the records from Renown? 4 Α. Yes. When you initially received the materials 5 0. 6 for this case, what else did you get? MR. SHOGREN: I object to that. I believe 7 8 that's confidential. 9 HEARING OFFICER HALSTEAD: Ms. Hueth, do 10 you have a response? 11 MS. HUETH: I'll rephrase it. 12 BY MS. HUETH: 13 Q. When you initially received materials 14 related to this case, you received records from 15 Humboldt General Hospital; is that right? 16 Α. Yes. 17 Renown? Q. 18 A. Yes. 19 Q. Did you receive the death certificate? 20 A. Yes. 21 0. Okay. When you first received the 22 materials, you knew that this is patient passed; 23 true? 24 Α. Yes. Q. When hindsight bias? 25

Page 91 It is the outcome after an event changing 1 Α. 2 the -- one's perception of the circumstances of an 3 event. 0. If you can turn, please, to Exhibit 9, 4 5 which are the medical records from Humboldt General 6 Hospital, and specifically page -- Bates stamp page 7 23? Which Exhibit number? 8 Α. 9 Q. Nine. Do you have that in front of you? I'm sorry. What do I have in front of me? 10 Α. Exhibit 6, page 23? 11 Q. 12 HEARING OFFICER HALSTEAD: And just to be 13 clear, there's two Exhibit 6 because one is 14 respondent's and is the IC's, and so the reference 15 is to the IC's Exhibit 6. 16 MS. HUETH: Okay. And for, I think, all 17 of my questions, but if not, they're from the 18 Investigative Committee's Exhibit s. 19 HEARING OFFICER HALSTEAD: Thank you. 20 MS. HUETH: Thank you. I should have 21 clarified. 2.2 THE WITNESS: I have Exhibit 6. Which 23 page? 24 BY MS. HUETH: 25 Bates stamp NSBME 023? Q.

Page 92 I have it. 1 Α. 2 Q. Okay. And according to this document, the 3 paramedics got to the patient at 15:57; correct? 4 Α. Yes. That's 3:57? 5 0. 6 Α. Yes. And the parents -- the patient's parents 7 0. 8 reported that the patient was bit about an hour ago; 9 true? 10 Yes. Α. 11 Q. So around 2:57? 12 Α. Yes. 13 Q. The paramedics also document that the 14 patient's vitals were obtained and monitored during 15 transport to Humboldt General Hospital; correct? 16 Α. Yes. 17 Is there any document ation of the blood Q. 18 pressure taken by the paramedics on route to 19 Humboldt General Hospital? 20 Α. No. 21 0. However, the paramedics do document that 22 the patient's condition upon arrival to the 23 emergency department was improved; correct? 24 I'm reading. Α. 25 Sure. And it's in the middle -- still on Q.

Page 93 1 page 23, in the middle of the page, there's a box 2 entitled "Condition at Destination." 3 Α. Yes, I see that. 4 Q. And it says "improved"? 5 Α. Yes. 6 Q. If you can turn to page 76, please, still 7 within that same Exhibit? Α. 8 Yes. 9 Q. The nurse's triage assessment, which, by 10 the way, what is a triage? 11 Α. That's an initial assessment of the 12 patient upon arrival to a setting of care, intended 13 to identify problems and address them in a fashion 14 expedited appropriate for the patient's illness. Q. And the nurse's triage assessment states 15 16 that the patient's skin color is normal for 17 ethnicity; true? 18 Α. Yes. 19 Q. It says that the temperature is warm; 20 correct? 21 Α. Yes. 22 Q. If you go to page 78. There's the a 23 pediatric coma assessment, do you see that? 24 Yes. Α. Q. And then above that, there's a 25

Page 94 1 neurological assessment, do you see that? 2 Α. Yes. The patient is noted to be alert? 3 Q. 4 Α. Yes. Okay. Earlier, you testified that you 5 0. 6 provided a number of articles to the Investigative 7 Committee in support of your opinions in this case; 8 is that true? 9 Α. Yes. And if you turn to Exhibit 11, is this one 10 0. 11 of those article that you provided? 12 Α. Yes. 13 Q. And you testified earlier, did you not, 14 that this article establishes the standard of care? It is an article that addresses the 15 Α. 16 standard of care, not the only. 17 Okay. And this article was published Q. 18 September 14, 2020; is that right? 19 Α. Yes. Okay. But you testified earlier, did you 20 Q. 21 not, that it's your belief that earlier versions 22 were essentially identical to this one? In the major ways that affects this 23 Α. 24 patient's treatment, yes. 25 Okay. Then why didn't you provide a copy Q.

Page 95 1 of the article that would have been applicable at 2 the time of this patient's treatment? 3 Α. I did through the Wilderness Medical 4 Society article published in 2015. We're not taking about that article, 5 0. 6 Doctor. We're on Exhibit 11, which is a clinical 7 practice statement. A. I don't have an article -- I don't have a 8 9 previous version of this article, nor do I know if a 10 previous version of this article was published prior 11 to the -- May 9 of 2020. 12 Q. Well, do you know if a previous version 13 was published before September 14, 2020? I don't know that. 14 Α. Okay. Then how do you know that -- wait, 15 Q. 16 let me take a step back. 17 You don't even know if there was a prior 18 version; true? Α. That's correct. 19 Okay. But in any event, number one, under 20 Q. 21 the executive summary entitled "How should patients 22 with potential snake envenomation be assessed?" Do 23 you see that? 2.4 Α. Yes. And it goes on to say "All patients with 25 Q.

Page 96 1 possible snakebite envenomization should have the 2 following laboratory tests performed." Do you see 3 that? 4 Α. Yes. The first one is a complete blood count; 5 0. 6 is that right? 7 Α. Yes. Dr. Lasry ordered a complete blood count, 8 Q. 9 didn't he? A. I'm going to look back at his notes and 10 11 make sure I answer your question accurately. 12 Yes. 13 Okay. It also says "A basic metabolic Q. 14 profile," and on page 55, Dr. Lasry actually ordered 15 a comprehensive metabolic panel; true? 16 A. True. 17 So just more tests than would be done in a Q. 18 base metabolic profile; is that right? That's right. 19 Α. Okay. The next test that should be 20 Q. 21 ordered is the PT, the prothrombin time, and 22 Dr. Lasry ordered that, did he not? 23 Α. Yes. The next one fibrinogen. Dr. Lasry 24 ο. 25 ordered a fibrinogen; true?

Page 97 I don't see it document ed in his note. 1 Α. 2 I'm looking through other records right now to see 3 if it's was drawn but just not document ed in his 4 physician note. 5 0. Sure. Why don't you turn to page 53, 6 which is the orders. Yeah, that was drawn. 7 Α. 8 So a fibrinogen was ordered and drawn; Q. 9 true? 10 Yes. Α. 11 And then creatin kinase, CK --Q. 12 Α. Yes. -- that was also ordered and drawn; true? 13 Q. 14 Α. Yes. So Dr. Lasry ordered the appropriate labs, 15 Q. 16 at least according to this article; correct? 17 Α. Yes. Another article that you produced, and 18 Q. 19 it's in Exhibit 10, and you talked a little bit 20 about this earlier, entitled "Normal Ranges of Heart 21 Rate and Respiratory Rate in Children from Birth to 22 18 years. A Systemic Review of Observational 23 Studies"; true? 24 Yes. Α. Okay. And at least according to this 25 Q.

Page 98 1 article, the mean respiratory rate of a child of the 2 same age Patient A, so three years old, the mean 3 respiratory rate is about 26; is that right? 4 Α. I'm looking. 5 Yes, that's right. And --6 Q. I'm sorry. "Median" not the "mean." 7 Α. Thank you. The median. I apologize. 8 Q. 9 Median being the middle, the fiftieth 10 percentile? 11 Α. Correct. 12 Q. And there's a number of vital signs 13 document ed within the patient's medical records, in 14 which her respiratory rate is between 24 to 26; 15 true? I believe that's true, but I'm not looking 16 Α. 17 at that Exhibit we were looking at earlier right now 18 that had the various respiratory rates document ed, 19 but I believe that is accurate. Sounds about right. 20 Q. 21 It still with this article, a heart rate 22 of 150 in a patient that is three years old would be 23 in what percentile? 24 A. Greater than the ninety-ninth percentile. Do you have the table in front of you? 25 Q.

Page 99 Yeah. That's referencing -- let's see 1 Α. 2 here, figure 4 on page 127 of Exhibit 10. Q. When you provided this article to the 3 4 Investigative Committee, was it your goal -- or did 5 you feel like the article was helpful in 6 establishing a normal range of heart rate, 7 respiratory rate and other vitals of a patient of 8 three years old? My intent was to establish what is normal 9 Α. 10 and what is outside normal range for heart rate in 11 proving this article. 12 Q. Okay. For a patient such as the patient 13 we're talking about in this case, Patient A? 14 Α. Correct. On page -- the same article, if you can 15 Q. 16 turn to page 122? 17 Α. Um-hum. 18 Q. And excluded from this study, though, were 19 measurements taken at elevation greater than 1,000 20 meters above sea level; true? 21 Α. Yes. 22 Q. How many meters above sea level is 23 Winnemucca where Humboldt General Hospital is 24 located? A. I don't know. 25

Page 100 Would you have any reason to dispute that 1 0. 2 it's over 1,300 meters above sea level? 3 Α. No. ο. And at least based upon this criteria, if 4 5 I'm correct that Winnemucca is situated at more than 6 1,300 meters above sea level, a patient would be 7 excluded, at least under this study? Α. 8 Yes. Do you find it to be surprising that a 9 ο. 10 child who is in the emergency department after a 11 stressful event has an elevated heart rate? 12 Α. No. 13 ο. Am I understanding your criticisms 14 correctly that one of your criticism is that 15 Dr. Lasry did not document that the heart rate was 16 tachycardic? 17 Α. One of them. Okay. But it is documented -- is it not? 18 0. 19 -- in the medical records that the heart rate was 20 tachycardic. 21 Α. Not in his physician note. 22 Q. That wasn't my question. 23 My question was: Is it document ed in 24 patient's medical records from Humboldt General 25 Hospital emergency department that the heart rate

Page 101 1 was tachycardic? 2 A. I would have to review them entirely to 3 see if there is a Humboldt nurse or other assessment 4 that made such a distinction. 5 0. Sure. Turn to page 74. A. Page 74. Tachycardia under the general 6 7 subjective vital signs, document ed by Cristal 8 Fimbre Espinosa. Okay. So you see that it's document ed in 9 Q. 10 tachycardia? 11 Α. Yes. 12 Q. If you can turn back to page 72, which you 13 were discussing with Mr. Shogren? Let me know when 14 you're at that page. 15 A. I'm at that page. 16 Next to the peripheral pulse rate and the Q. 17 BPM, there's a reference range. Do you see that? 18 Α. Yes. 19 Q. The reference range is 70 to 100. Do you 20 see that? 21 Α. Yes. 2.2 HEARING OFFICER HALSTEAD: Sorry. Can you 23 redirect to that page again, please. MS. HUETH: Yep. 72. 24 25 HEARING OFFICER HALSTEAD: Thank you.

1 BY MS. HUETH:

2 Q. And the reference range is 70 to 100. Do 3 you see that?

4 A. Yes.

5 Q. But, based upon your testimony for a 6 three year old, the, I guess, reference range goes 7 up to 140; is that true?

8 A. Reference range and percentiles are not9 the same thing.

10 Q. Do you have any information to indicate 11 that this reference range if for a pediatric patient 12 and not an adult patient?

13 A. I don't have any information on that14 either way.

Q. When you told Mr. Shogren that the little h was indicating that this pulse rate was high for a patient of this age, do you have any information to high is actually adjusted for a pediatric patient?

20 A. No.

21 Q. Okay.

THE REPORTER: Ma'am. I'm so sorry to interrupt. I just got a prompt that says I am now the host. And I -- yeah. I'm not sure if something -- I didn't touch anything, but apparently I'm the

Page 103 1 host now. And the investigator wants to be let in. 2 HEARING OFFICER HALSTEAD: You better let 3 her in and see what happens. 4 THE REPORTER: Okav. 5 HEARING OFFICER HALSTEAD: Maybe she'll 6 take it back from you. We may have to log out and 7 log back in. 8 Mr. Shogren, just let us know when that's 9 resolved, please. 10 While we're waiting, Ms. Hueth, I'll just 11 note that it's your cross-examination, and so I will 12 let you direct the flow that works for you. It's 13 nearly lunchtime, and I don't want to direct that on 14 your behalf, so you let us know when a good time 15 would be to break. 16 I mean, I'm happy to break any MS. HUETH: 17 time. The only thing is -- I don't know if the 18 doctor has time limitations that he needs to be done 19 by a certain time. Otherwise, I'm happy to defer to 20 the group about when to take a break. 21 HEARING OFFICER HALSTEAD: Well, and 22 Mr. Shogren, I don't know if you're planning to 23 retain Dr. Glissmeyer for potential rebuttal and not 24 release him. I don't know what all your 25 considerations are.

Page 104 THE WITNESS: I can just speak for myself 1 2 and say that I do not any obligations on the rest of 3 this working day today. 4 MR. SHOGREN: Yes. And I just want to say 5 it looks like the technical difficult is fixed. HEARING OFFICER HALSTEAD: Okay. So, 6 7 Ms. Hueth, again, I'm going to defer you because I 8 don't want you to stop in a spot that works for you, 9 given you're in the middle of your cross. 10 MS. HUETH: We've had a brief break, and 11 this is good as a time as any, if everyone is ready 12 for a lunch break, I'm happy to do so now. 13 HEARING OFFICER HALSTEAD: If you had to 14 go to another break point, how long do you think you 15 would be? 16 MS. HUETH: Maybe 30 minutes. HEARING OFFICER HALSTEAD: Dr. Glissmeyer, 17 18 would you be fine going another 30 minutes. 19 THE WITNESS: Yes. 20 HEARING OFFICER HALSTEAD: Okay. And 21 Ms. Court Reporter? 2.2 THE REPORTER: Yes. 23 HEARING OFFICER HALSTEAD: Okay. I just 24 want to get as much under our belt as possible. 25 It's still -- it's not quite noon. And then we

Page 105 1 didn't start at 8:30, and we started later than 2 that. 3 So with that, Ms. Court Reporter, could 4 you please read the last question and answer and we 5 will go from there. THE REPORTER: I was afraid you were going 6 7 to ask me that. I was distracted by all the 8 prompts. So what I am going to do is play them for 9 you. If you could just stand by one second. (Audio played.) 10 11 HEARING OFFICER HALSTEAD: Go ahead, Ms. 12 Hueth. 13 MS. HUETH: Thank you. 14 BY MS. HUETH: Dr. Glissmeyer, turning now to Dr. Lasry's 15 Q. 16 documented physician exam, which is on Bates stamp 17 NSBME 034. 18 Α. Yes. 19 Q. Dr. Lasry did perform a physician exam of 20 the patient; true? 21 Α. It's document ed. 22 Q. And at least according to his 23 document ation of time of his examination, the 24 patient did not appear to be in distress, and she 25 was asking for juice?

1 A. Yes.

2 Q. Dr. Lasry also documented his examination 3 of left knee; true?

4 A. Yes.

5 Q. And it was noted that there was no 6 significant edema, no streaking, no skin necrosis, 7 no peripheral edema, and then goes on to describe 8 other negative findings; true?

9 A. At that time, yes.

10 Q. Did you see anything in the medical 11 records to indicate that upon arrival to the 12 emergency department at Humboldt General Hospital 13 that the patient had muscle weakness?

14 A. No.

15 Q. Did you see anything in the medical 16 records to indicate that upon arrival to Humboldt 17 General Hospital that the patient was unable to move 18 her left leg?

19 A. No.

20 Q. Do you feel like the records were legible?
21 A. Yes.

Q. At any time while the patient was in the
emergency department at Humboldt General Hospital is
it documented that she had muscle weakness?
A. No.

Page 107 It's also not document ed that did not, 1 2 such as any measurement of her negative inspiratory 3 force or assessment of her strength. ο. And that's true of the documentation by 5 the nurses as well? A. I don't -- I'm looking right now. I don't 6 7 recall if the document ation about the patient's leg 8 movement was by nurses or by other providers, such 9 as the EMS providers later or someone else. While the patient was in the emergency 10 0. 11 department at Humboldt General Hospital, did you see 12 any document ation by anyone that the patient was 13 unable to move the leg? 14 Α. I don't think so, no. In a patient with systemic envenomization, 15 Q. 16 would you expect to see low platelets? 17 A. It is all depends when the labs were 18 drawn. It's a time-dependent thing. 19 Q. Can we please turn to Exhibit 11, which is 20 another one of the articles you provided. 21 Specifically, Bates stamp page 130? 2.2 A. I'm there. Q. And under --23 A. -- clarifying question? 24 25 Excuse me? Q.

Page 108 Can I just ask a clarifying question? 1 Α. 2 Q. Sure. You're referring to this exhibit, yet 3 Α. 4 earlier, you pointed out that document was written 5 after the evaluation by Dr. Lasry. HEARING OFFICER HALSTEAD: I imagine she 6 7 will put that in context in her question. 8 Otherwise, can be an argument as to weight that 9 Mr. Shoqren can raise. 10 THE WITNESS: Okay. Thank you. 11 Go ahead. 12 BY MS. HUETH: 13 And, Doctor, let me try and ask a Q. 14 clarifying question: Was this an article that you 15 found and you provided to the Investigative 16 Committee? 17 Α. Yes. And why did you do that? 18 Q. 19 Α. To support my recommendation 20 that antivenom should have been administered. 21 0. All right. So you felt like this article 22 and the opinions contained therein support your 23 opinions with respect to this patient's care; true? 24 Yes. Α. Okay. And so it's says "Administer 25 Q.

Page 109 1 antivenom for any of the following," and then the 2 third bullet point says "Significant or progressive 3 hematologic toxicity, abnormalities that are 4 particularly worrisome, include fibrinogen of less 5 than 50 milligrams or platelets less than 50,000." 6 Did I read that correctly? 7 Α. Yes. And this patient's platelets were normal; 8 Q. 9 true? 10 Α. True. Her creatinine level was also normal? 11 Q. 12 Α. Yes. 13 And her CK, which was another one of the Q. 14 labs, the creatin kinase, that was also normal? 15 Yes. Α. There was no evidence rhabdomyolysis? 16 Q. 17 Not at that time of the lab, no. Α. Q. When it has the lab sample collected? 18 Let's see. The creatin kinase was 19 Α. 20 collected -- I know it was ordered at 16:31 hours on 21 May 9. It's not entirely clear to me exactly when 22 it was collected, but sometime after that order. 23 0. If you turn to Exhibit 6, page 68, Bates 24 stamp page 68. 25 Thank you. Α.

Page 110 So, yeah, so all these labs, the CBC, the comprehensive metabolic panel, the coagulation test, PTINR, PTT, collected at 17:00.

4 Q. So five o'clock?

A. Yes.

5

6 Q. Several hours after the snakebite; true? 7 A. I wouldn't say several. The snakebite --8 let's see. 3:56 was when the EMS providers arrived 9 on the scene. 2:56 was the time estimated the 10 patient was bit. So between 2:56 and 5:00 P.M., so 11 two hours and four minutes.

12 Q. Okay. And going back to Exhibit 11, the 13 article that you provided because you felt it 14 supported you opinions, on page 130. If you can let 15 me know when you have that in front of you.

16 A. I have it.

Q. Under what I just read, it goes on to say Minimal hematologic" -- excuse me. "Lab abnormalities, e.g., isolated fibrinogen levels between 100 and 150, in an otherwise well-appearing patient, warrant serial testing, but not treatment with antivenom." Did I read that correctly?

23 A. Yes.

Q. If we can turn, please, to Exhibit 12?
A. Yes.

Page 111 Q. Is that an article that you also provided 2 to the Investigative Committee?

3 A. Yes.

Q. Did you provide this article because you
5 felt like it supported your opinions in this case?
A. Yes.

Q. The Wilderness Medical Society practice
8 guidelines, do they establish the standard of care
9 for an emergency medicine doctor, in your opinion?
10 A. They are one of the resources that
11 establish the standard of care.

12 Q. Within this document, on page 139, there 13 is the table, table 3 is entitled "Laboratory and 14 Diagnostic Testing for Snakebite Evaluation." Do 15 you see that?

16 A. Yes.

Q. And it says "Fibrinogen most specific for l8 coagulopathy. Important to obtain measured, but not l9 calculated level." Did I read that correctly?

20 A. Yes.

21 Q. What's coagulopathy?

A. That's the blood either not clotting or23 clotting too readily.

Q. And what is the significance of that when
25 evaluating a patient after a snakebite?

Page 112 Oh, it's one of many ways in which their 1 Α. 2 body systems can be deranged? And what significance, if any, does 3 Q. 4 whether or not a patient has signs of coagulopathy 5 have after a snakebite? Whether they have it or not doesn't mean 6 Α. 7 they were bitten or not bitten. Does it give you any information as to 8 Q. 9 whether there's systemic envenomization occurring? A. Could be one of the indications, but it's 10 11 not the only indication of systemic envenomization? 12 Q. Sure. Did you think I was asking if it 13 was the only indication of systemic envenomization? I wanted to be clear of what my answer 14 Α. 15 was. 16 This patient's fibrinogen level was Q. 17 normal; was it not? 18 Α. Yes. 19 Q. Okay. Right above that, with respect to 20 the PTINR, PTT is says "Evaluate for coagulopathy 21 (INR is most useful)." Did I read that correctly? 2.2 Α. Yes. 23 Q. And this patient's INR was also normal; 24 true? 25 Α. Yes.

Page 113 Just before, maybe, we break for lunch, if 1 0. 2 you turn to the next page, which is NSBME 140, and 3 on the right side of that page, the right column, 4 maybe about half way down in this article that you 5 provided because you felt it was helpful, it says 6 "All patients receiving antivenom should be admitted 7 to the hospital for further observation, maintenance 8 antivenom dosing, and repeat laboratory testing 9 until abnormalities resolved"; true? 10 Α. Yes. 11 Q. "Manufacturer recommended maintenance 12 dosing includes two vials of antivenom every 13 six hours for three consecutive doses"; true? 14 Α. Yes. So that would be over the course of 15 Q. 16 18 hours; true? 17 Α. Yes. 18 Okay. Q. 19 MS. HUETH: For me, this is a good time to 20 break. 21 HEARING OFFICER HALSTEAD: Okay. Is 22 everyone fine with that? 23 MR. SHOGREN: Yes. 24 HEARING OFFICER HALSTEAD: Okay. And how 25 long would everyone like to break? At least an

1 hour? Do you need more?

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MS. HUETH: I don't need more, but I was 3 going to request that I can -- my client and I can 4 rejoin the Zoom, but from my office. I'm just 5 having a little trouble hearing with the laptop here 6 that the Board generously set up for us. HEARING OFFICER HALSTEAD: I want to make 8 sure that you get lunch, that you get refreshed, and 9 that you have travel time. So what works for you 10 for a time to reconvene? MS. HUETH: No more than an hour and a 12 half would be needed more me. And I could even do 13 less, if that's everyone's preference. HEARING OFFICER HALSTEAD: So right now 15 an hour would be -- a little more than an hour would 16 be 1:15. Would 1:30 be more helpful? MS. HUETH: It would for me, as long as 18 it's okay with everybody. HEARING OFFICER HALSTEAD: Okay. I see 20 it's good with Dr. Glissmeyer. Mr. Shoqren? MR. SHOGREN: That's fine.

23 HEARING OFFICER HALSTEAD: Okay.

Ms. Smith? 24

25 THE REPORTER: Just tell me when to be 1 back, and I'll be here.

2 HEARING OFFICER HALSTEAD: Okay. We'll3 back at 1:30, everyone. Thank you.

4 (Lunch recess from 12:08 P.M. to 1:30

5 P.M.)

6 HEARING OFFICER HALSTEAD: We're going 7 back on the record. This is case number 23-29251-1, 8 In the Matter of Charges and Complaint Against Jason 9 Howard Lasry, M.D. We have left off with the 10 cross-examination of Dr. Glissmeyer, who is present 11 and remains under oath. All parties are present. 12 We've had a lunch break. It is now 1:31, and we 13 will the proceedings.

14 Ms. Heuth, you may continue.

15 MS. HUETH: Thank you.

16 BY MS. HUETH:

Q. Doctor, over the lunch break, did you have an opportunity to speak with Mr. Shogren regarding your testimony?

20 A. I have not had any communication with him. 21 Q. If we can turn back to Exhibit 6, which is 22 the Humboldt General Hospital medical records, and 23 specifically page 35, please. Let me know when 24 you're there.

25 A. I'm there.

Page 116 Dr. Lasry, you would agree, assessed the 1 0. 2 patient on multiple occasions, at least as far as 3 his document ation; true? 4 Α. Yes. 5 0. And when he reassessed the patient, he 6 noted that there was increasing edema and swelling 7 at the site of her envenomization, and there's 8 approximately 25 percent more edema in the radius of 9 circle of swelling; true? 10 Α. Yes. The patient remained -- excuse me. Let me 11 Q. 12 take a step back. 13 Dr. Lasry notes that the patient is doing 14 well, she's watching a movie, she is awake and 15 talking; true? 16 That's what's stated. Α. Okay. You're not aware of any information 17 Q. 18 to suggestion that that's false, are you? 19 Α. No. On the same page, it's document ed that 20 Q. 21 Dr. Lasry had a conversation with Dr. Thorp 22 regarding admitting the patient; true? 23 Α. Yes. And that Dr. Thorp was not comfortable 24 ο. 25 accepting admission and preferred that the patient

Page 117 1 be transferred to a facility with a higher level of 2 care; true? 3 Α. Yes. 4 ο. Okay. You're not of the opinion -- are 5 you? -- that Dr. Lasry didn't think this patient 6 would ever need antivenom. 7 Α. No. Because Dr. Lasry document that, while he 8 Q. 9 did not think antivenom indicated at that time, it 10 may be required or indicated at a future time; 11 correct? 12 Α. Correct. 13 Ultimately, it's Dr. Thorp's decision Q. 14 whether or not to accept admission of this patient; 15 true? 16 A. Yes. Once Dr. Thorp declines the admission, 17 Q. 18 Dr. Lasry then calls the emergency department 19 physician a Renown; correct? 20 Yes. Α. 21 0. And we heard the recording earlier, and 22 Dr. Lasry told the ER physician at Renown that he 23 was on the fence regarding the administration of 24 antivenom. Do you recall that? 25 Α. Yes.

Page 118 But that he did not think the 1 0. 2 administration of antivenom was an emergency at that 3 time; true? 4 Α. Yes. And during that conversation between what 5 0. 6 we heard via the audio recording and what's 7 document ed at least, the ER physician at Renown did 8 not battery express any concern or suggest that 9 antivenom be started before the patient's transfer; 10 true? 11 With the information that physician was Α. 12 presented, true. 13 Well, did you hear in that recording the Q. 14 physician ask for more information? 15 Α. No. 16 Did the ER physician at Renown ask for the Q. 17 patient's vital signs? 18 Α. No. 19 Q. Did the ER physician at Renown express 20 concern about transferring the patient via ground 21 ambulance as opposed to air? 2.2 Α. No. 23 0. So, at least based upon the document ation 24 as well as what we've heard, there's evidence that 25 Dr. Lasry spoke with two other physicians regarding

Page 119 1 this patient while she was in the emergency 2 department at Humboldt General Hospital; true? 3 Α. True. 4 ο. Ultimately, consent to transfer the 5 patient via air belonged to the patient's mother, 6 given her age; is that true? 7 Α. Yes. 8 If you can please turn to page 27. Let me Q. 9 know when you're there. Α. Yes, I'm there. 10 11 This is the Physician's Certification and Q. 12 Patient Transfer Form; correct? 13 Α. Yes. And on the left side, maybe a third of the 14 0. 15 way down, do you see the box where it says "Family 16 notified"? 17 Α. Yes. And then below that, it says "Family 18 Q. 19 going," and "Y" is circled. Do you see that? 20 Yes. Α. 21 0. Does that indicate to you that the family 22 was going to go in the ambulance with the patient 23 during transfer? 24 Yes. Α. The box underneath, that the first line is 25 Q.

Page 120 1 "allergies." Do you see that? 2 Α. Yes. 3 Q. And then at the bottom of the box, it's 4 signed by a nurse; true? Α. 5 Yes. Would this indicate to you that the nurse 6 Q. 7 fills out at least this portion of the form? 8 A. I don't know about filling it out. 9 Responsible for its content, I would say yes. 10 That the nurse is responsible for the 0. 11 content of this box of the form? 12 Α. Yes. 13 Q. Okay. And there's no blood pressure 14 noted? 15 A. Yes, there's not. Temperature, 36.6, is that normal? 16 Q. 17 Yes. Α. Her oxygen saturation of 96 percent, 18 Q. 19 normal? 20 A. Yes, normal. 21 Q. And what was that patient's pain scale? 2.2 A. Zero. 23 Q. On a scale of zero to ten, ten being the 24 highest? 25 Α. Yes.

Page 121 Q. If you can turn to Exhibit 12, page 139, 2 and let me when you're there.

3 A. I am there.

Q. On the left column of that page at the 5 bottom, the last sentence in the paragraph states 6 "From minor envenomization, patients should be 7 observed for 12 to 24 hours, and have repeat 8 laboratory studies every four to six hours." Did I 9 read that correctly?

10 A. Yes.

11 Q. Then it goes on to state "Patients with 12 moderate to severe envenomization should receive 13 antivenom, be admitted to the hospital, and have 14 repeat laboratory studies within four hours hours of 15 the initial set." Did I read that correctly?

16 A. Yes.

Q. But at the time -- and the reason that the 18 patient had to be transferred, in part at least, was 19 because Dr. Thorp did not accept admission of 20 patient; true?

A. I think that's part of the reason, yes.
Q. Well, and at least according to what we
just read, even if Dr. Lasry felt antivenom was
indicated, the patient would need to be admitted;
true?

A. Yes.

1

2 Q. Do you have an understanding or any 3 information to suggest that Humboldt General 4 Hospital had the capability or the resources to keep 5 this patient in the emergency department for 6 24 hours to monitor her and re-dose antivenom, if 7 necessary? 8 Α. No. 9 ο. And, Doctor, you're not offering the 10 opinion that if a toxicologist was consulted, it 11 would have led to a different result in this case, 12 are you? 13 Α. I am offering that opinion. Q. And what do you base that on? 14 Based on the criteria to give antivenom in 15 Α. 16 patients with evidence of systemic toxicity and 17 local swelling. And earlier you, in answering questions by 18 0. 19 Mr. Shogren, testified that the evidence of systemic 20 envenomization in this case was the tachycardia; is 21 that right? 2.2 Α. Yes. The hypotension? 23 Q. 24 Yes. Α. And the progression of the swelling? 25 Q.

1	Α.	Yes. Page 123
2	Q.	Okay. While the patient was in the
3	emergency	department at Humboldt General Hospital,
4	there's no	o evidence of airway swelling, was there?
5	Α.	No.
6	Q.	No evidence of respiratory depression?
7	Α.	No.
8	Q.	No evidence of respiratory compromise?
9	Α.	No.
10	Q.	No evidence of weakness in breathing?
11	Α.	It was not tested.
12	Q.	And the test for that was called what,
13	again?	
14	Α.	Negative inspiratory force.
15	Q.	And how's that tested?
16	Α.	With a simple hand-held device that you
17	suck in wh	nile putting your mouth around. And if you
18	can suck :	in about 20 centimeters of water, you have
19	normal st	rength of inspiration.
20	Q.	Do you have any information to suggest
21	whether or	r not in the emergency department at
22	Humboldt (	General Hospital on May 9th, 2020, that
23	they had t	the device to test the negative inspiratory
24	force?	
25	Α.	No.

Page 124 No document ation that the patient was 1 0. 2 having to use her accessory muscles to breathe, is 3 there? 4 Α. No. I will point out that patients with 5 6 respiratory weakness don't have evidence of working 7 hard to breathe. In the medical records from the emergency 8 0. 9 department at Humboldt General Hospital, there's no 10 evidence that the swelling progressed past the 11 patient's ankle, is there? 12 Α. So it progressed on to the thigh and lower 13 leg. I'm not sure what you mean by past their 14 ankle. Do you mean on to their foot? Going down past that ankle? 15 Q. No. No, I don't think there is. 16 Α. Okay. Earlier you testified -- correct me 17 Q. 18 if I'm wrong -- that the development of redness or 19 bruising can vary among patients? 20 A. Correct. 21 0. And it can take hours after a snakebite 22 for that bruising to develop? 23 A. Correct. And earlier you testified that mottling is 24 ο. 25 color changes to the skin; true?

Page 125 1 Α. Correct. 2 Q. Turning back to the medical records 3 contained within Exhibit 6, and specifically 4 page 79. 5 Α. Okay. 6 Q. According to this note, the patient's care 7 was turned over to paramedics at 18:24; true? 8 Α. Yes. 9 Q. And if you go to page 84. Are you there? Yes. 10 Α. 11 Q. Okay. Thank you. 12 The paramedics document that the patient 13 was alert and acting normal for her age; correct? 14 Α. Yes. That she was speed to her mother with 15 Q. 16 clear sentences, with no signs of respiratory 17 distress; true? 18 Α. Yes. The skin assessment, it says "skin," and 19 Q. 20 there's a negative sign. Do you see that? 21 Α. Yes, I see that. 22 Q. Okay. Do you understand that to mean that 23 there was no signs, with respect to the skin 24 assessment, that it was cold or cyanotic? 25 So, that indicates to me that, except for Α.

Page 126 1 what is document ed in the extremities, that is 2 true. Okay. Well, the subcategory specifically 3 0. 4 relates to skin; true? 5 Α. Yes. And then there's a negative sign, and then 6 Q. 7 it goes on to say "negative, hot, jaundice, 8 lividity, mottled, pale"; correct? Yes, that's what it says. 9 Α. Earlier you testified that hypotension in 10 0. 11 a patient of this age, three years old, looking at 12 top number is when the top number is below 70; is 13 that right? In a child this age, below 76. 14 Α. Below 76. 15 Q. At least according to paramedics, the 16 17 potassium was discontinued due to hypotension; true? 18 Α. Yes. 19 Q. And then on page 83, three we see in the 20 blood pressure goes up at 19:38. Do you see that? 21 Α. Yes. 22 Q. Now the top number is above 76, so it's no 23 longer hypotensive; true? 24 That's right. Α. And remains above 76 for almost two hours 25 Q.

1 until 21:17; true?

2 A. Yes.

3 Q. Okay. You mentioned that your 4 interpretation at least of the paramedics' skin 5 assessment is it's negative, except for what's 6 document ed in the extremities portion; is that 7 right?

8 A. Yes.

9 Q. Okay. And you read this into the record 10 earlier, but in the extremities, it starts with 11 "Patient had two puncture marks on the anterior left 12 knee." Do you see that?

13 A. Yes.

Q. Okay. And then it goes on, skipping a few sentences ahead, to say "Currently, swelling was extended to the entire extremity. The patient's rupper leg was approximately three times the size of sopposite leg." Did I read that correctly?

19 A. Yes.

Q. The fact that the upper leg was
20 Q. The fact that the upper leg was
21 document ed as being three times the size of the
22 opposite leg by the paramedics, did you see anything
23 document ed by the nurses at Humboldt General
24 Hospital that reflected that?
25 A. I saw it document ed by the nurses --

Page 128 1 well, increasing swelling. Nothing specifically by 2 the nurses as three times the size of the opposite 3 leg, but increasing swelling is document ed by the 4 nurses. As also by Dr. Lasry's note. 5 0. On the next page, page 85, you were asked 6 to read into the record, in the third paragraph 7 under the narrative, "ER RN noted that the patient's 8 leg had swollen to three times the size while in the 9 ER." Do you recall reading that into the record? Yes. This is from the EMS note. 10 Α. Right. And as we just discussed, there's 11 Q. 12 nowhere where an ER nurse document s that leg had 13 swollen to three times the size; true? 14 Α. In those words, true. Would you agree that the standard of care 15 Q. 16 is what a reasonable physician would do in similar 17 circumstances? 18 Α. Yes. 19 Q. Would you agree that whether or not a 20 doctor complied with the standard of care is 21 determined prospectively, not retrospectively? 2.2 Α. That question doesn't make sense to me 23 because you can't determine what someone's actions 24 were before those actions happen. 25 That's fair enough. Q.

Page 129 Would you right agree that the standard of 1 2 care should be determined without using hindsight? I think that the actions of a physician 3 Α. 4 should be judged independent of the final outcome. And the actions of the physician should be 5 0. 6 judged based upon the information that the physician 7 had available to him or her at the time of their 8 care? Yes. Yes, with a caveat, if I could add 9 Α. 10 that caveat, that you actually obtain the 11 information you should on a patient you care for. 12 0. Sure. My point, though, is that the fact 13 that this patient had a terrible result, that the 14 patient -- it was devastating, we'd all agree, that 15 the patient died, that the fact that the patient 16 died, alone, does establish that Dr. Lasry breached 17 the standard of care; would you agree with that? 18 Α. Absolutely. 19 Q. Okay. If you could turn to Exhibit 12? 20 Yes. Α. 21 This is the article you provided from 0. 22 Wilderness Medical Society; correct? 23 Α. Yes. And this was published in 2015; correct? 24 Q. 25 Correct. Α.

Page 130 Has there been any updates or revisions to 1 0. 2 this since 2015? 3 Α. There wasn't at the time that I looked 4 when reviewing this case. I don't know about since 5 then. So, not at least through 2021, I think, or 6 2022. Had you ever seen this article before you 0. 7 8 were working on this case? I had, yeah. This is one of the articles 9 Α. 10 reviewed in some teaching that I did, just informal 11 teaching with our fellows about pit viper 12 envenomization in our emergency department. 13 Are you member of the Wilderness Medical ο. 14 Society? 15 Α. No. On page 132, under the introduction, about 16 0. 17 half way through, it states "These guidelines should 18 assist in clinical decision-making, but a cookbook 19 approach is often insufficient, as each patient is 20 unique and may respond differently to therapeutics." 21 Do you agree with that? 2.2 Α. Yes. 23 0. It goes on to say "Physicians must use 24 their experience and frequently clinical assessments

25 to apply these recommendations to their individual

1 patients." Did I read that correctly?
2 A. Yes.

3 Q. If you can please turn to Exhibit 8, and 4 specifically page 100. Let me know when you're 5 there.

6 A. I'm there.

7 Q. The second to last full paragraph on that 8 page states: "In the ambulance, her mental status 9 worsened. She became obtended and was snoring, 10 which is unusual for her." Did I read that 11 correctly?

12 A. Yes.

Q. Did you see anywhere in the paramedics'
14 records reflecting that the patient was snoring?
15 A. Not in those words, specifically, but in
16 patients who are snoring when there's a possibility
17 of them having ineffective breathing, ineffective
18 breathing is an example of snoring breathing, or
19 rather snoring breathing is an example of
20 ineffective breathing.

And that's document ed on page 85 of 22 Exhibit 6, in the EMS records. So the exact same 23 word isn't used, but I think that's an immaterial 24 differentiator. Yeah.

25 Q. So -- do I understand you correctly? --

1 what you're saying is that snoring is a type of 2 effect ineffective breathing. 3 Α. Yes. 4 0. And ---- talking about -- to be really clear, 5 Α. 6 almost everyone snores -- right? -- and they snore 7 when they sleep. That's -- when you're talking about a 8 9 patient become obtended and was snoring, that's not 10 talking about a sleeping patient that can be 11 aroused. Obtended is unarousable, not any level of 12 restorable consciousness through stimulation. 13 So, it's imprecise language here, but this 14 is not referring to normal sleeping snoring. And, 15 therefore, that's why I'm concluding that. But I --16 yeah. Enough said. 17 The next sentence "Transport team Q. 18 initiated bag-mask ventilation for the last few 19 minutes" -- which is in quotation marks -- "of 20 transport." Do you see that? 21 Α. Yes. 22 Q. Do you have any reason to dispute that? 23 Α. No. You were asked a bit about Exhibit 9, 24 0. 25 which is the Certificate of Death?

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Page 133 When we referred to it earlier, we weren't 1 Α. 2 referring to Exhibit 9; we were referring to the 3 transcript of it in the Renown record in Exhibit 8, 4 but go ahead. Well, did I understand you correctly when 5 0. 6 you testified earlier that this was one of the 7 documents that you reviewed when you received 8 materials for this case? 9 Α. Yes. 10 Okay. And on the bottom right, box 0. 11 number 26, do you see that? 12 Α. Yes. 13 Q. It says "autopsy, yes"; correct? 14 Α. Yes. And then the next box "Was case referred 15 Q. 16 to coroner," it says "yes"; correct? 17 Α. Yes. 18 Q. Okay. The autopsy report, that is not 19 contained within any of the Exhibit s in front of 20 you, is it? 21 Α. No. 22 Q. Can you please turn the Exhibit 13, page 23 153, and let me know when you're there? 24 HEARING OFFICER HALSTEAD: Can you repeat 25 that again, please.

1			Page 134 MS. HUETH: Sure. Exhibit 13, page 153.			
2			HEARING OFFICER HALSTEAD: Thank you.			
3			THE WITNESS: I am there now.			
4	BY MS	. HUI	STH:			
5		Q.	And this is another one of the articles			
6	that	you p	provided because you felt like it supported			
7	your	opin	ions?			
8		Α.	Yes.			
9		Q.	This particular article by UpToDate			
10	indic	ates	the literature review was current through			
11	1 October of 2022; is that right?					
12		Α.	Yes.			
13		Q.	And this topic was last updated August 1,			
14	2022; true?					
15		A.	Yes.			
16		Q.	So it was updated two years after			
17	Patient A's care; correct?					
18		A.	Yes.			
19		Q.	But on page 153, it maybe the second to			
20	last	full	paragraph, starts with "Additional			
21	l observation experience suggests that untreated					
22	Crotalinae envenomization is rarely fatal in regions					
23	where cooperhead bites predominate, but can be life					
24	24 or limb threatening," and this it goes on to say					
25	"For	exam	ple, an observational study of 81 adult and			

Page 135 1 pediatric patients who were managed without 2 antivenom therapy after snakebite, 45 copperhead, 12 3 water moccasin, 10 rattlesnake, and 14 unknown, 4 reported no fatalities or long term morbidity"; 5 correct? I -- that is what it says. 6 Α. And, again, this was an article that you 7 0. 8 provided because you felt like it was helpful and 9 supported you opinions? Yes. The region where this occurred is 10 Α. 11 not a region where copperhead snakebites 12 predominate. 13 Sure. And I wasn't trying to suggest that ο. 14 it was, but that observational study at least 15 included ten rattlesnake bits, and the patient's 16 were managed without antivenom and none of them 17 died; correct? Yes. In that study, that's representing 18 Α. 19 about 15 percent or so percent of all the snakes, 20 but yes. 21 MS. HUETH: Just one moment. Those are 22 all the questions I have for now. Thank you. 23 HEARING OFFICER HALSTEAD: Mr. Shogren, 24 redirect? 25 MR. SHOGREN: Yes, just a couple follow-up

Page 136 1 questions. 2 REDIRECT EXAMINATION 3 BY MR. SHOGREN: Dr. Glissmeyer, your experience and 4 0. 5 knowledge, when should antivenom be administered to 6 snakebite victims? As early as the patient demonstrates one 7 Α. 8 of three things: evidence of systemic toxicity as 9 defined by abnormalities in vital signs that 10 persist, evidence of --11 HEARING OFFICER HALSTEAD: Just go slowly 12 because I want to -- it's hard for me to write all 13 these medical terms quickly. 14 THE WITNESS: I can stop and wait. 15 HEARING OFFICER HALSTEAD: Okay. So, 16 you're saying antivenom should be administered --17 THE WITNESS: As soon as possible. 18 HEARING OFFICER HALSTEAD: Okay. As soon 19 as possible when there are signs of? 20 THE WITNESS: Of one of three things. The 21 first being signs of systemic toxicity as evidence 22 by vital -- persistent vital sign abnormalities. 23 Number two -- this is any one of these three. 24 Number two, signs of progressive swelling as it 25 monitored progressively in the patient or over time.

Page 137 Four, the laboratory abnormalities that 1 2 we've discussed, particularly the things like the 3 low platelets, elevated INR, abnormal fibrinogen 4 level. There's others too. 5 BY MR. SHOGREN: And why should antivenom be administered 6 Q. 7 as soon as possible if one of those three things 8 presents itself? To prevent local tissue damage and 9 Α. 10 mortality. And just to be clear, could you turn to 11 Q. 12 page 153, which is Exhibit 13 of the Board's 13 Exhibit s here? 14 Α. Yes. First, could you read the very last 15 Q. 16 sentence of -- on page 153? This is the article 17 that you relied on; correct? One of them. 18 Α. 19 Q. Yes. In addition, the clinician should provide 20 Α. 21 pain control and monitor for and be ready to manage 22 hypotension, bleeding, rhabdomyolysis, elevated 23 tissue, and/or compartment pressures, and, rarely, 24 respiratory failure. In your opinion, why should the clinician 25 Q.

## 1 monitor for hypotension?

A. It's one of the cardinal vital signs that all patients should have monitored in the emergency department, measured at least once. Low blood pressure, especially in this setting, is a sign of shock and a sign of systemic toxicity.

7 Q. Just in general, in your experience, what 8 are some signs of shock or symptoms of shock?

9 A. So the earliest and most sensitive or the 10 ones that appear most early are elevated heart rate. 11 A later vital sign that becomes abnormal more later 12 is a low blood pressure.

Other clinical signs or examination Other clinical signs or examination finding signs of shock include poor profusion, which is measured multiple ways, including by how strong a patient's pulses are. If they're weak, that's concerning for poor profusion. Or their capillary refill, which is a physical exam measurement of how guickly the normal skin color returns after using the examiner's finger or thumb to push on the skin, have it turn a little lighter color because you're pushing the blood out of the skin, and then watching that come back. If that is prolonged longer than three or so seconds, that's concerning for poor profusion. And then other findings, such as -- would 2 be caused by poor blood flow through the body, such 3 as a patient being confused or sleepy. Such as a 4 patient having poor urine output and other findings 5 that would be found later on over monitoring of a 6 longer period of time than is usually done in the 7 emergency department.

8 And then other laboratory findings too 9 that are not usually abnormal at first, but become 10 more abnormal with time in settings of shock, like 11 the ones we reviewed in this case, like signs of 12 liver damage with liver enzyme elevations and many 13 other laboratory abnormalities that can only really 14 present over time.

15 Q. Thank you.

During the cross-examination there, there During the cross-examination there, there was mention of -- I think it was called "hindsight bias," which was discussed. In your own personal experience, your had mentioned previously during the direct examination you had administered antivenom to to multiple patients. When did you administer it -or how soon after from being bitten did you administer it?

A. That's fairly variable because some of these patients came to me within an hour of being bit, some it was multiple hours, but it was always
 within about an hour of the arrival at the emergency
 department in my care.

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Q. And in your own experience, to what extent 5 do, I guess, the setup of the emergency department, 6 how does that play into your consideration to 7 administer antivenom?

8 A. Antivenom can be administered in the most 9 rural critical access hospital, as well as it can in 10 a cursorary referral or botany referral medical 11 center like the one I practice in.

12 Q. Okay. And just to be clear, based on your 13 review of the records, while at Humboldt, who was 14 the patient's physician?

15 A. Jason Lasry.

16 Q. Is there any mention of any other 17 attending physicians?

18 A. I don't believe so.

19 Q. And what -- in your view of the records 20 here, what mention is there of the availability of 21 antivenom?

A. I don't believe that's mentioned in theserecords here.

Q. Based on your review of the records, how 25 is that -- sorry. I take that back, the question.

Page 141 And just to be clear, you touched on this 1 2 before, but if you turn to page 79 of the Board's 3 exhibits. 4 Α. I'm sorry. Which exhibit? 5 0. Page 79. In which exhibit number? Sorry? 6 Α. Q. I'm sorry. This is Exhibit 6. 7 8 Α. Thank you. I'm there. 9 Just in general, what are these notes 10 0. 11 here? These are --12 Α. These are notes of the patient from the 13 emergency department at Humboldt General Hospital, 14 on the date of visit May 9, that were document ed on 15 this page here by the nurse. 16 What do these notes say about the Q. 17 swelling? That it was increasing more and the 18 Α. 19 physician was notified of that. On three occasions. 20 Um-hum. And -- give me one second here. Q. 21 MR. SHOGREN: I have no further questions. 2.2 MS. HUETH: I just have a few follow-up. 23 HEARING OFFICER HALSTEAD: Go ahead, 24 Ms. Heuth. 25 Thank you. MS. HUETH:

1	Page 142 RECROSS-EXAMINATION					
2	BY MS. HUETH:					
3	Q. Doctor, you testified a few moments ago					
4	that a couple of the signs of shock or a sign of					
5	shock is poor profusion as demonstrated by how					
6	strong that pulses are as well as capillary refill;					
7	is that right?					
8	A. Yes. Other ways profusion can be					
9	measured.					
10	Q. And with respect capillary refill, you					
11	said "If it takes longer than three seconds, that					
12	could suggest poor profusion"; is that right?					
13	A. Yes.					
14	Q. And if you can turn to page 84?					
15	A. Um-hum.					
16	Q. And the capillary refill of left lower					
17	extremity is document as less than two seconds;					
18	correct?					
19	A. That's what's document ed in EMS notes,					
20	yes.					
21	Q. And where and pulse is document ed as					
22	brachial two plus normal, and brachial is where?					
23	A. I'm just looking to see where that's					
24	document ed. Is that on that same page?					
25	Q. Yep, right above it.					

Page 143 I'm sorry. Is that in the chest row, or 1 Α. 2 what row is that in? Right above to capillary refill we were 3 Q. 4 just looking at. 5 Α. Thank you. 6 Yeah, brachial the upper arm. 7 Q. Okay "pedal" refers to where? The foot. 8 Α. And that pulse, it's documented "pedal, 9 Q. 10 two plus normal"; is that right? 11 Α. Yes. 12 Q. Would you agree that the standard of care 13 is objective not subjective? For signs of systemic toxicity for vital 14 Α. 15 signs abnormalities, it's objective. 16 When you were testifying in response to Q. 17 Mr. Shogren's questions about what you've done at 18 your facility, were you intending to suggest that 19 what you do establishes the standard of care? 20 I do my best to follow published standards Α. 21 of care. I don't think that my testimony of what I 22 individually do is the standard of care. 23 MS. HUETH: That's all I have. Thank you. HEARING OFFICER HALSTEAD: Thank you. 24 I have some follow-up questions. 25

Page 144 EXAMINATION BY THE HEARING OFFICER 1 2 BY HEARING OFFICER HALSTEAD: Of the three things you mentioned for the 3 0. 4 basis for the administration of the antivenom -- and 5 I just want to clear what your testimony is -- are 6 you relying on persistent vital signs abnormalities? 7 Α. Yes. And are you relying on signs of 8 Q. 9 progressive swelling as monitored? 10 Α. Yes. 11 And are you replying upon laboratory Q. 12 abnormalities? 13 Α. Yes. And then who -- you touched upon this 14 0. 15 earlier. I believe Ms. Heuth asked you this, and 16 you said that it was the parent's decision, ultimate 17 decision about transport? It's what was document ed in the transfer 18 Α. 19 form signing release -- or rather, parental consent 20 for transfer. 21 How the patient is transferred regardless 22 of what parents want is what -- is in the 23 decision-making ability of the physician. So 24 whether the patient transferred by ambulance or 25 ground ambulance or air is not the parents'

1 decision, but rather the physician's ultimate
2 responsibility to determine what's best for the
3 patient.

All physicians, including myself, do take 5 into account parent wishes, yet we must, and are 6 obligated to, do what's best for the patient, 7 regardless of what parents' wishes are about mode of 8 transport to another facility.

9 Q. Okay. And I don't know that this was 10 specifically touched upon, but can you expand to me 11 on the timing of administration of antivenom?

12 I know there's a window and heard -- it 13 eluded to that the administration was not precluded, 14 but obviously it was not given sooner rather than 15 potentially later.

16 And what is the impact of waiting to 17 administer antivenom?

A. The longer venom in the body and is not neutralized by antivenom, the more damage it does. And so once there are one of criteria met, systemic symptoms, progress swelling, laboratory abnormalities, antivenom should be administered as soon as one of three criteria are met. HEARING OFFICER HALSTEAD: Did my

25 questions prompt any questions from counsel?

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Page 146 Mr. Shogren, I'll start with you? 1 2 MR. SHOGREN: No questions. HEARING OFFICER HALSTEAD: Ms. Heuth, do 3 4 you want to follow-up. MS. HUETH: Yeah. 5 FOLLOW-UP EXAMINATION 6 7 BY MS. HUETH: I just wanted to clarify, Doctor, are you 8 Q. 9 saying that a physician can transfer a minor without 10 the patient consent? 11 Α. Absolutely. 12 Q. Okay. 13 HEARING OFFICER HALSTEAD: I do have 14 another question. I'm sorry. I wanted to follow-up 15 on this too. I think I was -- and it was, perhaps, 16 the questioning and not so much the answers that --17 I'm sure it will get flushed out. It's implied that there was antivenom 18 19 available, although no one seems to have said that 20 specifically. Correct me if I'm wrong. 21 And then also I don't hear -- I heard that 22 a patient would have to be admitted to administer 23 the antivenom, but then I heard that the antivenom 24 could be administered in any rural facility 25 without -- I mean, do you see what I'm getting at?

1 Can you clarify that for me, please.

2 THE WITNESS: I think the first question 3 is not one I should be speaking to.

HEARING OFFICER HALSTEAD: Okay. Fair
enough. But that is a concern, so I'm hoping that
will get flushed out.

7 And then what about the location of 8 administration and the need to be admitted into a 9 hospital setting for administration of the 10 antivenom?

11 THE WITNESS: The emergency department is 12 a perfectly appropriate place to administer 13 antivenom. Patients should be observed and 14 admitted. That can happen in a variety of settings. 15 Perfectly appropriate to admit them into the 16 hospital, to the regular floor for continued 17 monitoring, but they should be continued to be 18 monitored in some setting after administration of 19 antivenom.

20 But they should not wait to receive
21 antivenom until they are admitted to a hospital.
22 HEARING OFFICER HALSTEAD: Does anyone

23 want to follow-up on that?

24 MR. SHOGREN: No questions on my end.25 MS. HUETH: Nothing from me.

Page 148 HEARING OFFICER HALSTEAD: 1 Okay. 2 Mr. Shogren, do you want to dismiss Dr. Glissmeyer, 3 or do you want to have him remain for potential 4 rebuttal? MR. SHOGREN: I'm okay with having him 5 6 dismissed now. Well, actually, I believe 7 Dr. Glissmeyer stated he's set aside today, so he 8 can, I quess, remain still, just in case to reserve 9 him. THE WITNESS: I would much rather remain 10 11 available this evening -- this afternoon and early 12 evening here than be called back for some reason 13 tomorrow. 14 MS. HUETH: As a practical matter, I'm not 15 going to be able to finish mine today. My expert is 16 planning on appearing first thing tomorrow morning. 17 Not that I anticipate that we even get to him today. 18 That's all I would have to, I guess, add, but, 19 obviously, it's up to Mr. Shogren Dr. Glissmeyer 20 whether he wants to stick around on the Zoom. 21 HEARING OFFICER HALSTEAD: All right. 22 Dr. Glissmeyer, you have not been released, so 23 you're subject to being recalled. You can either 24 stay and continue to watch the proceedings, or you 25 can choose not to. We will leave that Mr. Shogren

Page 149 1 as to how he wishes to direct you, because I don't 2 know if he wants you to hear the other testimony so 3 that you can respond appropriately to it. 4 THE WITNESS: I'll do what I'm asked to 5 do. 6 HEARING OFFICER HALSTEAD: Thank you, 7 Dr. Glissmeyer. We appreciate your time. 8 Mr. Shogren, do you have another witness? 9 MR. SHOGREN: No further witnesses. 10 HEARING OFFICER HALSTEAD: Are you resting 11 you case? 12 MR. SHOGREN: Yes. 13 HEARING OFFICER HALSTEAD: Okay. So, 14 Ms. Hueth, it's your turn to present your case. Do 15 you have a witness you can call or a certain order 16 you were going to do it and it's disrupted by the IC 17 resting? 18 MS. HUETH: No disruption. I am happy to 19 call Dr. Lasry. Would it be possible to take 20 five minutes to get organize and then proceed? 21 HEARING OFFICER HALSTEAD: Yes. It is 22 2:22 right now, we'll come back at 2:30. Thank you. 23 MS. HUETH: 24 (Recess from 2:22 P.M. to 2:31 P.M.) 25 HEARING OFFICER HALSTEAD: We're back on

Page 150 1 the record in case number 23-29251-1, In the Matter 2 of the Charges and Complaint Against Jason Howard 3 Lasry, M.D.

We ended with Mr. Shogren closing his case on behalf of IC, subject to rebuttal, and so it's respondent's opportunity to put his case. And when we went off the record, Ms. Hueth said she was going to call Dr. Lasry.

9 So if that remain it is case, Dr. Lasry,
10 I'll have you raise your right hand to be sworn.
11 MR. SHOGREN: Ms. Halstead, sorry to
12 interrupt. There is one housekeeping matter I want
13 to address. I apologize for interjecting now.
14 After further review, we could dismiss
15 Dr. Glissmeyer. I don't think he needs to be here
16 for the remainder of today.

17 HEARING OFFICER HALSTEAD: Okay. Thank18 you.

19Dr. Glissmeyer, you are excused. Thank20 you, again, for time your time and your testimony.

DR. GLISSMEYER: Thank you.

21

22 Can someone tell me what time the 23 proceedings start in the morning, and if I should be 24 on, and, I guess, essentially, what time I should be 25 on?

Page 151 HEARING OFFICER HALSTEAD: 1 Well, 2 Mr. Shogren, my understanding was you're releasing 3 him. Are you just releasing him for the day, or are 4 you releasing him as a witness? MR. SHOGREN: I'm releasing him as a 5 6 witness. 7 So, Dr. Glissmeyer, you don't have to 8 appear tomorrow. DR. GLISSMEYER: Okay. That's fine. 9 10 Thank you. If that were to change, you know how to 11 reach me. 12 MR. SHOGREN: Thank you. 13 HEARING OFFICER HALSTEAD: Thank you. 14 Okay are we good to go back to Ms. Hueth 15 and Dr. Lasry? 16 DR. LASRY: Yes. 17 HEARING OFFICER HALSTEAD: Okav. 18 Dr. Lasry, please raise your right hand. (The oath was administered.) 19 20 THE WITNESS: Yes, I do. 21 HEARING OFFICER HALSTEAD: I didn't have 22 him state his name and spell his name for the 23 record, but because he's the respondent, I believe 24 we have that information. 25 With that, go ahead, Ms. Hueth.

Page 152 1 MS. HUETH: Thank you. 2 DIRECT EXAMINATION 3 BY MS. HUETH: Dr. Lasry, when did you decide that you 4 0. 5 wanted to go to medical school? I think that was 1993 or so, around that 6 Α. 7 time. And why did you want to go to medical 8 Q. 9 school? A. I enjoyed the art of helping people. I 10 11 have a younger brother who had entered medical 12 school before me, and he told me about his 13 experiences and how much he was enjoying it, and 14 that also helped prompt me to go medical school. 15 Lastly, I was always most interested in the 16 biological sciences, that was my specialty for my 17 undergraduate. So, those are the things that motivated me 18 19 to go to medical school. 20 Q. Where did you medical school? 21 Α. Sackler School of Medicine, in Tel Aviv 22 University. 23 Q. When tell you graduate? A. 2000. May 2000. 24 25 Q. After medical school, what did you do next

1	in terms o	Page 153 of medical education or training?			
2	A.	I did my undergraduate, or my residency in			
3	emergency	medicine at the Orlando Regional Medical			
4	Center in	Orlando.			
5	Q.	And how long was the emergency medicine			
6	residency?				
7	A.	Three years.			
8	Q.	Are you board-certified?			
9	A.	Yes, I am.			
10	Q.	When did you first become board-certified?			
11	Α.	2004.			
12	Q.	Have you had to recertify since then?			
13	Α.	Yes, I have.			
14	Q.	How frequently do you have to recertify?			
15	Α.	It was every ten years. I believe now			
16	it's every five years.				
17	Q.	When did you first become licensed to			
18	8 practice medicine in Nevada?				
19	Α.	I believe I originally got my license at			
20	the end of 2004.				
21	Q.	And what brought you to Nevada?			
22	Α.	I had been living in California, in			
23	Pasadena.	I was just I had just graduated			
24	residency, and the cost of living there was				
25	extremely expensive and traffic was a big pain, and				

Page 154 1 I heard about an opportunity in Las Vegas. We came 2 up for an interview, we visited the city, we enjoyed 3 it, and we decided to give it a try. 4 Q. When you say "we" --A. Oh, me and my wife. 5 If your wife in the medical field? 6 Q. A. She is. 7 Are you member of any professional 8 Q. 9 organizations? 10 Α. Yes. 11 Q. Which ones? 12 Α. The American Academy of Emergency 13 Medicine, and Physicians for Human Rights. What is the American Academy of Emergency 14 ο. 15 Medicine? It is an organization that works for 16 Α. 17 supporting the rights of emergency physicians, as 18 well as supporting outreach programs to improve the 19 care of emergency patients. 20 In May of 2020, were you working at Q. 21 Humboldt General Hospital? 2.2 Α. Yes, I was. 23 0. And what type of hospital is Humboldt 24 General? 25 It's considered a critical access Α.

Page 155 1 hospital. 2 Q. Humboldt General Hospital, where is that 3 located? In the town of Winnemucca. 4 Α. And in your experience, is Humboldt 5 0. 6 General Hospital a rural hospital? Yes, it is. 7 Α. Prior to May of 2020, had you had occasion 8 Q. 9 to treat a patient who suffered a snakebite? Yes, I had. 10 Α. 11 Can you estimate on how many occasions Q. 12 prior to May 9, 2020, you had treated a patient 13 after a snakebite? Approximately 20, 15 to 20 patients. 14 Α. Prior to May 9, 2020, of the patients you 15 Q. 16 treated after a snakebite, had you had occasion to 17 administer antivenom? A. Yes, I have. 18 19 Q. And on approximately how many occasions? 20 A. The majority of them, perhaps two-thirds. 21 0. Do you believe that your care of Patient A 22 complied with the standard of care? Yes, I do. 23 Α. Do you believe that your care was 24 ο. 25 reasonable?

Page 156 1 Absolutely. Α. 2 Q. Now, I want to talk specifically about 3 your care of Patient A. And if you need to refer to 4 the records, please do. It's contained within 5 Exhibit 6. Turning to Exhibit 6, page 34. 6 Yes. 7 Α. Is this your document ation? 8 Q. Yes, it is. 9 Α. Okay. When you first evaluated the 10 0. 11 patient, did you get a history or what brought her 12 emergency department? 13 Α. Yes, I did. And from whom? 14 0. I think the history was obtained from 15 Α. 16 multiple sources. There was likely an EMS call that 17 announced that the patient was coming to the ER. 18 There was the reports that I would have obtained 19 from the EMS providers, who gave us additional 20 history. There's the history that I obtained from 21 the mother. 2.2 And so I, most likely, gathered the 23 history from multiple sources, whatever was 24 available. And on May 9th, 2020, 9th, 2020, was there 25 Q.

Page 157 1 any limitation at Humboldt General Hospital 2 emergency department of how many people could be in 3 the ER with a patient? Α. So this was COVID time, I believe. This 4 5 was the beginning of COVID, and so we had to -- we 6 did have limitations on visitors being allowed into 7 the patient rooms. What were where you told about the history 8 0. 9 prior to your evaluation of the patient? Α --10 Α. 11 And I think -- let me back up. That did Q. 12 not come out articulately. What were you told about the events that 13 14 took place leading up to the patient's presentation 15 to the emergency department? That the father had taken Patient A out to 16 Α. 17 somewhere in the wilderness or the desert for an 18 outing. He had -- he was carrying the patient, he 19 had tried or attempted to put down his daughter, the 20 daughter was bitten on her left knee by the snake. 21 Following that, the father tried to suck out some 22 venom from the wound on his own. And then I imagine 23 he tried to reach a medical facility. 24 But we were told there was an hour up to 25 an hour and a half between the time of the bite and

1 the time of EMS arrival.

Q. The History Of Present Illness section of your document ation, is that a correct recitation of the information that you obtained from EMS and from the mom?

6 A. Yes.

Q. Did you, at the time of your initial
8 evaluation of the patient, either obtain yourself or
9 review the patient's vital signs?

10 A. Of course.

11 Q. Typically in the emergency department, who 12 obtains the patient's vital signs?

13 A. The nurses obtain the vital signs.14 Always.

15 Q. At Humboldt General Hospital in the 16 emergency department, were patients put on 17 continuous monitoring?

A. While often, they were. In patients that 19 are potentially critically ill, they would usually 20 continuously be monitored throughout the stay. The 21 majority of patients do get continuous monitoring 22 once we figure out their stay. Not always because 23 they're critical, but sometimes just for the ease of 24 document ing.

25 For example, if the nurse needs to

Page 159 1 document vital signs every hour, it's easier for her 2 to just leave a patient on the monitor, and just 3 look at the monitor to see what the vital signs, 4 rather than removing all of the leads to determine 5 the vital signs, rather than replying the leads 6 every hour to repeat the vital signs.

7 Q. The continuous monitoring, what exactly 8 would it be monitoring?

9 A. So continuous monitoring would include 10 heart rates, blood pressure, respirations, and 11 oxygen saturation.

12 Q. Do you believe that Patient A was on a 13 continuous monitor when she was in the emergency 14 department at Humboldt General?

15 A. Yes, I do. I know she was.

16 Q. When you first evaluated the patient, was 17 she tachycardic?

18 A. Yes.

19 Q. And what was her heart rate at the time of 20 your initial evaluation?

A. In my note, it's 149 beats per minute.
Q. Now did you, on page 34 in your note,
document specifically the word "tachycardia" or
"tachycardic"?

25 A. I don't believe so.

Page 160 Why not? 1 0. 2 A. It's obvious. I mean, if the heart rate's 3 fast, it's tachycardic. It's not some special 4 interpretation that needs to be made. It's 5 something that's just simple and obvious at its 6 face. In your experience, what is a normal heart 7 0. 8 rate for a three year old? Oh, in the range of about 110 to 130, or 9 Α. 10 as Dr. Glissmeyer said, 140 beats per minute. 11 Q. Does this page 34 also contain your 12 Physician Exam of the patient? 13 Α. Yes, it does. Under the Cardiac section, you documented: 14 0. 15 Heart has a regular rate and rhythm. Why did you document that the heart has a 16 17 regular rate if she was tachycardic? Because tachycardia does not talk about if 18 Α. 19 the rate is regular or irregular. 20 Regular means that there's regular 21 intervals. It does not mean that it's below 100 or 22 below 140. It just means that there's regular 23 intervals, and it's not irregular. Intervals of what? 24 0. Intervals, beat-to-beat intervals, from 25 Α.

Page 161 1 one beat to another. 2 If it -- do you want me to explain? 3 0. Sure. Α. If you have an irregular heartbeat, the 4 5 beat-to-beat variation varies. Meaning there may 6 be -- for example, somebody with an irregular 7 heartbeat may have a beat and then a three-second 8 pause, and then a beat and then a one-second pause, 9 and then a beat and then a five-second pause, and 10 then a beat. 11 Whereas somebody with a regular rate will 12 have a regular -- or will have the same interval 13 between each beat. So, every one second or every 14 two seconds, they'll have a beat. Regardless of how fast the beat is? 15 Q. A. Regardless of how fast. 16 The fact that the patient's heart rate was 17 Q. 18 149, was that surprising to you? Not in this setting. 19 Α. What do you mean by that? 20 Q. 21 Α. Well, there's a lot of things that can 22 cause a heart rate to be artificially evaluated. 23 And conditions like pain or fear or worry or anxiety 24 are all things that can make you fearful or worried 25 to make the heart rate elevated.

Page 162 Other things that I can think of would be, 1 2 you know, she's a three-year-old girl, she's being 3 put in an ambulance, she was just bitten by a snake, 4 she had a painful and fearful experience, and now 5 she's in an ambulance and there's all these adults 6 around and they're drawing blood and taking her 7 vital signs, then she's brought to the ER with 8 unpleasant lighting and no privacy and a bunch of 9 nurses approaching her to get her vital signs. So I can understand why a three year old 10 11 would be fearful or tachycardic in this situation. 12 Q. Did you see anywhere in the document ation 13 where the patient's blood pressure was noted? 14 Α. No. But did you obtain the patient's blood 15 Q. 16 work? 17 The nurses did. Α. Why this not recorded? 18 Q. 19 Α. I can't speak that. The nurses are 20 responsible for obtaining the vital signs and 21 document ing them. 22 Q. Was knowing the patient's blood pressure 23 important to you? 24 Α. Yes. 25 Why is that? Q.

A. It's a cardio vital sign, just as
 Dr. Glissmeyer said. It's something that is
 important and can reveal if a patient -- or how ill
 a patient is.

5 Q. Was the patient hypotensive while she was 6 in the emergency department at Humboldt General?

A. No, she was not.

Q. How do you know that?

9 A. Because we would have addressed it, and we 10 would have documented it, and it would have changed 11 our management.

12 Q. In what way?

7

8

13 A. If we thought or if she was hypotensive, 14 it would change our calculation. And we talked 15 about earlier, there are several factors that we 16 look at when deciding to treat a rattlesnake 17 envenomization patient. Like, we look at the vital 18 signs, and we look at the coagulation studies, and 19 we look at the progression of the swelling of the 20 wound.

21 And so --

HEARING OFFICER HALSTEAD: I'm, Doctor.
You look at the vital signs, and the what?
THE WITNESS: Coagulation factors.
HEARING OFFICER HALSTEAD: And what was

Page 164 1 the third one? 2 THE WITNESS: Progression of wound 3 swelling. 4 HEARING OFFICER HALSTEAD: Thank you. 5 BY MS. HUETH: Q. At the time that you evaluated the 6 7 patient, was her respiratory rate normal? 8 Α. Yes. Q. And for a patient of this age, three years 9 10 old, what is generally considered to a normal 11 respiratory rate? 12 A. Somewhere between 18 and 26 or 28. 13 Q. And what was her oxygen saturation? There was normal. The exact number was 14 Α. 15 96 percent. 16 Q. Was that on -- was she receiving any 17 supplemental oxygen? She didn't need any, but the nurses 18 Α. 19 applied it anyway. 20 Q. When you first evaluated the patient, what 21 was her demeanor? 2.2 Α. So, she was well-appearing, in general. 23 She had good color. She had good profusion. She 24 did not seem like she was in any pain or distress or 25 discomfort. She was not sweaty, she was not

Page 165 1 restless, and she did not appear to be suffering in 2 any way. She actually was quite calm and well 3 appearing, especially with all the drama that was 4 going on around her.

5 And I say that because when a potentially 6 critically patient arrives, they get, in a way, 7 attacked by the staff. Everybody jumps on her 8 remove her clothing, put them in a gown, start an 9 IV, get the leads put on, take vital signs, obtain a 10 history. So there's a lot going when a person first 11 arrives in the emergency department, and it could be 12 daunting and scary.

13 Q. Did you perform a physical examination of 14 the patient?

15 A. Yes, I did.

16 Q. Earlier you testify that the patient came 17 in with a snakebite to the knee, can you describe 18 for us where on the knee the bite was?

19 A. Yes.

20 Q. And where was that?

21 A. Directly over the left patella.

22 Q. Is that the front of the knee?

23 A. That's the front of the knee.

Q. Is it sometimes referred to as the25 kneecap?

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1 A. Exactly right.

2 Q. Can you describe your examination findings 3 of the patient's left knee?

A. Absolutely. From -- would you prefer that 5 I read from the record or give my own description of 6 it?

Q. Well, and specifically I'm asking about 8 your first evaluation of the patient. And you're 9 welcome to either read from the record, although we 10 all have it, or just describe your first evaluation 11 of the patient's left knee.

12 A. Yeah. Let me read what I wrote so I can 13 expand upon it.

14 "On the anterior left knee, there were two 15 puncture wounds, which are likely the site of 16 envenomization, and there is just a small amount" --17 THE REPORTER: I'm so sorry once again,

18 Ms. Hearing Officer.

19 I'm having a really hard time keep up with 20 you, Doctor. Could you slow down just a little bit. 21 Thank you so much.

HEARING OFFICER HALSTEAD: Yeah. Just as 23 a point of procedure, always, usually when you read 24 on a record, you tend to read fast.

25 So just when you read, make sure you slow

Page 167 1 it down. It's common. It's just what happens when 2 you're recording testimony when people read it. 3 THE WITNESS: No problem. 4 "On the anterior left knee, there are two 5 puncture wounds, which are likely the sites of 6 envenomization, and there is just a small amount of 7 ecchymosis noted in that generalized area. No 8 significant edema, no streaking, no skin necrosis, 9 no peripheral edema, no petechiae, no vesicles, 10 ulcers or pustules." 11 And what is ecchymosis? Q. 12 Α. Bruising. The swelling that you would see 13 when a bruise develops. 14 0. Okay. Thank you. Was there a swelling at the time of your 15 16 initial evaluation? Yes, there was. 17 Α. 18 0. Were you surprised to see some swelling at 19 that time? 20 No. Α. 21 0. And why not? 2.2 Α. Any injury, if it was a puncture wound 23 from a pen or if you got stabbed with a knife, or if 24 you got smashed really hard with a first, you would 25 develop a bruise in the area of the injury. That's

Page 168 1 a normal body reaction. That's how to body 2 responds, and that's how the body repairs itself. 3 The reason why you get swelling is the 4 blood vessels become leaky in that area, and that 5 allows the white blood cells to migrate to the area 6 of injury, and it allows them to do the repair. So swelling, localized swelling right at 7 8 the site of the injury is common, normal, and 9 expected. Can you describe -- because this will 10 0. 11 ultimately be transferred to a written form, can you 12 describe the size of the swelling or quantify it in 13 any way as it existed at the time of your initial 14 evaluation? 15 The way I described it in my note Α. Sure. 16 is it increased in size from -- about 25 percent. 17 And that 25 percent, I'm not sure how lay people see 18 that, but that's a really minuscule amount of 19 increase of swelling. 20 The way I've told people previously, and I 21 believe in deposition that I did before, was 22 swelling increased in size from the size of a 23 quarter to the size of a silver dollar. And so that

24 is the amount of increase of swelling that we're 25 discussing. Well circumscribed, circular, directly

\_\_\_\_

Page 169 1 over the kneecap. If I could just demonstrate, 2 other my kneecap, going to the size of a quarter to 3 the size silver dollar (indicating.) That is the 4 edema that we're talking about in this particular 5 case. And sticking with your initial exam --6 Q. 7 Α. Yes. 8 HEARING OFFICER HALSTEAD: I'm sorry. 9 Over what period of time from the quarter to the 10 silver dollar? 11 THE WITNESS: From the time of arrival 12 until she departed the emergency department. 13 HEARING OFFICER HALSTEAD: Thank you. 14 BY MS. HUETH: 15 At the time of your initial exam, was the Q. 16 patient having any muscle weakness in the left leg? 17 Α. Not at all. Was she unable to move the left leg? 18 Q. 19 Α. No. At any point while she was in the 20 Q. 21 emergency department did she develop muscle weakness 22 in the left leg? 23 Α. No. At any point while the patient was in the 24 Q. 25 emergency department did she become unable to move

Page 170 1 her left leq? 2 Α. No. 3 Did you order any labs for this patient? Q. Yes, I did. 4 Α. 5 0. Why? It's part of the workup of this snakebite 6 Α. 7 envenomization. I want to go through those lab results 8 Q. 9 with you. And specifically if you can turn to 10 page 67. 11 Α. Yes. 12 Q. The prothrombin time, my first question is 13 what is prothrombin time? 14 Prothrombin time is a laboratory value Α. 15 that we obtain to look at the clotting cascade. 16 When the body forms a clot, it goes through numerous 17 chemical reactions in order for the clot to form. 18 And so we require multiple factors and proteins that 19 help that clot form. 20 When we check for PT and PTT, we're 21 looking at two different clotting cascades to see if 22 there's a problem with them; either a problem where 23 they clot too easily or they don't clot well enough. What is INR? 24 ο. The prothrombin time, the PT, is always 25 Α.

Page 171 1 converted into an INR. The reason that is done is 2 so -- the INR is a number that will be consistent 3 throughout different laboratories. Because if they 4 draw prothrombin time, the laboratory value in one 5 hospital may not be the exact same in another 6 hospital.

7 So, universally, everyone uses the INR 8 because that value will remain the same regardless 9 of the laboratory where it's being drawn, and that's 10 the number that's actually use to determine whether 11 or not there is coagulopathy, or whether or not the 12 patient requires any kind of treatment.

13 Q. And was her INR normal?

14 A. It was normal.

15 Q. And you mentioned coagulopathy, what is 16 that?

17 A. That's a problem of the clotting cascade. 18 It can go either way. It can either cause a problem 19 where the body forms too many clots, or it can be a 20 problem where the body does not form clots, and this 21 causes you to bleed more than you should.

Q. Was there any indication at any time the
patient was in the emergency department Humboldt
General that she was having ongoing bleeding?
A. Not at all.

Page 172 The fact that the patient's INR was 1 0. 2 normal, was did that signify to you, if anything? Α. It's a laboratory value that was done at 3 4 one moment in time. At the moment, it was 5 reassuring that the patient had a less serious 6 envenomization. With a more serious envenomization, 7 you would expect more laboratory abnormalities, such 8 elevation of the INR, elevation of the PTT, a drop 9 in platelets or a drop of fibrinogen. She didn't 10 have any of those changes. 11 So, it doesn't give us the whole story. 12 It doesn't -- you can't just decide the entire 13 management of the patient based on the one 14 laboratory value. But taken in combination with the 15 other factors, it was reassuring that it was a minor 16 type of an issue. 17 In a patient who has been bitten by a Q. 18 snake and your concern for systemic envenomization, 19 would you expect to see decreased or evaluated 20 platelets? 21 Α. Decreased platelets. 22 Q. And what were this patient's platelets? 23 Α. 240,000. And is that normal? 24 Q. 25 That is totally normal. Α.

Page 173 Is the platelets part of -- this is my 1 0. 2 term, not yours, but one piece of the puzzle that 3 you were just describing? Α. Yes. They are important for clotting or 4 5 essential for clotting. 6 Q. Did the patient have any significant lab 7 abnormalities? Not really. The only thing that was 8 Α. 9 significantly abnormal was the potassium level of 10 2.7. 11 What did you do in response to that Q. 12 abnormal potassium level? 13 We replaced it intravenously. Α. Q. And why did you order a fibrinogen level? 14 That is also a factor that we look at to 15 Α. 16 determine their ability to form clots. If the 17 number was very low, it would indicate that she was 18 prone to bleeding, and that could indicate a more 19 systemic envenomization. 20 Her value was normal. 21 Q. Well, if you can turn to page 42? 2.2 Α. Yes. 23 0. Does this appear to be the fibrinogen 24 result? Yes, it does. 25 Α.

Page 174 Okay. Now it's says it was collected 1 0. 2 May 9, 2020 9, 2020, do you see that? 3 Α. T do. 4 But not reported until May 12, 2020. ο. Do 5 you understand that to mean that's when the 6 fibrinogen lab results were available? 7 Α. Correct. So this lab wasn't available to you while 8 0. 9 the patient was in the emergency department? 10 Α. Correct. However, after the fact, you have had an 11 Q. 12 opportunity the look at this, and do you say her 13 fibrinogen level was normal? Yes, I did. 14 Α. The fact that the patient's INR was normal 15 Q. 16 and platelets were normal, did that give you any 17 clue as to whether you would expect a normal 18 fibrinogen? Not necessarily. We just -- I check all. 19 Α. 20 I don't know -- I don't necessarily expect one or 21 the other. We test to see if there are any 22 coagulation defects, and then we decide what to do 23 from there. 24 I didn't have -- I don't recall having any 25 expectations of there being normal or high.

Page 175 **Q.** Did you assess the patient on more than **2 one occasion?** 

3 A. Yes, I did.

Q. Okay. After your initial assessment --5 you've already described for us a little bit about 6 the change in swelling, where there any other 7 changes to your evaluation after your initial 8 assessment?

9 A. No. The only change that is the change 10 that we talked about with the limited, localized, 11 circular swelling that was limited to the kneecap 12 area only. Otherwise, her condition was really 13 good. She was awake, she was alert, she was 14 talking. She didn't seem to be in any distress. 15 She didn't seem like she was suffering or in agony 16 or complaining, and she appeared well.

17 Q. If you turn to page 35.

18 A. Yes.

Q. And it says "assessment," do you see that?
A. Yes.

Q. Okay. Does this document ation contain 22 information regarding your reassessment of the 23 patient?

A. Yes, it does.

25 Q. Okay. And upon you reassessment, was the

Page 176 1 patient awake? 2 Α. Yes. Absolutely. 3 Was she alert? 0. 4 Α. She was. And how was she acting? 5 0. She seemed very comfortable. She seemed 6 Α. 7 well appearing. She did not seem to be in any 8 distress. Did you have a conversation with the 9 ο. 10 patient's mother regarding the potassium level? 11 I certainly did. Α. 12 Q. And what do you recall about that 13 discussion? That conversation actually came up in the 14 Α. 15 telephone call I had with Dr. Gassen. Ι 16 mentioned -- well, on one of my reevaluations of the 17 patient, I -- whenever I went for a reevaluation, I 18 spoke to mother because mother was with her, with 19 Patient A at the bedside. And so I was always 20 updating the mother as to what was happening, what 21 the findings were, what our plan of action was going 22 to be. When I informed Patient A's mother about 23 24 the low potassium level, she informed me that there 25 was a strong family history of hypokalemia, which is

a low potassium level, where mother had that problem
 and other family members in her family suffered from
 that problem.

And so I gathered that it's likely a 5 genetic abnormality that causes her family to suffer 6 low potassium levels.

7 Q. And did the low potassium level cause any 8 alarm to you that the patient was having a systemic 9 envenomization?

10 A. No, not at all. That potassium -- the 11 potassium -- you wouldn't expect the potassium to 12 change as a result of the envenomization.

Q. Did you discuss this patient with any14 other physicians?

15 A. I discussed the patient with Dr. Thorp and 16 with Dr. Gassen.

17 Q. Why did you contact Dr. Thorp?

A. Being a critical access hospital, our resources were limited, and so the hospital -- the hospital recommended or preferred that I consult with the hospital in-patient doctors prior to to transferring any patients to be sure that we were and able to care for them at our -- at that facility. The facility's desire was to keep as many of the patients as possible.

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1 And so I contacted Dr. Thorp, going 2 through the process, and to see if she was 3 comfortable with taking care of the rattlesnake 4 patient.

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5 Q. From a medical standpoint, why did you 6 contact Dr. Thorp as opposed to discharging the 7 patient?

A. Well, it was clear that the patient should 9 not be discharged. It was clear and obvious to me 10 that the patient needed a longer period of 11 monitoring and needed to have a period of 12 observation to look at all the parameters we spoke 13 of: the swelling, coagulation defects, and vital 14 sign abnormalities.

And so hospital admission was indicated,16 regardless of our decision to give antivenom or not.

Q. The closer monitoring that you just 18 described, is that something that you thought could 19 be performed in the emergency department over a 20 prolonged period of time?

A. No. That's not the function of theemergency department.

Q. And what do you mean by that?
A. The emergency department isn't designed to
take care of patients for longer terms. We're

Page 179 1 designed to take care of patients that are acutely 2 ill, stabilize them, and then transfer them out or 3 admit them for the appropriate level of care.

We're not designed to provide meals and to provide regular medicine intervals and to do some of the regular things that a floor nurse or ICU nurse would do. Our nurses are limited in that they're able to care emergency patients, and they're not yery good at taking care of in patient.

10 The other thing is that we limited 11 resources. We can't afford -- usually I'll work, 12 like there will one doctor and two nurses working. 13 And one nurse has to do triage, and other nurse has 14 to monitor all the other patients. If there was a 15 critical patient that stayed with us for 24 hours, 16 that would really take up that nurse, and it would 17 be incredibly difficult to run the emergency 18 department with the additional needs to care for 19 that critical patient.

20 Q. So when you said "we can't afford," were 21 you referring to money or resources?

A. I'm talking about resources. It has nothing to do with actual dollars. We have limited resources at the hospital. I am the only -- or there is only one emergency doctor that is working 1 at a time, and there is only two nurses that are on 2 during at time.

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And one nurse needs to be available to 4 take care of whoever walks through the door. And 5 the other nurse is there to help or to provide 6 medications or to give the other patients the care 7 they need.

8 Q. Approximately how many beds did the 9 Humboldt General Hospital ER have on May 9, 2020? 10 A. Five.

11 Q. And you were present for Dr. Glissmeyer's 12 testimony. Did you hear when he described how many 13 beds were in the ER that he works at?

14 A. I believe he counted about 34.

Q. And did Dr. Glissmeyer's ER, as he described it, sound comparable as far as resources go as Humboldt General Hospital ER?

A. They sounds like very different
facilities. His facility is way bigger than ours.
I think he said there was 350 beds at his facility,
whereas ours probably had ten to 15 beds.

We don't have consultants for every We don't have consultants for every specialty for vascular or for a lot of specialties we would such as nephralgy, neurology, urology. We would have one surgeon one, one orthopaedic doctor, and

Page 181 1 one -- either a pediatrician or a nurse-practitioner 2 that took care of pediatric patients. And then 3 there was usually also a gynecologist for 4 obstetrical emergencies. Was Dr. Thorp willing to accept admission 5 0. 6 of this patient? 7 Α. No, she was not. What was your understanding of why not? 8 Q. She wasn't comfortable with it, and she 9 Α. 10 didn't have experience with taking care of snakebite 11 patients. 12 Q. And did you document in the medical 13 records a summary of your conversation with 14 Dr. Thorp? Yes, I did. 15 Α. Can you please read that into the record? 16 Q. 17 Sure. Α. "At 5:30 P.M., I discussed the 18 19 full history and physical exam 20 with Dr. Thorp, and she explains 21 that she has never cared for a 2.2 patient with a rattlesnake 23 envenomization, and thus would not 24 be comfortable with this patient 25 being admitted at this facility.

Page 182 And prefers that we transfer this 1 2 patient to another facility with a 3 higher level of care." 4 ο. At Humboldt General Hospital in May of 5 2020, did you have admitting privileges? 6 Α. No. Does that mean you couldn't admit the 7 0. 8 patient, it had to be another doctor who accepts 9 admission? That is correct. 10 Α. 11 Once Dr. Thorp indicated she was not Q. 12 comfortable accepting admission, did you contact any 13 other doctors? 14 Α. Yes. 15 Q. And who did you contact? 16 A. Dr. Gassen at the Renown emergency 17 department. Did you hear earlier Dr. Glissmeyer's 18 Q. 19 testimony wherein he said your conversation with 20 Dr. Gassen was just a handoff? 21 Α. Yes. 22 Q. And do you agree with that? 23 Α. No. And what -- and why not? 24 Q. 25 Well, having worked in rural ERs, I have Α.

Page 183 1 had to transfer many patients. Since Dr. Glissmeyer 2 works at a tertiary or quaternary higher-level 3 facility where he has all the resources available, 4 he doesn't commonly transfer patients. So I am very 5 familiar with the calls that we make to receiving 6 hospitals.

7 Oftentimes when I transfer a patient, the 8 receiving physician will ask me questions, and 9 sometimes ask me to do additional tests or 10 additional imaging prior to transferring the patient 11 to satisfy what they think is necessary.

Dr. Gassen -- I had a conversation with Dr. Gassen, where believe I gave him a good and d complete report of the patient's presentation, laboratory results, evaluation of the wound, and f progress through her ER stay. And he agree that antivenom wasn't indicated at this moment, but we were considering it.

19 Q. Well, and let me clarify, because we all 20 heard the audio recording, and at no time did 21 Dr. Gassen say the words "I agree, antivenom is not 22 indicated at this time"; right?

A. Correct. But he had the opportunity and A. Correct. But he had the opportunity and he knows it's within his rights or ability to ask me to do something if he thinks it's indicated.

Page 184 Q. Did you take his silence with respect to 1 2 not administering antivenom to be an agreement with 3 that? Α. My understanding was that he was in 4 5 agreement with our care, because he was happy to 6 receive the patient, given the story that I provided 7 him with. Did you call Poison Control at any time 8 0. 9 while the patient was in the ER? I did not. 10 Α. 11 Q. Why? 12 Α. I did not think it would affect the care 13 of the patient. I -- I am experienced in treating 14 rattlesnake victims. I've been educated. I've 15 followed up. I've done CME units. I think I'm 16 knowledgeable about treating rattlesnake patients, 17 and I didn't think it was going impact our care of 18 the patient. Did Humboldt General Hospital have an 19 ο. 20 on-call toxicologist? 21 Α. No. 22 Q. Did you initially consider transferring 23 the patient via air ambulance? 2.4 Yes. We originally made plans to go via Α. 25 helicopter.

Page 185 And earlier, did you hear Dr. Glissmeyer 1 0. 2 testify that you don't need a minor patient's 3 parents' consent to transfer a patient? 4 Α. I heard what he said, yes. Do you agree with that? 5 0. 6 Α. I totally disagree. I cannot understand 7 how anybody can take a child away from a parent and 8 send them wherever they want without the parents' 9 consent. That makes no sense to me whatsoever. 10 Now, did you have a discussion with the 0. 11 patient's mom about transferring the patient via air 12 ambulance versus ground ambulance? 13 I did. And I -- I mean, I regret that Α. 14 it's not in medical records. I didn't think at the 15 time this was important to document. But we 16 originally -- let me go back a step. 17 From Huntington or HGH has its own 18 ambulance helicopter. So there is usually a crew 19 available to help us with transfers most of the time 20 when weather permitted. 21 We did originally make plans for patient 22 to be flown by helicopter. Mother, turns out, she 23 is morbidly obese. I'm talking in the ballpark of 24 300 pounds. The helicopter could not accommodate 25 her weight. When mother was told that she would not

1 be able to fly with her daughter to go to the 2 receiving hospital, she refused transport by 3 helicopter.

And for that reason, we decided to go by 5 ground because of mother's insistence that she 6 needed to be transported with her daughter.

Q. Well, did you think it was, from a medical 8 standpoint, safe to send the patient via ground 9 transport?

10 A. I thought it was okay. She was stable. 11 She -- vital signs did not change. There was 12 minimal progression of the wound. She was not in 13 pain. She had excellent color and excellent 14 profusion. She looked really well. I thought that 15 she was stable, and I didn't think it was a big deal 16 that she would go by ground in that moment.

17 Q. Okay. So you're not trying to suggest 18 that the patient's mother was dictating or forcing 19 you to make unsafe medical decisions?

20 MR. SHOGREN: Objection. I believe that's 21 a leading question.

22 HEARING OFFICER HALSTEAD: Ms. Hueth, do 23 you want to respond?

24 MS. HUETH: Sure. I'm just happy to 25 rephrase it. Page 186

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1 BY MS. HUETH:

2 Q. Did you -- was your medical 3 decision-making -- let me take a step back. 4 Who was making the medical decisions for 5 the patient, you or the patient's mom? 6 Α. Me. Okay. If you had felt it unsafe for the 0. 7 8 patient to be transferred via ground ambulance, 9 would you have discussed that with the patient's 10 mother? 11 Absolutely. If it was -- if I thought Α. 12 that that decision between helicopter or ambulance 13 was going to make a critical difference in the 14 patient's outcome, I would have insisted that she go 15 by helicopter with or without the mother, and we 16 would have had a different conversation about it. 17 And I would have tried to convince her more 18 forcefully that transfer by air ambulance was 19 important rather than going by ground. 20 But I really did think that difference in 21 time savings wouldn't make much of a difference in 22 her care, especially given how stable she was for 23 the last four hours that she was -- last four hours 24 since the envenomization. Can you turn, please, to Exhibit 11. 25 Q.

Page 188 1 We've been discussing this document over the course 2 of today. 3 My question is, on this document, it 4 indicates the initial dosing of CroFab is four to 12 5 vials. Is that consist with your understanding? Yes, it is. 6 Α. Okay. Do you have an estimate of how long 7 0. 8 it would take for that initial dose to be 9 administered? A. So, the actual medication, I think it 10 11 comes frozen. It needs to be thawed, and it's 12 extremely viscous, meaning it's a very thick, thick 13 substance. So it takes awhile to prepare it, it 14 takes awhile to thaw, it takes awhile to mix it with 15 saline before it can be administered in the patient 16 intravenously. And then it's given in over about a 17 period of about an hour or two hours, depending on 18 the patient and if they're having any reactions to 19 it. 20 So it's typically hours. 21 0. And are you familiar with maintenance 22 dosing? 23 Α. Yes. What is that? 24 Q. Sometimes if the patient still has signs 25 Α.

Page 189 1 of systemic toxicity or laboratory abnormalities 2 after the initial dose of antivenom was provided, 3 then we can re-dose the antivenom to further address 4 the patient's needs.

5 Q. This document that Dr. Glissmeyer provided 6 indicates that maintenance dosing consisting of two 7 vials of every six hours for three doses is 8 recommended starting six hours after the initial 9 dose. Is that consistent with your understanding? 10 A. That sounds about right, yes.

Q. So at least according to this and your 2 experience, the first dose of a maintenance dose is 3 given how long after you start antivenom?

A. You know, so with this one, it's really for going to depend. Every patient is going to depend because even with the vial dosing, some patients vill end up just receiving four vials. Some patients may end up receiving 20 vials. It really just depends on their response to treatment and how bad or how toxic they are from the envenomization. And everyone is different.

And so it's hard to say because there's no as set protocol where it has to be one way or another, just like we discussed earlier, it's not a cookbook practice or approach that we're taking to treatment Page 190 1 of a patient. We're tailoring each patient's 2 treatment to their toxicity or the signs that they 3 develop, and deciding to give additional doses 4 whether or not they need it based on if they are 5 still appearing toxic, if they're still having 6 worsening edema, or if they still are developing 7 coagulopathy.

8 Q. And in deciding not to give the antivenom 9 before the patient left the ER, was part of your 10 decision-making process the length of time in which 11 the patient needs to be monitored or receive 12 maintenance dosing?

13 A. Absolutely. It would be safer for the 14 patient to receive the antivenom while in the 15 hospital setting. I don't think this has come up 16 yet, but there is a significant risk of adverse 17 reactions with antivenom envenomization.

18 I read in one of the articles -- should I 19 find the page?

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20 Q. Well, --
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21 A. Well, I read there could be as high as 22 20 percent adverse reactions. Some serum sickness, 23 some hypersensitivity reactions, and these are not 24 mild or benign reactions; these are potentially 25 life-threatening anaphylactic reactions that have to Page 191 1 be treated with adrenaline, Benadryl, steroids, and 2 fluids.

And we have to balance the risks A associated with giving the medicine as well as the risks of not treating the patient. And we have to balance. And each patient is going different, and reach patient will have different needs based on a whole variety of factors: their presentation, how sick they appear, their coagulation studies, how old they are, their comorbidity. So, there are numerous factors that we

MS. HUETH: I apologize. I know it's only MS. HUETH: I apologize. I know it's only been about an hour since our last break, but I have been drinking way too much water. Would it be okay if we took a very quick confront bake?

17 HEARING OFFICER HALSTEAD: Yeah. Why 18 don't we come back at 3:30.

12 take into account.

19

HEARING OFFICER HALSTEAD: We're back on the record in case number 23-29251-1, In the Matter of the Charges and Complaint Against Jason Howard Lasry, M.D. We were proceeding with Dr. Lasry's testimony, he remains under oath, and we're on the by his counsel, Ms. Hueth.

(Recess from 3:22 P.M to 3:30 P.M.)

Page 192 1 MS. HUETH: Thank you. 2 BY MS. HUETH: Dr. Lasry, did you make a determination as 3 Q. 4 to whether or not the patient needed antivenom while 5 she was at Humboldt? Yes. 6 Α. Q. And what was your determination? 7 It was my determination that this was a 8 Α. 9 minor envenomization on the scale of 10 envenomizations, and that, for the time being, the 11 envenomization was mild enough that we could 12 withhold antivenom. 13 However, she still needed to be admitted 14 so that she could be watched in case her condition 15 deteriorated, and there was anticipation that she 16 may require antivenom in the future. 17 Q. While the patient --18 HEARING OFFICER HALSTEAD: Before you're 19 asking that -- just hold on before ask another one. 20 MS. HUETH: Of course. 21 HEARING OFFICER HALSTEAD: Thank you. 2.2 Okay. Thank you. 23 BY MS. HUETH: You mentioned that you wanted her admitted 24 ο. 25 for close monitoring in case she deteriorated. Did

Page 193 1 you anticipate, or did you expect that patient was 2 going to deteriorate? I don't think I had an expectation that 3 Α. 4 she was going to deteriorate, but it was a 5 possibility. 6 Q. While the patient was in the emergency 7 department at Humboldt General, did you observe her 8 to have mottling to the left leg? 9 Α. No. Never. 10 What is mottling? 0. Mottling is a marble-like appearance of 11 Α. 12 the skin that gives the skin a bluish/purplish 13 discoloration pattern. 14 Ο. While the patient was in the emergency 15 department at Humboldt General, did her swelling 16 from the snakebite ever extend past her ankle? 17 It never extended past her knee. It never Α. 18 extended beyond the size of a silver dollar. Was her left leg, while she was in the 19 Q. 20 emergency department at Humboldt General, swollen to 21 three times the size of the other leg? 2.2 Α. Absolutely not. 23 0. And the swelling on the knee although it 24 increased; is that fair? 25 The knee swelling increased, there's no Α.

1 doubt about it, I do agree with that, but by a 2 minuscule amount.

3 Typically, when we see envenomizations, we 4 can watch the edema progressing in front of our eyes 5 as it slowly creeps up the leq. It will start 6 usually in the feet or in the tips of the extremity, 7 and the edema will develop centrally, it will come 8 towards the core, and we mark it at different 9 intervals to show the progression of the swelling. In this case, the swelling was circular, 10 11 it was not circumferential around the extremity, and 12 it was minimal increase in the few hours or so that 13 she was in our care. Was her left knee ever swollen to 14 ο. 15 three times the size of her right knee? Absolutely not. 16 Α. While the patient in the emergency at 17 Q. 18 Humboldt, was she ever hypotensive? Α. 19 No. And we've talked about the fact that there 20 0. 21 is no blood pressure document ed, are there other 22 clinical signs to suggest whether or not a patient 23 is hypotensive? 2.4 Certainly. Α. And can give us an example of some of 25 Q.

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1 those? 2 Certainly. Hypotensive patients are Α. 3 typically -- the patients that we would see in the 4 ER that sometimes pass out or have syncope. So, the 5 symptoms would be weakness, being lightheaded, being 6 dizzy, having trouble staying awake, and, perhaps, 7 looking ill or pale. And did Patient A, while she was in the 8 Q. 9 emergency department at Humboldt General, ever show 10 any of those signs or symptoms of hypotension? 11 Not at all. Α. 12 Q. At the time of the patient's transfer when 13 she's leaving Humboldt to go to Renown, did you feel 14 like she was stable? 15 Α. Yes. 16 And what do you base that on? 0. On multiple factors. She looked really 17 Α. 18 well. She didn't complain of pain. She had minimal 19 swelling of her bite site. She had a pulse that was 20 a little bit elevated, but it was stable, it was 21 staying between 150 and, let's say, 160 beats 22 per minute, and that's how I gauge stability. There 23 was no coagulation abnormalities. 24 And we did the medical screening exam 25 sufficiently to determine the antivenom wasn't

1 indicated at this time.

2 Q. If the patient appeared to you unstable, 3 would you have transferred her?

A. Yes, I still would have transferred her. 5 She still needed to be admitted to a fatality with a 6 higher level of care where she could be admitted and 7 closely monitored. That wouldn't change.

8 Q. Would it potentially change the method of 9 transport, assuming mom agreed?

10 A. If it was a more severe envenomization, 11 that we would categorize as moderate or severe, yes, 12 then I would insist that she go by a faster means of 13 transport.

14 Q. Did you see anything in the medical 15 records that document ed that the patient was stable 16 at the time of transfer?

17 A. Yes, I did.

18 Q. What did you see?

19 A. Nurse's notes. I will have to flip 20 through. But the nurse's note at the time of 21 transfer, she document ed the patient's condition, 22 and let's see, on page 81, one there's a shape 23 that's title "Admit Transfer Discharge Information," 24 at 18:32, Nurse Espinosa, she documents: "Patient's 25 condition for transfer, stable." 1 And that is about in the first paragraph 2 of the page .

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3 Q. While the patient was at the emergency 4 department at Humboldt General, do you believe that 5 she showed signs or symptoms of systemic 6 envenomization?

7 A. No.

8 Q. And why not?

9 A. She was stable from the vital signs 10 standpoint, she did not have any coagulation defects 11 on her laboratory testing, and the progression of 12 wound swelling was guite minimal.

Q. We've talked throughout the day regarding 14 various articles that Dr. Glissmeyer provided to the 15 Investigative Committee. My question is is there 16 any one article that establishes the standard of 17 care for an emergency medicine physician?

18 A. No, there is not.

19 Q. Okay. In making the decision to not give 20 the patient antivenom, did you use your medical 21 judgment?

22 A. Absolutely.

23 Q. As we were looking through these articles 24 over to course of day, did you see indication in any 25 of them where, if the swelling progresses minimally,

Page 198 1 you should still give antivenom? 2 Α. No, I did not see it. Did you see anything to the converse of 3 Q. 4 that, that if the swelling progressed minimally, you 5 don't need to necessarily give antivenom? 6 Α. I'm sorry. There's too many negatives. 7 Can you please --Q. Yeah. I'm sorry. It's becoming late in 8 9 the day and my questions are deteriorating. In the articles that have been provided by 10 11 Dr. Glissmeyer, did you see anything that supported 12 your opinion that minimal progression of swelling 13 does not necessarily warrant antivenom? 14 Α. Yes. And are there any examples you can give 15 Q. 16 us? 17 Yes. Α. Just tell us what exhibit you're looking 18 Q. 19 at. A. On Exhibit 12, page 132, the first column, 20 21 about half way through, it starts with "these 22 guidelines." Should I read it out loud? Is this the section that was read when I 23 0. 24 was talking to Dr. Glissmeyer? A. Yes, it is. And there are other ones. 25 Do

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1 you want me to read that?

2 Q. It's okay. I think we read into the 3 record.

A. The other one, this one is also section 5 12, page 139. Let's see. At bottom of the second 6 column, in the last paragraph, where it starts with 7 "Patients with dry bite or who have not been bitten 8 by a pit viper should not receive antivenom."

9 And then it reads "Patients with minor 10 envenomization, defined as swelling and localized 11 pain at the envenomization site, should be closely 12 observed and not be given antivenom unless local 13 tissue affects progress."

Q. Did this patient at any time while she was in the emergency department at Humboldt General have hemorrhagic bleb?

17 A. No.

18 Q. And what is that?

19 A. It's a blood-filled blister.

20 Q. While patient was in the emergency

21 department at Humboldt General, did she demonstrate 22 any airway swelling?

23 A. Not at all.

Q. Did she demonstrate anything to suggest to25 you that she was having difficulty breathing?

Page 200 Not at all. 1 Α. 2 Q. Earlier, Dr. Glissmeyer described a test, 3 the negative inspiratory force. Do you recall that 4 testimony? Α. I do. 5 6 Q. Is that a test that you routinely perform 7 in the emergency department? I have never performed it in the emergency 8 Α. 9 department. It is not a common ER procedure. HEARING OFFICER HALSTEAD: Can you repeat 10 11 the name of that procedure, please? 12 MS. HUETH: The negative inspiratory, 13 I-N-S-P-I-R-A-T-O-R-Y, force. 14 HEARING OFFICER HALSTEAD: Thank you. 15 THE WITNESS: I would also add something, 16 just that I wouldn't see a good reason to do that 17 test if there was no breathing abnormalities. She 18 wasn't hypoxic, she wasn't in respiratory distress, 19 she wasn't -- her breathing wasn't labored, and she 20 was speaking freely. So, it just didn't seem like 21 there was any indication to do such a test. 22 BY MS. HUETH: 23 Q. We also have talked about today the 24 patient's vitals while she was on route to Renown. 25 And if you can turn to page 83.

Page 201 1 Α. Yes. And is there a period of time during which 2 Q. 3 the patient was not hypotensive while she's on route 4 to Renown? 5 Α. Yes. 6 Q. And approximately how long? Between 19:38 and to 21:17, so that's 7 Α. 8 about an hour and a half. So, an hour and 9 45 minutes that she was normal tensive, not 10 hypotensive. 11 And, Doctor, do you have an opinion, to a Q. 12 reasonable degree medical probability, whether you 13 complied with the applicable standard of care of 14 while you were taking care of this patient? Α. I definitely feel that I met the standard 15 16 of care. The patient's ultimate outcome, you're 17 Q. 18 aware that the patient ultimately passed; is that 19 right? 20 Yes. Α. 21 Do you have opinion of whether that 0. 22 outcome was predictable? On my side, it was completely unexpected. 23 Α. 24 I expected that she had been stable during her ER 25 stay, she seemed quite well, she had zero pain, she

Page 202 1 had minimal swelling, she had no coagulation 2 deficits, and she had been stable for the three or 3 four hours since the envenomization had occurred. 4 So, I believed that she would be perfectly 5 safe for the one- or two- hour trip that it would 6 take to get to Renown. I really didn't expect her 7 to decline or deteriorate as quickly as she did. 8 MS. HUETH: Those are all my questions. 9 Thank you. HEARING OFFICER HALSTEAD: Thank you. 10 11 Mr. Shoqren? 12 MR. SHOGREN: Yes. Thank you. 13 CROSS-EXAMINATION 14 BY MR. SHOGREN: 15 Q. Good afternoon, Dr. Lasry. A. Good afternoon. 16 17 Thank you. Q. First off, you had mentioned that you had 18 19 treated previous snakebite patients. Did you treat 20 any at Humboldt General Hospital with snakebites? 21 Α. I don't believe so. Other patients, other 22 than Patient A, no, I can't recall. 23 0. How long did you work at Humboldt General 24 Hospital for? 25 Α. One or two years.

Page 203 Okay. And you mentioned that you had 1 0. 2 administered antivenom in with two-thirds of 3 patients that you treated with that issue. When --4 at what point after the snakebite did you normally 5 administer the antivenom? So as we discussed, it's going to vary. 6 Α. 7 Some people, they come in so systemically ill, 8 they'll present with low blood pressure or massive 9 swelling of their extremities or some other 10 abnormality that we decide, from the time that they 11 stepped through the ER doors, that patient warrants 12 antivenom. 13 Other patients, we need a workup. We need 14 to watch them period of time, we need to see how the 15 swelling is progressing, we need to monitor their 16 vital signs, we need to check for coagulation 17 deficits, and then we decide. 18 So, it's really a case-by-case. It is not 19 cookbook treatment of patients, just as described in 20 the article. 21 0. But did you administer antivenom there in 22 the emergency department? In Humboldt General, I don't recall if I 23 Α. 24 did. I don't think I did. How about in other hospitals settings? 25 Q.

Page 204 1 Other hospitals, yes. Α. 2 And do you recall, what's the youngest Q. 3 patient you've treated with an envenomization? 4 Α. I think it was a five year old. Okay. So mentioned that Patient A's blood 5 0. 6 pressure was monitored while at Humboldt on May 9th? 7 Α. Correct. And is there any reference of it in any of 8 Q. 9 the Humboldt General Hospital records we've 10 reviewed? 11 No. Α. 12 Q. So how do you know that it was measured? 13 Α. I know this because it's our normal 14 practice that we do with every patient that comes to 15 through the emergency doors. New patients has leads 16 put on them, every patient has a pulse oximeter put 17 on them, every patient has EKG leads put on them, 18 every patient has a blood pressure cuff put on them. All off of those recording devices are 19 20 connected to the bedside monitor, which can 21 interpret and show those vital signs to us. 22 Q. So why wasn't it included in, like say, 23 the vitals section? 2.4 I can't speak to that. It's the nurses Α. 25 who obtain the vital signs and document the vital

Page 205 1 signs. And I don't have control over that part of 2 the patient care. 0. And why wasn't it mentioned on your notes 3 4 regarding the patient? Because the blood pressure was normal, so 5 Α. 6 it didn't need to be addressed. And moving on to page 83 of Exhibit 6. 7 0. Α. Yes. 8 So the vital signs are listed here. 9 ο. What 10 are the first three blood pressure readings? 11 There are recorded -- you're talking about Α. 12 where it starts at time 18:49? 13 Q. Yes. Yes. The first three readings are 59 over 14 Α. 15 40, and then 58 over 42, and then 59 over 41. Does that indicate hypotension? 16 Q. 17 Those numbers are slightly low. Α. Yes. 18 Q. What is the threshold for a young child, a 19 three year old, for hypotension? 20 Α. So there's a formula that we use to 21 determine what makes that normal blood pressure to 22 be for a certain age when we're talking about 23 pediatrics. The formula is two times the patient's 24 age, plus the number 65. 25 And so for her, an expected blood pressure

Page 206 1 would be about 70. And so, you know, 60 is not too 2 far from 72, but it is lower. So she does --3 according to these values, she does demonstrate 4 hypotension on the first three reads. 5 HEARING OFFICER HALSTEAD: Dr. Lasry, can 6 you correct me if I'm wrong, I'm just trying to keep 7 everyone's testimony, compare apples to apples. I think you said two times the patient's 8 9 age, plus 65. Is that what Dr. Glissmeyer said, or 10 did he say plus 70, I thought? 11 THE WITNESS: He said plus 70. But my 12 Google search showed plus 65. 13 HEARING OFFICER HALSTEAD: Okay. Thank 14 you. I just wanted to make sure I understood that 15 correctly. 16 THE WITNESS: Sure. HEARING OFFICER HALSTEAD: Sorry, 17 18 Mr. Shogren. MR. SHOGREN: That's fine. Thank you. 19 20 BY MR. SHOGREN: 21 0. And there on page 83, when was the 22 patient's blood pressure first measured? At 18:49. That's when they first 23 Α. 24 documented it. Q. And when did the patient depart Humboldt? 25

A. I would have to check specifically. I 2 would say it's hard to tell. Somewhere between 3 18:30 and 18:50.

Q. So you said the patient did not exhibit -5 or did not have hypotension during her stay at
6 Humboldt?

7 A. Correct.

8 Q. How would you explain that dip in the 9 blood pressure there at --

10 A. These are -- I don't know how to explain 11 it. These are numbers that the EMS crew obtained. 12 They did not inform me about these about 13 abnormalities, because I only saw normal blood 14 pressures while the patient was in the ER.

And so I do not know why those numbers are 16 low. As we can clearly see, they normalized soon 17 afterwards.

18 Q. And you mentioned the blood pressure for 19 patients is normally document ed in the patient 20 records?

21 A. Yes.

Q. Do you look at the patient records, such
as vital signs, before seeing a patient or during?
A. Well, the care in the ER is really -25 we'll go in and out. Sometimes I'll see the patient

Page 208 1 before they have vital signs taken. Sometimes I'll 2 see them a half hour after they've been there, and 3 the vital signs are already available. 4 It just varies depending on how sick an 5 individual patient is or how busy we are. You looked at this patient's vital signs 6 Q. 7 during her stay there; correct? Α. Correct. 8 And did you note the lack of any record of 9 ο. 10 blood pressure? So, when I look at the vital signs, I look 11 Α. 12 at the monitor. I don't have to flip through a 13 chart to see what the vital signs are. They're just 14 available visually for me on the monitor. So if I see the results or if I see the 15 16 vital signs on the monitor, I'm not really flipping 17 through the nurse's note to see what she document ed 18 or whether or not she document ed it. In fact, I 19 leave that alone. It's -- the nurse's 20 document ation is separate from the physician's 21 document ation. 22 Q. So you're going off the signs you saw 23 there at the time. How do you remember what her 24 signs -- this was -- what? -- three years ago. Ι 25 mean, is this how --

Page 209 A. This was a critically ill patient. I 2 don't see hundreds of snakebite patients. This one 3 was a young child, and this one died. So my memory 4 of this patient's case has stayed with me.

5 Q. So despite the lack of any record of the 6 blood pressure in the notes provided from Humboldt, 7 you remember what her blood pressure was from 8 three years ago?

9 A. I don't remember an exact number, but I
10 remember her blood pressure was in the normal range.
11 Q. And you mentioned that there is record of
12 the patient having tachycardia; correct?

13 A. Yes.

Q. And I believe you said in your direct that it possibly was because the patient was fearful or excited, given the circumstances. That is your reason why the patient's heart rate was elevated? A. I gave that as a possible reason. It's not really meant to be the sole reason. A lot of times, I don't know why a patient's vital signs are abnormal, but those are contributing factors that could have possible contributed to her having tachycardia.

Q. So, the vital signs are abnormal, you 25 said?

Page 210 1 The heart rate was elevated, yes. Α. 2 What is another -- what could be another Q. 3 realistic reason for the tachycardia? Α. Dehydration, low volume, the 4 5 envenomization, of course. The envenomization. 6 Q. Okav. And in your experiences, is the 7 8 combination of low blood pressure and heart rate, 9 high elevated heart rate is that cause for concern? Α. Absolutely. 10 And that combination, what could be the 11 Q. 12 reason for that? 13 Again, there is many possible causes, but Α. 14 during the ER stay, the patient had mildly elevated 15 heart rate and had a normal blood pressure. 16 0. And during your testimony, you said 17 hypotension or low blood pressure, that is one of 18 the cardinal signs of severe envenomization? Yes, it could be. 19 Α. Is that, in itself, a serious sign? 20 Q. 21 Α. We take the whole picture. Low blood 22 pressure is a serious sign, for sure. 23 So, we look whole picture of the patient's 24 presentation, and how they appear and other vital 25 signs and other parameters.

Page 211 But you don't need multiple signs to 1 0. 2 determine if there's been severe envenomization? Α. So, I think my answer goes back to what we 3 4 talked about earlier. It's not cookbook medicine. 5 It's not whereas we have one vital signs that's 6 abnormal, and we decide that person needs to be 7 treated. It's not like we have one lab abnormality 8 and for sure that patient has to be treated. 9 We look at the patient as a whole. It's 10 can't be a cookbook. We're going to take into

11 account their age, their comorbidity, the event, 12 where the envenomization occurred, the progression 13 of the swelling, the coagulation deficits that 14 occur, how the patient appears, and the vital signs. 15 So I'm sorry, but it's not just one simple 16 parameter that you could look at where you make the

17 decision to treat or not treat. We look at the 18 whole picture.

19 Q. Okay. And so you talked about in your
20 testimony about swelling of the patient's knee area.
21 Just to be clear, there was increased swelling?
22 A. No doubt, there was increased swelling.
23 Q. Was there any mottling around the left
24 knee?

25 A. I did not see any mottling.

Page 212 1 Okay. Can you turn to page 79? 0. 2 A. Yes. 3 Q. Can you focus on the section titled 4 "Emergency document ation" here? Α. 5 Yes. There's these textual results listed. 6 Q. 7 What are these? 8 Α. These are the nurse's progress notes, is 9 what they look like. Q. So on the note dated May 9th, 2020, it's 10 11 6:24 P.M., does it say that there was noted mottling 12 around left knee? 13 A. It sure does. Yes, it does. Q. And does it say M.D. and where? 14 Yes, it does. 15 Α. 16 Q. And is that M.D., is that referring to 17 you? 18 Α. Yes. 19 Q. So just to be clear, you were the 20 admitting physician? 21 A. I was the treating physician. 22 Q. The treating physician. Was the 23 responsibility of the patient's care in your hands? 24 Α. Yes. Q. Was it any other physician's 25

Page 213 1 responsibility to take of the patient at Humboldt? 2 Α. No. 3 Q. Thank you. 4 Did you -- so you mentioned that you 5 talked to a Dr. Thorp at Humboldt? A. Correct. 6 Q. What was Dr. Thorp's position? 7 She is a pediatrician. 8 Α. 9 Q. And was she responsible for the care of 10 the patient here? 11 Α. She was not responsible for Patient A. 12 She would be responsible for patients that I 13 admitted to her service. Would she be the one to determine if 14 Ο. 15 antivenom was necessary? She couldn't be because she wasn't 16 Α. 17 comfortable with it and wasn't experienced with it. But you were ultimately the one that 18 Q. 19 decided whether or not to administer antivenom? 20 A. That's right. 21 Q. Did you make that determination before you 22 spoke with Dr. Thorp? I can't recall for sure. I believe so. 23 Α. Ι 24 can't be sure, but I believe so. I believe that I 25 spoke to the consulting physicians once I had most

Page 214 1 of the results back from testing. 2 Q. And then you note, and you've testified, 3 it says in your notes at 5:45 P.M. you spoke with a 4 Dr. Gaffen, it says here in the notes. And just for 5 the record, was it Gassen or Gaffen? Gassen. SS like Sam. 6 Α. Okay. When you spoke with Dr. Gassen, was 0. 7 8 he responsible for the care of the patient at that 9 time? 10 No. I was responsible care of the patient Α. 11 while she was in our emergency department. 12 Q. And when you spoke with him -- well, first 13 of all, were you present when there was -- we played 14 respondent's Exhibit number 7, which was an audio 15 recording? 16 A. What's the question? Were you present and did you hear the 17 Q. 18 audio recording that was played earlier? Yes, I was. 19 Α. Do you recall the contents of that 20 Q. 21 conversation? 2.2 A. Yes, I do. 23 0. And that was a conversation between you 24 and Dr. Gassen? 25 Α. Correct.

Page 215 Okay. Did you convey to Dr. Gassen the 1 0. 2 patient's vital signs? 3 Α. I believe I told him the vital signs were 4 stable. Did you convey to him the patient's blood 5 0. 6 pressure? 7 The blood pressure was normal, so I did Α. 8 not convey --So you didn't convey that to him? 9 Q. I didn't relay that specifically, no. 10 Α. 11 And did you convey the patient's heart Q. 12 rate? 13 A. I did not hear it on the conversation. 14 0. But you said the patient's heart rate was 15 abnormal? 16 The patient's heart rate was fast, a Α. 17 little bit fast, but it was also stable, meaning it 18 wasn't fluctuating, it wasn't going up and down. So 19 there was stability with the heart rate. 20 ο. You didn't think it was necessary to 21 explain to this Dr. Gassen the tachycardia of the 22 patient? 23 Α. You know, when I give a report, I gave the 24 information that I thought was most relevant at the 25 time. If I forgot to give the exact number of the

Page 216 1 heart rate, it's my mistake, but I try to convey as 2 well as possible the correct and -- the correct 3 story of how the patient presented, how she 4 appeared, how her workup went, and how she 5 progressed during the ER stay. And if I left out some exact number, it's 6 7 on me. I apologize. But I thought I have a very 8 fair representation of the patient's ER evaluation 9 and assessment on that date. 10 Okay. And so do you believe that Humboldt 0. 11 was not equipped to deal with adverse reactions to, 12 you know, if you were to administer antivenom? 13 No. We -- Humboldt General Hospital, I Α. 14 believe, had the medications necessary to treat 15 severe allergic reactions. 16 Okay. You got in -- do you recall, did 0. 17 Humboldt have antivenom on hand on about May 9th, 18 2020? 19 Α. I cannot say for sure. Do you recall, does Humboldt typically 20 Q. 21 have antivenom available? 2.2 Α. I don't know. I'm not at all involved in 23 what the pharmacy stocks or what they keep or what's 24 available, so I really don't know. Is it typical, in your experience, for 25 Q.

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1 emergency departments to have antivenom on hand?
2 A. Yes. A majority of emergency departments
3 will have. However, some of the smaller, more rural
4 hospitals won't because they can't afford it, and
5 it's very expensive medication.
6 Q. Was the availability antivenom, was that a

Q. was the availability antivenom, was that a
7 consideration into whether or not to administer it
8 here?

9 A. Not really. My main consideration was to 10 treat or not to treat. To give the antivenom or not 11 to give the antivenom.

12 Q. So you mentioned that antivenom has --13 that administration of antivenom may have adverse 14 affects?

15 A. Correct.

16 Q. What would those adverse affects be, 17 typically?

18 A. Well, the common and serious ones that we 19 typically see in about 20 percent of patients given 20 antivenom would be either hypersensitivity reaction 21 or serum sickness. And both of those are allergic 22 type of reactions.

Q. Could you turn to Exhibit 13, and page on24 150.

25 A. I'm there.

Page 218 So if you go to the section titled "Dose 1 0. 2 and Administration," could you read the beginning of 3 the second paragraph of that section, the first 4 sentence? 5 Α. Yes. It starts with "Antivenom Therapy"? 6 Q. Yes. 7 Yes. Α. "Antivenom therapy with FabAV or 8 Fab2AV, can be associated with 9 potentially severe allergic 10 11 reactions, but the risk appears to 12 low. Less than one percent. 13 Nevertheless, antivenom should only be administered in a 14 continuously monitored emergency 15 or intensitive care unit setting." 16 Okay. Thank you. Just the beginning 17 Q. 18 there. Thank you. And what is the second section here, 19 20 "Treatment of acute antivenom reactions." What does 21 this section, the first paragraph, say about the 22 rate of acute serum reaction and sickness? 23 Α. I don't know. Where do you want me to 24 read from? Well, does this section say that patients 25 Q.

Page 219 1 receiving either FabAV or Fab2AV is approximately 2 two to three percent of the rate of acute serum 3 reaction in sickness? Α. If you don't mind, I'll read it myself, if 4 5 you want my interpretation. Yeah. That makes it clear. 6 ο. Yes, I see it says that the rate of 7 Α. 8 reaction is two or three percent in previously 9 treated patients. Meaning patients that received 10 antivenom before, have a two to three percent. 11 However, there's another article that 12 shows completely different numbers. 13 Okay. That was just my question just on ο. 14 this here. 15 And you mentioned HGH at the time was 16 equipped to deal with reactions to antivenom? 17 As we read in the paragraph you had me Α. 18 read, the patient needs to be either in an ER or ICU 19 setting. 20 And the patient needed to be transferred 21 to a higher level of care. It wasn't something we 22 want the patient to have while being transported 23 with EMS with limited resources, with limited 24 ability to care for adverse reactions. 25 Q. Okay. And so what was the risk, then, of

1 not administering antivenom in this situation?

2 A. The risk was of a severe life-threatening 3 hypersensitivity reaction, to which could be as high 4 as 20 percent.

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5 So, yes, if antivenom is indicated, we 6 should give it and I would give it and I have given 7 it. But if it's a questionable case or if it's 8 strongly indicated, then you have make the decision: 9 Is the risk of severe hypersensitivity or allergic 10 reaction worth the chance taking?

And my first oath as a doctor was to cause 12 no harm. So, if it was indicated, if it was 13 strongly indicated, I would give it. If she was 14 more ill or ill appearing or had other parameters 15 that indicated that she needed to have antivenom, I 16 would give it.

17 But short of that, it is not a benign 18 medicine that you can just freely to anybody. It's 19 not like tap water. It is something that has --

20 Q. Okay.

A. -- a significant risk associated with it.
Q. Okay. But according to this article, I
23 decided the risk appears to be low for potentially
24 severe allergic reactions?

25 A. That's true. But another article that

1 Dr. Glissmeyer provided said that it was as high as 2 20 percent. Q. I'm referring to this article, and it 3 4 appears to be a peer-reviewed article; correct? 5 Α. Okay. 6 Q. Okay. 7 I thought they were all peer-reviewed Α. 8 articles. 9 Q. Correct. And I just wanted to move here -- the 10 11 transfer -- the mode of transportation, whose 12 decision was that? 13 Ultimately, it was mother's choice to go Α. 14 by ground. Q. So you had no say in this? 15 A. Again, mother has to consent to me 16 17 transferring the patient anywhere. I cannot simply 18 take a child away from a parent and send them to 19 another hospital where the parent isn't allowing me 20 to send. 21 So your question is hard so answer because 22 I can't send a child anywhere without the mother's 23 consent. 24 And so since as the mother refused, yes, I 25 would prefer to go by air ambulance, yes, I would

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Page 222 1 have preferred the fastest means possible, but if 2 she refused, I have to negotiate with mother. And 3 if mother was adamant that she wasn't willing to go 4 as she was by -- to allow the child to go by 5 helicopter, then I gave into her request. And I 6 thought it was okay to go by ground transport 7 because I thought we had a period of time of safety 8 and because the patient has been stable in our ER 9 for the last three to four hours. And all the other 10 issues I've already discussed. 11 Okay. And roughly how long did it take Q. 12 for the patient to get from Humboldt General 13 Hospital to Renown in Reno? I think it's about two and a half hours. 14 Α. Two and a half hours. 15 Q. Would that time have been shorter if she 16 17 were to take air transport? 18 Α. Yes. 19 Q. Do you know roughly how much shorter or 20 how much longer it would have taken? 21 Α. Oh, I think -- I think it would have been 22 just an hour by helicopter. HEARING OFFICER HALSTEAD: Do you know or 23 24 are you guessing? 25 I'm approximating. THE WITNESS: I'm

Page 223 1 guessing. I don't know the exact times. 2 BY MR. SHOGREN: Q. Okay. Can you -- actually, going back to 3 4 page 34, this is Exhibit 6. Α. 5 Yes. Q. Under the section "Procedure." 6 7 A. Yes. Q. Was this patient listed under critical 8 9 care? A. I document ed that I provided critical 10 11 care for this patient. 12 Q. Did you bill for critical care of the 13 patient? Yes. I don't actually billing myself. I 14 Α. 15 just document my care. So I didn't -- I don't get 16 any remuneration from any particular patient I've 17 seen. 18 Q. Sure. 19 To your knowledge, was this patient billed 20 for critical care? 21 A. It depends on the billing companies, 22 whether or not they billed for it. Q. And why was this critical care in this 23 24 instance? 25 A. Snakebite envenomization are classified as

Page 224 1 critical care cases. And then there's also the care 2 that I provided, multiple reassessments, the 3 multiple reevaluations of the patient, the 4 discussion with the consulting physicians, the 5 medical decision-making time, all of those 6 categories count towards critical care time.

7 Q. And despite this being critical care, you 8 didn't think antivenom was necessary?

9 A. Critical -- you could have critical care 10 without a patient being critical. So, patients can 11 be potentially critical care, critically ill, and we 12 could bill for critical care for them. And they may 13 be able to walk home without having any critical 14 abnormalities.

15 So, critical care does not mean that the 16 patient was critically ill; it means they were 17 potentially critical.

Q. You also mentioned in your testimony there
was a possibility of deterioration for the patient?
A. Correct.

21 Q. Can you elaborate on that? What do you 22 mean by that?

A. Well, with snake envenomizations, the A. Well, with snake envenomizations, Page 225 1 could develop over time. Even if she didn't have 2 signs of toxicity at the onset or after the first 3 few hours, she, or any snakebite patient, may 4 develop signs of toxicity 12, 24, even 72 hours 5 after the envenomization.

6 So that's why I could not predict -- I 7 don't see the future, I wasn't certain if need meet, 8 but that possibility did exist. And the only way to 9 know would be to continuously monitor her, watch the 10 progression of the swelling, repeat the coagulation 11 studies and the laboratory tests, and based on those 12 findings, you would determine if antivenom is 13 indicated at that time.

14 Q. Okay. So do you believe you did 15 everything you could do at that time for the 16 patient?

17 A. Yes. I believe that I gave her very good 18 care, and I believe I treated her well and 19 appropriately and I followed the standard of care. 20 And I did my best to give her the best care 21 possible.

22 Q. So why do you think she needed to be 23 transferred?

A. Because we didn't have a physician that 25 could care for a rattlesnake patient at our

Page 226 1 hospital. I had to transfer her to a facility where 2 they did have such specialists. 0. And you mentioned that you've treated how 3 4 many patients with --5 Α. Twenty. 6 Q. Twenty? Fifteen to 20. 7 Α. So just to sum, what did you do for the 8 Q. What -- how did you benefit the patient? 9 patient? We did multiple things to help stabilize 10 Α. 11 this patient. We started off with a medical 12 screening examination. We obtained a history. Ι 13 performed a physical exam. I ordered laboratory 14 testing. I provided her with IV fluids for 15 additional hydration. I provided her with pain 16 medications. I provided her with potassium 17 replacement because her potassium was extremely low. I updated the mother with what was 18 19 happening, with our decision-making, our decision 20 not to treat now, but the fact that we may need to 21 treat in future. 2.2 And I consulted with admitting physicians 23 in order to get the patient to the appropriate level 24 of care where she could be watched and where 25 antivenom could be administered, if it was needed in

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1 the future.

2 Q. Okay. And just to be clear, is it 3 possible to give the patient antivenom and then 4 transfer her to another facility? Everything is possible. I mean, sure, 5 Α. 6 that is within the realm of possibility. Yes. But you didn't think that was necessary to 0. 7 8 give the antivenom and transfer her? Well, there is a couple of points I'd like 9 Α. 10 to make. 11 One is I thought that we could withhold, 12 and I thought that we had some time before making 13 the decision to give antivenom. The patient had a 14 period of being stable, she had no lab 15 abnormalities, she had minimal progression of the 16 swelling of the wound, she had no pain, and 17 everybody document ed that she was well profused and 18 had good color and looked well and was comfortable. On top of that, I did not want the patient 19 20 receiving antivenom while being transported by EMS. 21 EMS is not very well suited to severe anaphylactic 22 reactions or to intubate a pediatric child. If she 23 had lost her airway, if she had developed swelling 24 of airway over time or of her mouth or lips and she 25 needed a tube put in her airway, EMS wouldn't be

Page 228 1 able to do for her. So it wouldn't a safe transfer. 2 Yes, it's within the realm of possibility, 3 but it wasn't something I deemed to be safe. 4 MR. SHOGREN: I have no further questions 5 right now. Thank you. MS. HUETH: I just have a brief follow-up. 6 HEARING OFFICER HALSTEAD: 7 Sure. 8 REDIRECT EXAMINATION 9 BY MS. HUETH: 10 Can you turn, please, to Exhibit 1, 0. 11 specifically page 3. 12 Α. Yes. 13 Q. Paragraph 16, the one that starts with 14 "NAC 630.040 defines malpractice." Can you read 15 what is in quotation marks as the definition of 16 malpractice? A. Certainly. 17 "The failure of a physician in 18 19 treating a patient to use the 20 reasonable care, skill, or 21 knowledge ordinarily used under 2.2 similar circumstances." 23 **Q**. Does it define malpractice as not doing 24 everything you could? No, it does not. 25 Α.

Page 229 1 0. Okay. 2 MS. HUETH: That's all I have. 3 HEARING OFFICER HALSTEAD: Thank you. Do 4 you guys all mind if I ask a few questions? MS. HUETH: Of course not. 5 EXAMINATION BY THE HEARING OFFICER 6 7 BY HEARING OFFICER HALSTEAD: Dr. Lasry, is it possible for a physician 8 Q. 9 to go on the transfer with the patient? No, that's not possible. There's only one 10 Α. 11 ER physician. I work -- in those shifts, we did 12 24 hours. There is no other physician that could 13 cover the emergency department. There's no other 14 physician in the hospital that's skilled or trained 15 or credentialed or certified to do that duty. So, no, it was not possible for me to 16 17 travel with the patient. Based on staffing only? 18 Q. 19 Α. I think the answer is yes, based -- yes, 20 because there's nobody to -- there's nobody to cover 21 it. There's nobody to cover the ER. It would be 22 illegal for me to leave the ER without medical 23 coverage. I guess -- I'm not asking -- I guess I'm 24 ο. 25 asking if there had been other coverage, is it ever

Page 230 1 a situation where physicians travel with patients on 2 transport? They -- not in this country. I've seen it 3 Α. 4 happen in France, that's commonly done. In some 5 countries, it's common that the EMS system has 6 physicians, but not in this country. 7 0. Okay. Thank you. I appreciate your indulgence because I'm a 8 9 lawyer, I'm not a physician, so I might ask some 10 questions that you might find strange, but it's just 11 so I can understand. 12 Α. I'm happy to answer them. 13 Thank you. I appreciate that. Q. How much lead time did you have to know 14 15 that you had a patient coming in with a snakebite? I can't recall exactly. Maybe 15 or 16 Α. 17 30 minutes. Okay. And did you think to check if there 18 0. 19 was any --20 A. That's a guess. 21 Q. You said maybe 15 or 20 minutes? 2.2 Α. Fifteen or 30 minutes, correct. 23 0. Okay. And did you think to check if there 24 was any antivenom available within that time, 25 knowing that there was someone coming in and you

Page 231 1 wouldn't know their condition until they got there 2 and there was preparation needed for the serum if it 3 needed to be administered? A. I didn't think in those terms. In my mind 4 5 at the time, I just assumed that we had it. I did 6 not check beforehand. 0. Okay. So you weren't worried about it not 7 8 being available? No. And if it wasn't available, then we 9 Α. 10 would send the ambulance to go find some from 11 another ER. 12 Q. Okay. How -- okay. Okay. And then the other snakebites 13 14 you've treated, were those in this area, this area 15 being Northern Nevada, or were those in different 16 locations? A. Different locations. 17 Q. 18 Okay. So have you ever dealt with a 19 rattlesnake bite in particular? A. Of course, yes. 20 21 0. Okay. And how many of the bites that you 22 dealt with previously were rattlesnake bites? A. So, you know, we're talking about 23 24 Crotalidae, it's a genius of snakes. And so I think 25 it encompasses rattlesnakes and water moccasins and

1 pit vipers, they're all of the same category. And 2 the antivenom is made from a combination of those 3 snakes.

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4 Oftentimes, a person who is bitten by the 5 snake doesn't know exactly what type of snake bit 6 them. They are not knowledgeable about the 7 different types of snakes. Sometimes they give us a 8 description, sometimes not.

9 So in reality, we don't worry too much 10 about the exact description of the type of snake 11 that bit the patient, but it seemed like it was of 12 the rattlesnake family, then we'll give the 13 antivenom that usually has the venom of a whole host 14 of the snakes.

15 Q. That was helpful. Thank you.

16 Where there any other medical
17 professionals there, nurses or physicians assistants
18 or anybody who tried to encourage you to give the
19 antivenom?

A. They didn't encourage me. They asked if 21 we should give it. I wouldn't say they encouraged 22 me.

There was just the two nurses there I was working with. So, Cristal was one. I don't recall the name of the other nurse. But it was just me and

Page 233 1 two nurses that were caring for all of the patients 2 coming through the emergency department. And when you said that they talked to you 3 0. 4 about that antivenom, what was the nature of their 5 inquiry to you? 6 Α. They asked if they thought we should give They asked if we thought it was indicated. 7 it. And 8 I was the one making the medical decision-making, 9 and I had come to the judgment that I didn't believe 10 that it was indicated at this time. 11 Okay. Did both nurses inquire of you or Q. 12 just one? I only recall one asking. 13 Α. And which one was that? 14 ο. Cristal. 15 Α. And then just because I'm not familiar 16 0. 17 with how -- I've heard talk about how you checked 18 the vital and why and the indication of the vitals, 19 but I don't have an understanding of how a snakebite 20 impacts a person's system, and so what you would 21 look for to see that bite. 22 Can you explain that to me, please? 23 Α. For sure. So we talked about the swelling 24 that develops. What happens is -- maybe I'll just 25 give you just a brief rundown of snakebites, of what

Page 234

1 they are.

Basically, when you get bitten by a snake or envenomated by a snake, you're getting a soup of different toxins, lots of different proteins and peptides, it's organic materials, some metals, but it's a whole soup. It's a concoction of different things that are toxic to us.

8 The effects on the body are various 9 because there's so many different toxins within the 10 venom. There are toxins that make the blood vessels 11 leaky, and by making them leaky, that can make the 12 blood pressure drop, and that's what causes the 13 swelling to develop. So when you have swelling, 14 it's because the blood vessels are leaky, and the 15 fluid or blood within them is leaking out of the 16 blood vessels causing the edema to form.

17 There are other symptoms that develop like 18 metallic taste in the mouth, or we talked about 19 abnormal muscle movement or muscle weakness or 20 respiratory failure or changes in mental status or 21 pain, you know, shooting pains, pains, pain is 22 usually one of the hallmark symptoms of a snakebite. 23 Usually when patients comes with a snake 24 envenomization, usually they're in severe pain. 25 Usually they're suffering. Usually they're crying Page 235 1 and screaming and complaining of pain, and usually 2 we're giving them morphine or some kind of narcotic 3 to treat the pain.

If you don't mind, can you go back and ask me again. I know I was talking about the snakebites, but you wanted to know details about why or why --

8 Q. I'm trying -- and you were answering me. 9 I was just wondering -- no one's explained 10 to me how the venom -- I know what you look for, but 11 I don't know why you look for it because I don't 12 know how the venom works.

13 So when you were explaining it to me with 14 regard to the leaky vessels, that's sort of the 15 inquiry I was looking at.

A. And that's just one of the factors. A. And that's just one of the factors. Because it also will effect the coagulation profile that makes you bleed more easily. And then it depends -- of course, if you imagine that your blood vessels are very leaky and you're developing a lot of swelling or edema in your leg, that's fluid that was in your vascular system that's not no longer in the vascular system, and that's what will make you tachycardic, hypotensive, or having signs of shock, which Patient A did not demonstrate. Q. So, for instance, her death certificate
2 says she died by a snakebite. And I believe it's,
3 you know, it says "rattlesnake bite." And then it
4 says "complications of toxic envenomization."

5 And I guess what I'm hearing from you is 6 that could be various things. I guess -- I guess 7 I'm wondering: How does it get to you? Does it get 8 to respiratory failure, does it get organ shutdown, 9 or could it be a combination of things because of 10 all the different toxins?

11 A. It's more of a combination. And you can't 12 predict what a single envenomization is going to do 13 to a particular person. We don't know if it's going 14 to cause airway problems. We don't know if it's 15 going to cause fistulation. We don't know -- it 16 could be any combination of them because every 17 patient is different.

Different snakes have different soups in 19 their venom or soups of toxins in their venom. We 20 don't know how much venom the patient received. We 21 don't know if the venom was injected, let's say, 22 into a blood vessel, which would make it extremely 23 toxic and much more fatal or much more critical. 24 There's a lot of parameters we don't know. We don't 25 know if it's a dry bite. We don't know if it's a

Page 237

1 toxic bite.

So we can't know much about the bite, So we can't know much about the bite, So ther than there's been a bite. And that's why we have to look at all those other parameters to help us figure out whether or not we thought this was a toxic bite, indicating antivenom, or if it's a minor or a more-minor envenomization or a dry bite that doesn't require any antivenom.

9 Q. And did you read from the report from when 10 she was brought into EMS how the father had reported 11 that he set her down, and then the mother screamed 12 when he picked her back up that the snake was still 13 attached to her leg, and that they then got it off? 14 A. I read that.

Q. Okay. And so was it impactful for you -l6 I mean, I obviously haven't seen this child, but I 17 know she was three and I know that's little -- if 18 you have a snake, and I don't know how old the snake 19 was or how big the snake was, but was the impactful 20 that she was a tiny child and she had a snake 21 latching on to her for, you know, not just a strike, 22 but based on the snake attaching and the size of 23 child, I guess is what I'm getting at, if that was a 24 factor to you?

25 A. All those things are factors. Yes, I

1 would take that into consideration.

2 However, there's a couple of things that I 3 would say regarding that. Just as we talked about 4 earlier, when it comes to dosing the antivenom, we 5 don't chose different doses for pediatric patients 6 or for small patients because we have no way of 7 knowing exactly how much venom the patient was 8 envenomated with. That's why we give the standard 9 dose to everybody, adults or pediatric. On top of that, this particular 10 11 envenomization was right over her kneecap. What is 12 right under the skin of her kneecap? It's bone. Furthermore, the swelling that she had was 13 14 perfectly circular. It was limited to a very small 15 area, the size of a coin. This was not a big, fat 16 edema that was progressing quickly. This was not 17 circumferential swelling of the leq. There was none 18 of the blebs, blisters, that were formed. So there was a lot of features of her 19

20 presentation that told us that this was a more minor 21 envenomization, rather than a more serious 22 envenomization.

23 Could the fact that the snake hung on for 24 a period of time mean that she got more venom? For 25 sure. It's possible. There's no way for me to know

Page 238

Page 239 1 this. 2 Q. Okay. Thank you. HEARING OFFICER HALSTEAD: I just want to 3 4 make sure that I got all my questions answered, and 5 then I'll turn it back over counsel to follow up on 6 what I asked. I think that's all that I had. 7 Ms. Hueth, did you want to follow up on 8 9 any of my questions or ask questions to clarify 10 anything I may have asked? 11 MS. HUETH: No. I don't have anything 12 further. Thank you. 13 HEARING OFFICER HALSTEAD: Mr. Shogren? MR. SHOGREN: Nothing further. 14 HEARING OFFICER HALSTEAD: Okay. 15 16 Ms. Hueth, do you have other witnesses that you're 17 able to call today? 18 MS. HUETH: Not today, no. HEARING OFFICER HALSTEAD: Okay. And who 19 20 are your witnesses for tomorrow? 21 MS. HUETH: Tomorrow, I have my expert, 22 Dr. Levin. 23 HEARING OFFICER HALSTEAD: Any other 24 witnesses? 25 MS. HUETH: Nope. That's it.

Page 240 HEARING OFFICER HALSTEAD: Okay. And how long do you anticipate that testimony will last? MS. HUETH: Obviously I can only speak for 4 my questioning, so I anticipate an hour and a 5 half-ish.

6 HEARING OFFICER HALSTEAD: All right. Any 7 other housekeeping matters that we need to address 8 today?

9 MR. SHOGREN: Actually there is one. I 10 forgot to mention, I don't know if it's too late, 11 but earlier in the hearing today, there was an audio 12 recording played, respondent's Exhibit 7, and as I 13 recall, there was mention in that audio record of 14 the patient's name, specifically. I don't know if 15 there's a way that that could be redacted.

16 HEARING OFFICER HALSTEAD: Well, I mean, 17 the patient's name is all over the medical records. 18 Her name hasn't been redacted from any of them.

MR. SHOGREN: Right. But I'm just talking 20 specifically about the transcript that it would 21 generally appear.

HEARING OFFICER HALSTEAD: Well, I don't HEARING OFFICER HALSTEAD: Well, I don't think that that that was transcribed. That call has hot been transcribed. So the court reporter didn't transcribe that call. That would have to be

Page 241 1 separately transcribed and submitted as an exhibit 2 as a transcription of the call. 3 MR. SHOGREN: Okay. I just wanted to make 4 sure that the patient's name wouldn't be in the 5 transcription. That does not seem to be the case, 6 so okay. 7 HEARING OFFICER HALSTEAD: Anything else 8 anyone would like to address today before we 9 adjourn? Ms. Hueth, will your expert be available 10 11 by 8:30, the start time tomorrow? 12 MS. HUETH: Yep. 13 HEARING OFFICER HALSTEAD: Okay. And 14 everyone will be appearing from the locations 15 they're appearing from this afternoon? MS. HUETH: Yes. 16 17 HEARING OFFICER HALSTEAD: Okay. MS. HUETH: Well, obviously, except my 18 19 expert will be appearing remotely from a different 20 location. 21 HEARING OFFICER HALSTEAD: Okay. Thank 22 you. If there's nothing further, we'll adjourn for 23 the day, and we will reconvene tomorrow at 8:30 in 24 the morning. 25 (Hearing adjourned at 4:40 P.M.)

Page 242 1 STATE OF NEVADA ) ) ss. 2 COUNTY OF WASHOE ) 3 I, BRANDI ANN VIANNEY SMITH, do hereby 4 5 certify: That I was present on September 21, 2023, 6 7 for the herein entitled hearing via Zoom, and took 8 stenotype notes of the proceedings entitled herein, 9 and thereafter transcribed the same into typewriting 10 as herein appears. 11 That the foregoing transcript is a full, 12 true, and correct transcription of my stenotype 13 notes of said proceedings consisting of 242 pages, 14 inclusive. 15 DATED: At Reno, Nevada, this 3rd day of 16 October, 2023. 17 18 /s/ Brandi Ann Vianney Smith 19 20 BRANDI ANN VIANNEY SMITH 21 22 23 24 25

Page 243 HEALTH INFORMATION PRIVACY & SECURITY: CAUTIONARY NOTICE 1 2 Litigation Services is committed to compliance with applicable federal and state laws and regulations ("Privacy Laws") governing the 3 protection and security of patient health information. Notice is herebygiven to all parties that transcripts of depositions and legal 5 proceedings, and transcript exhibits, may contain patient health 6 information that is protected from unauthorized access, use and 7 disclosure by Privacy Laws. Litigation Services requires that access, 8 9 maintenance, use, and disclosure (including but not limited to electronic database maintenance and access, storage, distribution/ 10 11 dissemination and communication) of transcripts/exhibits containing patient information be performed in compliance with Privacy Laws. 12 13 No transcript or exhibit containing protected patient health information may be further disclosed except as permitted by Privacy 14 Laws. Litigation Services expects that all parties, parties' 15 attorneys, and their HIPAA Business Associates and Subcontractors will 16 17 make every reasonable effort to protect and secure patient health information, and to comply with applicable Privacy Law mandates, 18 including but not limited to restrictions on access, storage, use, and 19 disclosure (sharing) of transcripts and transcript exhibits, and 20 21 applying "minimum necessary" standards where appropriate. It is 22 recommended that your office review its policies regarding sharing of 23 transcripts and exhibits - including access, storage, use, and disclosure - for compliance with Privacy Laws. 24 25 © All Rights Reserved. Litigation Services (rev. 6/1/2019)



# IC'S ADMITTED EXHIBITS

1	<b>BEFORE THE BOARD OI</b>	F MEDICAL EXAMINERS				
2		E OF NEVADA				
3		* * *				
4						
5	In the Matter of Charges and Complaint	Case No. 23-29251-1				
6	Against:	FILED				
7	JASON HOWARD LASRY, M.D.,	MAR - 8 2023				
8	Respondent.	NEVADA STATE BOARD OF				
9		By:				
10	COMP	PLAINT				
11	The Investigative Committee <sup>1</sup> (IC) of t	the Nevada State Board of Medical Examiners				
12	(Board), by and through William P. Shogren, I	Deputy General Counsel and attorney for the IC,				
13	having a reasonable basis to believe that Jason Howard Lasry, M.D. (Respondent) violated the					
14	provisions of Nevada Revised Statutes (NRS) Chapter 630 and Nevada Administrative Code (NAC)					
15	Chapter 630 (collectively, the Medical Practice Act), hereby issues its Complaint, stating the IC's					
16	charges and allegations as follows:					
17	1. Respondent was at all times relative to this Complaint a medical doctor holding an					
18	active license to practice medicine in the State of	of Nevada (License No. 10970). Respondent was				
19	originally licensed by the Board on June 7, 2004.					
20		d female at the time of the events at issue.				
21		nted to Respondent for medical care at Humboldt				
22	General Hospital in Winnemucca, Nevada, after	being bitten by a snake on her left knee earlier in				
23	the day.					
24		al Hospital, Patient A had an elevated heart rate,				
25	indicating tachycardia. Patient A also had pro	ogressive swelling of her left leg, where two (2)				
26		The transformed and the sine ship from a				
27	Complaint was authorized for filing, was composed of E	State Board of Medical Examiners, at the time this formal Board members Bret W. Frey, M.D., Carl N. Williams, Jr.,				
28	M.D., and Col. Eric D. Wade, USAF (Ret.). <sup>2</sup> Patient A's true identity is not disclosed her Designation served upon Respondent along with a copy of	ein to protect her privacy, but is disclosed in the Patient f this Complaint.				
	1	of 6 NSBME 001				

OFFICE OF THE GENERAL COUNSEL Nevada State Board of Medical Examiners 9600 Gateway Drive Reno, Nevada 89521 (775) 688-2559

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puncture marks were observed on her left knee and had muscle weakness in her left leg, including
 the inability to move the affected leg on her own.

5. Patient A's stay at Humboldt General Hospital totaled close to three (3) hours.
 During this time, Patient A's heart rate measured from 149 beats per minute to 154 beats per minute, indicating continued tachycardia.

6. Respondent documented Patient A's vital signs but did not document Patient A's blood pressure measurements. Respondent's notes during Patient's A presentation did not discuss a recognition of Patient A's continued tachycardia.

7. Respondent spoke with the hospitalist at Humboldt General Hospital, who expressed preference to have Patient A transferred to another facility with a higher level of care.

8. Respondent then spoke with a physician at Renown Regional Medical Center (Renown) in Reno, Nevada. It was then arranged to have Patient A transferred from Humboldt General Hospital to Renown. Initially, it was decided to transport Patient A via helicopter, but then the decision was made to transport Patient A via ground ambulance.

9. Respondent did not document that he spoke with any other physicians regarding Patient A's snake bite.

10. During Patient A's entire time at Humboldt General Hospital on May 9, 2020,
Respondent elected not to provide an antivenom injection to Patient A, although the appropriate
antivenom was available at Humboldt General Hospital on the day of Patient A's arrival.

11. The first documented blood pressure measurement on May 9, 2020, was taken by
Emergency Medical Services prior to Patient A's departure from Humboldt General Hospital.
Patient A's blood pressure reading was 59/40, indicating low blood pressure (hypotension).

12. Prior to transferring Patient A by ambulance, Respondent failed to administer the
appropriate antivenom, despite clear evidence of Patient A's critical life signs and uncompensated
shock.

26 13. Despite clear evidence of Patient A's medical instability, Respondent transferred
27 Patient A from Humboldt General Hospital to Renown via ground ambulance, whereupon
28 Patient A expired on May 13, 2020, as a result of the snake bite.

1	<u>COUNT I</u>
2	NRS 630.301(4) - Malpractice
3	14. All of the allegations contained in the above paragraphs are hereby incorporated by
4	reference as though fully set forth herein.
5	15. NRS 630.301(4) provides that malpractice of a physician is grounds for initiating
6	disciplinary action against a licensee.
7	16. NAC 630.040 defines malpractice as "the failure of a physician, in treating a
8	patient, to use the reasonable care, skill, or knowledge ordinarily used under similar
9	circumstances."
10	17. As demonstrated by, but not limited to, the above-outlined facts, Respondent failed
11	to use the reasonable care, skill or knowledge ordinarily used under similar circumstances when
12	rendering medical services to Patient A, by failing to recognize hypotension and tachycardia in a
13	patient who had been bitten by a snake, and by failing to treat her diminishing condition, failure of
14	which led to Patient A's expiration.
15	18. By reason of the foregoing, Respondent is subject to discipline by the Board as
16	provided in NRS 630.352.
17	<u>COUNT II</u>
18	NRS 630.306(1)(b)(2) - Violation of Standards of Practice Established by Regulation –
19	Failure to Consult
20	19. All of the allegations contained in the above paragraphs are hereby incorporated by
21	reference as though fully set forth herein.
22	20. Violation of a standard of practice adopted by the Board is grounds for disciplinary
23	action pursuant to NRS 630.306(1)(b)(2).
24	21. NAC 630.210 requires a physician to "seek consultation with another provider of
25	health care in doubtful or difficult cases whenever it appears that consultation may enhance the
26	quality of medical services."
27	22. Respondent failed to timely seek consultation with regard to Patient A's medical
28	condition on May 9, 2020 and Respondent should have consulted with a medical toxicologist to
	3 of 6 NSBME 003

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address the doubtfulness of the diagnosis of Patient A's medical condition and such a timely
 consultation would have confirmed or denied such a diagnosis and may have enhanced the quality
 of medical care provided to Patient A with regard to the need for antivenom and other therapies.

23. By reason of the foregoing, Respondent is subject to discipline by the Nevada State Board of Medical Examiners as provided in NRS 630.352.

#### **COUNT III**

#### NRS 630.3062(1)(a) - Failure to Maintain Appropriate Medical Records

24. All of the allegations contained in the above paragraphs are hereby incorporated by reference as though fully set forth herein.

25. NRS 630.3062(1)(a) provides that the "failure to maintain timely, legible, accurate and complete medical records relating to the diagnosis, treatment and care of a patient" constitute grounds for initiating discipline against a licensee.

26. Respondent failed to maintain complete and proper medical records relating to the diagnosis, treatment and care of Patient A, by failing to document his actions when he treated Patient A, whose medical records were not timely, legible, accurate, and complete. Respondent's medical records were not accurate and complete by failing, on May 9, 2020, to note a recognition of Patient A's elevated heart rate (tachycardia), or a recognition of Patient A's continued tachycardia, despite treatment with IV fluids, or a recognition of Patient A's low blood pressure (hypotension).

20 27. By reason of the foregoing, Respondent is subject to discipline by the Board as 21 provided in NRS 630.352.

22 WHEREFORE, the Investigative Committee prays:

That the Board give Respondent notice of the charges herein against him and give
 him notice that he may file an answer to the Complaint herein as set forth in
 NRS 630.339(2) within twenty (20) days of service of the Complaint;

26
2. That the Board set a time and place for a formal hearing after holding an Early
27
27 Case Conference pursuant to NRS 630.339(3);

28 || / / /

		-
	1	3. That the Board determine what sanctions to impose if it determines there has been
	2	a violation or violations of the Medical Practice Act committed by Respondent;
	3	4. That the Board award fees and costs for the investigation and prosecution of this
	4	case as outlined in NRS 622.400;
	5	5. That the Board make, issue and serve on Respondent its findings of fact,
	6	conclusions of law and order, in writing, that includes the sanctions imposed; and
	7	6. That the Board take such other and further action as may be just and proper in these
	8	premises.
	9	DATED this <u>8th</u> day of March, 2023.
EL	10	INVESTIGATIVE COMMITTEE OF THE NEVADA STATE BOARD OF MEDICAL EXAMINERS
UNS	11	NEVADA STATE BOARD OF MILDICAL LAMMINERS
CE OF THE GENERAL COUNSEL Nevada State Board of Medical Examiners 9600 Gateway Drive Reno, Nevada 89521 (775) 688-2559	12	By: Will LIAM D SHOCDEN
ENERA of Medical eway Drive evada 89521 688-2559	13	WILLIAM P, SHOGREN Deputy General Counsel
E GENER/ 30ard of Medical 0 Gateway Drive 10, Nevada 89521 (775) 688-2559	14	9600 Gateway Drive Reno, NV 89521
THE C ate Board 9600 Gau Reno, N (775)	15	Tel: (775) 688-2559 Email: <u>shogrenw@medboard.nv.gov</u>
OF 7 ada Str	16	Attorney for the Investigative Committee
OFFICE OF THE Nevada State Boa 9600 Reno, (77)	17	
OF	18	
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		5 of 6 NSBME 005

<sup>6 of 6</sup> NSBME 006	OFFICE OF THE GENERAL COUNSEL Nevada State Board of Medical Examiners 9600 Gateway Drive Reno, Nevada 89521 (775) 688-2559	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	STATE OF NEVADA       )         STATE OF NEVADA       )         COUNTY OF WASHOE       )         Bret W. Frey, M.D., having been duly swom, hereby deposes and states under penalty of perjury that he is the Chairman of the Investigative Committee of the Nevada State Board of Medical Examiners that authorized the Complaint against the Respondent herein; that he has read the foregoing Complaint; and that based upon information discovered in the course of the investigation into a complaint against Respondent are true, accurate and correct.         DATED this <u>8th</u> day of March, 2023.         INVESTIGATIVE COMMITTEE OF THE NEVADA STATE BOARD OF MEDICAL EXAMINERS         By:         WINTER BOARD OF MEDICAL EXAMINERS         By:         BRET W. MEY, M.D.         Chairman of the Investigative Committee	
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1	CERTIFICATE OF SERVICE	
2	I hereby certify that I am employed by the Nevada State Board of Medical Examiners and	
3	that on the 8th day of March, 2023, I served a file-stamped copy of the foregoing COMPLAINT	
4	and PATIENT DESIGNATION, with accompanying required fingerprinting materials via	
5	U.S. Certified Mail, to the following parties:	
6	JASON HOWARD LASRY, M.D.	
7	Tracking No.: 9171 9690 0935 0254 7667 97	
8	DATED this day of March, 2023.	
9	DATED uns uay of March, 2025.	
10	$\sim$	
11	MERCEDES FUENTES Legal Assistant	
12	Nevada State Board of Medical Examiners	
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	NSBME 007	

	1 2 3	BEFORE THE BOARD OF MEDICAL EXAMINERS OF THE STATE OF NEVADA * * * * *							
	4								
	5	In the Matter of Charges and Complaint Case No. 23-29251-1							
	6	Against: FILED							
	7	JASON HOWARD LASRY, M.D. MAR 2 9 2023							
	8 9	Respondent. NEVADA STATE BOARD OF MEDICAL EXAMINERS By:							
	10	PROOF OF SERVICE							
	11	I, Mercedes Fuentes, Legal Assistant for the Nevada State Board of Medical Examiners							
	12	hereby certify that on March 8, 2023, I sent a filed-stamped copy of the COMPLAINT an							
2	13	PATIENT DESIGNATION, along with required fingerprinting materials to:							
	14	JASON HOWARD LASRY, M.D.							
	15	15							
	16	via U.S. Certified Mail, tracking no. 9171969009350254766797. Tracking for this parcel shows							
	17	that notice was left for pickup of the certified mailing and that it has not been claimed							
	18	See Exhibit 1.							
	19	On March 20, 2023, Respondent left a voicemail on my phone (775-324-9380) indicatin							
	20	that he received the filed formal complaint and wanted to know the next steps of proceeding							
	21	forward.							
	22	On March 23, 2023, I received a mailing from Respondent that contained a complete							
	23	fingerprint card and fingerprinting waiver.							
	24	Upon information and belief, Respondent did pick up the certified mailing and the trackin							
	25	5 information, by error, has not been updated. For the reasons listed above, service is believed to b							
	26	5 ///							
	27	///							
	28	///							
		NSBME 008							

OFFICE OF THE GENERAL COUNSEL Nevada State Board of Medical Examiners 9600 Gateway Drive Reno, Nevada 89521 (775) 688-2559	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	effectuated upon Respondent and the Complaint, Patient Designation and fingerprinting materials are considered served. DATED this day of March, 2023. MERCEDES FUENTES Legal Assistant Nevada State Board of Medical Examiners
		NSBME 009

## **EXHIBIT 1**

#### **USPS Tracking**<sup>®</sup>

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Arrived at USPS Regional Facility RENO NV DISTRIBUTION CENTER March 8, 2023, 10:45 pm Hide Tracking History

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FAQs

#### NEVADA STATE BOARD OF MEDICAL EXAMINERS

325 E. Warm Springs Road, Suite 225 Las Vegas, NV 89119

Rachakonda D. Prabhu, M.D. Board President

Edward O. Cousineau, J.D. Executive Director



Jason Lasry, M.D.

#### RE: BME CASE #: PATIENT:

weit.

Dear Dr. Lasry,

We have received information and a complaint regarding your medical treatment of the above named patient. The complaint alleges your care and treatment of the patient may have fallen below the standard of care.

It is alleged:

1. The patient presented to you on or around May 9, 2020, to Humbolt General Hospital located at 118 E. Haskell St., Winnemucca, NV 89445 by ambulance after being bitten by a rattlesnake on her left knee.

2. You failed to administer antivenom to the patient; instead agreeing to transfer the patient to Renown Regional Medical Center without first stabilizing the patient.

3. Life Flight was cancelled and a decision was made to transport the patient via ambulance to Renown Regional Medical Center located at 1155 Mill St., Reno, NV 89502 even though the patient was in poor condition and near death.

It is further alleged:

4. On or around May 13, 2020, the patient succumbed as a result of the rattlesnake bite.

It is further alleged:

5. You may have been deceptive with the Nevada State Board of Medical Examiners on your renewal for failing to answer "yes" to being "Named Defendant Respond to Legal Action" regarding Washoe County Second Judicial District Court Case CV21-00866 filed May 7, 2021.

17/18/21

L-35A

According to these allegations, you may have violated the Nevada Medical Practice Act, Nevada Revised Statutes, Chapters 629 and 630, and Nevada Administrative Code, Chapters 629 and 630 (NMPA).

1. 1

In order to determine whether or not there has been a violation of the NMPA, <u>please provide a</u> <u>written response to each allegation noted above, as well as complete health care records for</u> <u>the aforesaid patient[s]</u>. <u>Include copies of any imaging, x-ray or other films that were</u> <u>produced during treatment of this patient</u>. Please include any further information you believe would be useful for the Board to make a determination in this matter. <u>Please reply to this</u> <u>request within 30 calendar days</u>.

<u>Please return the health care records with the signed Custodian of Records Affidavit,</u> <u>enclosed herewith. If you are not a custodian of the patient records, please indicate where</u> <u>the health care records can be obtained.</u>

The Nevada State Board of Medical Examiners investigates all information received concerning possible violations of the NMPA. We make no determination as to whether or not there has been a violation of the NMPA until a thorough investigation is completed. As a physician under investigation by the Board, you are required by the NMPA to provide the requested information, and your cooperation is not subject to the whistle-blower protections provided to physicians in NRS 630.364(3).

Please be advised that if the particular allegations referenced above did occur, and depending on the facts and circumstances, then you may have violated the NMPA, specifically including but not limited to: NRS 630.301(4), NAC 630.040, NRS 630.3067(1)(a) & NAC 630.306(1)(b)(2).

Respectfully

Kim Friedman, CMBI Sr. Investigator Las Vegas Office

#### Jason Lasry, MD

Board Certified Emergency Physician A Professional Corporation



August 18, 2021

Kim Friedman Nevada State Board of Medical Examiners 325 E. Warm Springs Road, Ste. 225 Las Vegas, NV 89119

Re: BME C	ase#:	
Patient:		

Dear Medical Board,

I am in receipt of your July 19, 2021 correspondence requesting information regarding my treatment of **Sector 19**. I am not the custodian of records as Humboldt General Hospital maintains the patient's records.

Responses:

- 1. I did treat for a snakebite injury on May 9, 2020. The patient was transported via EMS. Upon arrival it was reported that the patient was bitten by a rattlesnake about 90 minutes prior. The patient's father reportedly tried sucking out the venom immediately.
- 2. I did not fail to administer antivenom. Instead, a joint decision was made to hold off on providing antivenom after making a complete and thorough risk benefit analysis. This analysis was well documented in my note. Specifically, upon evaluation, I noted 2 puncture wounds on the anterior left knee. There was a small amount of eccyhmosis in that area, but no significant swelling, no necrosis, petechia, vesicles ulcers or pustules. The patient was awake, talking, and watching a movie on her mother's phone.

The decision to administer antivenom must include careful weighing of the risks and benefits. Patients with minor envenomation do not routinely receive antivenom. I performed a full physical evaluation and ordered labs to determine whether there were signs of systemic envenomation. Additionally, the patient was observed for a period and only found to have minimal progression of edema at the envenomation site. At that time, I did not think antivenom in the emergency department was warranted, but may be indicated at a later time. I made all of this information and the reasoning behind my recommendation not to administer antivenom at that time to the patient's mother who expressed her understanding and agreement.

Antivenom is associated with severe allergic reactions and is generally administered in the ICU or other setting where the patient can be continuously monitored. I discussed the patient's presentation and findings with the hospitalist who stated she had never cared for a patient with rattlesnake envenomation and would not be comfortable accepting admission of the patient. She requested the patient be transferred to a facility with a higher level of care.

I then contacted the pediatric emergency medicine physician at the receiving hospital to discuss the patient's presentation, workup, and current condition. After consultation, the receiving physician also agreed that antivenom was not indicated at that time. I discussed this joint decision with the patient's mother.

I disagree that I agreed to transfer the patient to Renown without first stabilizing her. At the time the patient was being prepared for transport, she did not have any pain, her oxygen saturation was normal, and she was alert and talking with her mother.

- 3. It is correct that Life Flight was cancelled and it was decided to transport the patient via ambulance. We tried to arrange air transport for the patient. However, the helicopter flight was cancelled at the mother's request. The patient's mother insisted that she be transported with the patient. Since the mother is morbidly obese, the helicopter could not accomodate the additional weight, and for this reason transfer by ambulance was requested instead. Again, this decision was due to the mother's insistence. I deny the allegation that the patient was transported via ambulance "even though the patient was in poor condition and near death." As discussed above, the patient appeared stable for transport.
- 4. It is my understanding that the patient died on May 13, 2020 due to cessation of cardiac function secondary to multi-organ dysfunction syndrome. I was not involved in the patient's care after May 9<sup>th</sup> and can't comment on the subsequent events. This was a tragic outcome that I did not anticipate when the patient left the emergency department. I would not have agreed to ground transport if I felt the patient's imminent deterioration was likely.
- 5. I was not deceptive when renewing my license. I renewed my NV medical license on May 17, 2021. I was served with the summons for this case on

June 3, 2021. You can verify this from your records, and I can provide my payment receipt from May 17<sup>th</sup> proving this fact.

I have tried to fully respond to all of the questions in your request. Thank you for your consideration and please feel free to contact me with any further questions in regard to my application.

Truly yours,

/s/ Jason Lasry

Jason Lasry, M.D. FAAEM

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JL

#### NEVADA STATE BOARD OF MEDICAL EXAMINERS

325 E. Warm Springs Road, Suite 225 Las Vegas, NV 89119

Victor M. Muro, M.D. Board President



Edward O. Cousineau, J.D. Executive Director

October 12, 2021

Humbolt General Hospital ATTN: Health Care Records/ ROI & Radiology 118 E. Haskell St. Winnemucca, NV 89445

#### RE: BME CASE PATIENT:

To Whom It May Concern:

Pursuant to Nevada law (Nevada Revised Statutes (NRS) 629.061), the Nevada State Board of Medical Examiners requests copies of the health care records of the above named patient, to include copies of any X ray or other films, treated at your facility beginning May 9, 2020, through present. If the health care records and films are available to be provided on disk, that is preferred.

Please provide the health care records in an electronic searchable format.

NRS 629.061 requires each provider of health care to make the health care records of a patient available for physical inspection and shall furnish a copy of the records to any authorized representative or investigator of a state licensing board during the course of any investigation authorized by law.

NRS 629.021 defines health care records as: "any reports, notes, orders, photographs, X-rays or other recorded data or information whether maintained in written, electronic or other form which is received or produced by a provider of health care, or any person employed by a provider of health care, or any person employed by a provider of health care, and contains information relating to the medical history, examination, diagnosis or treatment of the patient."

#### <u>Please return the health care records with the signed Custodian of Records Affidavit,</u> enclosed herewith.

The Board investigation files are confidential. The physician-patient confidentiality is protected by the Board and its staff as required by law.

Please forward the records to the Investigative Committee of the Board within 21 days.

If you have questions or we may be of assistance, please call me at (702) 486-3339.

Telephone 702-486-3300 • Fax 702-486-3301 • www.medboard.nv.gov • nsbme@medboard.nv.gov Rev. 03-10-2021 NSBME 018

Respectfully,

Kim Friedman, CMBI Sr. Investigator Las Vegas Office

#### CERTIFICATE OF CUSTODIAN OF RECORDS OR HUMBOLT GENERAL HOSPITAL

STATE OF NEVADA COUNTY OF Humbold+ ) SS.

NOW COMES <u>Kally Patterson</u> (name of custodian of records), who after being first duly sworn, deposes and says:

1. That I am the <u>Clerk</u> (position or title) of <u>Humboldt General Hospital</u>(name of company or employer) and in my capacity as Clerk (position or title), I am a custodian of the records of Humboldt General Hospital (name of company or employer).

2. That <u>Humboldt General Hogritul</u>(name of company or employer) is licensed to do business as a <u>Hospital</u> in the State of Nevada.

3. That on the 25 day of the month of October of the year 2021, I received a request for health care records in connection with the Nevada State Board of Medical Examiners Case No. 21-20403, calling for the production of records pertaining to

4. That I have examined the original of those records and have made or caused to be made a true and exact copy of them and the reproduction attached hereto is true and complete.

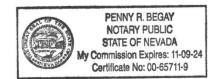
5. That the original of those records was made at or near the time of the act, event, condition, opinion or diagnosis recited therein by or from information transmitted by a person with knowledge, in the course of a regularly conducted activity of <u>Humboldt General</u> (name of company or employer).

Executed on: 10/27/2021 Control Signature of Custodian of Records

SUBSCRIBED AND SWORN to before me this 27 day of October, 2021.

NOTARY PUBLIC in and for the County of HUM bo bl, State of Nevada.

My commission expires: 1/-09-2024



Rev. 03-10-2021 NSBME 020

# MEDICAL RECORDS

This exhibit contains personal medical information, records of a patient or other personal identifying information that is confidential and otherwise protected from disclosure to the public pursuant to NRS 622.310.

## **EXHIBIT 7**

## **EXHIBIT 7**

**NEVADA STATE BOARD OF MEDICAL EXAMINERS** 

325 E. Warm Springs Road, Suite 225 Las Vegas, NV 89119

Victor M. Muro, M.D. Board President



Edward O. Cousineau, J.D. Executive Director

October 12, 2021

Renown Regional Medical Center ATTN: Health Care Records/ ROI & Radiology 1155 Mill St. Reno, NV 89502

RE: BME CASE PATIENT:

To Whom It May Concern:

Pursuant to Nevada law (Nevada Revised Statutes (NRS) 629.061), the Nevada State Board of Medical Examiners requests copies of the health care records of the above named patient, <u>to</u> <u>include copies of any X ray or other films</u>, treated at your facility <u>beginning May 9, 2020</u>, <u>through present</u>. If the health care records and films are available to be provided on disk, that is preferred.

Please provide the health care records in an electronic searchable format.

NRS 629.061 requires each provider of health care to make the health care records of a patient available for physical inspection and shall furnish a copy of the records to any authorized representative or investigator of a state licensing board during the course of any investigation authorized by law.

NRS 629.021 defines health care records as: "any reports, notes, orders, photographs, X-rays or other recorded data or information whether maintained in written, electronic or other form which is received or produced by a provider of health care, or any person employed by a provider of health care, or any person employed by a provider of health care, and contains information relating to the medical history, examination, diagnosis or treatment of the patient."

## <u>Please return the health care records with the signed Custodian of Records Affidavit,</u> enclosed herewith.

The Board investigation files are confidential. The physician-patient confidentiality is protected by the Board and its staff as required by law.

Please forward the records to the Investigative Committee of the Board within 21 days.

If you have questions or we may be of assistance, please call me at (702) 486-3339.

10/25/21

- Telephone 702-486-3300 • Fax 702-486-3301 • www.medboard.nv.gov • nsbme@medboard.nv.gov

Respectfully ,

Kim Friedman, CMBI Sr. Investigator Las Vegas Office

## **CERTIFICATE OF CUSTODIAN OF RECORDS**

	CERTIFICATE OF	CUSTODIAN OF RECORDS	NEVADA STATE BOARD OF BABNIMAXE JADIQAU
STATE OF NEVADA	)	Case No.	0CL 5 2 2051
COUNTY OF WASHOE	) ss. 2 )		RECEIVED

NOW COMES Lisa Castro (name of custodian of records), who after first being duly sworn deposes and says:

1. That the deponent is the Manager (position or title) of Renown Health (name of employer) and in his or her capacity as Manager (position or title) is a custodian of the records of Renown Health (name of employer).

2. That <u>Renown Health</u> (name of employer) is licensed to do business in the State of Nevada.

3. That on the 18 day of the month of October of the year 2021 the deponent was served with an authorization or subpoend in connection with the above-entitled cause, calling for the production of records pertaining to: **Renown Regional Medical Center- Medical** Records and Radiology studies/films for dates of service 5/9/2020 to 10/12/2021.

4. That the deponent has examined the original of those records and has made or caused to be made a true and exact copy of them and that the reproduction of them attached hereto is true and complete.

5. That the original of those records was made at or near the time of the act, event, condition, opinion or diagnosis recited therein by or from information transmitted by a person with knowledge, in the course of a regularly conducted activity of the deponent or <u>Renown Health</u> (name of employer).

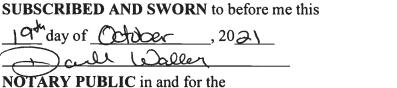
6. That a thorough search of our files, carried out under my direction and control, revealed no record of the following documents: None

Executed on: 10 | 9 | 202|

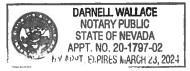
Kennv

ΗΓΔΙΤΗ

of Custodian of Records



County of Upshoe, State of Neugla



MEDICAL EXAMINERS

# MEDICAL RECORDS

This exhibit contains personal medical information, records of a patient or other personal identifying information that is confidential and otherwise protected from disclosure to the public pursuant to NRS 622.310.

## **EXHIBIT 10**

## **EXHIBIT 10**

## Europe PMC Funders Group Author Manuscript Lancet. Author manuscript; available in PMC 2013 October 03.

Published in final edited form as: Lancet. 2011 March 19; 377(9770): 1011–1018. doi:10.1016/S0140-6736(10)62226-X.

## Normal ranges of heart rate and respiratory rate in children from birth to 18 years: a systematic review of observational studies

Susannah Fleming<sup>1,4</sup> [Research Fellow], Matthew Thompson<sup>1,2</sup> [Senior Clinical Scientist] [Associate Professor], Richard Stevens<sup>1</sup> [Senior Statistician], Carl Heneghan<sup>1</sup> [Clinical Lecturer], Annette Plüddemann<sup>1</sup> [Researcher], Ian Maconochie<sup>3</sup> [Consultant Paediatrician], Lionel Tarassenko<sup>4</sup> [Professor of Electrical Engineering], and David Mant<sup>1</sup> [Emeritus Professor of General Practice]

<sup>1</sup>Oxford University Department of Primary Health Care, Rosemary Rue Building, Old Road Campus, Headington, Oxford, OX3 7LF.

<sup>2</sup>Department of Family Medicine, Oregon Health and Sciences University, Portland, Oregon, USA.

3A&E, St Mary's Hospital, Praed St, London W2 1NY

<sup>4</sup>Oxford University Institute of Biomedical Engineering, Department of Engineering Science, Old Road Campus, Headington, Oxford, OX3 7LF.

## Summary

**Background**—Although heart rate and respiratory rate are routinely measured in children in acute settings, current reference ranges are not evidence-based. The aim of this study is to derive new centile charts for heart rate and respiratory rate using systematic review data from existing studies, and to compare these with existing international ranges.

**Methods**—We searched MEDLINE, EMBASE, and CINAHL to April 2009, and reference lists to identify studies which had measured heart rate and/or respiratory rate in normal children between birth and 18 years of age. We used a non-parametric kernel regression method to create centile charts for heart rate and respiratory rate with respect to age. We compared existing reference ranges with those derived from the centile charts.

**Findings**—We included 69 studies, 59 of which provided data on the heart rate of 143,346 children, and 20 on the respiratory rate of 3,881 children. Our new centile charts demonstrate the decline in respiratory rate from birth to early adolescence, with the steepest decline apparent in infants under two years; decreasing from a median of 44 breaths/minutes at birth to 26 breaths/ minute at the age of two. The heart rate centile chart demonstrates a small peak at one month of age. The median heart rate increases from 127 beats/minute at birth to a maximum of 145 beats/ minute at approximately one month of age, before decreasing to 113 beats/minute by the age of two. Comparison of the centile charts with existing published reference ranges for heart rate and respiratory rate show marked disagreement with the centile charts, with limits from published ranges frequently exceeding the 99th and 1st centiles, or crossing the median.

Interpretation—Our review shows that existing international guidelines for heart rate and respiratory rate in children are not based on evidence. We have created new centile charts based

Correspondence to: Matthew.Thompson@dphpc.ox.ac.uk.

Contributions SF and MT identified eligible studies. MT and IM identified sources of existing reference ranges. SF and AP carried out the data extraction. SF and RS carried out the statistical analysis. All authors contributed to the writing of the paper. Conflicts of interest IM is the UK chair for the European Paediatric Life Support Course, and a member of the European Guidelines writing team.

on a systematic review of studies which have measured these vital signs in normal children. Clinical and resuscitation guidelines should be updated in the light of these evidence-based reference ranges.

**Funding**—Research funded by the National Institute for Health Research programme grant for applied research 'Development and implementation of new diagnostic processes and technologies in primary care'. SF was funded by the Engineering and Physical Sciences Research Council and the National Institute for Health Research Biomedical Research Centre Programme.

### Keywords

children; heart rate; respiratory rate; normal; centiles; ranges

### Introduction

Heart rate and respiratory rate are key vital signs used to assess the physiological status of children in many clinical settings. They are used as initial measurements in acutely unwell children, as well as in those undergoing more intensive monitoring in high dependency or intensive care settings. During cardiopulmonary resuscitation, heart rate and respiratory rate are critical values used to determine responses to lifesaving interventions. Heart rate and respiratory rate remain an integral part of the standard clinical assessment of children presenting with acute illnesses,<sup>1</sup> and are used in paediatric early warning scores<sup>2,3</sup> and triage screening.<sup>4,5</sup> Early warning scores are widely used in routine clinical care, and there is good evidence that they can provide early warning of clinical deterioration in hospitalised children and in emergency situations.<sup>6–9</sup>

Reference ranges for heart rate and respiratory rate in children are published by a variety of international bodies (Web Box 1). Of these, only two guidelines quote sources for their reference ranges: the Pediatric Advanced Life Support (PALS) guidelines<sup>10</sup> cite two textbooks,<sup>11,12</sup> neither of which cite sources for their ranges, and the WHO limits for respiratory rate, which are based on measurements made in developing countries.<sup>13</sup> The evidence underpinning the guidelines is therefore limited, and it is likely that many of the ranges are based on clinical consensus.

Scoring systems underpinning triage and resuscitation protocols for children invariably require measurement of heart rate and respiratory rate. Measured rates are converted to a numerical score by applying age-specific thresholds. Accurate reference ranges are key to assessing whether a vital sign is abnormal. Thresholds that are incorrectly set too low risk overdiagnosing tachycardia or tachypnoea, whereas ones set too high risk missing children who do have tachycardia or tachypnoea. In addition, a reference range that is applied to an age range that is too broad is likely to lead to incorrect assessment of children within some parts of these age groups.

The aim of the present study is to develop new age-specific centiles for heart rate and respiratory rate in children, derived from a systematic review of all studies which measured these vital signs in normal children. We use these centiles to define new evidence-based reference ranges for normal children, which we compare with the existing reference ranges.

## Methods

## Search strategy and selection criteria

We included published studies based on the inclusion and exclusion criteria in Box 1. There were no language restrictions. We searched MEDLINE (1950 to April 2009), EMBASE

Sources of existing reference ranges were identified by clinicians (MT, IM). To reflect the likely exposure of clinicians to reference ranges, we concentrated on ranges published in resuscitation guidelines, manuals for standardised clinical training courses, and international guidelines from the WHO (Web Box 1). These sources are not intended to be exhaustive, as a variety of reference ranges may be found in textbooks and as part of triage scores or early warning scores. These reference ranges were not considered in this review because of their heterogeneity.

#### **Data extraction**

The following data were extracted by one author (SF), and checked by a second reviewer (AP): year of study, participants (age range, number, reason for measurements being performed), study setting, method of measurement, and whether awake or asleep. The minimum and maximum ages of the group and the sample size were extracted, with the reported summary statistics (i.e. mean, median, centiles, standard deviation, confidence intervals, and/or standard error) for heart rate and/or respiratory rate. Where data were reported separately (i.e. for male and female subjects, or for subjects in different ethnic groupings) within the same age group, we treated them as independent groups.

Where multiple results were reported for a single group of children at a particular age (e.g. in different phases of sleep, or using different measurement methods) we selected a single data point to avoid introducing bias, based on the following guidelines agreed prior to data extraction: i) if different measurement methods were used, data from the least invasive or stressful method were selected; ii) where data were presented as combined age groups, we selected data from separate age groups unless the age ranges spanned by the individual groups were very small (e.g. infants between one and two days of age); iii) we used the awake measures when both awake and asleep measurements were available; iv) we averaged readings over all sleep states where multiple states of sleep were reported; v) we used the first baseline result where multiple baseline measurements were recorded in intervention studies. The guidelines were chosen to ensure that the data used was relevant to the clinical setting, where children are typically awake and at rest, to improve the accuracy of the calculated centile charts, and to avoid potential confounding factors such as the definition of sleep states, or distress due to invasive measurements or interventions. Combined age groups were separated to ensure that the most accurate age range was associated with each data point, but very small age ranges were left combined, as it was felt that the benefit of accurate ages would be small, compared to the loss of accuracy for raw centiles calculated from small sample sizes.

## Data analysis

We calculated the median and representative centiles (1st, 10th, 25th, 75th, 90th, 99th) for the data from each included study. Where the relevant summary statistics were not reported by a study, we estimated them from the mean and standard deviation. We used Pearson's 2nd skewedness coefficient and Bowley skewness to test for skewness. We observed no skewness in either the heart rate or respiratory rate data, and so assumed a normal distribution at each age. We excluded two outlier values of data spread (one standard error, and one set of confidence intervals) as they resulted in negative respiratory rates for a number of centiles, which is not physiologically plausible.<sup>14,15</sup> We did not identify any outliers in the heart rate data.

We created centile charts using kernel regression, a form of non-parametric curve fitting<sup>16</sup> which avoids imposing an excessive degree of constraint on the resulting curves. We adjusted the classical kernel regression to take account of both the age range and sample size associated with each data point. More details on this method may be found in Web Annex 1. For both heart rate and respiratory rate, kernel regression was used to fit seven curves showing the variation with respect to age, using the calculated values for the median and six representative centiles from the included studies. These centiles were compared visually to the reference ranges in Web Box 1.

Subgroup analyses assessed whether the setting, economic development of the country, method of measurement, or awake/asleep state of the child had an effect on the vital signs after correction for age using the centile charts. While ideally separate centile charts could be created to compare subgroups, many subgroups did not contain sufficient data across the full age range to allow this. Therefore, the mean and standard deviation of the measured vital signs from each study were normalised using the centile charts, so that variations due to age were removed. The normalised data was analysed using one-way ANOVA, taking into account the size and variation in each study. In addition, regression analysis of the normalised means, weighted by the sample size of each study, was carried out to identify trends related to the date of publication.

We determined cut-off values for heart rate and respiratory rate using the data from the centile charts by calculating the mean value in each of 13 age groups covering the full range of ages (0-18 years). The age groups were selected to correspond to changes of approximately five beats/minute in heart rate and two breaths/minutes in respiratory rate. Cut-off values were selected based on this mean value by choosing an appropriate integer value.

### Role of the funding source

The sponsors of the study had no role in the study design, data collection, data analysis, data interpretation, writing of the report or the decision to submit the paper for publication. SF had full access to all the data in the study, and had final responsibility for the decision to submit for publication.

## Results

We identified 69 studies from an initial 2,028 publications (Figure 1). Of the 69 studies, 59 provided data on heart rate from 150,080 measurements on 143,346 children, and 20 provided data on respiratory rate from 7,565 measurements on 3,881 children, with ten studies providing data on both. Scatter plots of the data extracted from the studies are shown in Web Figure 1. Study types were cross-sectional (46), longitudinal (12), or case-control (11). Studies were performed in 20 different countries from four continents (Web Tables 2 & 3): 55 (80%) in developed countries (as defined by the United Nations Statistics Division), 7 (10%) in developing countries, and 7 (10%) in countries considered to be neither developing nor developed.

The number of subjects per study ranged from 20 to 101,259. Studies were carried out in the community e.g. home, school or kindergarten (27 studies, 26,024 measurements), in clinical settings e.g. hospitals, clinics or medical centres (19 studies, 105,982 measurements), in unspecified or multiple settings (17 studies, 15,957 measurements), and in research laboratories (6 studies, 3,976 measurements). Most measurements (32 studies, 132,891 measurements) were on awake children, while 8 studies (505 measurements) were on asleep children, and 29 studies (18,545 measurements) did not report the state of wakefulness, or did not distinguish between data from awake or asleep children.

Most studies measured heart rate with an electrocardiograph (ECG) (31 studies, 114,802 measurements), while others used automated blood pressure monitors (12 studies, 21,362 measurements), manual measurement (6 studies, 10,228 measurements), echocardiography (4 studies, 890 measurements), and pulse oximeters or proprietary heart rate monitors (6 studies, 2,798 measurements). The majority of respiratory rate measurements were made manually (7 studies, 6,531 measurements), with automated measurements using strain gauges, thermistors, thoracic impedance and helium dilution in 13 studies (1,034 measurements).

### Centiles of normal respiratory rate

The 1st to 99th centiles of respiratory rate in normal children from birth to 18 years of age are displayed in Figure 2. These demonstrate the decline in respiratory rate from birth to early adolescence, with the steepest decline apparent in infants during the first two years of life. The median respiratory rate decreases by 40% in these two years (44 breaths/minute at birth to 26 breaths/minute at two years). Web Table 4 presents the proposed cut-offs for respiratory rate at each of 13 age groups from birth to 18 years of age.

The subgroup analysis of the respiratory rate data showed no significant differences based on the type of study setting (P=0.09), level of economic development of the country in which it was carried out (P=0.83), wakefulness of the child (P=0.36), or whether manual or automated methods of measurement were used (P=1.00). Regression analysis on the dates of publication did not show any significant difference in measured respiratory rate (P=0.19).

Figure 3 shows how the centiles derived from our systematic review compare to two existing reference ranges (APLS and PALS). None of the existing reference ranges detailed in Web Box 1 showed good agreement with our centile charts across the whole age range from birth to 18 years of age, but the best agreement was seen with the ranges quoted by APLS and EPLS (European Paediatric Life Support Course).<sup>17,18</sup> Examples of this disparity can be seen in the graphs in Figure 3. For example, in children under one year of age, the APLS upper limit for respiratory rate is 40 breaths/minute, which approximates to the median value on our centile chart for children in this age range. In children over 12 years of age, the PALS upper limit of 16 breaths/minute is below the median value on our centile chart for much of this age range.

We noted that one median value of respiratory rate for children between 0 and 6 months of age,<sup>19</sup> was considerably higher than the median values at this age from many other studies. However, as can be seen from Web Figure 1(a), the spread of measured respiratory rates at these ages is very large. Since the kernel regression method used to create the centile charts takes account of both age range and sample size, it was not felt that this data point would bias the estimation, and so we did not consider this to be an outlier.

## Centiles of normal heart rate

The 1st to 99th centiles of heart rate against age are displayed in Figure 4, with the proposed cut-offs for heart rate in Web Table 5. These show a decline in heart rate with age. The first section of Figure 4, showing the heart rate centile chart for infants under one year of age, demonstrates a small peak in heart rate at one month of age. This peak is not an artefact of the modelling method, but can be observed in the primary data from a number of studies that report multiple measurements on infants under one year of age.<sup>20-25</sup> The median heart rate in this age range increases from 127 beats/minute at birth, reaching a maximum of 145 beats/minute at approximately one month of age, before decreasing to 113 beats/minute by two years of age.

Lancet. Author manuscript; available in PMC 2013 October 03.

Europe PMC Funders Author Manuscripts

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Subgroup analysis revealed that heart rates measured in community settings were higher (P<0.0001) than those measured in clinical or laboratory settings, and rates measured using automated techniques (e.g. ECG) were higher (P=0.0011) than those measured manually. Heart rates of children in developing countries were also found to be higher than those measured in awake children tended to be higher than those measured in asleep children, this did not reach statistical significance (P = 0.06). Regression analysis on the dates of publication showed that there was a small but significant trend in heart rate (P<0.0001), with older studies tending to measure lower heart rates than more recent studies.

Figure 5 compares the reference ranges from the APLS and PALS guidelines with our centiles of heart rate. Comparisons were also made between our centile chart and the other reference ranges cited in Web Box 1. As with respiratory rate, none of these ranges showed good agreement with our centile chart across the whole age range from birth to 18 years of age. The best agreement between the reference ranges for heart rate and our centile chart was observed with the APLS and ATLS reference ranges, <sup>17,26</sup> although both of these also showed considerable disagreement with our centile charts. For example, in children from 2 to 5 years of age, the APLS lower limit for heart rate is 95 beats/minute, which approximates to the 25th centile from our chart, and reaches the median heart rate at the upper end of the age range. In children 2 to 10 years of age, the upper limit for PALS is 140 beats/minute, which lies above the 99th centile from our chart for most of the age range.

## Discussion

The reference ranges for heart rate and respiratory rate cited in international paediatric guidelines, such as those presented in Web Box 1, are widely used as the basis for clinical decisions when interpreting vital signs in children. For example, the widely used PAWS and Brighton PEWS<sup>2,3</sup> assessment tools refer to APLS reference ranges. We have shown that: 1) there is considerable disagreement between these reference ranges; 2) they appear to be inconsistent with existing evidence on heart and respiratory rates in healthy children.

For clinicians involved in the assessment of children, our findings suggest that current consensus-based reference ranges for heart rate and respiratory rate should be updated with new thresholds based on our proposed centile charts, particularly for age groups where our findings show that many children are likely to be misclassified. Normal ranges, such as those published in textbooks and clinical handbooks, should also be updated in the light of our results. To assist the development of cut-offs for use in clinical settings, we present values corresponding to the median and six different centiles for both heart rate and respiratory rate for 13 age groups between birth and 18 years of age.

By providing several different centiles for children of all ages, we have given clinicians and those responsible for developing clinical guidelines and early warning scores sufficient information to select cut-offs that are most appropriate to the type of clinical setting in which they are likely to be used. Selection of an appropriate cut-off should take into account the likely derangement in vital signs associated with the level of illness that is to be detected, and the penalty associated with misclassifying both healthy and unwell children. Further research may be required in some areas to ascertain this. Where multiple measurements are made over time, the centile charts may also be used to assess the magnitude of changes in heart rate or respiratory rate.

Clinicians who wish to carry out accurate measurements of heart rate in children should be aware that manual measurement of heart rates, which is common practice in many settings, may underestimate the true rates. In these children, measurement of heart rate by automated

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methods provides more accurate results. Professional bodies responsible for publishing guidelines and scoring systems should consider revising current thresholds, by selecting heart rate and respiratory rate values that represent an upper centile for each age group. To facilitate this, the authors propose to make the data used to create Figures 2 and 4 freely available upon request.

A key strength of our approach is that the centile charts were created using kernel regression, a non-parametric modelling technique which avoids imposing any particular form onto the shape of the centile charts. This is particularly important for this type of data, as there is no reason to expect that it will follow an analytical function such as a straight line or exponential. However, a number of limitations to the method are worth noting. Our systematic review involved an extensive search of the available literature using three large databases, with no restriction on language or country of publication. However, it is possible that our search strategy and inclusion criteria may have missed relevant studies, particularly studies published before 1960. We excluded 13 studies as we were not able to extract the required data or could not obtain full copies, and we did not attempt to contact original authors to obtain individual patient data, as this would not have been feasible given the number of included studies, some of which were published over 25 years ago. We observed marked heterogeneity in the settings in which the children were measured, their state of wakefulness, and the method of measurement, all of which may have an effect on the measured variables. As reported, subgroup analysis showed that the setting, method of measurement, and economic development had a significant effect on heart rate in children, but not on respiratory rate (for more detail see Web Annex 2). We excluded children with illnesses that might affect the heart rate or respiratory rate, and measurements known to be made during exertion, but many studies did not report whether children were quiet or agitated during measurement, which may have introduced additional heterogeneity that could not be assessed. However, by using the subgroup analysis on wakefulness as a proxy for agitation, it is unlikely that this would have a significant effect on the results. The heterogeneity of the data can also be interpreted as a strength, making the centiles more relevant to a wide spectrum of clinical settings.

Our centile charts have been developed using data from normal children. As with all clinical measurements, they should be used as part of an overall assessment of a child's condition, and interpretation of measured values should also take into account any factors which might be expected to affect the measured value. For example, measurements of heart rate may be increased in the presence of fever,<sup>27</sup> anxiety, or if measured with automated methods or in developing countries. These should therefore inform the selection of appropriate centiles for use as cut-offs in such situations.

Further research should consider assessing the benefit of integrating our centiles into early warning scores. Improvement in sensitivity and specificity will be age-dependent and will depend on the accuracy of the previous reference ranges. For the existing APLS reference ranges, which were observed to have the greatest agreement with our centiles, Figures 3 and 5 suggest that a large number of children are currently misclassified. For example, at the age of ten years, the APLS cut-off for heart rate classifies approximately 40% of normal children as abnormal, and the APLS cut-off for respiratory rate misclassifies approximately 63% of normal children. Furthermore, based on the age distribution of children presenting to primary care in a previously reported study,<sup>27</sup> we estimate that the specificity of APLS could be improved by as much as 20% for heart rate, and 51% for respiratory rate if revised centile charts are used. Further research, in both healthy children, and those presenting with a spectrum of conditions, should test the validity of our centiles and any cut-offs derived from them.

In conclusion, we have shown that existing reference ranges for heart rate and respiratory rate in children are inconsistent, and do not agree with centile charts derived from a systematic review of observational studies. This has potentially wide-ranging implications for clinicians involved in the assessment of children, and for the design of resuscitation guidelines, triage scores, and early warning systems.

## Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

## Acknowledgments

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## References

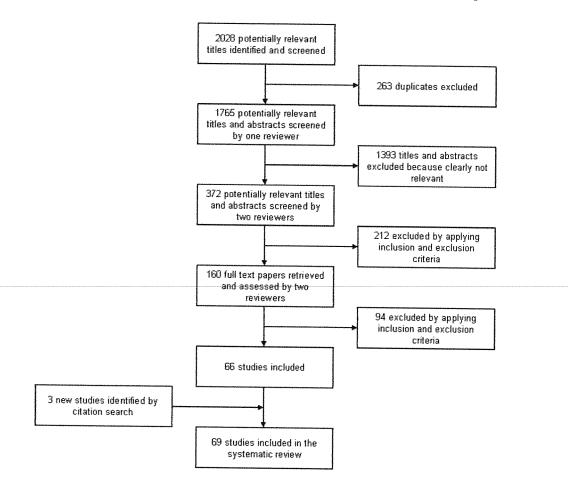
- National Collaborating Centre for Women's and Children's Health. Feverish illness in children: assessment and initial management in children younger than 5 years. National Institute for Health and Clinical Excellence; 2007. Report number: CG47
- Monaghan A. Detecting and managing deterioration in children. Paediatric nursing. 2005; 17(1):32– 5. [PubMed: 15751446]
- Egdell P, Finlay L, Pedley DK. The PAWS score: validation of an early warning scoring system for the initial assessment of children in the emergency department. Emergency medicine journal : EMJ. 2008; 25(11):745–9. [PubMed: 18955610]
- 4. Gilboy, N.; Tanabe, P.; Travers, D.; Rosenau, A.; Eitel, D. Emergency Severity Index, Version 4: Implementation Handbook. Agency for Healthcare Research and Quality; 2005.
- Warren DW, Jarvis A, LeBlanc L, Gravel J. Revisions to the Canadian Triage and Acuity Scale paediatric guidelines (PaedCTAS). Canadian Journal of Emergency Medicine. 2008; 10(3):224–43. [PubMed: 19019273]
- Duncan H, Hutchinson J, Parshuram CS. The Pediatric Early Warning System score: a severity of illness score to predict urgent medical need in hospitalized children. J Crit Care. 2006; 21(3):271–8. [PubMed: 16990097]
- Parshuram CS, Hutchinson J, Middaugh K. Development and initial validation of the Bedside Paediatric Early Warning System score. Critical Care. 2009; 13:R135. [PubMed: 19678924]
- Akre M, Finkelstein M, Erickson M, Liu M, Vanderbilt L, Billman G. Sensitivity of the Pediatric Early Warning Score to identify patient deterioration. Pediatrics. 2010; 125(4):e763–9. [PubMed: 20308222]
- Bradman K, Maconochie I. Can paediatric early warning score be used as a triage tool in paediatric accident and emergency? Eur J Emerg Med. 2008; 15(6):359–60. [PubMed: 19078844]
- 10. American Heart Association. Pediatric Advanced Life Support Provider Manual. American Heart Association; 2006.
- 11. Adams, FH.; Emmanouilides, GC.; Riemenscheider, TA., editors. Moss' Heart Disease in Infants, Children and Adolescents. 4th ed. Williams and Wilkins; 1989.
- 12. Hazinski, MF. Manual of Pediatric Critical Care. Mosby; 1999.
- World Health Organization. Technical bases for the WHO recommendations on the management of pneumonia in children at first-level health facilities. World Health Organization; 1991. Report number: WHO/ARI/91.20
- Balasubramanian S, Suresh N, Ravichandran C, Dinesh CG. Reference values for oxygen saturation by pulse oximetry in healthy children at sea level in Chennai. Annals of Tropical Paediatrics: International Child Health. 2006; 26(2):95–9.

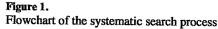
- Ward SL, Jacobs RA, Gates EP, Hart LD, Keens TG. Abnormal ventilatory patterns during sleep in infants with myelomeningocele. J Pediatr. 1986; 109(4):631–4. [PubMed: 3761076]
- 16. Wand, MP.; Jones, MC. Kernel Smoothing. Chapman and Hill; 1995.
- 17. Advanced Life Support Group. Advanced Paediatric Life Support: The Practical Approach. 4th ed. WileyBlackwell; 2004.
- Biarent, D.; Resuscitation Council (UK). European Resuscitation Council. European paediatric life support course. 2nd ed. Resuscitation Council (UK); 2006.
- Morley CJ, Thornton AJ, Fowler MA, Cole TJ, Hewson PH. Respiratory rate and severity of illness in babies under 6 months old. Arch Dis Child. 1990; 65(8):834–7. [PubMed: 2400218]
- Betau H, Tzee-Chung W, Meng L. An electrocardiographic study of chinese infants. Chung Hua Min Kuo Hsiao Erh Ko I Hsueh Hui Tsa Chih. 1980; 21(4):247-55.
- Davignon A, Rautaharju P, Boisselle E, Soumis F, Mégélas M, Choquette A. Normal ECG standards for infants and children. Pediatr Cardiol. 1980; 1(2):123-31.
- Lindner W, Döhlemann C, Schneider K, Versmold H. Heart rate and systolic time intervals in healthy newborn infants: longitudinal study. Pediatr Cardiol. 1985; 6(3):117-21. [PubMed: 4080570]
- Gemelli M, Manganaro R, Mamí C, De Luca F. Longitudinal study of blood pressure during the 1st year of life. European Journal of Pediatrics. 1990; 149(5):318–20. [PubMed: 2311627]
- Macfarlane PW, McLaughlin SC, Devine B, Yang TF. Effects of age, sex, and race on ECG interval measurements. J Electrocardiol. 1994; 27(Suppl):14-9. [PubMed: 7884351]
- Semizel E, Öztürk B, Bostan OM, Cil E, Ediz B. The effect of age and gender on the electrocardiogram in children. Cardiology in the Young. 2008; 18(1):26–40. [PubMed: 18093359]
- 26. American College of Surgeons. ATLS: Advanced Trauma Life Support for Doctors. 7th ed. American College of Surgeons; 2004.
- Thompson MJ, Harnden A, Perera R, et al. Deriving temperature and age appropriate heart rate centiles for children with acute infections. Arch Dis Child. 2009; 94(5):361-5. [PubMed: 19019883]

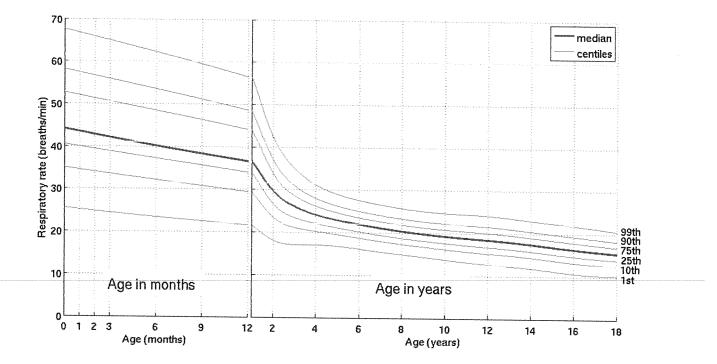
Box 1	
	Inclusion and Exclusion Criteria
Inclusion (	Criteria
- Cross	s-sectional, case-control, or longitudinal study
- Mini	mum of 20 subjects
– Age	range between birth and 18 years
– Obje	ctive measurement of heart rate and/or respiratory rate
– Raw age gro	data or average measure of heart rate and/or respiratory rate reported for each sup
Exclusion (	Criteria
- Pre-t	erm infants
- Child	ren with illnesses likely to affect the cardiac or respiratory system
- Child	Iren with pacemakers or requiring ventilatory support
- Anae	sthetised children
	ren known to be taking medications that would affect the cardiac or tory system
- Data	from exercising children, without baseline (pre-intervention) measurements
– Meas	surements taken at elevations greater than 1,000m above sea level
– Age	groups including adults (without subgroups)
- Age	groups spanning more than 10 years (without subgroups)

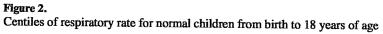
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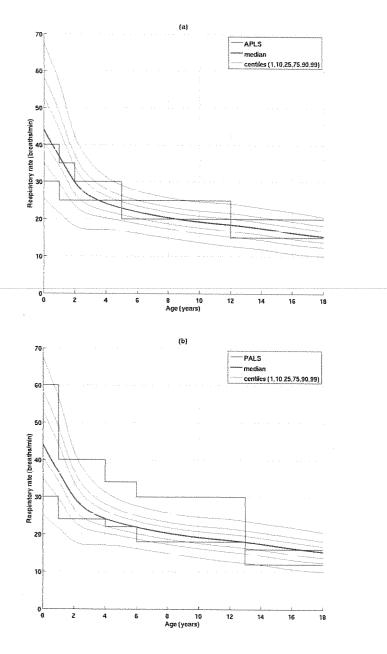
Box 2	
	Summary
Systematic Review	
<ul> <li>We searched CINAHL, ME lists, for studies measuring he between birth and 18 years of</li> </ul>	DLINE and EMBASE to April 2009, and reference art rate and/or respiratory rate in normal children age.
<ul> <li>Measurements during exerci likely to affect their heart rate</li> </ul>	ise, at altitude, or on children whose condition was or respiratory rate were excluded.
<ul> <li>Non-parametric kernel regree was used to construct centile c</li> </ul>	ession taking into account age range and sample size charts based on the extracted data.
Interpretation	
- There is considerable disagranges for heart rate and respin	eement between existing consensus-based reference ratory rate in children.
<ul> <li>Existing reference ranges for correspond to centile charts de across the full range of ages.</li> </ul>	r heart rate and respiratory rate in children do not prived from a meta-analysis of observational studies

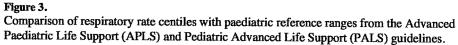












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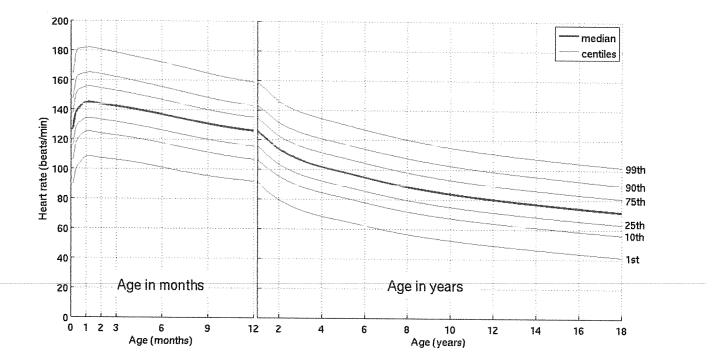
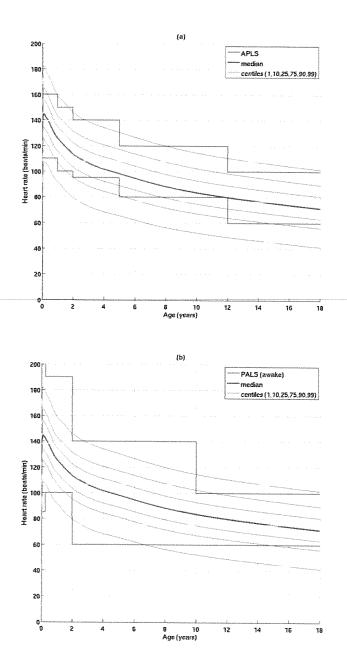
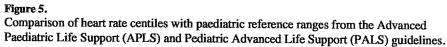


Figure 4. Centiles of heart rate for normal children from birth to 18 years of age

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## **EXHIBIT 11**

## **EXHIBIT 11**

## **Clinical Practice Statement**

How Should Native Crotalid Envenomation Be Managed in the Emergency Department? (9/14/2020) | Updated 4/26/2021 and 8/16/2021

Chairs:	Michael Abraham, MD FAAEM Grzegorz Waligora, MD FAAEM
Authors:	Spencer Greene MD MS FAAEM David Cheng, MD FAAEM
Reviewers:	Al Giwa, MD MBA MBE FAAEM Lisa Mills, MD FAAEM

## Disclosures:

- Dr. Greene has disclosed a conflict of interest-served as a speaker for BTG/Boston Scientific.
- Drs. Cheng, Giwa and Mills have disclosed no commercial relationships or conflicts of interest.

Statement reviewed and approved by AAEM Board of Directors. (9/14/2020) Updated 4/26/2021 and 8/16/2021.

## **Recommendations:**

1.Address airway, breathing, circulation, then assess for local, hematologic, and/or systemic toxicity indicative of envenomation.

2. Assess and determine the antivenom dosage needed.

3. Prophylactic antibiotics and surgical intervention are unnecessary and should be avoided.

## **Executive Summary**

## 1. How should patients with potential snake envenomation be assessed?

After life-threatening airway, breathing, or circulatory conditions are identified and corrected, snakebite victims should be assessed for local, hematologic, and systemic toxicity. Clinicians should examine the affected extremity for swelling, tenderness, and hemorrhagic blebs every 15 – 30 minutes for a minimum of eight hours and until progression has halted [1].

All patients with possible snakebite envenomation should have the following laboratory tests performed:

- Complete blood count (CBC), Basic metabolic profile (BMP)
- Prothrombin time (PT), Fibrinogen, Creatine kinase (CK)

Serial dynamometry and negative inspiratory force (NIF) assessments may be used to identify muscular weakness following envenomations from snakes with neurotoxic venom components. Capnography can also be used to diagnose respiratory insufficiency.

## 2. What are the initial steps in snakebite management?

Life-threatening conditions must be immediately stabilized. Ensure airway patency and adequate oxygenation and ventilation. Intravenous crystalloids are recommended to maintain euvolemia.

Analgesia is an essential component to snakebite management. Intravenous opioids are preferred initially. NSAIDs are discouraged because of the potential inhibition of platelet function. The use of topical ice packs is discouraged because prolonged cryotherapy is harmful to tissue [2].

The crotalid-envenomated limb should be elevated once the patient has arrived at the hospital. This prevents the venom from accumulating in the extremity and reduces the hydrostatic pressures that can exacerbate tissue swelling.

## 3. What are the indications for antivenom?

Administer antivenom for any of the following:

- significant or progressive local tissue damage e.g., tenderness, swelling, hemorrhagic bleb.
- systemic toxicity, e.g., hypotension, airway swelling, neurological toxicity.
- Significant or progressive hematologic toxicity. Abnormalities that are particularly worrisome include fibrinogen
   50 mg/dL or platelets < 50K/µL.</li>

If the swelling and tenderness are more than minimal and have extended beyond a major joint (e.g., wrist, ankle), antivenom is warranted [1]. If there is significant local tissue injury, e.g., necrosis, antivenom is also indicated, even if the swelling has not progressed across a joint. Minimal hematologic laboratory abnormalities, e.g., isolated fibrinogen levels between 100 - 150 mg/dL in an otherwise well-appearing patient, warrant serial testing but not treatment with antivenom. Antivenom is most effective when given early [3].

## 4. How should antivenom be dosed?

There are currently two antivenoms with FDA approval to treat native crotalid envenomations in adult and pediatric patients. Crotalidae Polyvalent Immune Fab Ovine (CroFab®, FabAV) is ovine (sheep)-derived and prepared using the venoms from four snakes found in the U.S.:

- Western diamondback rattlesnake (Crotalus atrox)
- Eastern diamondback rattlesnake (C. adamanteus)
- Mojave rattlesnake (C. scutulatus)
- Cottonmouth (*Agkistrodon piscivorus*)

Initial dosing of CroFab®) is 4 - 12 vials [4]. If control is achieved within one – two hours, maintenance dosing consisting of two vials of every six hours for three doses is recommended starting six hours after the initial dose. There is evidence that maintenance dosing may not always be necessary when a snakebite expert can serially assess the patient at the bedside [5]. If no such expert is available, maintenance doses should be administered. If control is not initially achieved, another 4 - 6 vials should be administered. CroFab® should be used with caution in patients with allergy to latex, papaya, pineapple, papain, bromelain, and sheep.

Crotalidae Immune F(ab')2 Equine (Anavip®) is equine (horse)-derived and prepared using the venoms from two non-native snakes:

- Central American rattlesnake (Crotalus simus)
- Terciopelo (Bothrops asper)

The recommended starting dose of Anavip® is 10 vials [6]. An additional 10 vials should be given if initial control is not attained within one – two hours. Maintenance dosing is not recommended for Anavip®, and it should be used with caution in patients with allergy to horses, pepsin, and cresol.

The choice of which product to use should be based on patient allergies, prior adverse reaction to either product, availability, and familiarity/comfort with each product.

5. Should copperhead envenomations be managed differently from other crotalid envenomation? Although the average copperhead envenomation tends to be less severe than a typical rattlesnake envenomation, any native crotalid envenomation can result in significant local and systemic toxicity. Furthermore, many snakes go unidentified or misidentified by patients or healthcare professionals.

Moderate and severe envenomations should be treated regardless of what crotalid was responsible. In a mild envenomation from a confirmed copperhead, the physician and patient should engage in shared decision-making regarding treatment with antivenom. It is important to acknowledge the expense and the low (1.4 – 2.7% for FabAV) risk of acute adverse reactions associated with antivenom therapy as well as the potential financial and health consequences of going untreated [7,8]. A randomized clinical trial demonstrated that copperhead envenomations recover more quickly when treated with CroFab® compared to placebo [9]. CroFab® also reduced total opioid requirements [10].

## 6. To what unit should snakebite patients be admitted?

Not all crotalid bites require hospitalization. Patients with "dry" bites, in which there are no venom effects, should be monitored for a minimum of eight hours, because what appears insignificant at first may progress to something more severe. If no signs or symptoms develop, the patient can be discharged. Patients with evidence of envenomation should be monitored for a minimum of 12 – 24 hours. The level of care should be determined by patient severity, likelihood of progression to severe envenomation, use of antivenom, and capabilities of the individual facility. Many patients can be safely monitored in an ED observation unit or a general medical floor. Admission to the ICU is recommended for patients with significant systemic toxicity. Early medical toxicology consultation is encouraged. Hospital length of stay is decreased by an average 21 hours when a toxicologist is involved in patient care, with no difference in readmission rates [11]. Poison control should be contacted for complex cases when medical toxicology is unavailable.

## 7. What is the role of antibiotics following crotalid envenomation?

Infection is uncommon following crotalid envenomation [12]. Prophylactic antibiotics have not proven to be beneficial, and indiscriminate use of antibiotics can cause side effects and contribute to antimicrobial resistance [12,13]. Therefore, antibiotics should not be administered unless there is clinical evidence of infection.

## 8. What are the indications for surgical consultation for snakebite in the ED?

Acute surgical intervention is rarely necessary following crotalid envenomation. Excising tissue around the bite site confers no benefit and will exacerbate local tissue damage [14]. Compartment syndrome is an exceptionally uncommon complication from crotalid envenomation, and prophylactic fasciotomies are not recommended. Even in a confirmed compartment syndrome, the initial treatment should be additional doses of antivenom, not fasciotomy. Fasciotomy should only be considered in those patients with persistently elevated compartment pressures despite adequate antivenom therapy [14,15].

## 9. Should pediatric patients be treated differently from adult patients?

Indications for treatment with antivenom are the same in the pediatric population and the adult population. A study by Levine et al. found that pediatric patients were less likely to exhibit edema than adult patients [16]. Adults developed tissue necrosis more often than children, but this difference resolved when rates were adjusted for the bite location. There was a trend for more systemic toxicity in adults, but it did not reach statistical significance. Pediatric patients were more likely to develop elevated PT and hypofibrinogenemia, but the rates of bleeding were similar.

In the randomized clinical trial of FabAV for copperhead bites by Gerardo et al., there was a trend for pediatric patients to recover faster from copperhead bites, irrespective of antivenom therapy, but this did not reach statistical significance [9].

Antivenom dosing should not be adjusted for age or weight, because the amount of venom injected is not dependent upon the size of the victim. Initial doses are the same as listed above. However, the antivenom should be reconstituted for smaller patients to avoid volume overload.

## **EXHIBIT 12**

## **EXHIBIT 12**

## WILDERNESS MEDICAL SOCIETY PRACTICE GUIDELINES

## Wilderness Medical Society Practice Guidelines for the Treatment of Pitviper Envenomations in the United States and Canada

Nicholas C. Kanaan, MD; Jeremiah Ray, MD; Matthew Stewart, MD; Katie W. Russell, MD; Matthew Fuller, MD; Sean P. Bush, MD; E. Martin Caravati, MD, MPH; Michael D. Cardwell, MS; Robert L. Norris, MD; Scott A. Weinstein, PhD, MD

From the Department of Surgery, Division of Emergency Medicine, University of Utah, Salt Lake City, UT (Drs Caravati, Fuller, Kanaan, Ray, and Stewart); Department of Surgery, Division of General Surgery, University of Utah, Salt Lake City, UT (Dr Russell); Department of Surgery, Division of Emergency Medicine, Stanford University School of Medicine, Stanford, CA (Dr Norris); Department of Biological Sciences, California State University, Sacramento, CA (Mr Cardwell); Department of Toxinology, Women's and Children's Hospital, North Adelaide, South Australia, Australia (Dr Weinstein); and the East Carolina University Brody School of Medicine, Greenville, NC (Dr Bush).

> Key words: antivenom, copperhead, cottonmouth, Crotalinae, CroFab, crotaline, crotalid, dermotomy, – envenomation, FabAV, fasciotomy, pitviper, rattlesnake, snakebite, Viperidae

### Introduction

The Wilderness Medical Society convened an expert panel to develop a set of evidence-based guidelines for the prevention and treatment of North American pitviper envenomations. We present a review of pertinent pathophysiology, discuss prevention measures, and therapeutic management. Graded recommendations are made regarding each treatment and its role in management. These guidelines should assist in clinical decision making, but a "cookbook" approach is often insufficient, as each patient is unique and may respond differently to therapeutics. Physicians must use their experience and frequent clinical assessments to apply these recommendations to their individual patients. Consultation with a local toxicologist familiar with envenomations or poison control center is recommended to assist in patient management. These guidelines are for crotaline snakes in the United States and Canada, and should not be applied to other snakes species or geographic regions.

#### Methods

The expert panel was convened at the 2014 Annual Winter Meeting of the Wilderness Medical Society in Park City, Utah. Members were selected based on clinical and research experience and interest in snakebites and included members with specialties in emergency medicine, surgery, toxicology/toxinology, wilderness medicine, herpetology, and evolutionary biology. Relevant English language articles from 1965 to 2013 were

Corresponding author: Nicholas C. Kanaan, MD, 30 North 1900 East Medical Drive, Room 1C026, Salt Lake City, UT 84132. (e-mail: kanaan2@gmail.com). identified through the PubMed MEDLINE database using search terms (antivenom, copperhead, cottonmouth, crotalid, Crotalinae, crotaline, Crofab, digital dermotomy, envenomation, FabAV, fasciotomy, first aid, pitviper, prevention, rattlesnake, snakebite, treatment, and Viperidae). Studies in these categories were reviewed and level of evidence was assessed. The panel used a modified Delphi consensus approach to develop recommendations graded based on the quality of supporting evidence and balance between the benefits versus risks and burdens for each modality according to criteria stipulated by the American College of Chest Physicians (Table 1).<sup>1</sup>

## **Section 1: Characteristics**

## VENOMOUS SNAKES IN THE UNITED STATES AND CANADA

The taxonomic family Viperidae contains the Old World taxa (subfamily Viperinae) and the Old and New World pitvipers (Crotalinae), which are venomous snakes with long folding fangs. Crotalinae are pitvipers with heatsensing facial (loreal) pits, including the North American rattlesnakes (genera Crotalus and Sistrurus) and cottonmouths and copperheads (genus Agkistrodon). Crotalus contains almost all rattlesnakes and includes the larger, widely distributed, and more dangerous species. Sistrurus includes only 2 small species north of Mexico: the pigmy rattlesnake (Sistrurus miliarius) and the massasauga (Sistrurus catenatus). Cottonmouths or water moccasins (Agkistrodon piscivorus) and copperheads (Agkistrodon contortrix) are similar to rattlesnakes but lack a rattle, having tapered, pointed tails instead. All of these pitvipers are generally heavy-bodied snakes with

Grade	Description	Benefits vs risks and burdens	Quality of supporting evidence
1 <b>A</b>	Strong recommendation, high- quality evidence	Benefits clearly outweigh risk and burdens, or vice versa	RCTs without important limitations or overwhelming evidence from observational studies
1B	Strong recommendation, moderate-quality evidence	Benefits clearly outweigh risk and burdens, or vice versa	RCTs with important limitations or exceptionally strong evidence from observational studies
1 <b>C</b>	Strong recommendation, low- quality evidence	Benefits appear to outweigh risk and burdens or vice versa	Observational studies or case series
2A	Weak recommendation, high- quality evidence	Benefits closely balanced with risks and burdens	RCTs without important limitations or overwhelming evidence from observational studies
2B	Weak recommendation, moderate- quality evidence	Benefits closely balanced with risks and burdens	RCTs with important limitations or exceptionally strong evidence from observational studies
2C	Weak recommendation, low- quality evidence	Uncertainty in estimates of benefits, risks, and burdens; benefits, risks, and burdens may be closely balanced	Observational studies or case series

Table 1. American College of Chest Physicians classification scheme for grading evidence in clinical guidelines

RCT, randomized controlled trial.

triangular heads, vertically elliptical pupils, keeled dorsal scales, and a single row of subcaudal scales. Although these traits can be found in various nonvenomous snakes, the specific combination of keeled dorsal scales and undivided subcaudal scales is diagnostic for pit-vipers in the United States and Canada.<sup>2</sup> The rattle is unique to rattlesnakes.

Coral snakes are the only other major venomous snakes naturally found in the United States and Canada and belong to the family Elapidae, which also includes cobras, mambas, and kraits. They are slender and identified by the order of their black, red, and yellow (or white) body rings (although they rarely can be melanistic) and do not possess any of the previously mentioned pitviper traits.<sup>2</sup> Because the management of coral snake envenomation differs from pitvipers, their management is not included in these guidelines.

Field guides and other publications list nearly a hundred subspecies of "dangerous" North American snakes; however, the taxonomy of these snakes remains incompletely defined as ongoing genetic analyses are improving species characterization.<sup>3</sup> Some experts suggest the elimination of many subspecific designations altogether.<sup>4</sup> Clinically, identification to the species or subspecies level is usually unnecessary for guiding treatment—with the exception of Mohave (*Crotalus scutulatus*), timber (*Crotalus horridus*), and Southern Pacific rattlesnakes (*Crotalus oreganus helleri*), among

other taxa that may produce venoms containing potent Mohave or similar presynaptic neurotoxins. Snakebites with this toxin require management that differs from the majority of crotaline envenomations in the United States.<sup>5,6</sup>

Knowledge of pitviper geographic distributions can help identify a snake (Figure). A picture of the snake can also help with identification by an expert at a later time; however, trying to kill or capture the snake is not recommended as it could lead to a second patient requiring treatment.<sup>7</sup> If positive identification of a nonvenomous snake by an expert is made, no evacuation is necessary.

Snakes are poikilothermic and tend to seek underground shelter during temperature extremes. Therefore, wild snakes are usually not a threat during cold weather unless their shelter is breached. Field and laboratory studies of temperate pitvipers indicate that they are more active with body temperatures between approximately 25°C and 30°C (77°F-86°F).<sup>8-10</sup> Snake body temperatures are better correlated with substrate temperature than air temperature, and unshaded substrate temperature can be much hotter than the air on warm sunny days.<sup>11</sup>

#### **VENOM PROFILES**

Some pitviper venoms are known to contain more than 100 different proteins and peptides that produce toxic effects in prey and envenomated humans.<sup>12,13</sup> The toxic components of snake venom vary greatly and are naturally selected in

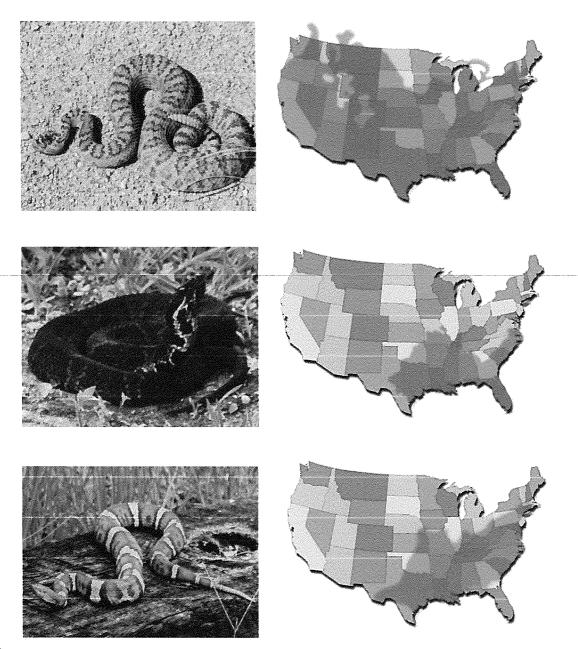


Figure. Three common pitvipers in the United States and Canada and their geographic range. From top to bottom: Western rattlesnake (Crotalus oreganus) and geographic range of Crotalus and Sistrurus; Cottonmouth (Agkistrodon piscivorus) and geographic range of A piscivorus; Copperhead (Agkistrodon contortrix) and geographic range of A contortrix.

response to prey susceptibility.<sup>14,15</sup> These toxic constituents are known to vary considerably between species,<sup>16</sup> geographically within species,<sup>17–19</sup> ontogenetically within individuals,<sup>20</sup> and even between siblings.<sup>21,22</sup> The genes expressing toxins undergo more rapid evolution than nontoxin-related genes.<sup>16</sup> Given these variations in venom composition, it is not possible to predict the specific frequency of various venom components. Despite this

limitation, important generalizations can be made based on genetic and molecular analysis of venom supported by clinical experience and may inform the clinical course.<sup>20</sup>

Ontogenetic variation in snake venoms also appears to be correlated with changes in diet as young snakes mature, often switching from predation of lizards and frogs to a diet consisting primarily of small mammals.<sup>23,24</sup> That may be related to the widespread myth that juvenile rattlesnakes are more dangerous than adults because they have not yet learned to meter their venom. Regardless of venom metering, small snakes have small heads and venom glands and simply do not have the volume of venom available in larger snakes, as is borne out by venom yields in laboratories that produce venom for pharmaceutical and research use: the average yield of 100-cm rattlesnakes is 1100 mg (dry mass) compared with 9 mg from 30-cm juveniles,<sup>25</sup> a difference of 2 orders of magnitude. That is consistent with clinical experience; namely, bites by medium and large rattlesnakes have been shown to produce mean snakebite severity scores that are almost double those produced by small rattlesnakes.<sup>26</sup>

### Section 2: Epidemiology and Prevention

Snakebites are estimated to lead to as many as 9000 emergency department visits annually in the United States. Venomous species account for approximately one third of these visits, almost all of which are pitviper bites.<sup>27</sup> Accurate snakebite statistics are difficult to assemble in the United States. Nonfatal bites by venomous species are underreported by epidemiological databases. Poison centers are not consulted on all bites, and many bites are never reported beyond a primary treating facility. Finally, an unknown but likely significant number of snakebite patients never seek medical treatment, especially if alarming symptoms fail to develop. Many experts continue to rely somewhat on the statistics published in 1966 by Dr Parrish,28 based on his unprecedented survey returned by more than 5000 hospitals and 27,000 physicians in the United States. He estimated that approximately 6680 persons per year were treated for venomous snakebite in 1958 and 1959.28 Based on the work of Parrish and more current, albeit less robust data, recent investigators have estimated the incidence of venomous snakebite in the United States at roughly 7000 to 8000 per year,<sup>29</sup> with annual fatalities averaging 5.2 between 1991 and 2001<sup>30</sup> and 7.4 between 1999 and 2007.31 According to recent data from the American Association of Poison Control Centers (AAPCC), there were 6919 snakebites reported to poison centers in 2012, 4052 of which were pitviper envenomations. More than half (57%) of pitviper envenomations in this dataset resulted in moderate or major outcomes, as defined by the AAPCC, and 1 bite (by a rattlesnake) was fatal.<sup>32</sup> These data are based on voluntary reporting to poison control centers, and hence are certain to underreport the problem.

The majority of crotaline envenomations occur during intentional interaction with the snake, as opposed to an unintentional exposure to an unseen threat.<sup>33,34</sup> Most snakebite patients are male, with white men 25 to 34

years old being at greatest risk of life-threatening envenomations.<sup>35</sup> Intentional interactions may be associated with alcohol or drug intoxication<sup>33-36</sup> and typically occur when people try to catch, kill, or interfere with a wild snake, as well as when handling or caring for captive snakes. Moreover, caution must be exhibited when handling a dead snake or detached head as they may have intact bite reflexes.<sup>29,37</sup> Knowledge of snake habits and appropriate avoidance measures, in addition to not deliberately antagonizing these animals, offers the most significant protection from unwanted exposure.

Most studies indicate that the majority of bites occur on the upper extremities, fewer on the lower extremities, and rarely on the face, neck, or trunk.<sup>27,34</sup> Bites from unintentional encounters are predominantly on the lower extremities, whereas those resulting from intentional interaction are mainly on the hands and arms.<sup>27</sup> Certain protective clothing such as leather or heavy boots offers a protective barrier against envenomation, and denim may reduce the amount of venom by two thirds.<sup>38,39</sup>

Pitvipers are almost exclusively ambush predators<sup>40</sup> and seek out locations where they are likely to encounter prey (mostly rodents and other small mammals), then coil and wait motionless for prey to enter within strike range.<sup>40,41</sup> In locations with harsh winters, snakes must migrate between winter dens and summer foraging areas, increasing the probability of human interaction.<sup>42,43</sup> The kinematics of the strike and venom injection are usually different between defensive and predatory strikes,44 and almost all bites to humans are defensive. As a result, research about predatory behavior is not necessarily applicable to human snakebites. The exception are bites by long-term captives, as these animals often lose fear of humans and associate any cage disturbance with feeding. Emergency departments presented with patients bitten by captive (and frequently exotic) snakes must reliably identify the snake and locate the appropriate antivenom.<sup>45</sup> A small but significant number of persons privately keep venomous exotic snakes---often illegally. These snakes may be misidentified or the species name withheld on account of potential legal consequences. When exotic antivenom is needed, it frequently requires collaboration with a zoo that keeps the same species. An exotic antivenom database is maintained for this purpose and can be accessed through local poison control centers.

#### Section 3: Field Management

#### INITIAL MANAGEMENT AND FIRST AID

A priority after a snakebite is to avoid another bite, either to the same patient or to another. Patients should move away from the snake. The patient should be calmed, as fatalities are rare and serious sequelae are usually preventable. A good photograph, carefully taken from a safe distance (ie, equal to more than the length of the snake), can sometimes be transmitted by cell phone to an expert and may be valuable later for identification. If in doubt, determining whether the biting snake is a venomous species can make the difference between simple superficial wound care and a potentially hazardous and expensive evacuation.

There is nothing that can be done in the field to significantly alter the outcome of a serious snakebite, and field first aid should not delay rapid transfer to a facility capable of safely administering antivenom.<sup>46</sup> The degree of envenomation cannot be quickly determined with confidence; therefore, any bite by a venomous species must be considered a medical emergency and evaluated by a physician without delay. While en route or waiting for evacuation, first aid and wound care can be administered.

Time and date of the snakebite should be noted, either on the patient or in an incident report. Circumference of bitten appendage should be measured above and below the snakebite for later comparison and determination of subsequent swelling.<sup>47,48</sup> The leading edge of erythema should be marked for comparison. Jewelry or constrictive clothing near the bite should be removed or cut to avoid constriction with subsequent swelling. (Recommendation grade: 1C)

Snakebites should be approached in a manner similar to that for any other puncture wound or laceration. Without delaying transport, the wound should be quickly cleaned in standard fashion (soap and running water, high-pressure irrigation or an antiseptic solution or both) and a sterile dressing applied to protect the wound.<sup>49</sup> (Recommendation grade: 1C)

There have been no studies directly assessing immobilization alone for the improvement of snakebite outcomes. Limiting movement of the affected area by immobilization with splinting techniques (without compression) may benefit the patient, although no rigorous trials have validated this practice. Depending on the evacuation needs, the affected area should be maintained at the level of the heart: raising it above the heart can cause increased systemic spread of venom, whereas lowering it may lead to increased swelling and local venom activity. However, this practice has not been proved with evidence or clinical trials. Furthermore, the limb and joints should be kept in a functional position in case they swell or the joints become immobile.<sup>50,51</sup> (Recommendation grade: 2C)

Any initial symptoms should be clearly noted in a field report. Local symptoms should be noted and monitored for progression. Local tissue effects from hemotoxins or vasculotoxins can cause significant erythema, swelling, and tenderness at the envenomation site and can spread proximally and distally. Local tissue effects are the most common physical manifestations of pitviper envenomations and occur in more than 90% of patients with medically significant envenomations.<sup>25</sup> (Recommendation grade: 1C)

Systemic symptoms including hypotension, bleeding, angioedema, vomiting, and neurotoxicity indicate more severe envenomation.<sup>52</sup> Hematologic effects are multifactorial and include the degradation of fibrinogen and platelet aggregation or destruction. Although the majority of patients do not develop medically significant bleeding, the patient should be carefully examined for petechiae, ecchymosis, gingival bleeding, epistaxis, retinal hemorrhage, or signs of more serious hemorrhage (ie, intracranial or intra-abdominal).53 Vomiting can also arise from autonomic response to fear and anxiety, and may be misleading. Hypotension can result from vasodilatation and third-spacing. The most common neurotoxic effects are from Mohave rattlesnake (C scutulatus) and Southern Pacific rattlesnake (C helleri), but are much less common in other US rattlesnake species.<sup>54</sup> All snakebite patients, especially those with local or systemic symptoms, should be transported immediately to a hospital for evaluation and monitoring for progression (Table 2). (Recommendation grade: 1C)

Unfortunately, there are many myths associated with the field care of snake envenomations, some of which can be harmful to the patient. Despite a lack of evidence, many of these techniques have permeated popular culture and historical medical literature, and therefore they are often erroneously applied. The following techniques are of no benefit or are potentially harmful to the patient.

#### Oral suction

One study and review article showed that mouth or mechanical suction is not successful at removing venom in a "mock venom" human model, and the 0.04% to 2% of venom load extracted was clinically insignificant.<sup>55</sup> Furthermore, oral suction can introduce bacteria into the wound and increase the potential for superinfection or abscess formation. Finally, oral suction may pose a risk to the caregiver by absorption of venom through the oral mucosa.<sup>56</sup> (Not recommended)

#### Mechanical suction

An experimental model showed that mechanical suction devices can increase localized tissue damage around the wound in the shape of the device, causing tissue necrosis and sloughing, resulting in tissue loss that prolonged healing by weeks.<sup>57–59</sup> (Not recommended)

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Local	Systemic	Hematologic	Neurologic
Pain	Tachycardia <sup>*</sup>	Anemia	Diplopia
Localized bleeding	Dyspnea <sup>*</sup>	Thrombocytopenia	Perioral paresthesias or metallic taste
Erythema	Chest pain	Petechiae	Numbness/tingling (widespread)
Edema	Nausea or vomiting <sup>*</sup>	Gingival bleeding	Fasciculations (widespread)
Ecchymosis	Hypotension	Epistaxis	Altered mental status
Blistering	Angioedema	Retinal hemorrhage	Cranial nerve dysfunction, especially ptosis (Mohave toxin)
Joint stiffness	Myalgia/cramps	Internal bleeding	
Numbness/tingling (localized)	Rhabdomyolysis	Coagulopathies	
Cramps/fasciculations (localized)		Disseminated intravascular coagulation	

Table 2. Local,	systemic,	hematologic,	and neurologic	signs and a	symptoms of	snakebite envenomation

\*Can be from envenomation or autonomic responses to pain and anxiety, therefore not used as a sole indicator of systemic signs of envenomation.

#### Laceration or bleeding of the bite

Laceration or bleeding the bite site to enlarge the wound to increase blood flow often results in increased tissue damage and local irritation and is without any proven benefit.<sup>60</sup> (Not recommended)

#### Electricity or electrotherapy

At one time, it was theorized that electrical current may denature snake venom, but research demonstrated that electrotherapy is not useful for snakebite treatment and is harmful to the patient.<sup>61-63</sup> (Not recommended)

### Cryotherapy or cooling

Cryotherapy with ice or other cooling techniques is thought to reduce the spread of the snake venom; however, this technique has no proven benefit, and in extreme cases can result in increased localized tissue injury.<sup>64–66</sup> (Not recommended)

#### Tourniquet placement

Tourniquets (either venous or arterial occluding tourniquets) can lead to ischemia and gangrene, which can result in a higher amputation frequency or antivenom requirements, and no studies have conclusively demonstrated tourniquets improve patient outcomes.<sup>46,67,68</sup> (Not recommended)

#### Pressure bandaging

Clinical evidence for pressure bandaging with elastic or cohesive bandaging is limited, and it does not appear to have any benefit in crotaline envenomations. Pressure bandaging is thought to restrict the blood flow and progression of venom to systemic circulation by reducing lymphatic and venous return. One study using a porcine model with a lethal dose of venom showed pressure immobilization increased intracompartmental pressure after envenomation and delayed mortality.<sup>69</sup> Only when treating life-threatening snakebites containing neurotoxic venom (such as Australian elapids) does evidence support containing the venom with pressure bandaging.<sup>70</sup> These results have not been replicated in the United States and Canada where crotaline venom causes more localized tissue damage, and pressure bandaging may instead increase the severity of tissue damage; 1 animal study demonstrated lethal hyperkalemia when the pressure wrap was removed.<sup>71</sup> Furthermore, 2 studies indicated that physicians and laypeople rarely apply pressure bandaging correctly,<sup>72,73</sup> and a third showed that even after training, practitioners were still unsuccessful at effective immobilization in cases of simulated snakebites.74 Pressure bandaging has not been proven beneficial in studies and case series involving crotaline envenomations.75,76 (Not recommended)

#### THE DRY BITE

Venomous snakes may also fail to deliver venom in an event commonly referred to as a dry bite that may occur in 25% or more of crotaline bites.<sup>25,77</sup> Duration of fang contact also affects the amount of venom injected in both predatory and defensive situations, with venom quantities from defensive bites (eg, to humans) being more

variable and often larger than predatory bites.<sup>78,79</sup> It may be difficult to initially determine whether a bite was dry or if venom was injected. A dry bite should never be assumed, and serial observations and laboratory tests should be performed as indicated to monitor the possible development of envenoming. If there are fang marks and a positive identification of a pitviper, one must assume there is associated envenomation and seek medical attention immediately because delaying care increases morbidity and mortality. If evacuation is difficult or prolonged, the absence of local or systemic symptoms 8 hours after the bite may indicate a dry bite. (Recommendation grade: 1C)

### EVACUATION CONSIDERATIONS

As a general rule, all venomous snakebites should be evacuated and transported to the nearest emergency department. Rapid transport to an emergency department allows for life- or limb-saving interventions. For the caregiver familiar with envenomations, a positive identification of a nonvenomous snake would not necessitate evacuation; however, identification must be certain. Even a knowledgeable caregiver may not be able to predict the amount of envenomation from a snakebite or potential sequelae, and therefore observation for the sake of risk stratification is not recommended. [Recommendation grade: 2C]

Every effort should be made to evacuate snakebite patients; however, if the patient is in a remote location with a difficult evacuation, further considerations must be weighed, including patient and rescuer safety, likelihood of successful evacuation, and availability of resources required to carry out the evacuation. Evacuating to a health facility without access to antivenom may be of little benefit to the patient. The nearest healthcare facility should be contacted ahead of time, and if antivenom is unavailable, it may be sent from another facility or the patient's immediate transport to a different facility arranged. This process can also be coordinated by contacting poison control directly. (Recommendation grade: 1C)

#### **Section 4: Emergency Department Management**

#### INITIAL PATIENT ASSESSMENT

On arrival to the emergency department, snakebite patients should be rapidly assessed, including airway, breathing, and circulation. After initial assessment and vital signs, the patient should be placed on continuous cardiac, blood pressure, and pulse oximetry monitoring. A thorough history including the time of the bite and signs or symptoms of envenomation should be taken from the patient or bystanders. It is important to remove constrictive clothing or jewelry because of the risk of increasing swelling.<sup>7</sup> The leading edge of tenderness, erythema, and swelling should be marked and limb circumference above and below the envenomation measured for future comparison. That should be repeated every 15 to 30 minutes until local tissue effects have stabilized. (Recommendation grade: 1C)

### LOCAL WOUND CARE AND ANTIBIOTICS

Anaerobic and aerobic bacteria can be introduced by the snake's fangs during the bite.<sup>80</sup> Despite this inoculation. wound infections occur in only 3% of pitviper bites.<sup>81</sup> A prospective trial compared prophylactic antibiotic treatment to none after pitviper envenomation and found no significant differences in rates of infection between the groups.<sup>82</sup> One analysis noted 0% infection rate after crotaline envenomation and prophylactic antibiotics.83 Chloramphenicol failed to reduce the frequency of abscess formation complicating pitviper snakebites in a randomized controlled trial.<sup>84</sup> Based on current evidence, prophylactic antibiotics are not recommended, and antibiotics should only be administered if signs of infection develop, such as purulence (other signs of infection may be obscured by local tissue changes caused by venom). (Recommendation grade: 1C)

Any significant open wounds should be treated with moist dressings changed twice daily, and large debrided areas treated with negative pressure dressings.<sup>49</sup> Early active and passive physical therapy with range of motion and occupational therapy is recommended, especially for hand and digit bites to avoid stiffness and long-term dysfunction.<sup>85</sup> (Recommendation grade: 1C)

Opioids are preferred for pain control. Aspirin and nonsteroidal anti-inflammatory drugs are relatively contraindicated owing to risks of increased bleeding, platelet dysfunction, and potential for prerenal effects in patients with rhabdomyolysis.<sup>50,86,87</sup> (Recommendation grade: 1C)

Although there are no reported cases of tetanus associated with snakebites, patients should receive tetanus immunization according to standard recommendations from the Centers for Disease Control and Prevention.<sup>68</sup> Administration of tetanus immunization after reversing coagulopathy will minimize bleeding from injection sites. (Recommendation grade: 1C)

### DIAGNOSTIC AND LABORATORY ASSESSMENT

If envenomation is suspected, intravenous access should be obtained in an unaffected extremity and initial laboratory studies performed: complete blood count (CBC) with platelets, basic metabolic panel, liver

Table 3. Laboratory and diagnostic testing for snakebite evaluation	Table 3.	Laboratory	and dia	agnostic	testing :	for	snakebite	evaluatio
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Study	Rational <sup>®</sup>
CBC	Evaluate for anemia and thrombocytopenia
BMP	Evaluate electrolytes and renal function for rhabdomyolysis
LFT	Evaluate liver enzymes for hepatic dysfunction
PT/INR, PTT	Evaluate for coagulopathy (INR is most useful)
Fibrinogen	Most specific for coagulopathy-important to obtain measured (not calculated) level
D-dimer	More sensitive for coagulopathy
Urinalysis	Hemoglobin in absence of red blood cells or presence of myoglobin indicates rhabdomyolysis
TCK	Evaluate for rhabdomyolysis
Troponin	Evaluation of chest pain
ECG	Evaluation of chest pain
Chest radiograph	Evaluation of chest pain or shortness of breath
Type and screen	Obtain early, though rarely required as coagulopathy is managed with antivenom
CT brain (noncontrast)	Evaluation of neurological findings suggesting hemorrhagic cerebrovascular accident
CT abdomen or FAST US	Evaluation of abdominal pain and distention or concern for intra-abdominal bleeding

\* Any abnormal results or changes in clinical condition warrant re-evaluation of laboratory studies.

CBC, complete blood count with platelets; BMP, basic metabolic panel; LFT, liver function tests; PT/INR, prothrombin time/international normalized ratio; PTT, partial thromboplastin time; TCK, total creatine kinase; ECG, electrocardiogram; CT, computed tomography; FAST, focused assessment with sonography in trauma; US, ultrasonography.

function tests, prothrombin time/international normalized ratio (PT/INR), partial thromboplastin time, fibrinogen, d-dimer, total creatine kinase, and urinalysis (Table 3). These studies provide baseline laboratory characteristics for serial evaluation and help diagnose anemia, thrombocytopenia, coagulopathies, and rhabdomyolysis. For critically ill patients with complaints of chest pain or shortness of breath, further diagnostic studies include a 12-lead electrocardiogram, chest radiograph, and troponin. If a patient presents with proteinuria, testing for myoglobinuria and microscopic hematuria should be performed. If myoglobinuria or severe muscle swelling is present, serial total creatine kinase assays are indicated to evaluate for rhabdomyolysis. Providers should perform serial comprehensive neurological examinations and order a noncontrast computed tomography scan of the brain if any deficit is identified or there is concern for hemorrhagic cerebrovascular accident. For patients with a potentially worrisome abdominal examination, providers should consider further imaging with abdominal ultrasound or computed tomography to assess for possible intra-abdominal bleeding.<sup>50</sup> (Recommendation grade: 1B)

Serial laboratory studies including CBC, basic metabolic panel, PT/INR, d-dimer, total creatine kinase, and fibrinogen should be obtained for all patients with pitviper bites. For suspected dry bites, patients should be observed for a minimum of 8 hours and undergo repeated laboratory studies before discharge, if vital signs are normal. For minor envenomations, patients should be observed for 12 to 24 hours and have repeat laboratory studies every 4 to 6 hours. Patients with moderate to severe envenomations should receive antivenom, be admitted to the hospital, and have repeat laboratory studies within 4 hours of the initial set.<sup>50</sup> (Recommendation grade: 1C)

#### INDICATION FOR ANTIVENOM

Antivenom and supportive care are the mainstay for crotaline envenomation management. The ovine-derived Crotalidae polyvalent immune Fab antivenom (FabAV) was approved by the US Food and Drug Administration in 2000 and causes fewer adverse reactions than the previous equine-derived polyvalent product. FabAV works by binding to and neutralizing crotaline venom in the intravascular space and also diffuses into the interstitium arresting progression of local tissue injury. Whereas older resources use a snakebite grading scale to stratify crotaline envenomation, it is now recommended to administer antivenom in any patient with progressive signs or symptoms after a crotaline snakebite.<sup>50</sup>

Patients with a dry bite or who have not been bitten by a pitviper should not receive antivenom. Patients with minor envenomation, defined as swelling and localized pain at the envenomation site, should be closely observed and not be given antivenom unless local tissue effects progress.<sup>50</sup> Snakebites to high-risk anatomical sites (ie, hands, joints, or face) may necessitate a more conservative approach, lowering the threshold for antivenom administration as localized tissue effects can have more severe and potentially long-term sequelae.<sup>89</sup> (Recommendation grade: 1C)

Patients with progressive local tissue findings or any systemic toxicity (signs, symptoms, or acute laboratory abnormalities) should receive antivenom. Progression after pitviper envenomation is defined as worsening of local tissue injury ( $\geq 2$  cm of erythema expansion). systemic symptoms, or abnormal laboratory results. Moderate envenomation includes bites with severe local pain, worsening edema, mild to moderate systemic symptoms that are not life threatening, and abnormal coagulation tests without signs of bleeding. Severe envenomation includes bites with significant swelling and pain, systemic symptoms that are life threatening, and abnormal coagulation tests with serious bleeding. Common systemic symptoms include hypotension, systemic bleeding, or neurotoxicity. Various symptoms of neurotoxicity and myotoxicity include oral paresthesias, muscle fasciculations, altered mental status, or seizures.<sup>90</sup> For patients receiving antivenom, providers should contact a medical toxinologist or poison control center (United States (800)222-1222, British Columbia (800)567-8911, Ontario (800)268-9017, Québec (800) 463-5060). (Recommendation grade: 1A)

#### ANTIVENOM ADMINISTRATION

The initial dose of FabAV is 4 to 6 vials, with each vial reconstituted in 25 mL 0.9% sterile saline and gently rotated 180 degrees back and forth to dissolve the powder into solution. Although the manufacturer recommends reconstituting with 18 mL, 25 mL is associated with decreased dissolution times.<sup>91</sup> Once reconstituted, the 4 to 6 vials should be further diluted with normal saline to a volume of 250 mL. Then 25 mL should be infused intravenously over the first 10 minutes, and if there is no allergic reaction, the remaining infusion should be given over 1 hour.<sup>22</sup> Dosing is based on the amount of venom and not the weight of the patient, and therefore remains the same for children. For infants weighing less than 10 kg in whom fluid overload is a concern, the antivenom can be mixed in a smaller volume to approximate a 20 mL/kg bolus.93 (Recommendation grade: 1A)

There are no absolute contraindications to FabAV because the benefits of antivenom outweigh the risks of reactions from allergy to FabAV or hypersensitivity to papain or papaya extracts—papain is used to cleave the whole antibody into Fab and Fc segments, and a small inactive amount may be left in the antivenom.<sup>94</sup> In these cases, patients should be pretreated for allergic reactions and monitored closely (see Section 6). (Recommendation grade: 1B)

It is important to obtain initial and prompt control of crotaline envenomations. As many as 88% of patients treated with antivenom achieve initial control, which is defined as no further tissue swelling or ecchymosis, improvement of vital signs, improvement of systemic symptoms, and stabilized coagulopathy.<sup>92</sup> In addition to reassessing vital signs and wound site every 15 to 30 minutes, repeat laboratory studies with CBC, PT/INR, partial thromboplastin time, and fibrinogen should be obtained within 1 hour of antivenom administration to assess response. If there is progression of local or symptoms or worsening systemic laboratory abnormalities within the first hour, 4 to 6 more vials should be given to gain initial control.<sup>95</sup> According to prior studies, 4 to 18 vials of FabAV may be required to achieve initial control.<sup>92</sup> (Recommendation grade: 1A)

All patients receiving antivenom should be admitted to the hospital for further observation, maintenance antivenom dosing, and repeat laboratory testing until abnormalities resolve. Manufacturer recommended maintenance dosing includes 2 vials of antivenom every 6 hours for 3 consecutive doses. The treating physician may elect to deviate from the redosing schedule based on the patient's response and clinical course.<sup>96</sup> Patients should be monitored closely for any recurrence of signs and symptoms that warrant additional antivenom. Clinical deterioration should prompt repeat doses of antivenom and timely toxinologist or poison control center consultation.<sup>92</sup> (Recommendation grade: 1B)

#### DISPOSITION

Dry bites that show no progression beyond the simple wound should be monitored for a minimum of 8 hours, with laboratory studies repeated during observation to monitor for possible delayed onset of venom effects. Patients who present late (>8 hours from their initial bite) should be observed for 2 to 4 hours with laboratory evaluation. Patients safe for discharge should have normal vital signs and not have abnormalities or concerning trends in laboratory studies. (Recommendation grade: 1C)

Patients with a minor envenomation (characterized by local pain, mild edema, no signs of systemic toxicity, and normal laboratory studies) should be observed for approximately 12 to 24 hours and should also have repeat laboratory studies before discharge.<sup>50</sup> Other factors influencing this observation time are patient age, comorbidities, bite location, and healthcare access (Table 4). (Recommendation grade: 1C)

For patients who are admitted and receive antivenom, discharge information should include precautions on serum sickness and delayed coagulopathy. Provide clear information to return immediately for any signs of envenomation progression. Discharged patients should

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Envenomation	Observation	Laboratory Studies	Treatment
Dry/no bite	$\geq 8$ hours	Initial laboratory studies*	No antivenom
Minor: nonprogressive symptoms without systemic signs	12-24 hours	Initial laboratory studies; repeat laboratory studies <sup>†</sup> every 4–6 hours and before discharge	Consider antivenom only if high-risk areas affected (eg hand or face)
Moderate: progressive symptoms and/or systemic signs	Admit	Initial laboratory studies; repeat every 1 hour after antivenom until initial control	Antivenom administration, supportive care
Severe: progressive symptoms with systemic signs and/or end-organ damage	Admit	Initial laboratory studies; repeat every 1 hour after antivenom until initial control	Antivenom administration, supportive care

Table 4.	Emergency	medicine care	of	crotaline	envenomations

\* Initial laboratory studies include complete blood count with platelets, basic metabolic panel, liver function tests, prothrombin time/ international normalized ratio, partial thromboplastin time, total creatine kinase, fibrinogen, urinalysis.

<sup>†</sup> Repeat labs include complete blood count with platelets, prothrombin time/international normalized ratio, and fibrinogen.

have repeat laboratory studies (CBC, PT/INR, fibrinogen) as an outpatient 2 to 3 days and 5 to 7 days after their last antivenom dose to evaluate for delayed onset or recurrent coagulopathy.<sup>54,97</sup> They should also avoid contact sports, dental extractions, tattoos/piercings, and elective surgery for as long as 2 weeks. (Recommendation grade: 1B)

#### **Section 5: Wound Management**

Wounds after pitviper envenomation can be extensive and may require acute and chronic management. Common components of crotaline venom cause edema, hemorrhage, and sometimes necrosis at the site of envenomation. With the widespread availability of antivenom, surgical intervention in the acute management of snakebites is rarely required.<sup>66</sup>

#### DEBRIDEMENT

The vast majority of patients with crotaline bites recover without the need for surgery. Occasionally, severe Crotalus spp envenomations require surgical intervention for wound debridement, whereas copperheads rarely produce wounds requiring debridement.98 Historically, aggressive surgery was incorrectly advocated for the evaluation of injury, pain relief, compartment release, and prevention of further tissue necrosis.<sup>99</sup> In a series of 54 patients, conservative excision of ecchymotic tissue was performed, with a complication rate significantly higher than for nonsurgical management.<sup>100</sup> Histological evaluation of debrided tissue indicates live muscle fibers interspersed with necrotic fibers, which could recover.<sup>101,102</sup> Given the complications associated with surgery and improvements in the pharmacological treatment of snakebites, early surgery is contraindicated. Excision should not be routinely performed; however,

necrotic tissue and hemorrhagic blisters may benefit from debridement 3 to 5 days after injury, according to generally accepted surgical principles.<sup>103</sup> If secondary infection develops, more extensive debridement or antibiotic administration or both may be necessary. (Recommendation grade: 1B)

#### COMPARTMENT SYNDROME: FASCIOTOMY AND DIGITAL DERMOTOMY

True compartment syndrome is a rare complication of snakebites; however, it can lead to permanent disability if there is a delay in diagnosis. The diagnosis of compartment syndrome may be difficult because the primary signs and symptoms are similar to that of crotaline envenomations, including pain on passive flexion and a tense extremity. The pathophysiology of pitviper envenomation is different from that of compartment syndrome as it is caused by superficial edema and inflammation in the subcutaneous tissues rather than subfascial spaces. In cases in which venom is deposited within a muscle compartment, however, administration of antivenom can prevent and treat compartment syndrome.<sup>66</sup> In general, fasciotomy is rarely indicated and generally discouraged, favoring antivenom administered for reduction of intracompartmental pressure.<sup>103-106</sup> An experimental study of rabbits found antivenom for the preservation of muscle function to be superior to both fasciotomy alone and the combination of antivenom and fasciotomy.<sup>102</sup> In a series of 550 patients with snakebites, no patient needed fasciotomy,<sup>80</sup> and a second review found only 2 of 1257 reported cases underwent fasciotomy.<sup>101</sup> (Recommendation grade: 1B)

Serial examinations should be performed for 36 hours, at which point swelling is maximal. If concern arises for developing compartment syndrome, as in cases of severe swelling and edema that persists after appropriate administration of antivenom or development of suspicious clinical findings (worsening pain, paresthesias, pallor, etc), intracompartmental pressures should be objectively measured. If the pressures exceed 35 to 40 mm Hg, then a presumptive diagnosis of compartment syndrome should be made and appropriate surgical consultation obtained.<sup>107</sup> Although there is no uniform consensus for pressures defining compartment syndrome, clinical examination and serial pressure measurements should be carefully assessed if the diagnosis is entertained. Antivenom should be redosed (4-6 vials) and the extremity closely monitored with neurovascular examination and repeat pressure measurements. Early and aggressive use of antivenom almost always precludes the need for fasciotomy; however, in the rare patient who fails to respond, the decision to perform a fasciotomy should be made by a surgeon within 6 hours of signs of neurovascular compromise existing in the face of elevated pressures despite appropriate administration of antivenom.<sup>66</sup> (Recommendation grade: 1C)

The fingers and toes, because of their small diameter, have limited space to swell. Digit envenomation has been reported for as many as 21% of snakebites.<sup>107</sup> There is no accurate way to directly measure pressures in the digit; however, a tense, pale, insensate digit with poor capillary refill would increase clinical suspicion of digital compartment syndrome. Decision to perform digital dermotomy must be based on neurovascular examination with the aid of digital Doppler ultrasound.<sup>66</sup> If digital dermotomy is indicated, a longitudinal incision is made through the skin only from the web space to the mid distal phalanx and can be done under local anesthesia. Similar to fasciotomy, digital dermotomy is rarely required. (Recommendation grade: 1C)

#### Section 6: Unique Populations

#### PREGNANT WOMEN

Pregnant women with crotaline envenomations should be managed in close collaboration with an obstetrician. Snakebite envenomations may lead to increased morbidity to the fetus, and as many as 20% of documented envenomations in pregnancy have associated fetal death (with or without antivenom treatment). There have been no reported adverse reactions to antivenom in the mother or fetus<sup>108</sup>; however, owing to envenomation, the fetus is at higher risk to coagulopathy-related complications such as placental abruption.<sup>109</sup> Therefore, snakebite patients who are pregnant should receive antivenom as indicated and fetal assessment or monitoring.<sup>110</sup> (Recommendation grade: 1C)

#### PEDIATRIC PATIENTS

Pediatric snakebite patients should receive the same dose of antivenom as an adult. The antivenom counteracts snake venom and is dosed according to the amount of venom injected, not patient body weight. Antivenom has been shown to be safe to use in pediatric and infant populations.<sup>93,111–115</sup> (Recommendation grade: 1B)

#### ALLERGIC OR ANAPHYLACTIC REACTIONS

Antivenom-induced hypersensitivity reactions and serum sickness occur in approximately 8% and 13%, respectively, of patients treated with FabAV.<sup>116</sup> Some can be severe, and providers should be prepared to treat with epinephrine, steroids, antihistamines, or emergency airway management.<sup>7</sup> Once the allergic reaction is controlled, reversing the effects of venom remains paramount; therefore, physicians should resume slow administration of the remaining antivenom (potential benefit may be gained by further diluting to 1000 mL instead of the original 250 mL). (Recommendation grade: 1C)

Pretreatment with promethazine, hydrocortisone, or prednisone was not shown in a randomized controlled study to decrease adverse reactions to antivenom.<sup>117</sup> Although hydrocortisone plus chlorpheniramine or epinephrine may reduce the risk of adverse reactions, these were studied with nonovine antivenom formulations that were associated with significantly higher rates of anaphylaxis.<sup>118,119</sup> Pretreatment for the prophylaxis of allergic reactions should be given to patients who have had prior allergic reactions to antivenom and should be considered for patents with a history of asthma, atopy, or multiple allergies. (Recommendation grade: 1B)

#### CRITICALLY ILL PATIENTS

For the severely ill patient, supportive treatment and antivenom are the mainstays of therapy. Vasodilation, capillary leak, third-spacing, or hemorrhage can lead to hypotension and shock that necessitate supportive fluids. Fluid replacement with intravenous crystalloid boluses should be initiated in concert with antivenom dosing because antivenom remains the definitive treatment.<sup>120</sup> If hypotension persists despite antivenom and fluid therapy, vasopressor medications are recommended for hemodynamic support. (Recommendation grade: 1B)

Neurotoxic symptoms from species such as *C scutulatus* can be profound; however, antivenom has relatively poor efficacy in reversing presynaptic neurotoxicity. That is especially true in patients presenting late with paralytic features, with ptosis being an early sign.<sup>6</sup> Patients with paralytic features should be carefully evaluated and intubated or ventilated early, as clinically indicated, as that can be life saving. (Recommendation grade: 1C)

Acute renal failure due to rhabdomyolysis can be treated with standard methods of aggressive fluid hydration, alkalinization of the urine, and dialysis, if needed.<sup>121</sup> (Recommendation grade: 1C)

Respiratory compromise (unrelated to anaphylaxis) was found in as many as 8% of critically ill patients after envenomation, with 4% requiring mechanical ventilation for airway support.<sup>122</sup> (Recommendation grade: 1B)

Blood product transfusion (including packed red blood cells, fresh frozen plasma, cryoprecipitate, and platelets) may help maintain normal hematocrit in the case of severe bleeding; however, unlike antivenom, transfusion does not reverse or improve coagulopathies. Therefore, antivenom should be given initially and considered the mainstay of therapy, with transfusions reserved for only severe life-threatening hemorrhage or anemia refractory to antivenom treatment.<sup>123</sup> (Recommendation grade: 1C)

Rare and unexpected complications of snakebite envenomations have been documented in the literature. There has been a case report of a hypercoagulable state with multiple pulmonary emboli that followed an initial hypocoagulable state with hypofibrinogenemia.<sup>124</sup> Several case studies have presented cases of envenomation in which thrombocytopenia did not improve in a linear fashion with increasing dosing of antivenom.<sup>125</sup> Two cases of catastrophic ischemic stroke have been reported after Crotalidae polyvalent immune Fab (ovine)-treated rattlesnake envenomation.<sup>126</sup> A review of the literature revealed a rate of 0.5% of crotaline envenomations treated with antivenom that had medically significant late sequelae requiring rehospitalization, such as bleeding requiring blood transfusions,<sup>127</sup> and 1 case resulting in death.<sup>128</sup> An investigational Crotalidae equine immune F(ab')<sub>2</sub> antivenom not yet commercially available has shown promise in reducing the risk of such subacute coagulopathies and bleeding.<sup>129</sup> If such bleeding complications are encountered, repeat dosing of antivenom may be necessary. (Recommendation grade: 2C)

#### Summary

Pitviper envenomations can cause significant morbidity and mortality and must be treated with prompt evidencebased management protocols. Crotaline envenomations often produce local tissue injury and swelling and may result in systemic effects (including coagulopathy, neurotoxicity, or hypotension), the progression of which can be halted with prompt administration of antivenom. More severe envenomations feature extensive local effects and life-threatening systemic derangements that require repeated dosing of antivenom and closely monitored supportive care. Frequent patient assessment and diligent tracking of progressive signs and abnormal laboratory results are important for appropriate snakebite management. Consulting a toxinologist or poison control center can greatly assist in patient management. Finally, these guidelines are for crotaline snakes in the United States and Canada, and cannot be safely extrapolated to other snakes species or geographic regions.

#### References

- Guyatt G, Gutterman D, Baumann MH, et al. Grading strength of recommendations and quality of evidence in clinical guidelines: report from an American College of Chest Physicians' task force. *Chest.* 2006;129:174–181.
- Cardwell MD. Recognizing dangerous snakes in the United States and Canada: a novel 3-step identification method. Wilderness Environ Med. 2011;22:304–308.
- Torstrom SM, Pangle KL, Swanson BJ. Shedding subspecies: the influence of genetics on reptile subspecies taxonomy. *Mol Phylogenet Evol*. 2014;76:134–143.
- 4. Douglas ME, Douglas MR, Schuett GW, Porras LW, Holycross AT. Phylogeography of the Western rattlesnake (*Crotalus viridis*) complex, with emphasis on the Colorado Plateau. In: Schuett GW, Höggren M, Douglas ME, Greene HW, eds. *Biology of the Vipers*. Eagle Mountain, UT: Eagle Mountain Publishing; 2002:11–50.
- 5. Weinstein SA, Minton SA, Wilde CE. 1985. The distribution among ophidian venoms of a toxin isolated from venom of the Mojave rattlesnake (*Crotalus scutulatus scutulatus*). Toxicon. 1985;23:825–844.
- Weinstein SA, Dart RC, Staples A, White J. Envenomations: an overview of clinical toxinology for the primary care physician. Am Fam Phys. 2009;80:793–802.
- Costello MW, Heins A, Zirkin DA. Diagnosis and management of North American snake and scorpion envenomations. *EBMedicine.net*. 2006;8:1–28.
- Peterson CR, Gibson AR, Dorcas ME. Snake thermal ecology: the causes and consequences of body-temperature variation. In: Seigel RA, Collins IT, eds. Snakes: Ecology and Behavior. New York: McGraw-Hill; 1993:241-314.
- Taylor EN, DeNardo DF, Malawy MA. A comparison between point- and semi-continuous sampling for assessing body temperature in a free-ranging ectotherm. J Thermal Biol. 2004;29:91–96.
- Beaupre SJ. Time-energy use in timber rattlesnakes. In: Hayes WK, Beaman KR, Cardwell MD, Bush SP, eds. *The Biology of Ratilesnakes*. Lona Linda, CA: Loma Linda University Press; 2008:111–122.
- Klauber LM. Rattlesnakes—Their Habits, Life Histories, and Influence on Mankind. 2nd ed. Berkeley, CA: University of California Press; 1972.

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#### Kanaan et al

- 12. Mackessy SP. Venom composition in rattlesnakes: trends and biological significance. In: Hayes WK, Beaman KR, Cardwell MD, Bush SP, eds. *The Biology of Rattlesnakes*. Loma Linda, CA: Loma Linda University Press; 2008;495–509.
- Rokyta DR, Lemmon AR, Margres MJ, Aronow K. The venom-gland transcriptome of the Eastern diamondback rattlesnake (*Crotalus adamanteus*). *BMC Genomics*. 2012;312:1–23.
- 14. Daltry JC, Wüster W, Thorpe RS. Diet and snake venom evolution. *Nature*. 1996;379:537–540.
- Barlow A, Pook CE, Harrison RA, Wüster W. Coevolution of diet and prey-specific venom activity supports the role of selection in snake venom evolution. *Proc R Soc B*. 2009;276:2443–2449.
- 16. Rokyta DR, Wray KP, Margres MJ. The genesis of an exceptionally lethal venom in the timber rattlesnake (*Crotalus horridus*) revealed through comparative venom-gland transcriptomatics. *BMC Genomics*. 2013;14:394.
- Minton SA, Weinstein SA. Geographic and ontogenetic variation in the venom of the Western diamondback rattlesnake (*Crotalus atrox*). *Toxicon*. 1986;24:71–80.
- Straight RC, Glenn JL, Wolt TB, Wolfe MC. Regional differences in content of small basic peptide toxins in the venoms of *Crotalus adamanteus* and *Crotalus horridus*. *Comp Biochem Physiol B*. 1991;100:51–58.
- Massey DJ, Calvete JJ, Sánchez EE, et al. Venom variability and envenoming severity outcomes of the *Crotalus scutulatus scutulatus* (Mojave rattlesnake) from Southern Arizona. J Proteomics. 2012;75:2576–2587.
- 20. Mackessy SP, Williams K, Ashton KG. Ontogenetic variation in venom composition and diet of *Crotalus* oreganus concolor: a case of venom paedomorphosis? *Copeia*. 2003;4:769–782.
- Minton SA, Minton MR. Venomous Reptiles. New York: Scribners; 1980.
- 22. Rael ED, Lieb CS, Maddux N, Varela-Ramirez A, Perez J. Hemorrhagic and Mojave toxins in the venoms of the offspring of two Mojave rattlesnakes (*Crotalus scutulatus* scutulatus). Comp Biochem Physiol B. 1993;106:595–600.
- Du X, Clemetson KJ, Reptile C-type lectins. In: Mackessy SP, ed. Handbook of Venoms and Toxins of Reptiles. Boca Raton, FL: CRC Press; 2010:359-376.
- Mackessy SP. Venom ontogeny in the Pacific rattlesnakes. Copeia. 1988:92–101.
- Glenn JL, Straight RC. The rattlesnakes and their venom yield and lethal toxicity. In: Tu A, cd. Rattlesnake Venoms, Their Actions and Treatment. New York: Marcel Dekker; 1982.
- Janes DN, Bush SP, Kolluru GR. Large snake size suggests increased snakebite severity in patients bitten by rattlesnakes in Southern California. Wilderness Environ Med. 2010;21:120–126.
- O'Neil ME, Mack KA, Gilchrist J, Wozniak EJ. Snakebite injuries treated in United States emergency departments, 2001–2004. Wilderness Environ Med. 2001;18:281–287.

- Parrish HM. Incidence of treated snakebites in the United States. *Public Health Rep.* 1966;8:269–276.
- 29. Gold BS, Dart RC, Barish RA. Bites of venomous snakes. N Engl J Med. 2002;347:347-356.
- Langley RL. Animal-related fatalities in the United States—an update. Wilderness Environ Med. 2005;16: 67–74.
- Forrester JA, Holstege CP, Forrester JD. Fatalities from venomous and non-venomous animals in the United States (1999–2007). Wilderness Environ Med. 2012;23:146–152.
- 32. Mowry JB, Spyker DA, Cantilena LR, Bailey JE, Ford M. Annual report of the American Association of Poison Control Centers' national poison data system (NPDS): 30th annual report. *Clin Toxicol.* 2013;51:949–1229.
- Morandi N, Williams J. Snakebite injuries: contributing factors and intentionality of exposure. Wilderness Environ Med. 1997;8:152–155.
- Wingert WA, Chan L. Rattlesnake bites in Southern California and rationale for recommended treatment. West J Med. 1988;148:37–44.
- Morgan BW, Lee C, Damiano L, Whitlow K, Geller R. Reptile envenomation 20-year mortality as reported by US medical examiners. *South Med J.* 2004;97:642–644.
- **36.** Kurecki B, Brownlee H. Venomous snakebites in the United States. *J Fam Pract.* 1987;25:386–392.
- Suchard JR, LoVecchio F. Envenomations by rattlesnakes thought to be dead. N Engl J Med. 1999;340:1930.
- 38. Warrell DA. Snake bite. Lancet. 2010;375:77-88.
- Herbert SS, Hayes WK. Denim clothing reduces venom expenditure by rattlesnakes striking defensively at model human limbs. Ann Emerg Med. 2009;54:830–836.
- Greene HW. The ecological and behavioral context for pitviper evolution. In: Campbell JA, Brodie ED, eds. Biology of the Pitvipers. Tyler, TX: Selva; 1992:107–118.
- Reinert HK, Cundall D, Bushar LM. Foraging behavior of the timber rattlesnake, *Crotalus horridus*. *Copeia*, 1984:976–981.
- 42. Gregory PT. Communal denning in snakes. In: Seigel RA, Hunt LE, Knight JL, Zuschlag NL. Vertebrate Ecology and Systematics: A Tribute to Henry S. Fitch. Lawrence, KS: University of Kansas; 1984:57–75.
- 43. Sexton OJ, Jacobson P, Bramble JE. Geographic variation in some activities associated with hibernation in neartic pitvipers. In: Campbell JA, Brodie ED, eds. *Biology of the Pitvipers*. Tyler, TX: Selva; 1992:337–345.
- 44. Hayes WK, Herbert SS, Rehling GC, GENNARO JF. Factors that influence venom expenditure in viperids and other snake species during predatory and defensive contexts. In: Schuett GW, Höggren M, Douglas ME. Biology of the Vipers. Eagle Mountain, UT: Eagle Mountain Publishing; 2002:207–233.
- Minton SA. Bites by non-native venomous snakes in the United States. Wilderness Environ Med. 1996;7:297–303.
- 46. Michael GC, Thacher TD, Shehu MI. The effect of prehospital care for venomous snake bite on outcome in Nigeria. Trans R Soc Trop Med Hyg. 2011;105:95–101.

#### WMS Practice Guidelines for Pitviper Envenomations

- **47.** Ashton J, Baker SN, Weant KA. When snakes bite: the management of North American Crotalinae snake envenomation. *Adv Emerg Nurs J*. 2011;33:15–22.
- Anz AW, Schweppe M, Halvorson J, Bushnell B, Sternberg M, Koman AL. Management of venomous snakebite injury to the extremities. J Am Acad Orthop Surg. 2010;18:749.
- 49. Quinn RH. Wedmore I. Johnson E. et al. Wilderness Medical Society practice guidelines for basic wound management in the austere environment. Wilderness Environ Med. 2014;25:295–310.
- 50. Lavonas EJ, Ruha AM, Banner W, et al. Unified treatment algorithm for the management of crotaline snakebite in the United States: results of an evidence-informed consensus workshop. *BMC Emerg Med.* 2011;11:2.
- Wall C. British Military snake-bite guidelines: pressure immobilization. J R Army Med Corps. 2012;158:194–198.
- **52.** Tanen DA, Ruha AM, Graeme KA, Curry SC. Epidemiology and hospital course of rattlesnake envenomations cared for at a tertiary referral center in central Arizona. *Acad Emerg Med.* 2001;8:177–182.
- Boyer LV, Seifert SA, Clark RF, et al. Recurrent and persistent coagulopathy following pit viper envenomation. Arch Intern Med. 1999;159:706–710.
- Richardson WH, Goto CS, Gutglass DJ, Williams SR, Clark RF. Rattlesnake envenomation with neurotoxicity refractory to treatment with crotaline Fab antivenom. *Clin Toxicol (Phila)*. 2007;45:472–475.
- Alberts MB, Shalit M, LoGalbo F. Suction for venomous snakebite: a study of "mock venom" extraction in a human model. Ann Emerg Med. 2004;43:181–186.
- 56. Riggs BS, Smilkstein MJ, Kulig KW, et al. Rattlesnake envenomation with massive oropharyngeal edema following incision and suction. Abstract presented at: AACT/AAPCC/ABMT/CAPCC Annual Scientific Meeting; October 2, 1987; Vancouver, BC, Canada.
- 57. Bush SP. Hegewald K. Green SM. et al. Effects of a negative-pressure venom extraction device [Extractor] on local tissue injury after artificial rattlesnake envenomation in a porcine model. Wilderness Environ Med. 2000;11:180-188.
- Bush SP, Hardy DL. Immediate removal of Extractor is recommended [Letter]. Ann Emerg Med. 2001;38:607–608.
- Bush SP. Snakebite suction devices don't remove venom: they just suck. Ann Emerg Med. 2004;43:187–188.
- 60. Hardy DL. A review of first aid measures for pitviper bite in North America with an appraisal of Extractor suction and stun gun electroshock. In: Campbell JA, Brodie ED, eds. *Biology of the Pitvipers*. Tyler, TX: Selva Publishing; 1992:405–441.
- Johnson E, Kardong K, Mackessy S. Electric shocks are ineffective in treatment of lethal effects of ratilesnake envenomation in mice. *Toxicon*. 1987;25:1347–1349.
- Howe N, Meisenheimer J. Electric shock does not save snakebitten rats. Ann Emerg Med. 1988;17:254–256.
- Welch BE, Gales BJ. Use of stun guns for venomous bites and stings: a review. Wilderness Environ Med. 2001;12:111–117.

- 64. Frank HA. Snakebite or frostbite: what are we doing? An evaluation of cryotherapy for envenomation. *Calif Med.* 1971;114:25.
- Watt CH. Poisonous snakebite treatment in the United States. JAMA. 1978;240:654–656.
- Toschlog EA, Bauer CR, Hall EL, Dart RC, Khatri V, Lavonas EJ. Surgical considerations in the management of pit viper snake envenomation. J Am Coll Surg. 2013;217:726–735.
- Theakston RD. An objective approach to antivenom therapy and assessment of first-aid measures in snake bite. Ann Trop Med Parasitol. 1997;91:857–865.
- 68. Amaral CF, Campolina D, Dias MB, Bueno CM, Rezende NA. Tourniquet ineffectiveness to reduce the severity of envenoming after *Crotalus durissus* snake bite in Belo Horizonte, Minas Gerais, Brazil. *Toxicon*. 1998;36:805–808.
- 69. Bush SP, Green SM, Laack TA, Hayes WK, Cardwell MD, Tanen DA. Pressure immobilization delays mortality and increases intracompartmental pressure after artificial intramuscular rattlesnake envenomation in a porcine model. Ann Emerg Med. 2004;44:599–604.
- Currie BJ, Canale E, Isbister GK. Effectiveness of pressure-immobilization first aid for snakebite requires further study. *Emerg Med Australas*. 2008;20:267–270.
- Meggs WJ, Courtney C, O'Rourke D, Brewer KL. Pilot studies of pressure-immobilization bandages for rattlesnake envenomations. *Clin Toxicol (Phila)*. 2010; 48:61–63.
- **72.** Norris RL, Ngo J, Nolan K, Hooker G. Physicians and lay people are unable to apply pressure immobilization properly in a simulated snakebite scenario. *Wilderness Environ Med.* 2005;16:16–21.
- 73. Canale E, Isbister GK, Currie BJ. Investigating pressure bandaging for snakebite in a simulated setting: bandage type, training and the effect of transport. *Emerg Med Australas*. 2009;21:184–190.
- 74. Simpson ID, Tanwar PD, Andrade C, Kochar DK, Norris RL. The Ebbinghaus retention curve training does not increase the ability to apply pressure immobilization in simulated snake bite—implications for snake bite first aid in the developing world. *Trans R Soc Trop Med Hyg.* 2008;102:451–459.
- Seifert S, White J, Currie BJ. Pressure bandaging for North American snakebite? No! *Clin Toxicol (Phila)*. 2011;49:883–885.
- 76. American College of Medical Toxicology; American Academy of Clinical Toxicology; American Association of Poison Control Centers; European Association of Poison Control Centres and Clinical Toxicologists; International Society on Toxinology; Asia Pacific Association of Medical Toxicology. Pressure immobilization after North American Crotalinae snake envenomation. *Clin Toxicol (Phila)*. 2011;49:881–882.
- 77. Young BA, Zahn K. Dry bites are real. Venom flow in rattlesnakes: mechanics and metering. J Exp Biol. 2001;204:4345-4351.

#### Kanaan et al

- **78.** Hayes WK. Factors associated with the mass of venom expended by prairie rattlesnakes (*Crotalus v. viridis*) feeding on mice. *Toxicon*. 1992;30:449–460.
- 79. Young BA, Lee CE, Daley KM. Do snakes meter venom? *BioScience*. 2002;52:1121–1126.
- Russell FE, Carlson RW, Wainschel J, Osborne AH. Snake venom poisoning in the United States. JAMA. 1975;233:341–344.
- Clark RF, Selden BS, Furbee B. The incidence of wound infection following crotalid envenomation. *J Emerg Med.* 1993;11:583–586.
- Kerrigan KR, Mertz BL, Nelson SJ, Dye JD. Antibiotic prophylaxis for pit viper envenomation: prospective, controlled trial. World J Surg. 1997;21:369–373.
- LoVecchio F, Klemens J, Welch S, Rodriguez R. Antibiotics after rattlesnake envenomation. J Emerg Med. 2002;23:327–328.
- 84. Jorge MT, Malaque C, Ribeiro LA, et al. Failure of chloramphenicol prophylaxis to reduce the frequency of abscess formation as a complication of envenoming by Bothrops snakes in Brazil: a double-blind randomized controlled trial. *Trans R Soc Trop Med Hyg.* 2004;98:529–534.
- Cowin DJ, Wright T, Cowin JA. Long-term complications of snake bites to the upper extremity. J South Orthop Assoc. 1998;7:205–211.
- 86. Levine M, Ruha AM, Padilla-Jones A, Gerkin R, Thomas SH. Bleeding following rattlesnake envenomation in patients with preenvenomation use of antiplatelet or anticoagulant medications. Acad Emerg Med. 2014;21:301–337.
- 87. Weinstein SA, Warrell DA, White J, Keyler DE. "Venomous" bites from non-venomous snakes: a critical analysis of risk and management of "colubrid" snake bites. London: Elsevier; 2011.
- 88. Centers for Disease Control and Prevention (CDC). Updated recommendations for use of tetanus toxoid, reduced diphtheria toxoid and acellular pertussis (Tdap) vaccine from the Advisory Committee on Immunization Practices, 2010. MMWR Morb Mortal Wkly Rep. 2011;60:13–15.
- Spano S, Vohra R, Macias F. Long-term complications of rattlesnake bites: a telephone survey from central California. Wilderness Environ Med. 2014;25:210-213.
- Cheng AC Management of Crotalinae (rattlesnake, water moccasin [cottonmouth], or copperhead) bites in the United States. Available at: www.uptodate.com. July 2012. Accessed February 26, 2015.
- Quan AN, Quan D, Curry SC. Improving Croialidae polyvalent immune Fab reconstitution times. Am J Emerg Med. 2010;28:593–595.
- 92. Lavonas EJ, Chaeffer TH, Kokko J, et al. Crotaline Fab antivenom appears to be effective in cases of severe North American pit viper envenomation: an integrative review. BMC Emerg Med, 2009;9:13.
- **93.** Goto CS, Feng SY. Crotalidae polyvalent immune Fab for the treatment of pediatric crotaline envenomation. *Pediatr Emerg Care.* 2009;25:273–282.

- Keating GM. Crotalidae polyvalent immune Fab. Biodrugs. 2011;25(2):69–76.
- 95. Yin S, Kokko J, Lavonas E, et al. Factors associated with difficulty achieving initial control with Crotalidae polyvalent immune Fab antivenom in snakebite patients. *Acad Emerg Med.* 2010;18:46–52.
- 96. Boyer LV. Seifert SA. Cain JS. Recurrence phenomena after immunoglobulin therapy for snake envenomations: part 2. Guidelines for clinical management with crotaline Fab antivenom. Ann Emerg Med. 2001;37:196–201.
- 97. Ruha AM, Curry SC, Albrecht C, Riley B, Pizon A. Late hematologic toxicity following treatment of rattlesnake envenomation with Crotalidae polyvalent immune Fab antivenom. *Toxicon*. 2011;57:53–59.
- 98. Rampal P, Moore N, Van Ganse E, et al. Comparative tolcrability of paracctamol, aspirin and ibuprofen for short-term analgesia in patients with musculoskeletal conditions: results in 4291 patients. J Int Med Res. 2002,30,301–308.
- **99.** Glass TG. Early debridement in pit viper bites. *JAMA*. 1976;235:2513–2516.
- 100. Huang TT, Lynch JB, Larson DL, Lewis SR. The use of excisional therapy in the management of snakebite. Ann Surg. 1974;179:598.
- 101. Hall EL. Role of surgical intervention in the management of crotaline snake envenomation. Ann Emerg Med. 2001;37:175–180.
- 102. Rossi MA, Peres LC, de Paola F, Cupo P, Hering SE, Azevedo-Marques MM. Electron-microscopic study of systemic myonecrosis due to poisoning by tropical rattlesnake (*Crotalus durissus terrificus*) in humans. Arch Pathol Lab Med. 1989;113:169–173.
- 103. Stewart RM, Page CP, Schwesinger WH, McCarter R, Martinez J, Aust JB. Antivenin and fasciotomy/debridement in the treatment of the severe rattlesnake bite. Am J Surg. 1989:158:543–547.
- 104. Cumpston KL. Is there a role for fasciotomy in Crotalinae envenomations in North America? *Clin Toxicol.* 2011;49:351–365.
- 105. Tanen DA, Danish DC, Clark RF. Crotalidae polyvalent immune Fab antivenom limits the decrease in perfusion pressure of the anterior leg compartment in a porcine crotaline envenomation model. Ann Emerg Med. 2003;41:384–390.
- 106. Tanen DA, Danish DC, Grice GA, Riffenburgh RH, Clark RF. Fasciotomy worsens the amount of myonecrosis in a porcine model of crotaline envenomation. Ann Emerg Med. 2004;44:99–104.
- 107. Walker JP, Morrison RL. Current management of copperhead snakebite. J Am Coll Surg. 2011;212:470–474.
- 108. LaMonica GE, Seifert SA, Rayburn WF. Rattlesnake bites in pregnant women. J Reprod Med. 2010;55:520–522.
- 109. Zugaib M, de Barros AC, Bittar RE, Burdmann EA, Neme B. Abruptio placentae following snake bite. Am J Obstet Gynecol. 1985;151:754–755.
- 110. Langley RL. Snakebite during pregnancy: a literature review. Wilderness Environ Med. 2010;21:54–60.

#### WMS Practice Guidelines for Pitviper Envenomations

- Offerman SR, Bush SP, Moynihan JA, Clark RF. Crotaline Fab antivenom for the treatment of children with rattlesnake envenomation. *Pediatrics*. 2002;110:968–971.
- 112. Shaw BA, Hosalkar HS. Rattlesnake bites in children: antivenin treatment and surgical indications. J Bone Joint Surg Am. 2002;9:1624–1629.
- 113. Trinh HH. Hack JB. Use of CroFab antivenin in the management of a very young pediatric copperhead envenomation. *J Emerg Med.* 2005;29:159–162.
- 114. Pizon AF, Riley BD, LoVecchio F, Gill R. Safety and efficacy of Crotalidae polyvalent immune Fab in pediatric crotaline envenomations. *Acad Emerg Med.* 2007;14: 373–376.
- 115. Campbell BT, Corsi JM, Boneti C, Jackson RJ, Smith SD, Kokoska ER. Pediatric snakebites: lessons learned from 114 cases. J Pediatr Surg. 2008;43:1338–1341.
- 116. Schaeffer TH, Khatri V, Reifler LM, Lavonas EJ. Incidence of immediate hypersensitivity reaction and serum sickness following administration of Crotalidae polyvalent immune Fab antivenom: a meta-analysis. *Acad Emerg Med.* 2012;19:121–131.
- 117. Nuchprayoon I, Pongpan C, Sripaiboonkij N. The role of prednisolone in reducing limb oedema in children bitten by green pit vipers: a randomized, controlled trial. Ann Trop Med Parasitol. 2008;102:643–649.
- 118. Gawarammana IB, Kularatne SA, Dissanayake WP, et al. Parallel infusion of hydrocortisone +/- chlorpheniramine bolus injection to prevent acute adverse reactions to antivenom for snakebites. *Med J Aust*, 2004;180:20–23.
- 119. De Silva HA, Pathmeswaran A, Ranasinha CD, et al. Low-dose adrenaline, promethazine, and hydrocortisone in the prevention of acute adverse reactions to antivenom following snakebite: a randomised, double-blind, placebo-controlled trial. *PLoS Med.* 2011;8:e1000435.
- 120. Schaeffer RC, Carlson RW, Puri VK, et al. The effects of colloidal and crystalloidal fluids on rattlesnake venom

shock in the rat. J Pharmacol Exp Ther. 1978;206: 687-695.

- 121. Jansen PW, Perkin RM, Van Stralen D. Mojave rattlesnake envenomation: prolonged neurotoxicity and rhabdomyolysis. Ann Emerg Med. 1992;21:322–325.
- 122. Brooks DE, Graeme KA, Ruha AM, Tanen DA. Respiratory compromise in patients with rattlesnake envenomation. J Emerg Med. 2002;23:329–332.
- 123. Burgess JL, Dart RC. Snake venom coagulopathy: use and abuse of blood products in the treatment of pit viper envenomation. Ann Emerg Med. 1991;20:795–801.
- 124. Bhagat R, Sharma K, Sarode R, Shen YM. Delayed massive pulmonary thromboembolic phenomenon following envenomation by Mojave rattlesnake (*Crotalus* scutulatus). Thromb Haemost. 2010;104;186–188.
- 125. Bush SP, Wu VH, Corbett SW. Rattlesnake venominduced thrombocytopenia response to Antivenin (Crotalidae) Polyvalent: a case series. Acad Emerg Med. 2000,7:181–185.
- 126. Bush SP, Mooy GG, Phan TH. Catastrophic acute ischemic stroke after Crotalidae polyvalent immune Fab (ovine)-treated rattlesnake envenomation. *Wilderness Environ Med.* 2014;25:198–203.
- 127. Lavonas EJ, Khatri V, Daugherty C, et al. Medically significant late bleeding after treated crotaline envenomation: a systematic review. Ann Emerg Med. 2014;63: 71–78.
- 128. Kitchens C, Eskin T. Fatality in a case of envenomation by *Crotalus adamanteus* initially successfully treated with polyvalent ovine antivenom followed by recurrence of defibrinogenation syndrome. *J Med Toxicol.* 2008;4: 180–183.
- 129. Bush SP, Ruha AM, Seifert SA, et al. Comparison of F (ab')2 versus Fab antivenom for pit viper envenomation: a prospective, blinded, multicenter, randomized clinical trial. *Clin Toxicol (Phila)*. 2014;31:1–9.

# **EXHIBIT 13**

## **EXHIBIT 13**





## Bites by Crotalinae snakes (rattlesnakes, water moccasins [cottonmouths], or copperheads) in the United States: Management

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## INTRODUCTION

This topic will review the management of Crotalinae (rattlesnake, water moccasin [cottonmouth], or copperhead) snakebites. The clinical manifestations, evaluation, and diagnosis of these snakebites; evaluation and management of bites by coral snakes; and snakebites outside the United States are discussed separately:

- (See "Bites by Crotalinae snakes (rattlesnakes, water moccasins [cottonmouths], or copperheads) in the United States: Clinical manifestations, evaluation, and diagnosis".)
- (See "Evaluation and management of coral snakebites".)
- (See "Snakebites worldwide: Clinical manifestations and diagnosis" and "Snakebites worldwide: Management".)

#### **FIRST AID**

The appropriate first aid for snakebites is controversial, and management strategies are primarily based on case series and clinical experience [1,2]. Numerous field measures have been advocated, but none have been shown to improve outcome [3].

We suggest the following approach for North American (NA) Crotalinae snakebite victims prior to definitive hospital care [1,2]:

- Remove the patient from the snake's territory and keep him or her warm, at rest, and calm.
- Remove any rings, watches, or constrictive clothing from the affected extremity.
- Immobilize the injured body part in a functional or extended position at the level of the heart [1,2]. For extremity bites, some experts advise elevation of the extremity to decrease local pain and swelling. Although there is a theoretical concern for increased systemic toxicity during prehospital care with elevation of the bite site, evidence is lacking that systemic toxicity is increased by the elevated position in patients with pit viper bites.
- Do not apply pressure immobilization, tourniquets, or constrictive dressings. Pressure immobilization refers to a procedure in which an elastic bandage is applied to the affected limb with a goal of delaying venom spread through the lymphatics but is not applicable and not advisable for the initial management of Crotalinae bites. Although pressure immobilization is mentioned as a potential first aid therapy for snakebites in the United States by the American Heart Association [4], no clinical studies in human patients have demonstrated benefit. Most snakebite experts do not support pressure immobilization for Crotalinae snakebites because these venoms cause local tissue toxicity, and sequestering the venom in the affected limb may increase local tissue damage [5,6].

Pressure immobilization may be useful as a first aid procedure for neurotoxic snakebites and is discussed in greater detail separately. (See "Snakebites worldwide: Management", section on 'Pressure immobilization'.)

- Cleanse the wound.
- Withhold alcohol and drugs that may confound clinical assessment.
- Transport the patient to the nearest medical facility as quickly as possible, preferably using emergency medical services.

Attempts to identify the snake should not endanger the patient or rescuer and should never delay transport to a medical facility. A
digital photo taken at a safe distance may be useful. Snakes and decapitated snake heads should not be handled directly because
the bite reflex may remain intact in recently killed snakes and result in additional envenomation.

Misidentification (particularly in an emergency situation) may have potentially serious outcomes, and patients with possible envenomation should be observed closely [7]. It may be difficult to determine whether a snake is venomous or not. Several characteristics have been proposed but are not a substitute for expert consultation (figure 1) [8]. Venomous rattlesnakes have a triangular-shaped head, elliptical pupils, and hollow, retractable fangs. By contrast, nonvenomous snakes have rounded heads and pupils and lack fangs but may be very effective mimics of venomous snakes in terms of appearance or behavior.

Methods such as tourniquets, incision and oral suction, mechanical suction devices, cryotherapy, surgery, and electric shock therapy have no role in snakebite management [5]. Tourniquets can damage nerves, tendons, and blood vessels; and oral suction can lead to infection [8-10]. Furthermore, venom removal by mechanical suction is minimal at best. In a study of attempted mock venom extraction with a mechanical suction device in human volunteers, suction reduced the total body burden by only 2 percent [11].

### **ACUTE MANAGEMENT**

Treatment depends upon the degree of envenomation [5]. (See "Bites by Crotalinae snakes (rattlesnakes, water moccasins [cottonmouths], or copperheads) in the United States: Clinical manifestations, evaluation, and diagnosis", section on 'Evaluation'.)

**Initial stabilization** — Stabilization of patients with Crotalinae snakebites requires rapid assessment and management of the airway, breathing, and circulation:

- Airway and breathing In addition to emergency antivenom administration, patients with airway compromise require endotracheal intubation and mechanical ventilation. Patients with the following clinical features are at highest risk:
  - Bites to the face or neck Crotalinae snakebites to the face or neck may result in rapid local tissue swelling with airway obstruction.
  - Myokymia (rippling muscle movement of the face and extremities) Myokymia that is extensive, or involves the muscles of respiration, is associated with respiratory failure [12].
- Mohave or Southern Pacific rattlesnake bite Some populations of these species possess a neurotoxin that may produce weakness and respiratory failure [13,14]. Although the decision to perform endotracheal intubation and institute mechanical ventilation should be made on clinical grounds (including the need for airway protection associated with bulbar palsy), ancillary studies may provide additional objective information to augment serial clinical assessment in some patients as discussed separately. (See "Evaluation and management of coral snakebites", section on 'Neurologic assessment and respiratory support'.)
- **Circulation** Emergency management of shock and bleeding followed by timely antivenom administration to patients with progressive tissue swelling or systemic toxicity after Crotalinae envenomation are the most common actions needed when stabilizing patients with Crotalinae snakebites.

Hypovolemia from hemorrhage secondary to bleeding, fluid shift into the bitten limb, and/or direct venom effects with vasodilation may cause shock with hypotension. These patients warrant treatment with rapid infusion of isotonic fluids (eg, normal saline or balance crystalloid solutions) or blood (depending upon degree of hemorrhage and to maintain the hematocrit at acceptable levels) and, if shock is not quickly reversed with intravenous fluid boluses, vasoactive medications, like patients with septic shock. (See "Septic shock in children: Rapid recognition and initial resuscitation (first hour)" and "Evaluation and management of suspected sepsis and septic shock in adults".)

**Marked local or systemic envenomation** — Patients with marked or progressive swelling, hematologic, or other systemic findings of envenomation, or who have bites to the face or neck that show signs of envenomation and a potential for airway obstruction warrant Crotalinae antivenom treatment of local effects, supportive care, and antivenom ( algorithm 1). (See 'Antivenom therapy' below.)

#### Antivenom therapy

**Initial treatment** = Consultation with a medical toxicologist or other physician with expertise and prior experience treating venomous snakebites is strongly encouraged **before** initiating antivenom therapy. Emergency consultation with a medical toxicologist in the United States is available at 1-800-222-1222. Regional poison control centers can also assist with locating and facilitating transport of

antivenom to the treating facility.

For patients with Crotalinae snakebites and progressive swelling or signs of systemic toxicity, we recommend antivenom therapy ( table 1). Antivenom should be administered as soon as possible once manifestations of envenomation (beyond minor localized swelling) are evident to both treat existing effects and prevent progression of venom effects. There is no specific time limit for administration of antivenom. Crotalidae Polyvalent-immune Fab (ovine), brand name CroFab (FabAV) [5,15-24] and Crotalidae Immune F(ab')<sub>2</sub> (equine), brand name Anavip (Fab2AV) [25,26], are each approved for North American (NA) Crotalinae snakebites and have similar efficacy as described below. (See 'Efficacy' below.)

For patients with Crotalinae snakebite sites that present a significant possibility for airway obstruction from local tissue swelling (eg, bites to the face or neck with signs of envenomation), we recommend antivenom administration even for mild swelling in the absence of other signs of envenomation. Patients with bites in these locations can have rapid onset of critical airway compromise from local swelling alone.

For patients exhibiting neurotoxicity (muscle fasciculation and/or motor weakness) after an NA rattlesnake bite, experience using FabAV to reverse these effects is inconsistent: both success and failure in reversing neurotoxic effects with FabAV are reported [27,28], although experience is limited [29]. Patients with alrway compromise or depressed respirations warrant emergency endotracheal intubation and mechanical ventilation.

• Relative contraindications – For patients receiving FabAV (CroFab), relative contraindications include allergy to papain, papaya, or FabAV during prior administration.

Relative contraindications for the use of Fab2AV (Anavip) include patients with known allergies to horse protein or who have had an allergic reaction to prior therapy with Fab2AV antivenom.

When relative contraindications are present, antivenom should only be administered when the benefits outweigh the risks [24]. These patients require pretreatment for anaphylaxis and adjustment of the rate of infusion as described separately. (See 'Treatment of acute antivenom reactions' below.)

Pregnancy is **not** a contraindication to antivenom administration; indirect experience with other antivenoms suggests that potential adverse effects to the fetus following pregnancy are primarily related to venom effects on the mother. Although acute antivenom reactions may occur in the mother, antivenom plus any required anaphylaxis management is likely the best approach to improved fetal outcome [24,26,30]. Case reports have also documented delivery of healthy newborns soon after FabAV antivenom therapy [31-33].

• **Dose and administration** – The table summarizes dosing, reconstitution, and administration for Crotalidae Immune F(ab')<sub>2</sub> (equine), brand name Anavip (Fab2AV) and Crotalidae Polyvalent-immune Fab (ovine), brand name CroFab (FabAV) ( table 1) and is based upon the manufacturer's instructions [24,26]. Snakes inject the same quantity of venom into children and adults. Thus, the dosage of antivenom is **not** dependent upon age or weight but does vary with the severity of envenomation; specifically, higher doses of antivenom are needed for patients with hypotension or serious active bleeding [5].

Antivenom therapy with FabAV or Fab2AV can be associated with potentially severe allergic reactions, but the risk appears to be low (<1 percent) [25]. Nevertheless, antivenom should only be administered in a continuously monitored emergency or intensive care unit setting. Epinephrine ([concentration 1 mg/mL] 0.3 to 0.5 mg intramuscularly [IM] for administration in the anterolateral thigh as well as epinephrine [concentration 0.1 mg/mL] for continuous intravenous [IV] infusion), diphenhydramine or similar antihistamine, IV corticosteroids, and inhaled albuterol should all be immediately available. (See 'Treatment of acute antivenom reactions' below.)

**Treatment of acute antivenom reactions** — Based upon the comparative trial between FabAV and Fab2AV, the rate of acute serum reaction and serum sickness for patients receiving either FabAV or Fab2AV is approximately 2 to 3 percent [25]. Patients who have previously received Crotalinae antivenom (or, for Fab2AV antivenom, other equine antivenoms) may be predisposed to acute allergic reactions.

In patients who experience signs of acute hypersensitivity (eg, anaphylactic shock, oropharyngeal swelling, bronchospasm, or urticaria) or nonimmunologic acute reactions (eg, nausea, vomiting, arthralgia, headache), the clinician should immediately stop antivenom infusion. Patients with signs suggestive of anaphylaxis should receive emergency treatment as outlined in the rapid overview for adults ( table 2) or children ( table 3). (See "Anaphylaxis: Emergency treatment", section on 'Immediate management'.)

Consultation with a medical toxicologist experienced in the management of Crotalinae snakebites is strongly encouraged for these patients. Further management depends upon the nature of the reaction [34]:

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- Acute hypersensitivity Once anaphylaxis is controlled, a decision regarding restarting the antivenom infusion should be based on a risk-to-benefit analysis. Clinicians may choose to proceed with antivenom administration in patients who manifest serious systemic toxicity despite the presence of allergy. If resumption of antivenom therapy is chosen, then the patient should receive pretreatment to blunt the allergic response (eg, IV diphenhydramine 1.25 mg/kg, maximum single dose 100 mg and/or IV methylprednisolone 2 mg/kg, maximum single dose 125 mg), and the clinician should ensure preparation and immediate availability of epinephrine (0.3 to 0.5 mg IM to the anterolateral thigh, 1:1000 preparation or continuous IV infusion of 1:10,000 epinephrine 0.1 to 1 microgram per minute, titrated to effect) before administration of any antivenom. Antivenom should be administered at a lower infusion rate (eg, 25 mL/hour or slower).
- Acute reactions without hypersensitivity Because acute reactions are often nonimmunologic in nature, the antivenom infusion may be resumed cautiously and completed at a lower infusion rate (eg, 25 mL/hour).

If signs or symptoms of anaphylaxis or hypersensitivity reactions occur again, antivenom administration should be discontinued immediately, appropriate therapy instituted, and the need for further antivenom treatment re-evaluated.

Assessment of response and need for redosing — The response to antivenom determines whether or not further doses are required ( table 1). Control of envenomation is indicated by all of the following [34]:

- Hemodynamic stability.
- Improvement in other systemic findings such as vomiting, diarrhea, or altered mental status.
- Lack of progression of tissue swelling adjacent to the bite site.
- Partial or complete reversal of hematologic toxicity based upon repeated laboratory studies performed one hour after each dose of antivenom. Studies should include a complete blood count, prothrombin time (PT), international normalized ratio (INR), and fibrinogen.

Patients who do not achieve control of envenomation after the initial dose of antivenom warrant repeat dosing under the guidance of a medical toxicologist or physician with similar expertise managing Crotalinae snakebites.

**Prevention of early recurrent toxicity** — Crotalidae Polyvalent-immune Fab (ovine), brand name CroFab (FabAV), and Crotalidae Immune F(ab')<sub>2</sub> (equine), brand name Anavip (Fab2AV), the antivenoms available for Crotalinae snakebites in North America, differ in their rates of early recurrence and duration of effect (see 'Efficacy' below). Thus, the approach to preventing early recurrent toxicity depends upon the antivenom used:

FabAV (CroFab) – To prevent recurrent toxicity marked by subsequent worsening of local (eg, swelling) or hematologic (eg, platelets or fibrinogen) effects after initial improvement, we suggest that patients with Crotalinae envenomation who have undergone FabAV administration receive scheduled doses of antivenom (two vials every six hours for three doses) (table 1) [5,19,24]. Alternatively, if medical toxicology oversight and resources allow, the clinician may choose to perform careful clinical assessment of the bite site and measurement of coagulation studies every six hours to determine the need for additional antivenom [35].

Provision of scheduled maintenance doses of FabAV after initial control is achieved may limit recurrence of local venom effects and decrease rates of late hemotoxicity [21,26]. Yet even with use of maintenance doses, late hemotoxicity is reported in approximately 30 percent of patients [22,25,36]. Some experts suggest that in settings where close monitoring of local swelling and coagulation parameters can occur, as-needed dosing of FabAV antivenom may be more appropriate than scheduled dosing. For example, in a retrospective observational study of 310 adults that compared hospital length of stay and total vials used between patients treated with an as-needed versus a scheduled maintenance antivenom regimen, the as-needed group received fewer vials overall (8 versus 16 vials) and had a shorter hospital length of stay (27 versus 34 hours) [35]. Follow-up information was available for over 90 percent of patients in this study, and there were no differences in hospital readmissions, retreatment with antivenom, bleeding, or procedures between groups. However, patients were admitted to a toxicology service managed by full-time toxicology faculty practicing at the bedside and covered by 24-hour onsite medical toxicology fellows. The immediate availability of physicians with a high level of snakebite expertise likely optimized timely detection of local recurrence and hastened administration of antivenom when necessary. From a practical standpoint, this degree of monitoring is not available at most hospitals where snakebite victims are managed. In those settings, a delay in recognition of and response to recurrence of local venom effects could result in increased local tissue injury, and scheduled maintenance dosing of FabAV is preferred.

• Fab2AV (Anavip) – Once initial control is achieved (local effects are no longer progressing, hematologic and systemic effects are

improving), maintenance doses of Fab2AV are not needed. However, patients should be observed for an additional 18 hours for reemergence of local or hematologic effects. If these occur, additional doses of antivenom are indicated [26].

#### Identification and treatment of late hemotoxicity

**Risk of late hemotoxicity** — Among patients with rattlesnake envenomation who receive FabAV, the risk of late hemotoxicity is approximately 30 percent depending upon the geographic region and snake species involved [22,25,36]. Late hemotoxicity describes either recurrent, delayed onset, or persistent thrombocytopenia, prolonged PT and/or decreased fibrinogen.

Late hemotoxicity appears to be much less common in patients treated with Fab2AV. In a randomized clinical trial of 121 patients receiving antivenom for a Crotalinae snakebite, 8 percent of patients who received Fab2AV experienced late hemotoxicity compared with 30 percent in the FabAV group [25]. Subsequent small observational studies from New Mexico and Arizona have revealed even lower rates of late hemotoxicity with use of Fab2AV (0 to 5 percent) [29,37]. Recurrent and delayed hemotoxicity may become apparent as early as 24 hours after treatment with FabAV but can develop up to 14 days after initial control with antivenom [25]. This risk is increased in patients with abnormal platelets or fibrinogen within the first 12 hours after FabAV administration [38]. Risk may also be increased in patients with normal platelets and fibrinogen but who exhibit an elevated D-dimer or fibrin split products [39]. However, late, new-onset hematologic abnormalities may develop even without these indicators, likely due to early administration of antivenom to treat swelling, and prevention of onset of hemotoxicity with this treatment [40].

**Monitoring** — Since late hemotoxicity can develop following use of FabAV or Fab2AV, and risk cannot be predicted, all patients who receive antivenom warrant monitoring (physical assessment and laboratory studies) for late thrombocytopenia or hypofibrinogenemia according to the antivenom received [19] (see 'Prevention of early recurrent toxicity' above):

- FabAV (CroFab) Obtain a platelet count and fibrinogen level two to three days after and again five to seven days after last administration of FabAV.
- Fab2AV (Anavip) Obtain a platelet count and fibrinogen level five to seven days after last Fab2AV administration.

If any abnormal trends are noted, further laboratory monitoring is indicated. Additionally, patients with additional risk factors for bleeding may require early or more frequent assessments.

**Treatment** — For patients in whom late hemotoxicity is identified, further management is determined based on the specific laboratory values, signs of bleeding, or presence of risk factors for serious bleeding [17,41-43].

Indications for antivenom therapy of late hemotoxicity with antivenom include:

- Any bleeding
- Platelet count <25,000/mL
- Multicomponent coagulation abnormalities (eg, platelets <50,000/mL and fibrinogen <80mg/dL)
- Comorbid conditions or behaviors that increase hemorrhagic risk such as pregnancy, use of antiplatelet or anticoagulant medications, injury prone behaviors or activities, or recent venom-induced systemic shock

Retreatment should be performed in consultation with a medical toxicologist or other physician with expertise in managing Crotalinae snakebites. An initial bolus dose of two vials of FabAV or four vials of Fab2AV is a reasonable starting point, with additional doses titrated to the neutralization of ongoing venom effects [38]. In some instances, total reversal of hemotoxicity with FabAV is not possible. In patients who have no significant bleeding, the clinician may choose improvement in coagulation parameters towards normal as an acceptable outcome [21]. Based on limited evidence, Fab2AV may be a more effective treatment for late hemotoxicity that occurs following use of FabAV [44].

Isolated late hypofibrinogenemia may be observed in healthy, nonpregnant patients without other risk factors for bleeding. These patients should be monitored for resolution of coagulation abnormalities, should not use medications that inhibit platelets, and should not undergo any surgical procedures or engage in activities that risk injury until hemotoxicity is resolved. Complete resolution may take up to three weeks from the time of envenomation [41-43].

**Efficacy** — Crotalidae Polyvalent-immune Fab (ovine), brand name CroFab (FabAV); and Crotalidae Immune F(ab')<sub>2</sub> (equine), brand name Anavip (Fab2AV) are the two antivenoms available for bites by Crotalinae snakes in North America:

• FabAV (CroFab) – FabAV consists of the purified Fab fragments of sheep immunoglobulin (IgG) raised against the venom of four snakes: Crotalus atrox (western diamondback rattlesnake), Crotalus adamanteus (eastern diamondback rattlesnake), Crotalus

*scutulatus* (Mohave rattlesnake), and *Agkistrodon piscivorus* (cottonmouth or water moccasin) [16,38,45]. When infused, these Fab fragments bind venom in the intravascular space and are renally excreted. The larger volume of distribution, compared with IgG and Fab2AV, results in more rapid decline in circulating antivenom levels.

Because approximately 50 percent of patients in the first phase of the clinical trial developed recurrence of local venom effects, routine maintenance doses in the first 18 hours are recommended for control of local effects. The half-life of FabAV is approximately 15 hours and shorter than Crotalinae venom substances, which may be detected for more than two weeks post-envenomation. Thus, recurrence or delayed onset of hemotoxicity is possible in the days to weeks following treatment as antivenom levels decline and may necessitate repeated antivenom administration.

• Fab2AV (Anavip) – Fab2AV consists of the purified F(ab')<sub>2</sub> fragments of equine IgG raised against the venom of *Bothrops asper* and *Crotalus simus* [25,46]. When infused, these F(ab')<sub>2</sub> fragments bind venom in the intravascular space. Because of the smaller volume of distribution compared with FabAV, circulating antivenom concentrations do not decline as rapidly, and routine maintenance doses in the first 18 hours following initial control are not required. Although no studies have specifically looked at the effectiveness of Fab2AV and time to treatment, it had similar effectiveness to FabAV when given in the same timeframe [25].

Because the molecular weight of Fab2AV is above the threshold for renal clearance, these fragments are not cleared renally and have a longer half-life (133 hours) than FabAV [26]. Thus, recurrent hematologic toxicities occur at a lower rate than with FabAV [25].

Based upon small trials and observational studies, the majority of envenomated patients achieve control of toxicity (local swelling and systemic effects) after initial administration of one or two loading doses of either FabAV [18-21,23,47] or Fab2AV [25,29,37], with some patients requiring additional doses. There is an approximately 2 to 3 percent risk of adverse immune reactions or type 1 (acute) and type 3 (delayed, "serum sickness") hypersensitivity; these are typically minor [25].

Fab2AV appears to have similar initial therapeutic benefit compared with FabAV. For example, in a trial of over 110 children and adults with Crotalinae envenomation, Fab2AV was found to have comparable efficacy as FabAV in terms of initial control of hemotoxicity after rattlesnake envenomation. Individuals receiving Fab2AV also did not require maintenance dosing for continued control of local envenomation effects, had a lower incidence of late hemotoxicity (5 to 10 percent for Fab2AV versus 30 percent for FabAV [relative risk reduction 0.20, 95% CI 0.01-0.37]), and had similar rates of type 1 and type 3 hypersensitivity reactions (2 to 3 percent) [25]. In an observational study of 37 patients with rattlesnake envenomation from the New Mexico regional poison control center, both Fab2AV and FabAV achieved initial control of local effects and managed initial hemotoxicity [37]. The lower risk of late hemotoxicity following use of Fab2AV makes it attractive for use in patients with rattlesnake envenomation. Although uncommon, late thrombocytopenia and coagulation abnormalities have been associated with serious bleeding and mortality [41-43].

Among patients receiving FabAV, thrombocytopenia and/or neurologic effects on presentation have been associated with difficulty achieving initial control [18]. In addition, FabAV antivenom did not reverse the thrombocytopenia following a reported timber rattlesnake envenomation [48].

Prior to the availability of antivenoms active against Crotalinae snakebites and the widespread availability of emergency departments and critical care units, snakebite mortality ranged from 5 to 36 percent in the United States [49-51]. After the introduction of Antivenin Crotalidae Polyvalent (ACP; Wyeth) in the 1950s and the development of widespread availability of emergency and critical care medicine starting in the 1960s, deaths from snakebites dropped to less than 1 percent. For example, analysis of 23,676 venomous snake exposures from 2001 to 2005 reported to the American Association of Poison Control Centers database found a fatality rate of 0.06 percent [52]. Similarly, no fatalities occurred in a United States registry study of 442 native pit viper snakebites occurring from 2013 to 2015 [53]. Thus, the availability of antivenom for most native Crotalinae snakebites combined with other trends in emergency and critical care capability has been associated with a marked and sustained decrease in snakebite mortality in the United States.

Additional observational experience suggests that untreated Crotalinae envenomation is rarely fatal in regions where copperhead bites predominate but can be life- or limb-threatening. For example, an observational study of 81 adult and pediatric patients who were managed without antivenom therapy after snakebite (45 copperhead, 12 water moccasin [cottonmouth], 10 rattlesnake, and 14 unknown) reported no fatalities or long-term morbidity [54]. However, significant acute toxicity did occur, including hemotoxicity (15 patients), skin necrosis (8 patients), respiratory distress requiring endotracheal intubation (3 patients), hypotension (2 patients), and cardiac arrhythmia (2 patients).

Supportive care — Antivenom administration is the mainstay for treatment of envenomation by NA Crotalinae snakes.

In addition, the clinician should provide pain control and monitor for and be ready to manage hypotension, bleeding, rhabdomyolysis, elevated tissue and/or compartment pressures, and, rarely, respiratory failure.

**Pain control** — Although evidence is limited, patients with rattlesnake or water moccasin bites whose clinical course suggests that the risk of coagulation abnormalities or thrombocytopenia is low or patients with copperhead bites and minimal hemotoxicity may receive analgesia for mild to moderate pain with acetaminophen or nonsteroidal antiinflammatory medications (eg, ibuprofen) [55,56]. Severe pain after snakebite frequently warrants treatment with opioid medications (eg, fentanyl or morphine).

**Coagulation abnormalities and thrombocytopenia** — Coagulation abnormalities associated with Crotalinae envenomation is primarily due to thrombin-like enzymes or fibrinogenases within the venom. Fibrinogen levels decline without a decrease in other clotting factors [43,57,58]. This pathophysiology contrasts with true disseminated intravascular coagulation (DIC), where fibrinolysis is activated by increased levels of endogenous thrombin. Thus, antivenom administration, and **not** coagulation factor replacement, is the primary treatment for Crotalinae-induced hemotoxicity. (See 'Antivenom therapy' above.)

Multiple venom components may affect platelets, and the mechanism by which thrombocytopenia occurs is complex [58]. Transfused platelets and coagulation factors in fresh frozen plasma are inactivated by Crotalinae venom and should be avoided in patients with Crotalinae-induced hemotoxicity unless the patient has significant bleeding that is uncontrolled by high-dose antivenom administration [59]. If blood products are given in response to acute blood loss, they should be given with additional antivenom to prevent rapid depletion of those components. Venom-induced thrombocytopenia and venom-induced coagulation abnormalities in the absence of blood loss are not indications for administration of blood products.

Rhabdomyolysis — Rhabdomyolysis (creatine kinase [CK] ≥1,000 IU/L) with potential for renal failure has been described in approximately 5 percent of patients bitten by rattlesnakes or water moccasins (cottonmouths) but is rare after copperhead bites [53]. The classic triad of rhabdomyolysis consists of pigmented granular casts in the urine, a red to brown color of the urine supernatant, and a marked elevation in the plasma CK. Primary treatment goals consist of fluid repletion and evaluation for significant electrolyte abnormalities (hyperkalemia, hyperphosphatemia, hypocalcemia). (See "Clinical features and diagnosis of heme pigment-induced acute kidney injury", section on 'Clinical manifestations' and "Prevention and treatment of heme pigment-induced acute kidney injury (including rhabdomyolysis)".)

**Elevated tissue pressures** — Elevated tissue pressures may complicate Crotalinae bites. Any dressing, constriction band, splint, cast, or other restrictive covering should be removed. Venom is usually introduced into the subcutaneous tissues, and most, if not all, edema occurs in this space. Tissue pressures may increase because of the massive amounts of subcutaneous tissue fluid and because the skin has limits to its elasticity. Swelling, pain, and paresthesias may occur in patients after Crotalinae snakebite, but true elevation in compartment pressure is uncommon. Antivenom administration is the primary treatment in this situation; surgical intervention based on clinical findings alone is inappropriate.

Generally, increased compartment pressures result from this extrinsic pressure and can be reduced with the administration of adequate amounts of antivenom and elevation. Elevation results in the drainage of subcutaneous edema and contributes to the reduction of the source of increased tissue pressure. (See 'Minor envenomation' below.)

**Compartment syndrome** — True compartment syndrome with documented elevations of muscle compartment pressure is uncommon after Crotalinae snakebites, and fasciotomy is rarely indicated. For example, among 442 patients with a snakebite from the North American Snakebite Registry, only eight (2 percent) had clinical findings concerning for compartment syndrome and only two (0.5 percent) had elevated intracompartmental pressure documented, although six received fasciotomy [53].

Bites to muscles in compartments that are very close to the skin (eg, anterior tibial, hand, or foot compartments) have a higher potential for compartment syndrome. For these patients, antivenom and elevation may still reduce compartment pressures by the reduction of extrinsic pressure, but persistent intracompartmental pressures may remain high. The indications for fasciotomy in this context are unclear. An animal model of direct compartmental injection of venom demonstrated improved outcomes with antivenom alone versus antivenom plus immediate fasciotomy [60]. If there is a concern for clinically significant increased tissue or compartment pressures, direct measurement with an appropriate device should be performed to guide additional management with antivenom and elevation [61,62] (see "Acute compartment syndrome of the extremities", section on 'Measurement of compartment pressures'). Further management should be guided by a medical toxicologist and surgeon with extensive experience caring for victims with a snakebite.

Full recovery has been described with nonsurgical management of acute compartment syndrome in the hand (compartment pressure of 55 mmHg) in a patient with a rattlesnake bite to the thenar eminence [63]. The patient received large amounts of polyvalent Crotalinae antivenom (46 vials total) and 20 g of IV mannitol.

**Neurotoxicity** — Neurotoxicity may rarely occur after bites by selected NA rattlesnakes (eg, Mohave, Southern Pacific, or timber rattlesnakes). Although antivenom is recommended, it may not reliably reverse neurotoxicity. Patients with airway compromise or

depressed respirations warrant emergency endotracheal intubation and mechanical ventilation. (See 'Initial stabilization' above and 'Initial treatment' above.)

Wound management — All patients also require wound management as described below. (See 'Minor envenomation' below.)

**Disposition** — All patients with signs of envenomation require admission for further observation or for treatment with antivenom and supportive care. Hospitalization is also warranted in the United States for exotic, non-United States snakebites, even in the setting of initially normal clinical appearance. (See "Snakebites worldwide: Clinical manifestations and diagnosis".)

At discharge, patients who have received antivenom should also receive the following instructions and be scheduled for recommended follow-up:

- Seek care if they develop symptoms of serum sickness (fever, rash, muscle pain, arthralgia, or arthritis).
- Seek care for immediate assessment of platelets and fibrinogen level if they develop bleeding (such as epistaxis, gingival bleeding, vaginal bleeding, or rectal bleeding) in the two weeks following the bite.
- If they had thrombocytopenia or coagulation abnormalities during their care or were victims of a rattlesnake envenomation, they should avoid contact sports, surgery, or dental work for two weeks.
- For patients bitten by a rattlesnake or cottonmouth, measurement of PT, fibrinogen, hemoglobin, and platelets according to antivenom received:
  - FabAV Two to three days after and then again five to seven days after the last dose of antivenom
  - Fab2AV Five to seven days after the last dose of antivenom

**Minor envenomation** — Patients with minor envenomation after an NA Crotalinae snakebite have swelling that is localized to the bite site, and do **not** have other signs of envenomation should **not** routinely receive antivenom. Bites to the face or neck are an important exception. (See 'Initial treatment' above.)

Management should focus on pain control, wound care, immobilization and positioning of the bite site with close monitoring for progression of swelling or development of hemotoxicity or other signs of envenomation ( algorithm 1):

- Pain control Patients with mild to moderate pain may receive oral analgesia with acetaminophen. Patients with rattlesnake or water moccasin snakebites whose clinical course suggests that the risk of coagulation abnormalities or thrombocytopenia is low and patients with copperhead bites and minimal hemotoxicity may receive nonsteroidal antiinflammatory medications (eg, ibuprofen) [55,56]. Severe pain warrants treatment with IV opioid medications (eg, fentanyl or morphine).
- Wound management Wound management includes cleansing the skin surface around the bite site with an iodine-containing or other antiseptic solution such as chlorhexidine, removal of any visible foreign bodies, and administration of tetanus prophylaxis according to the recommended immunization schedule ( table 4). (See "Tetanus-diphtheria toxoid vaccination in adults".)

The leading edge of swelling and tenderness, when apparent, should be marked and reassessed every 15 to 30 minutes. Alternatively, extremity circumference can be measured both distal and proximal to the bite site. A marker is used to outline the location of the tape measure on the skin so the same locations are used consistently [34].

Bedside superficial debridement of hemorrhagic bullae (should they occur) to permit recognition of underlying necrosis and to help decide further intervention has been proposed [64]. However, we do **not** recommend this approach because there are insufficient data demonstrating benefit or evaluating the risks, such as infection, of unroofing intact bullae.

Antibiotic prophylaxis is **not** indicated. Although snakebites may result in the inoculation of bacteria, infection is rare. A retrospective analysis of over 2500 rattlesnake bites reported to a regional poison control center found an infection rate of at most 1 percent based, in most cases, on clinical appearance [65]. These results may overestimate the frequency of infection in snakebites because inflammation from venom effects may track up lymphatic channels and mimic cellulitis. Thus, only patients with established infections or heavily contaminated wounds should receive antibiotics [2]. Empiric treatment should cover *Salmonella* species and common human organisms (eg, *Staphylococcus aureus* and group A *streptococcus*) until wound culture results are available. (See "Acute cellulitis and erysipelas in adults: Treatment" and "Suspected Staphylococcus aureus and streptococcal skin and soft tissue infections in children >28 days: Evaluation and management" and "Nontyphoidal Salmonella bacteremia", section on 'Treatment'.)

- Immobilization and positioning Proper immobilization and positioning for snakebites to the distal extremities consists of placement of a well-padded posterior splint (preformed, plaster, or fiberglass) in a position of extension that is gently secured to the extremity with a gauze or elastic wrap applied to avoid excessive pressure or restriction of circulation. During hospital care, we advise elevation of the extremity to reduce acute swelling. (See 'First aid' above.)
- Impaired limb function Because complete recovery is expected with supportive care alone in patients with minor Crotalinae envenomation that does not progress, expert guidelines recommend that antivenom therapy in patients with bites to a limb be reserved for those who have swelling that is extending from the bite site or is progressing, or have hemotoxic, systemic, or neurotoxic venom effects [5,66-70]. Patients with confirmed copperhead bites appear to be at a lower risk for systemic toxicity and progressive swelling but may have impairment of function due to swelling and pain in the involved extremity long enough to cause significant short-term morbidity (eg, inability to work or attend school). In one study, the duration of this impairment was a median of three weeks with a range of three days to four months [66].

Some experts have suggested that antivenom may provide short-term benefit to patients with mild copperhead envenomation with acceptable risk, primarily minor adverse effects, and increased cost of care. However, more data are needed to identify which patients are most likely to benefit and to establish if antivenom improves function enough to offset the potential risk of serious adverse effects, such as anaphylaxis, when only local venom effects are present. As an example, in one small trial of 74 patients with copperhead bites, treatment with polyvalent Crotalinae ovine immune Fab (FabAV, CroFab) modestly improved limb function and reduced use of opioid pain medication at two weeks but did not shorten the time to full recovery compared with placebo [66]. Although the benefit regarding local venom effects in rattlesnake envenomations has not been studied, there is no reason to believe that similar benefits would not apply to these cases as well. Patients who received FabAV had more minor adverse events (eg, pruritus, urticaria, nausea, dizziness, or fever) but no severe effects.

• Observation and monitoring – Patients with minor Crotalinae envenomation should be observed for 24 hours for progression of tissue swelling, hemotoxicity, and other systemic toxicity. Platelet and fibrinogen studies should be repeated every six to eight hours after the initial set of studies.

Patients with progressive swelling or abnormal coagulation testing during the observation period should receive antivenom as described below. They also warrant assessment for rhabdomyolysis. (See 'Antivenom therapy' above and 'Supportive care' above.)

- Discharge instructions Patients should be instructed to seek medical care for:
  - Increased swelling not relieved by elevation
  - •• Signs of coagulation abnormalities and/or thrombocytopenia (eg, easy bruising, petechiae, bleeding from gums or hematochezia)
  - Signs of infection (eg, fever or pus drainage)
  - Tissue necrosis
  - · Pain not controlled by oral analgesia
  - Any other acutely concerning changes in signs or symptoms

**Potential dry bite** — Up to 25 percent of patients with Crotalinae bite will not develop clinical envenomation. However, some patients may be asymptomatic at presentation, yet go on to develop swelling and/or hematologic toxicity over time. All patients presenting with report of potentially venomous snakebites should be placed on a cardiac monitor, have initial laboratory studies obtained, and observed for signs of toxicity (eg, progressive swelling, tachycardia, hypotension, or bleeding).

For patients with a potential dry Crotalinae snakebite who are at high risk should they have late progression of envenomation including patients with bites to the face, neck, or lower extremity; children <10 years old; adults >65 years old; and patients with medical comorbidities or poor social supports, we suggest hospital admission and observation for 24 hours with repeat laboratory studies every 8 hours.

All other patients warrant observation for 8 to 12 hours ( algorithm 1).

It is likely that no significant envenomation has occurred if all of the following criteria are met:

- The patient appears well during observation
- Repeat laboratory tests (ie, platelet count, PT, INR, and fibrinogen) at six hours are normal (when fibrinogen testing is not available, no elevation in fibrin degradation products [ie, D-dimer or fibrin split products])
- No progressive tissue swelling and no systemic toxicity develops during the observation period

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#### SERUM SICKNESS

Serum sickness occurs in about 2 to 3 percent of patients receiving either FabAV or Fab2AV. The evaluation and management of serum sickness is discussed separately. (See "Serum sickness and serum sickness-like reactions".)

#### OUTCOMES

Most victims of venomous North American snakebites fully recover. Permanent sequelae are uncommon but may include loss of range of motion, weakness, pain, abnormal sensation (paresthesia, hypesthesia, anesthesia), skin discoloration or tissue loss such as amputation of a digit.

Tissue necrosis occurs frequently and may require operative debridement. For example, in a prospective cohort of rattlesnake envenomation, tissue necrosis was seen in 40 percent of upper extremity envenomations, despite antivenom administration [64]. Signs on presentation associated with increased risk of necrosis included cyanosis and ecchymosis. In addition, patients with social or regular ethanol use were more likely to develop necrosis, and regular cocaine use was associated with an increased risk of surgical debridement.

Death following Crotalinae snakebite is unusual (<1 percent of all bites) [52,53]. Mortality is most often associated with rattlesnake bites [71].

#### ADDITIONAL RESOURCES

**Regional poison control centers** — Regional poison control centers in the United States are available at all times for consultation on patients with known or suspected poisoning, and who may be critically ill, require admission, or have clinical pictures that are unclear (1-800-222-1222). In addition, some hospitals have medical toxicologists available for bedside consultation. Whenever available, these are invaluable resources to help in the diagnosis and management of ingestions or overdoses. Contact information for poison centers around the world is provided separately. (See "Society guideline links: Regional poison control centers".)

**Society guideline links** — Links to society and government-sponsored guidelines from selected countries and regions around the world are provided separately. (See "Society guideline links: Envenomation by snakes, arthropods (spiders and scorpions), and marine animals".)

#### SUMMARY AND RECOMMENDATIONS

- First aid First aid measures for patients with bites by North American (NA) Crotalinae snakes (rattlesnakes, water moccasins [cottonmouths], or copperheads) include (see 'First aid' above):
  - Move them away from the snake and keep them calm.
  - For extremity bites, remove any jewelry or constricting clothing and immobilize the affected extremity in a functional position at the level of the heart; some experts prefer elevation of extremity bites to reduce tissue swelling and pain.
  - Rapidly transport to definitive care.
  - Do not apply pressure immobilization.
- Initial stabilization In addition to antivenom, patients with a NA Crotalinae snakebite, may require (see 'Initial stabilization' above):
  - Emergency endotracheal intubation and mechanical ventilation for patients with:
    - <sup>-</sup> Bites to the face or neck
    - <sup>-</sup> Myokymia (rippling muscle movement of the face and extremities) with airway compromise
    - Weakness and respiratory failure
  - Treatment of shock including:
    - Fluid resuscitation with isotonic saline or balanced crystalloid solutions
    - Blood as needed to maintain an acceptable hematocrit
    - For fluid-refractory shock, vasoactive medications as for septic shock (see "Septic shock in children: Rapid recognition and initial resuscitation (first hour)" and "Evaluation and management of suspected sepsis and septic shock in adults")

- Antivenom (marked local or systemic envenomation) The decision to administer antivenom is based upon clinical findings

   algorithm 1). Consultation with a medical toxicologist or other physician with expertise managing NA Crotalinae snakebites is
   encouraged before giving antivenom and to guide decisions about redosing of antivenom, prevention of early recurrent toxicity, and
   treatment of late hemotoxicity.
  - Indications For patients with NA Crotalinae bites with any of the following, we recommend antivenom therapy (Grade 1B) (see 'Initial treatment' above):
    - Progressive swelling
    - Signs of hemotoxicity or other systemic toxicity ( table 5)
    - <sup>-</sup> Potential for airway obstruction (bites to the face or neck with any swelling)
  - Initial dosing The recommended antivenom dosing is provided in the table ( table 1). Crotalidae Immune F(a<sub>b</sub>')<sub>2</sub> (equine), brand name Anavip (Fab2AV), and Crotalidae Polyvalent-immune Fab (ovine), brand name CroFab (FabAV), have similar efficacy for initial control of typical toxic effects; FabAV is associated with a higher risk for late hemotoxicity. For patients exhibiting neurotoxicity (muscle fasciculation and/or motor weakness), FabAV has been used with varying success; the efficacy of Fab2AV in patients with neurotoxicity is unknown. (See 'Initial treatment' above and 'Efficacy' above.)
  - **Treatment of acute reactions** Antivenom administration should occur in a continuously monitored emergency or intensive care unit setting because it can cause anaphylaxis that requires emergency treatment as described in the rapid overviews for anaphylaxis in adults ( table 2) and children ( table 3). (See 'Treatment of acute antivenom reactions' above.)
  - Redosing The need for repeat antivenom doses depends on the response to initial therapy and the agent used ( table 1):
    - Inadequate response to initial dose Regardless of the agent used, patients who do not achieve control of envenomation after the initial dose (eg, ongoing hemodynamic instability, persistent signs of systemic toxicity, progressive swelling, persistent hematologic toxicity) generally warrant repeat dosing under the guidance of a medical toxicologist. (See 'Assessment of response and need for redosing' above.)
    - FabAV (CroFab) maintenance dosing For most patients receiving FabAV, we suggest regularly scheduled maintenance doses (two vials every six hours for three doses) rather than as-needed dosing alone (Grade 2C). (See 'Prevention of early recurrent toxicity' above.)
    - Fab2AV (Anavip) as-needed dosing Scheduled maintenance dosing is **not** necessary for patients receiving Fab2AV; however, they should be observed for 18 hours after receiving antivenom and additional doses may be required if local or hematologic effects re-emerge. (See 'Assessment of response and need for redosing' above.)
  - Rhabdomyolysis Rhabdomyolysis and elevated tissue pressures are additional complications of severe NA Crotalinae envenomation. Primary treatment of rhabdomyolysis consists of fluid repletion and evaluation for significant electrolyte abnormalities such as hyperkalemia, hyperphosphatemia, and/or hypocalcemia. (See "Clinical features and diagnosis of heme pigment-induced acute kidney injury", section on 'Clinical manifestations' and "Prevention and treatment of heme pigmentinduced acute kidney injury (including rhabdomyolysis)".)
- **Compartment syndrome** Envenomation may rarely increase tissue pressures in the subcutaneous space and cause significant swelling, pain, and paresthesias. Patients with these findings should undergo removal of any dressing, constriction band, splint, cast, or restrictive clothing and elevation of the extremity. Antivenom administration is sufficient treatment in most patients; compartment syndrome requiring fasciotomy is rare. (See 'Elevated tissue pressures' above and 'Compartment syndrome' above.)
- Minor envenomation (nonprogressive, local swelling and no systemic toxicity) Initial management of patients with minor envenomation (swelling and skin changes adjacent to the bite site only without progressive swelling) and no bite to the face or neck consists of pain control, local wound care, elevating and immobilizing the affected limb, and tetanus immunization as needed. These patients do not require antivenom unless they develop marked or progressive swelling or systemic toxicity on repeated laboratory studies during 24 hours of observation. (See 'Minor envenomation' above.)
- Potential dry bite Management of patients with a potential dry bite also consists of local wound care and tetanus prophylaxis, as needed. The need for hospitalization and duration of observation depends on the patient's risk of complications if they develop late progression of envenomation (see 'Potential dry bite' above):
  - High risk Hospital admission and observation for 24 hours with repeat laboratory studies every 8 hours is warranted for patients

with any of the following risk factors for complications:

- <sup>~</sup> Patients with bites to the face, neck, or lower extremity
- Children <10 years old
- <sup>-</sup> Adults >65 years old
- Patients with medical comorbidities or poor social supports

• Not at high risk – All other patients warrant observation for 8 to 12 hours.

**ACKNOWLEDGMENT** — We are saddened by the death of Steven A Seifert, MD, FAACT, FACMT, who passed away in May 2022. UpToDate gratefully acknowledges Dr. Seifert's outstanding work as an author for this topic.

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Topic 121865 Version 11.0

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# **EXHIBIT 14**

## **EXHIBIT 14**

## Curriculum Vitae

## PERSONAL DATA

Name: Eric W. Glissmeyer, M.D. Birth Place: Salt Lake City, UT Citizenship: United States

.

## **EDUCATION**

Years	Degree	Institution (Area of Study)
2011 - 2014	Fellow	University of Utah (Pediatric Emergency Medicine)
2009 - 2011	Resident	Salt Lake City, UT Boston Children's Hospital/Boston Medical Center (Pediatrics)
2008 - 2009	Intern	Boston, MA Boston Children's Hospital/Boston Medical Center (Pediatrics) Boston, MA
2004 - 2008	M.D.	University of Utah (Medicine) Salt Lake City, UT
1998 - 2004	B.S.	Westminster College (Biology, minor in Chemistry and Spanish Language) Salt Lake City, UT

## **BOARD CERTIFICATIONS**

10/10/2011 - Present	American Board of Pediatrics (Pediatrics), Certified
10/09/2020 - Present	American Board of Preventive Medicine (Clinical Informatics), Certified
05/01/2008 - Present	National Board of Medical Examiners, Certified
03/25/2015 - Present	American Board of Pediatrics (Sub: Pediatric Emergency Medicine), Certified

## **CURRENT LICENSES/CERTIFICATIONS**

2016	American Heart Association: Advanced Cardiac Life Support (UT) - Physician (MD)
0010 D	
2012 - Present	Pediatric Advanced Life Support Instructor
2011 - Present	Advanced Trauma Life Support
2011 - 2016	State License (UT) - Physician (MD)
2008 - Present	Pediatric Advanced Life Support
2008 - Present	Basic Life Support
2008 - 2011	State License (MA) - Physician (MD)
2011 - 2016 2008 - Present 2008 - Present	State License (UT) - Physician (MD) Pediatric Advanced Life Support Basic Life Support

## **UNIVERSITY OF UTAH ACADEMIC HISTORY**

## Pediatrics (Pediatric Emergency Medicine), 07/01/2014 - Present

07/01/2019	Associate Professor (Clinical)
07/01/2014 - 06/30/2019	Assistant Professor (Clinical)

## Pediatrics (Pediatric Emergency Medicine), 12/01/2013 - 06/30/2014

12/01/2013 - 06/30/2014 Adjunct Instructor

## **PROFESSIONAL EXPERIENCE**

## **Full-Time Positions**

2016 - Present	Director of Medical Informatics, Intermountain Healthcare, Salt Lake City, UT
2014 - Present	Assistant Professor of Pediatric Emergency Medicine, University of Utah, Salt Lake City, UT
2013 - 2014	Adjunct Instructor of Pediatrics, University of Utah, Salt Lake City, UT
2008 - 2011	Teaching Fellow, Boston University School of Medicine, Boston Medical Center, Boston, MA
2008 - 2011	Clinical Fellow in Pediatrics, Harvard Medical School, Children's Hospital Boston, Boston, MA

## **Reviewer Experience**

Pediatric Quality and Safety, reviewer

Reviewer for Archives of Disease in Childhood: Feb 2017: Using dipstick screening by clean catch for urinary tract infection in young febrile infants - reject and resubmit Reviewer for BMJ Open Reviewer for Hospital Pediatrics Reviewer for Journal of Paediatrics and International Child Health Reviewer for Journal of Pediatrics Reviewer for Pediatrics

## SCHOLASTIC HONORS

2015	<b>Primary Children's Emergency Department Resident Teaching Award</b> Selected by the housestaff, University of Utah Emergency Medicine Residency Program.
2014	<b>Resident Teaching Award</b> Selected by the housestaff, University of Utah Pediatric Residency Program
2011	Medical Student Teaching Award Harvard Medical School and Children's Hospital Boston
2008	Outstanding Student in Pediatrics University of Utah School of Medicine
2008	Florence M. Strong Award University of Utah School of Medicine
2008	Gold Headed Cane Award University of Utah School of Medicine
2007	<b>Educational Resource Development Council Scholarship</b> University of Utah School of Medicine
2005	Vascular Biology Program First Place Poster AMA Interim Meeting, Dallas TX

2005	NIH Student Summer Research Award University of Utah School of Medicine
2005	American College of Physicians (ACP) First Place Poster Utah Chapter Meeting, Salt Lake City, UT
2004	Summa Cum Laude, B.S., Westminster College
2003	Western Region Scientific Presentation First Place Award Beta Beta National Biological Honors Society

## **ADMINISTRATIVE EXPERIENCE**

## **Administrative Duties**

2022 - Present Director of Pediatric Emergency Practice Expansion 2019 - 2020 Children's Health Medical Director, Care Transformation Information Services, Intermountain Healthcare. Medical Director oversight for University of Utah-Intermountain Healthcare Health Information Technology and Pediatric specialty care. Key activities and achievements in this role include: -Securing Meaningful Use funds for the Department of Pediatrics, and Surgical Departments of the University of Utah totaling \$1.17M and \$884000 for Department of Pediatrics divisions in 2019 alone. This is 75% of elegible clinicians passing Meaningful Use. 2020, then 2021 funds are yet to be claimed. My involvement in obtaining these funds includes activities in physician and medical director leadership, working with Intermountain and Cerner to obtain data to drive improvement toward qualifying for funds, escalating needs that arise with reports. and as consultant for educational materials and communications to physician leaders. -Addressing scheduling issues with Department of Pediatrics clinics after EHR conversion to iCentra. In the months after iCentra EHR implementation at Primary Childrens, clinics were not returning to full productivity quickly. As medical director with Intermountain CTIS, I quickly dug in to issues with scheduling and workflow. Partnered with a then informatician Trevor Slater, now director of the Ambulatory Operations of the Pediatric Clinical Enterprise, we identified people, process and technology failures and worked to address them quickly. I personally met with divisions, schedulers, and Cerner technology experts to improve workflow, communication, speed of software functionality. Additional trainings and workflow analyses, as well as technical changes made led to productivity improvements that exceeded previous numbers of patients seen. -Special projects related to Children's Health, as assigned by other areas in CTIS. Example: Early Onset Sepsis risk score alerts for newborn nurseries at Intermountain birth hospitals.

2016 - 2019	Director of Medical Informatics, Care Transformation, Intermountain Healthcare. Focus on Pediatric Speciality and Primary Care throughout the entire Intermountain Healthcare integrated network. Key early initiatives: Identifying and directing configuration of an in-EHR handoff process that replaced legacy functionality developed in-house. This new functionality is used by physicians and advance practice providers throughout Intermountain Healthcare. Configured Identifying and directing means of active notification of teams that patients of interest have emergency, in-hospital, or ambulatory encounters. Deemed "query-based notification lists" was a novel use of EHR functionality and presented at Cerner's Pediatric Leadership Council in 2018. Identifying and directing the workflow analysis, configuration, build, and training for the launch of electronic orders for infusion encounters at Primary Children's Hospital. Previous to October 2017, the electronic ordering process for infusions of medications to be delivered in Intermountain facilities had not gone well, and nearly all sites had reverted to paper. I partnered with Continuous Improvement specialists to perform in-depth analysis of current state and thorough future-state planning and change management activities. We successfully delivered electronic-order-only infusions
	at Primary Children's Hospital Rapid Treatment Unit from day 1 of go-live.
2015 - 2017	Primary Children's Hospital Provider Adoption Lead for iCentra Implementation
2015 - 2017	Member, Cerner Emergency Medicine Strategic Board
2014 - 2017	Intermountain Healthcare iCentra EHR ED Development Team (EDDT) and Transitions sub-team Lead. This group meets every 2 weeks to design and optimize the Emergency Department software used at all 20 Intermountain Healthcare emergency departments.
2013 - 2014	PEM fellow scheduling
2013	PCH ED culture log followup

## PROFESSIONAL COMMUNITY ACTIVITIES

2020 - Present	Stake Presidency 2nd Counselor, The Church of Jesus Christ of Latter-Day Saints,
2019	 Director & Teacher, The Church of Jesus Christ of Latter-Day Saints, First Aid Merit Badge course for Boy Scouts aged 11-14. Taught 6 scouts First Aid and organized a course with 2 other instructors. Instruction on burns, injury avoidance, bleeding, fractures, CPR and other life-saving and injury stabilization skills
2018	Educator, The Church of Jesus Christ of Latter-Day Saints, I prepared and presented an interactive discussion and handout on emergency preparedness: "medications, storage, and hygeine in the time of an emergency to 35 persons as part of an hour-long emergency preparedness fair.
2018	Camp Physician, The Church of Jesus Christ of Latter-Day Saints, The Church of Jesus Christ of Latter-Day Saints, This is the weeklong young women's camp of the Bountiful East Stake, attended by 160 girls 12-18 years.
2016	Camp Physician, The Church of Jesus Christ of Latter-Day Saints, This is the weeklong young women's camp of the Bountiful East Stake, attended by 160 girls 12-18 years.

2015	Medical Chairperson, The Church of Jesus Christ of Latter-Day Saints, Chaired a comittee of four medical professions to provide on-site medical support and expertise for the Bountiful East Stakes' 2015 youth pioneer trek, consisting of 150 youth and 30 leaders. An overland hiking and camping effort covering 34 miles in 4 days with children of all abilities.
2014	Alumnus Mentor, Westminster College, Take a Griffin to lunch mentoring program: Camrin Rivera. Facilitate connections with student career interests.
2014 - 2015	Cubmaster, Boy Scouts of America, Organize monthly pack meetings, track rank advancement, serve as mentor to 8-11 year old boys and assist them if developing habits of service to family and community, citizenship, lifelong learning and physical fitness.
2013	Volunteer, Camp Hobe, Provided medical and leadership support at a weeklong camp for children with cancer and their siblings, assisting in fundraising and planning for future camps
2008	Educator, Salt Lake City School District, Eye Safety, Taught intermediate school-age children about eye injury prevention through didactic and hands-on activities in an effort to reduce incidence of preventable eye injury
2005 - 2008	Coach, Boy Scouts of America, Varisty Scouts, Provided first aid and backcountry medicine certification training, mentoring, community awareness and outdoor skills education to boys in the metro Salt Lake City area and supervised their large-scale youth-led service projects

## **UNIVERSITY COMMUNITY ACTIVITIES**

## University of Utah Health

2016 - Present	Advisory Committee Member, University of Utah Hospitals and Clinics, University of Utah CIO, CMIO, and IT meet with PCH EHR leadership including myself in my role as director of medical informatics to track the development of data interfaces between Intermountain iCentra and University Utah electronic data warehouses. Challenges and tasks include establishing data primacy and data transfer protocols.
2005	Student Representative, Health Professions Education Building, Selected by school of medicine leadership to help plan and emcee opening ceremony for the health professions education building
College Level	
2014 - 2015	Faculty Interviewer, School of Medicine Admissions Interview Committee, Interview prospective medical studentis in one-on-one and group interview settings
2013	Evaluator, School of Medicine, MS-II OSCE, physical exam standardized patient examination
2011 - 2016	Member, School of Medicine, Innovations in Undergraduate Medical Education Advisory Committee
2011 - 2014	Member, School of Medicine Curriculum Implementation Committee
2007 - 2008	Member, School of Medicine Curriculum Committee
2007 - 2008	Member, School of Medicine Admissions Interview Committee, Interviewed prospective medical students applying for admission

2004 - 2005	Class President, School of Medicine, First Year Medical School, Served as liaison for class disputes, curriculum redesign and social activities
Department Level	
2017 - 2018	Faculty Liaison, Pediatrics, University of Utah Faculty Liaison to Care Transformation Services. Set strategy, track and communicate progress, and help Intermountain deliver operational data, reports and improvements to Department of Pediatrics clinics scheduling processes and documentation driving clinical revenue
2016 - Present	Advisory Committee Member, Pediatrics, Ambulatory and Surgery Division Chiefs meeting: This regular meeting of academic divisions in the Department of Pediatrics invites me to present on iCentra-relation go-live preparedness, training expectations, timeline of go-live, and post go-live enhancements
2016 - Present	Advisory Committee Member, Pediatrics, EMR committee meeting: invited in advisory role for administrative implications of the new EHR on clinical operations
2015 - Present	Advisory Committee Member, Pediatrics, Communications Committee: invited
	member for iCentra EHR related communications stategy with referring and primary care providers and families.
2013 - Present	Member, Pediatrics, Pediatric residency QI curriculum committee. Assisted in development of Quality Improvement curriculum for pediatric residents of the University of Utah, including use of Institute for Healthcare Improvement (IHI) educational modules for didactic training.
2013 - Present	Faculty Interviewer, Pediatrics, Review and interview candidates for the Pediatric residency program at the University of Utah, Pediatric Education Enterprise
<b>Division Level</b>	
2014 - Present	Member, Pediatric Emergency Medicine, EMR IT committee. Worked to prepare Primary Children's Hospital ER and PEM group for iCentra electronic medical record, including particular efforts on care transitions including discharge, admission, inter-facility transfering of patients, prescription writing, quick orders, decision support tools and order sets.
2011 - Present	Applicant Interviewer, Pediatric Emergency Medicine, Interview pediatric emergency medicine fellow candidates
SERVICE AT AF	FILIATED INSTITUTIONS

2016 - Present	Advisory Committee Member, Intermountain Healthcare, Standing invitee to Medical Executive Committee to report on iCentra implementation development and progress, set expectations for PCH, and address concerns and questions.
2016 - 2018	Advisory Committee Member, Intermountain Healthcare, The Resident training committe was formed to address the needs of physician trainees for go-live and post-go-live training and re-training. I advise as well as develop computer based training for residents.
2016 - 2018	Advisory Committee Member, Intermountain Healthcare, Physician training committee meets every 2 weeks to plan for next phase physician training for the new Intermountain EHR. Strategy affects the entire Intermountain enterprise before and after EHR go-live.

2011 - 2019 Committee Member, Intermountain Healthcare, Intermountain Pediatric Emergency Collaborative, Development of a guideline to standardize the diagnostic workup of pediatric appendicitis

### SERVICE AT PREVIOUS INSTITUTIONS

2010 - 2011 Member, Boston Medical Center/Boston Children's Hospital, QI Curriculum Committee

## **CURRENT MEMBERSHIPS IN PROFESSIONAL SOCIETIES**

Academic Pediatric Association

American Academy of Pediatrics

American Academy of Pediatrics, Council on Clinical Information Technology

College of Healthcare Information Management Executives

## **FUNDING**

Past Grants	
01/01/17 - 10/28/19	Glissmeyer Biosig Ii Jan 2017 Principal Investigator(s): Eric W. Glissmeyer Direct Costs: \$296,177 Total Costs: \$440,079 University Of Michigan Role: <u>Principal Investigator</u>
08/21/15 - 12/31/16	Glissmeyer Biosig II Sept 2014 Principal Investigator(s): Eric W. Glissmeyer Direct Costs: \$195,846 Total Costs: \$291,810 Wayne State University Role: Principal Investigator
07/01/10 - 06/30/11	Validation of a pediatric Quality Improvement Curriculum - Measuring the ability of the QI curriculum being implemented during the 2010-2011 BCRP academic year to improve residents' applied QI knowledge. Children's Hospital Program for Patient Safety and Quality (PPSQ) and Fred Lovejoy House-staff Research and Education Grant. Principal Investigator(s): Eric W. Glissmeyer Boston Children's Hospital Role: <u>Principal Investigator</u>
05/01/05 - 09/01/05	Investigated expression of key genes responsible for the vascular changes in Pulmonary Arterial Hypertension. Made initial observations of novel mechanisms of post-transcriptional regulation of the vasoconstricor peptide endothelin-1. Eccles Institute of Human Genetics, University of Utah School of Medicine Principal Investigator(s): Eric W. Glissmeyer National Institutes of Health Role: <u>Principal Investigator</u>

### **RESEARCH EXPERIENCE**

2012 - Present **Fellow-Institute for Healthcare Delivery Research** – Intermountain Health Care. Leadership of projects within the Intermountain Pediatric Clinical Program, including appendicitis, diagnosis of UTI in febrile infants

2009 - 2011	<ul> <li>Children's Hospital Boston, Department of Cardiology, Mary P. Mullen, MD PhD</li> <li>Description of Emergency Department Visits in Patients with Pulmonary Hypertension</li> <li>Chart review of the clinical presentation of and care delivered to patients with pulmonary hypertension in the Children's Hospital Emergency Department</li> </ul>
2007 - 2008	Primary Children's Medical Center and University of Utah School of Medicine, Carrie L. Byington, MD Missed Serious Bacterial Infection in Febrile Infants Managed as Outpatients - Demonstrated that missed cases of infection were linked to inappropriate variability in management of febrile infants
2002 - 2008	LDS Hospital, Department of Pulmonary and Critical Care Medicine, C. Gregory Elliott, MD Database and Translational Research in Pulmonary Arterial Hypertension (PAH) - Developed the Utah Pulmonary Hypertension Database and investigated genotype-phenotype relationships in a nationwide cohort of patients with PAH, leading to publication of manuscript in Circulation.
1997 - 1999	LDS Hospital, Department of Pulmonary and Critical Care Medicine, Robert O. Crapo, MD Validation of spirometric devices and research in standard spirometric equations and DLCO accuracy testing. - Managed the pulmonary spirometry research laboratory

## **TEACHING RESPONSIBILITIES/ASSIGNMENTS**

## **Course and Curriculum Development**

2012 - 2013	Pediatric residency Quality Improvement Curriculum. Assisted in design a longitudinal quality improvement curriculum for University of Utah pediatric residents. Serve as mentor to residents for QI projects.
<b>Course Lectures</b>	
2014	Instructor, MD ID: Final MOSPE/OSCE, Office of the Dean/Medicine, : MS2016 M+R - Final MOSPE/OSCE
2013	Instructor, OSCE/Multi-station Clinical Exam, : MS2015 SMBJ - OSCE/Multi-station Clinical Exam
2013	Instructor, OSCE/Multi-station Clinical Exam, : MS2015 SMBJ - OSCE/Multi-station Clinical Exam
2012	Instructor, Bioinformatics Small Group Discussion, : MS2013 Acute Care Track - Bioinformatics Small Group Discussion
2008	Teaching Assistant, Physical Diagnosis, 4 students, University of Utah School of Medicine, 1 week course, 40 teaching hours

## **Clinical Teaching**

2021 New Intern Pediatric Critical Care evaluation and treatment. With PALS certification on-hold at PCH in early 2021, I helped teach new interns PALS material outside of the PALS course, including assessment of critically ill patients, shared mental models of cardiac, respiratory, and shock scenarios.

2021	Case Simulation for Transition to Internship Course: spent 2 hours with 4th year medical students on simulation of pediatric assessment of patients in respiratory distress/asthma. Discussed team based care, shared mental models, and importance of roles and communication.
2021 - Present	Clinical Student Rounds: a 2-hour session in the emergency department with undergraduate pre-medical students, focused on teaching them initial clinical assessment of a sick infant and child. Discussed forming a differential diagnosis, demonstrated bedside ultrasound use, and obtaining a medical history and focused physical examination.
2015	Suturing Workshop for Pediatric Residents. 20 trainees present, taught in a small group of 3-4.
2014 - Present	Supervision of medical students, residents, and pediatric emegency medicine fellows in the emergency department and rapid treatment inpatient unit of Primary Children's Hospital
2012 - Present	Suturing technique instruction to pre-medical students enrolled in the University of Utah Academic Associates program. Once yearly.

## **Small Group Teaching**

2018	Instructor, BLS and PALS new provider course for Primary Children's Hospital housestaff
2018	BLS and PALS renewal course for PCH anesthesia staff
2017	Instructor, BLS and PALS renewal course for PCH Anesthesia physician staff
2016	PALS instructor: group of 6 PCH faculty and staff.
2016	iCentra reach - tutorial on how to view documents, MAR, and vital signs in patients seen at Intermountain facilities already on iCentra.
2016	University of Utah Emergency Medicine residency presentation on pseudoappendicits syndrome and workup of infectious gastroenteritis
2015	University of Utah Emergency Medicine residency lecture on pediatric inborn errors of metabolism
2015	University of Utah Emergency medicine Stump the Chumps presentation on Macrophage Activiation Syndrome
2015	Instructor, PALS renewal course, group of 6 nurses/staff.
2015	Instructor, PALS recertification course for PCH anesthesiology staff
2015	Invited presentation: Chair lift injuries and falls. PCH Trauma Morbidity and Mortality conference
2015	Logan Regional Hospital iCentra Physician training: instruction on use of launchpoint and ED-specific workflow
2014	Instructor, BLS and PALS new provider course for Primary Children's Hospital housestaff
2014	Case Presenter, University of Utah Emergency Medicine Residency, "Stump The Chumps" discussion on Aspirin overdose case
2014	Lecturer: Anaphylaxis. Primary Children's Hospital Advanced Shock Workshop, 30 trainees.
2014	Invited Panel Member: Bronchiolitis diagnosis and management. University of Utah Emergency Medicine Residency. 25 trainees.

2013	Instructor PALS renewal course for Primary Children's Hospital faculty/staff
2012 - 2013	Presenter at Division of Pediatric Emergency Medicine Morbidity and Mortality monthly conference. Case preparation and discussion preparation and lead.
2012	Instructor, PALS renewal course
2011	Small Group Discussion Facilitator, MS4 course in longitudinal preparation for internship, University of Utah School of Medicine
2011 - Present	Journal Club: alternating coverage of PEM-related articles supervising fellows in review of pertinent articles in JAMA, NEJM, Pediatrics, Journal of Pediatrics, Academic Emergency Medicine, American Journal of Emergency Medicine, Archives of Disease of Childhood, Pediatric Emergency Care, and other journals.
2010 - 2011	Senior Rounds presenter, Boston Children's Hospital, 5 conferences, 10-20 senior faculty and senior residents, in a case-based teaching format, and led discussion on evidence-based management and current research

## Mentoring/Advising

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Fellow	
2014 - Present	Supervisor, University of Utah, Supervision of clinical care delivered by fellows in the emergency department of Primary Children's hospital, including supervision of invasive procedures, bedside ultrasound examination, and medical control of emergent transfer of patients by air ambulance service.
2014 - 2016	Advisor/Mentor, Julia Rawlings, University of Utah, Mentor and advise fellow's progress through meeting fellowship educational and research milestones and career development.
	Trainee's Current Career Activities: Pediatric Emergency Medicine Faculty
Resident	
2011 - Present	Supervisor, University of Utah, Supervise care of patients in the emergency department of Primary Children's Hospital, including suturing, abscess drainage, admission and discharge decisions, and family centered care.
<b>Didactic Lectures</b>	
2020	Upper and Lower Gastrointestinal bleeding lecture to PEM colleagues, fellows, students.
2018	Noon conference on Discharge Instructions and Orders. Followed by similar presentations with Hospitalist staff. Total 50 attendees
2017	Computerized Provider Order Entry: preparing for iCentra. Lecutre to residents and trainees
2016 - Present	Lecture to Academic Associate students in Pediatric Research courses: Fever in infants 0-60 days and Biosignatures II study
2016	University of Utah Pediatric Emergency Medicine lecture: Pediatric Rashes in the ED. Given to University of Utah Emergency medicine residents, 30 attendees.
2016	University of Utah Pediatric Emergency Medicine Lecture: The Febrile Infant. Given to Emergency Medicine residents of the University of Utah (30 attendees) AND Academic Associates program (25 attendees).

2016	University of Utah Pediatric Emergency Medicine lecture: Metabolic emergencies in Children in the ED. To emergency medicine residents, 30 attendees.
2015	University of Utah Pediatric Emergency Medicine Lecture: Pediatric Surgical Emergencies seen in the ED. Lecture of University of Utah Emergency Medicine residents, 30 attendees.
2014	University of Utah Pediatric Emergency Medicine lecutre: Congenital Heart Disease, Arrhythmias, Resuscitation in the ED. Given to University of Utah Emergency Medicine residents, 30 attendees.
2013	University of Utah Pediatric Emergency Medicine Lecture: Fratures of the Elbow. Given to emergency medicine resident of the University of Utah, 30 attendees.
2013	University of Utah Pediatric Emergency Medicine lecture: Pediatric Nephrology Sampler: Glomerulunephritis, Nephrotic Syndrome and HUS. To University of Utah Emergency Medicine residents, 30 attendees.
2012	University of Utah Pediatric Emergency Medicine Lecture: Urine Drug Screens: pitfalls and shortcomings. To University of Utah emergency medicine residents and University of Utah Pediatric medicine residents. 30 attendees each lecutre.
2011	University of Utah Emergency Medicine Residency Lecturer. Fractures of the Elbow. Lecture given to St. Marks Hospital (SLC, UT) Residency program residents. 8 attendees.
2011	Case of The Week. Accidental head trauma in the newborn nursery, including risk factors for neonatal accidental falls, literature review, patient safety perspectives. Boston Medical Center, 40 facutly, 15 residents
2010 - 2011	Quality Improvement Curriculum Instructor. Assisted in teaching QI principles to PL2 pediatric residents as part of didactic sessions on topics based upon knowledge domains in Problem Based Learning and Improvement (PBLI) as outlined by the IHI, such as health care as a process and system, variation and measurement, and leading, following, and making changes in health care
Internal Teach	ing Experience
2017	DOPEM EBM lecture: becoming agents for change by choosing resilience
2016	Division of Pediatric Emergency Medicine Lecture: Computerized Physician Order Entry

2015	Division of Pediatric Emergency Medicine Lecture. iCentra: An ED provider view
2015 - 2017	iCentra Implementation knowledge sharing lecture. Given to PCH hospital IT committee, physician leadership, University of Utah leadership, Division of Pediatric Emergency Medicine. Main objective is communication of expectations around new EHR implementation. For administrators, frontline providers, IT leadership, and division/department chiefs.
2014	Division of Pediatric Emergency Medicine career development lecture: Biomedical Informatics. Audience is DOPEM faculty and staff. 15 attendees.
2013	Research in Progress: Performance of screening tests for urinary tract infection in febrile infants. Presented update on my research. Research meeting for all department of pediatrics faculty and staff, University of Utah School of Medicine. 25 attendees.
2012	Research in Progress: Performance of screening tests for urinary tract infection in febrile infants. Research meeting for all department of pediatrics faculty and staff, University of Utah School of Medicine. 25 attendees.

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2012	Interesting Case Conference presentation: Division of Pediatric Emergency Medicine, University of Utah School of Medicine
2008 - 2009	Lecturer, Continuity Clinic Resident Core Conference, Children's Hospital Primary Care Clinic, 2 conferences, 10-14 faculty and residents

## **Additional Teaching Contribution**

2017	Intermountain Leadership Conference, attended by invitation in my role as Director of Medical Informatics for the Primary Children's region.
2016	University of Utah Health Sciences Leadership Seminar I: Foundations of Leadership
2013	University of Utah School of Biomedical Informatics: courses in fundamentals of biomedical informatics (3 hours) and implementation of systems (3 hours)
2013	Data and Research Series Courses, Database design and querying, Oracle SQL training, Salt Lake City, UT
2008	Advanced Training Program in Health Care Delivery Improvement, Intermountain Healthcare, Salt Lake City, UT
2007 - 2008	Mentored Program in Pediatric Research, University of Utah School of Medicine, Salt Lake City, UT

## CE Courses Developed

2016 - 2017	FirstNet emergency physician training course for iCentra EHR (Intermountain Healthcare). This course has been taught to hundreds of emergency physicians since January 2015 across Utah and Idaho. Course is taught approximately 25 times per year, 5-10 attendees per class. In-classroom trining has been converted to computer-based training modules now in use.
2016 - Present	FirstNet Computer-Based training. Intended for residents and physicians needing re-training or addiional training. My role is in strategic design, course formatting, delivery, and review of content, incuding feedback and reformatting. Intermountain Healthcare. Initial deployment was June 2017. Audience is approximately 75 residents per academic year.
2017 - Present	This page contains video instructions on how to create and manage iCentra typed text macros called Auto-Text. For use by physicians and APCs throughout Intermoiuntain Healthcare. https://m.intermountain.net/knowledge/wiki-sites/icentra/ambulatoryproviderguide/ pages/create-and-manage-auto-text-training-video.aspx
2017 - Present	This page contains video instructions on how to create and use Care Team Lists in iCentra. These are critical to organizing admitted patients to PCH and this training is ued by attending physicians, advance practice clincians, fellows, and residents at Primary Children's Hospital https://m.intermountain.net/knowledge/wiki-sites/icentra/acuteproviderguide/pages /creating-and-using-care-team-lists.aspx
CE Courses Taught	
<b></b>	

2014 - 2017Thoracostomy tube placement simulation, pericardiocentesis simulation, needle<br/>thoracostomy simulation as part of the recurring Critical Procedures Course for<br/>members of the Division of Pediatric Emergency Medicine and housestaff

- 2017 Teach FirstNet, CPOE and Launchpoint to ED physicians. For physicians and APCs working in Intermountain EDs. Taught x1 to start off the Central Region teaching of EM physicans, effort in conjunction with training team. Class with 8 EM physicians, ultimately the course has been taught to >250 emergency physicians and APCs.
- 2017 FirstNet to EM residents, 30 attendees, coodinated with EM residency program. I have converted this course from in-person training to a computer based training course.

## PEER-REVIEWED JOURNAL ARTICLES

- Majan P, VanBuren JM, Tzimenatos L, Cruz A, Vitale M, Powell EC, Leetch AN, Pickett ML, Brayer A, Nigrovic LE, Dayan P, Atabaki SM, Ruddy RM, Rogers AJ, Greenberg R, Alpern ER, Tunik MG, Saunders M, Muenzer J, Levine DA, Hoyle JD, Grisanti Lillis K, Gatttu J, EF, Borgialli D, Bonsu B, Blumberg S, Anders J, Roosevelt G, Browne LR, Schnadower D, Park G, Mistry RD, Glissmeyer EW, Cator A, Bogie A, Quayle KS, Ellison A, Balamuth F, Richards R, Ramilo O, Kupperman N (2022). Serious Bacterial Infections in Young Febrile Infants With Positive Urinalysis Results. *Pediatrics*, 150(4).
- 2. **Glissmeyer EW**, Ryan S, Dudley N, Schunk JE, Nielsen J, Weng C, Skarda D. (2020). An Administrative Data-based Surrogate Definition Identifies Children Evaluated Beyond Physical Examination for Suspected Appendicitis. *Pediatr Qual Saf*, 5(6), e343.
- 3. Glissmeyer EW, Metzger RR, Bolte R (2018). Chair Lift Falls and Injuries in Children. Pediatr Emerg Care, 34(2), 106-108.
- 4. Doupnik SK, Ziniel SI, **Glissmeyer EW**, Moses JM (2017). Validity and Reliability of a Tool to Assess Quality Improvement Knowledge and Skills in Pediatrics Residents. J Grad Med Educ, 9(1), 79-84.
- 5. Curfman AL, Glissmeyer EW, Ahmad FA, Korgenski EK, Blaschke AJ, Byington CL, Miller AS (2016). Initial Presentation of Neonatal Herpes Simplex Virus Infection. *J Pediatr*, 172, 121-126.e1.
- 6. **Glissmeyer EW**, Ziniel S, Moses, J (2014). When is a change an improvement? Use of the Quality Improvement Knowledge Application Tool (QIKAT) in assessing pediatric resident QI education. J Grad Med Educ, 6(2), 284-291.
- 7. **Glissmeyer EW**, E. Kent Korgenski, Jacob Wilkes, Jeff E. Schunk, Xiaoming Sheng, Anne J. Blaschke and Carrie L. Byington (April 28, 2014). Dipstick Screening for Urinary Tract Infection in Febrile Infants. *Pediatrics*.
- 8. Elliott CG, **Glissmeyer EW**, Havlena GT, Carlquist J, McKinney JT, Rich S, McGoon MD, Scholand MB, Kim M, Jensen RL, Schmidt JW, Ward K (2006). Relationship of BMPR2 mutations to vasoreactivity in pulmonary arterial hypertension. *Circulation*, 113(21), 2509-15.
- Machado RD, Koehler R, Glissmeyer E, Veal C, Suntharalingam J, Kim M, Carlquist J, Town M, Elliott CG, Hoeper M, Fijalkowska A, Kurzyna M, Thomson JR, Gibbs SR, Wilkins MR, Seeger W, Morrell NW, Gruenig E, Trembath RC, Janssen B (2006). Genetic association of the serotonin transporter in pulmonary arterial hypertension. *Am J Respir Crit Care Med*, 173(7), 793-7.
- 10. White J, Hopkins RO, **Glissmeyer EW**, Kitterman N, Elliott CG (2006). Cognitive, emotional, and quality of life outcomes in patients with pulmonary arterial hypertension. *Respir Res*, 7(1), 55.
- 11. Machado RD, Aldred MA, James V, Harrison RE, Patel B, Schwalbe EC, Gruenig E, Janssen B, Koehler R, Seeger W, Eickelberg O, Olschewski H, Elliott CG, Glissmeyer E, Carlquist J, Kim M, Torbicki A, Fijalkowska A, Szewczyk G, Parma J, Abramowicz MJ, Galie N, Morisaki H, Kyotani S, Nakanishi N, Morisaki T, Humbert M, Simonneau G, Sitbon O, Soubrier F, Coulet F, Morrell NW, Trembath RC (2006). Mutations of the TGF-beta type II receptor BMPR2 in pulmonary

arterial hypertension. Hum Mutat, 27(2), 121-32.

12. White J, Hopkins RO, **Glissmeyer EW**, Kitterman N, Elliott CG (2006). Cognitive, emotional, and quality of life outcomes in patients with pulmonary arterial hypertension. *Respir Res*, 7, 55.

## **BOOK CHAPTERS**

 Glissmeyer EW, Nelson DS (2015). Coma and Altered Level of Conciousness. In Bachur, Shaw, Chamberlain, Lavelle Nagler, Shook (Eds.), *Textbook of Pediatric Emergency Medicine* (7e, pp. 99-108). Wolters Kluwer/Lippincott Williams and Wilkins.

## **ADDITIONAL PUBLICATIONS**

#### Commentary

1. Boggs W, **Glissmeyer EW**, Schroeder A, Roberts KB (May 27, 2015). Urinalysis contributes to urinary tract infection diagnosis in young infants..

#### **Case Reports**

- 1. Macak, R; Glissmeyer, EW (2021). Stuck at the top of his Mouth: *Hard palate foreign body removal in the pediatric population* http://epmonthly.com/article/stuck-at-the-top-of-his-mouth/...
- 2. Ferros M, Steimle M, Glissmeyer EW (2020). Not So Soft: A case report of pediatric rubber bullet injury Also featured on HIPPO education at: https://www.youtube.com/watch?v=POeAUTHrtm0..

#### Multimedia

- Glissmeyer EW (October 1, 2016). ED FirstNet Overview: This video provides a high-level overview of the functionality of FirstNet, LaunchPoint, and the ED Workflow for providers. [Web], Salt Lake City, UT: Intermountain Healthcare. Available: https://ebu.intermountainhealthcare.org/video/vod/default.aspx?f=http://mediaflash.intermountain.n et:1935/ivodcache/\_definst\_/path01/vod/smil:Ambulatory\_ED\_FirstNet\_Overview\_20160621.smil/ playlist.m3u&&t=ED%20FirstNet%20Overview.
- Glissmeyer EW, Sandweiss D (October 1, 2016). Quick Visits: This video discusses QuickVisits, which streamline the discharge process for providers of patients with common, uncomplicated medical conditions. [Web], Salt Lake City, UT: Intermountain Healthcare. Available: https://ebu.intermountainhealthcare.org/video/vod/default.aspx?f=http://mediaflash.intermountain.n et:1935/ivodcache/\_definst\_/path01/vod/smil:QuickVisits.smil/playlist.m3u&&t=Quick%20Visits.
- Glissmeyer EW, Porter J (October 1, 2016). Ambulatory overview: This is a brief introduction to the layout and interface of iCentra use in an Ambulatory setting. [Video], Salt Lake City, UT: Intermountain Healthcare. Available: https://ebu.intermountainhealthcare.org/video/vod/default.aspx?f=http://mediaflash.intermountain.n et:1935/ivodcache/\_definst\_/path01/vod/smil:Ambulatory\_Overview\_20160621.smil/playlist.m3u8 &t=Ambulatory%20Overview.
- 4. Glissmeyer EW (October 1, 2016). mPages Overview: This video briefly summarizes new features and functionality that have been added to Workflow pages with the mPages 6.0 update. [Web], Salt Lake City, UT: Intermountain Healthcare. Available: https://ebu.intermountainhealthcare.org/video/vod/default.aspx?f=http://mediaflash.intermountain.n et:1935/ivodcache/\_definst\_/path01/vod/smil:mPages\_Overview\_20160622.smil/playlist.m3u8&t= mPages%200verview.

5. Boggs W (April 30, 2014). Dipstick may be adequate screen for urinary tract infection in febrile infants [Web], New York: Reuters Health. Available: http://www.pediatricsconsultant360.com/story/dipstick-may-be-adequate-screen-urinary-tract-infect ion-febrile-infants.

#### **POSTER PRESENTATIONS**

2019	Not Just Papercuts - Removing Unnecessary Alerts Saves Real Caregiver Time
2016	<b>Glissmeyer EW</b> , Ryan, Wang, Sheng, Schunk J, Dudley N, Skarda. Next-Day Surgery Clinic Followup and ED Resource Utilization in Patients Evaluated for Appendicits. Poster session presented at Pediatric Academic Societies, Baltimore, MD.
2016	<b>Glissmeyer EW</b> , Ryan, Wang, Sheng, Schunk JE, Dudley N, Skarda. <i>Decreasing</i> <i>CT Utilization Without Increasing Ultrasond Utilization in Evaluating Appendicitis</i> . Poster session presented at Pedatric Academic Societies, Baltimore, MD.
2005	Glissmeyer EW, Martinez M, Zimmerman G. Endothelial Cells (EC) Alter the
	Expression of Key Genes Responsible for the Vascular Changes in Pulmonary Arterial Hypertension (PAH). Poster session presented at Medical Student Research Program Meeting, University of Utah School of Medicine, Salt Lake City, UT.
2004	<b>Glissmeyer EW</b> , Havlena GT, Schmidt JW, Carlquist J, Baxter B, Elliott CG. Genetic and Clinical Characteristics of 103 Patients With Primary Pulmonary Hypertension. Poster session presented at Westminster College Undergraduate Research Fair, Salt Lake City, UT.

#### **ORAL PRESENTATIONS**

#### **Meeting Presentations**

International	
2020	September 2020 Online presentation during COVID-19 pandemic with the American Academy of Pediatrics' conference. Presentation on removing unneccessary EHR dosing weight and allergies alert and savings in physician, nurse and other healthcare personnell time.
2020	Success Story: Resident Submit Note Workflow at Intermountain Healthcare. Shared with worldwide Cerner clients how we have streamlined resident documentation and avoided failures in notes being sent to attending MDs to sign.
2019	Cerner Pediatric Leadership Council meeting presentation
2019	Demonstration to worldwide Cerner pediatric hospital clients of how to use Query-Based Notification lists for alerting of key personnell of patient use of their facilities.
2018	Cerner Heath Conference 2018: Pediatric patients aren't small adults: how Intermountain supports subspecialties
2018	QuickVisits - a tool to enhance discharge efficiency. Collaborated with David Sandweiss MD on development of the tool and presentation of the content.
2013	Comparison of Urine Dipstick to Dipstick Plus Microscopy for Identification of Urinary Tract Infection In Febrile Infants
16. W W	

<u>National</u>

2019	Invited presentation to Cerner Academic Council: Submit Note Workflow to improve resident documentation
2014	Chair Lift Related Ski and Snowboarding Related Injuries - retrospective study from the trauma registry of the Utah Pediatric Trauma Database. Platform presentation at the Western Pediatric Trauma Conference, San Diego, CA.
2013	Comparison of Urine Dipstick to Dipstick Plus Microscopy for Identification of Urinary Tract Infection In Febrile Infants. Pediatric Academic Societies' Research Meeting, Washington DC
2008	Missed Serious Bacterial Infection in Febrile Infants Managed as Outpatients. Pediatric Academic Societies' Research Meeting, Honolulu, HI
2006	The Relationship of BMPR2 Mutations to Vasoreactivity in Pulmonary Arterial Hypertension. Pulmonary Hypertension Association Bi-annual meeting, Minneapolis, Minnesota
1999	Comparison of NHANES III Spirometry Reference Equations With Four Previous Spirometry Reference Studies. Western Student Medical Research Forum, Carmel, California

#### **Invited/Visiting Professor Presentations**

#### National

2014

Webinar presentation on Mulitidisciplinary experience with an appenidcitis diagnostic guideline using the Pediatric Appendicitis Score at Primary Children's Hospital. Webinar presentation to 150 online and 150 offline participants from 30 freestanding children's hospitals with the Children's Hospital Association Appendicitis Collaborative.

#### **Grand Rounds Presentations**

2017 Preparing for the iCentra implementation: focused on helping providers have a smooth transition. Objectives were to identify benefits and challenges of EMR implementation, review training and go-live support plan, use ZeroHarm safety principles to navigate change, identify local physician advocates, and describe how frontline providers can contribute to improving the system.

#### **Outreach Presentations**

2016	Health Educator, The Church of Jesus Christ of Latter-Day Saints, Taught Basic Life Support Skills to young women ages 12-18 in preparation for a summer camp
2015	Health Educator, The Church of Jesus Christ of Latter-Day Saints, Taught basic life support skills to the young women as part of their personal progress program.
2015	Speaker & Discussion Facilitator, Primary Children's Hospital, Speaker & Discussion Facilitator, Primary Children's Hospital, Moderator, Primary Children's Hospital, Intermountain Moms facebook page discussion moderator. Lead online discussion on Head Injuries, concussions and prevention. Addressing sports, play, and motor vehicle crashes, on scheduled chat using facebook with page with >52K likes. Generated 11 comments, 6 likes.

2014	Speaker & Discussion Facilitator, Primary Children's Hospital, Intermountain Moms facebook page discussion moderator. Lead online discussion on Summer safety: prevention of submersion injury, sun safety, and ride-on vehicle safety, on scheduled chat using facebook with page with >52K likes. Generated 14 comments, 29 likes.
2013	Speaker & Discussion Facilitator, Primary Children's Hospital, Moderator, Primary Children's Hospital, Intermountain Moms facebook page discussion moderator. Lead online discussion on Immunizations, addressing common myths and misinformation, on scheduled chat using facebook with page with >52K likes. Generated 64 comments, 6 likes.

### **OTHER SCHOLARLY ACTIVITIES**

#### Additional Research/Scholarship Contributions

2018 - Present	Following on successes with WIN32 scheduling softare and workflow improvements from early 2017, I am leading similar work beginning September 2018 for all other Department of Pediatrics and University of Utah clinics using
	Cerner Practice Management (CPM) scheduling software. This will be a significant effort but anticipated to improve workflows for office staff in >80 clinics at PCH, and hundereds of clinics outside PCH at Intermountain. Major areas of focus include queue loading times, block appointment scheduling (multiple appointment types in 1 day at 1 time) and enhanced appointment filtering and suggesting ability for schedulers.
2018 - Present	Cerner Referral Management Software optimization: The Department of Pediatrics clinics chose to utilize an integrated software approach for incoming referrals, but after iCentra implementation have struggled with slow loading times of the software. Beginning September 2018, I am working with Cerner and Intermountain leadership to escalate these needed changes to executive leadership, describe the changes needed, and deliver the needed improvements or, alternatively, evaluate other options.
2018	Incomplete physician notes and orders. With the implementation of a new EMR, PCH has struggled to complete physician notes in a timely fashion and this has had a deleterious impact on billing and chart completion rates. There are financial as well as compliance implications to this. While the compliance implications are managed by PCH HIM, with reminders to physicians, previous to May 2018 we did not have adequate reports of these problems. I worked with University Medical Billing and Intermountain EDW data experts to build a report that is divisible by physician division and document type, allowing division and department leadership to have visbility into missing notes and therefore lost revenue opportunities. I continue to work with the medical director for medical affairs and PCH HIM to improve these deficient chart rates. These efforts have impact beyond the department of pediatrics at a University-wide level and for physicians outside the University, such as private pediatric specialists, and pediatric primary care providers who admit patients to PCH.

2017 - Present	Important Patient Notifications A component by this name exists in nearly every workflow Mpage viewed by physicians and nurses. But prior to July 2018, there has been poor standardization of this component across specialties and it had hundreds of different configurations, thus we could not rely that highly important information shown there would be seen by caregivers. I led a team to standardize the configuration of this component, including which high risk problems and diagnoses would show, for how many years, a compromised documents alert, critical documents list, Accountable care organization designation alert, and patient demographics and contact information. We are optimizing this component over time but July 2018 the main standardization effort went into effect
2017 - 2018	Department of Pediatrics Cardiology Scheduling Optimization. After iCentra implementation, it was determined that fundamental changes in software and changes to staffing of schedulers and scheduler workflow was required to improve patient access to Department of Pediatrics clinics to improve patient access, reduce call waiting time, and improve patient experiment. Pro-work call also downers not
	call waiting time, and improve patient experience. Pre-work call abandonment rate (% of time inbound calls hung up while waiting to be answered) exceeded 50%. This work focused principally on those clinics using WIN32 Cerner scheduling software. I worked wth Cerner and Intermountain leadership to deliver software changes and Departmen of Pediatrics leadership to deliver workflow changes that resulted in significant measurable improvements in inbound call abandonment rates to <5%, and template fill percentage for pediatric specialty outpatient clinics. Some of these changes had positive spillover effect to other clinics, resuting in call abandonment rates that were lower than pre-iCentra implementation rates.
2017	Anticoagulation alert Prior to iCentra implementation we had regular but infrequent preventable bleeding events during surgical procedures, which happened when a patient was taken to the OR from an inpatient bed, on medications known to cause bleeding risk, but the surgical teams did not recognize that risk or acknowledge those medications as being received by the patient. I begain work in 2017 with a multidiciplinary team including pharmacy, surgical services, and surgeon representation to develop an alert that fires when a patient receiving an anticoagulant/antiplatelet agent from a defined list of agents is about to have a PEDSURG powerplan ordered on that patient. This provides the ordering provider and alert that the patient is on xyz anticoagulant and when its last dose was. This provides real-time decision support to ordering providers to help avoid patient harm. This alert fires across all sites for
2016 - 2017	all patients having PEDSURG powerplans ordered on them, so has impact outside PCH, the University, and across Intermountain's 22 hospitals. Pediatric weight-based dosing enhancements. Prior to iCentra go-live at PCH, I outlined a plan to have the top 100 most frequently ordered inpatient medications and outpatient prescriptions built as common order sentences, allowing for easier, and safer medication dosing in the inpatient setting and in outpatient prescribing. While these dosing sentences are valuable to clinicians, this work on optimizing weight-based medication ordering is ongoing.

2016 - Present	Infusion optimization. Delivery of infusion medications is a high-complexity, frequent, and high-cost operation. Before Primary Children's this workflow proved to be one of the most difficult challenges in implementation of iCentra, between the scheduling, medication preparation, communication, and care delivery changes that a new EMR brought with it. Once we decided to utilize Day of Treatment powerplans for this care delivery instead of a paper process used in much of Intermountain, work began in earnest to standardize workflows and orders. I engaged subject matter experts from genetics, rheumatology and other disciplines and helped outline workflows for the complex workflows between scheduling, pharmacy, ordering providers, prior authorization, nurses, and physicians.Ultimately, we have successfully delivered thousands of infusions, made changes where necessary to the workflows, and are expanding the "Primary Children's way" of infusions to Riverton and Utah Valley Hospitals for pediatric patients.
2016 - Present	Common Powerplans as Quickorders One challenge presesented by Computerized Physician Order Entry includes knowing the right orders to select. Health unit coordinators (HUCs) and clerks often provided this translation for us in a pre-iCentra hand-written or paper-witten order world. To make it easier for providers to select the msot common powerplans
	they will use, we have worked with medical and surgical specialties to provide a list of most commonly used powerplans on their QuickOrders pages to make the selection of appropriate powerplans more reliable. This contributes to utilization of best practices and consensus driven care processes. This work has been completed for all medical and surgical specialties and recent optimization efforts have revised those listings for Pediatric Hematology/Oncoloyg, for Pediatric Hospitalists, Pedaitric Critical Care, Pediatric Urology, Pediatric Orthopedics, and Pediatric Endocrinology, with more to follow.
2016 - 2017	Orderset conversion to powerplans. Over 150 ordersets were converted to powerplans in perparation for iCentra go-live at PCH. Some are simple, others complex, but all represent practice standards, expert consensus, best evidence, and local preference/workflow adaptations. I formed a physician review committee, and regularly tracked the progress of the build of these plans, including determining the resourcing needed for pharmacy and clinical workflow expertise. While there was an initial uplift of effort requird for EMR go-live, we have continued this effort and built an additional 7 powerplans since go-live as needs arise. These powerplans represent best practice guidelines and are available to physicians outside PCH, and outside the Univesity across Intermountain's hospitals and clinics.
2016 - Present	Encouranging best practices in computerized physician order entry (CPOE) By carefully designing the options presented to physicians during computerized order entry, we can encourage best practices in diagnostic test ordering. This is an ongoing effort, and examples to date of where we have designed CPOE to "make it easy to do the right thing" inclues Clostridium difficile testing (3/18), and insurance-based outpatient prescription tiered coverage display (2/17). My particular involvement in these examples include physician input on design, prioritizatin of the technical build effort, and acceptance testing (validation that the change achieves the desired effect and does not add burden to the physician).

2014 - 2015	.er common list I led a months-long optimziation project with Intermounain pharmacy leadershp to provide all 20 emergency departments throughout Intermountain (soon to be 21) with a standardized most frequent prescription list. Such lists were utilized, in various forms as shared favorite lists in the Intermountain legacy electronic medical record HELP2. We examined prescribing data from Intermountain emergency departments, and pharmacy and emergency physician leadership to develop a list of >1000 order sentences, including pediatric weight-based sentences, that are automatically and immediately filtered for the use of th emergency physician, improving accuracy in prescriping and reducing prescription-writing errors. These have also included considerations of liquid medication volume dosing, with built-in rounding rules that make the prescription reasonably deliverable by non-healthcare professionals (like parents of our pedatric patients). This work continues now with intermittent optimizations.
2014 - Present	Support of Adademic missions of the University and Department of Pediatrics - financial. Optimization electronic medical record is part of any healthcre enterprise business and care delivery system. I have advocated for an arranged for Intellectual Service Agreements for approximately 70 University of Utah physicians and about 5 advance practice clinicians, including 59 from the Department of Pediatrics. The hourly rate of \$100 does not compensate physician time entirely to relieve them from equivalent time in clinical activity, but this administrative work is important to our operational efficiency and business and we benefit thereby as well. I arranged for configuration meetings by specialty, track configuration design of all medical and surgical specialties, and continue to engage a diverse body of physician advocates for EMR optimization. These are the number of hours reimbursed for physician engagement in EMR work over the last 4 years: 2014: 1057 2015: 1817 2016: 4303 2017: 6350

## **EXHIBIT 15**

## **EXHIBIT 15**

## Curriculum Vitae

#### PERSONAL DATA

Name: Eric W. Glissmeyer, M.D. Birth Place: Salt Lake City, UT Citizenship: United States

#### **EDUCATION**

Years	Degree	Institution (Area of Study)
2021 - 2023	MBA	University of Utah (Business Administration) Salt Lake City, UT
2011 - 2014	Fellow	University of Utah (Pediatric Emergency Medicine) Salt Lake City, UT
2009 - 2011	Resident	Boston Children's Hospital/Boston Medical Center (Pediatrics) Boston, MA
2008 - 2009	Intern	Boston Children's Hospital/Boston Medical Center (Pediatrics) Boston, MA
2004 - 2008	M.D.	University of Utah (Medicine) Salt Lake City, UT
1998 - 2004	B.S.	Westminster College (Biology, minor in Chemistry and Spanish Language) Salt Lake City, UT

#### **BOARD CERTIFICATIONS**

10/10/2011 - Present	American Board of Pediatrics (Pediatrics), Certified
10/09/2020 - Present	American Board of Preventive Medicine (Clinical Informatics), Certified
05/01/2008 - Present	National Board of Medical Examiners, Certified
03/25/2015 - Present	American Board of Pediatrics (Sub: Pediatric Emergency Medicine), Certified

#### **CURRENT LICENSES/CERTIFICATIONS**

2012 - Present	Pediatric Advanced Life Support Instructor
2011 - Present	Advanced Trauma Life Support
2008 - Present	Pediatric Advanced Life Support
2008 - Present	Basic Life Support

#### **UNIVERSITY OF UTAH ACADEMIC HISTORY**

#### Pediatrics (Pediatric Emergency Medicine), 07/01/2014 - Present

07/01/2019Associate Professor (Clinical)07/01/2014 - 06/30/2019Assistant Professor (Clinical)

#### Pediatrics (Pediatric Emergency Medicine), 12/01/2013 - 06/30/2014

12/01/2013 - 06/30/2014 Adjunct Instructor

#### **PROFESSIONAL EXPERIENCE**

#### **Full-Time Positions**

2019 - Present	Associate Professor of Pediatrics, University of Utah, Salt Lake City, UT
2016 - 2020	Director of Medical Informatics, Intermountain Healthcare, Salt Lake City, UT
2014 - 2019	Assistant Professor of Pediatric Emergency Medicine, University of Utah, Salt Lake City, UT
2013 - 2014	Adjunct Instructor of Pediatrics, University of Utah, Salt Lake City, UT
2008 - 2011	Teaching Fellow, Boston University School of Medicine, Boston Medical Center, Boston, MA
2008 - 2011	Clinical Fellow in Pediatrics, Harvard Medical School, Children's Hospital Boston, Boston, MA

#### **Reviewer Experience**

Pediatric Quality and Safety, reviewer Reviewer for Archives of Disease in Childhood: Feb 2017: Using dipstick screening by clean catch for urinary tract infection in young febrile infants - reject and resubmit Reviewer for BMJ Open **Reviewer for Hospital Pediatrics** Reviewer for Journal of Paediatrics and International Child Health Reviewer for Journal of Pediatrics

Reviewer for Pediatrics

#### **SCHOLASTIC HONORS**

2015	<b>Primary Children's Emergency Department Resident Teaching Award</b> Selected by the housestaff, University of Utah Emergency Medicine Residency Program.
2014	<b>Resident Teaching Award</b> Selected by the housestaff, University of Utah Pediatric Residency Program
2011	Medical Student Teaching Award Harvard Medical School and Children's Hospital Boston
2008	<b>Outstanding Student in Pediatrics</b> University of Utah School of Medicine
2008	Florence M. Strong Award University of Utah School of Medicine
2008	<b>Gold Headed Cane Award</b> University of Utah School of Medicine
2007	<b>Educational Resource Development Council Scholarship</b> University of Utah School of Medicine
2005	Vascular Biology Program First Place Poster AMA Interim Meeting, Dallas TX
2005	<b>NIH Student Summer Research Award</b> University of Utah School of Medicine

2005	American College of Physicians (ACP) First Place Poster Utah Chapter Meeting, Salt Lake City, UT
	Otan Chapter Meeting, Sait Lake City, OT
2004	Summa Cum Laude, B.S., Westminster College
2003	Western Region Scientific Presentation First Place Award
	Beta Beta Beta National Biological Honors Society

## ADMINISTRATIVE EXPERIENCE Administrative Duties

2022 - Present	Director of Pediatric Emergency Practice Expansion, including: 1) Same-Day Pediatric Clinic University of Utah's at Sugarhouse Health Center and collaboration with pediatric primary care in improving access for newborn checks, newborn jaundice and feeding followups, and acute care sick visits, 2) Emergency Department documentation and clinical revenue optimization including rapid modifications in documentation practices connected to 2023 AMA coding updates, deep sedation (Anesthesia codes) billing for in-emergency department sedation, telemedicine documentation, and non-face-to-face documentation for advice calls.
2019 - 2020	Children's Health Medical Director, Care Transformation Information Services, Intermountain Healthcare. Medical Director oversight for University of Utah-Intermountain Healthcare Health Information Technology and Pediatric specialty care. Key activities and achievements in this role include: -Securing Meaningful Use funds for the Department of Pediatrics, and Surgical Departments of the University of Utah totaling <b>\$1.17M and \$884000</b> for Department of Pediatrics divisions in 2019 alone. This is 75% of elegible clinicians passing Meaningful Use. 2020, then 2021 funds are yet to be claimed. My involvement in obtaining these funds includes activities in physician and medical director leadership, working with Intermountain and Cerner to obtain data to drive improvement toward qualifying for funds, escalating needs that arise with reports, and as consultant for educational materials and communications to physician leadersAddressing scheduling issues with Department of Pediatrics clinics after EHR conversion to iCentra. In the months after iCentra EHR implementation at Primary Childrens, clinics were not returning to full productivity quickly. As medical director with Intermountain CTIS, I quickly dug in to issues with scheduling and workflow. Partnered with a then informatician Trevor Slater, now director of the Ambulatory Operations of the Pediatric Clinical Enterprise, we identified people, process and technology failures and worked to address them quickly. I personally met with divisions, schedulers, and Cerner technology experts to improve workflow, communication, speed of software functionality. Additional trainings and workflow analyses, as well as technical changes made led to productivity improvements that exceeded previous numbers of patients seen. -Special projects related to Children's Health, included: Early Onset Sepsis risk score alerts for newborn nurseries at Intermountain birth hospitals, Day-of-Treatment powerplan initiative in Pediatric Oncology, leading an effort to improve physician experien

Focus on Pediatric Speciality and Primary Care throughout the Intermountain Healthcare integrated network. Key early initiati directing configuration of an in-EHR handoff process that repla functionality developed in-house. This new functionality is use advance practice providers throughout Intermountain Healthcan third-party application that would eventually replace this in-hou Identifying and directing means of active notification of teams interest have emergency, in-hospital, or ambulatory encounters "query-based notification lists" was a novel use of EHR function at Cerner's Pediatric Leadership Council in 2018. Identifying an workflow analysis, configuration, build, and training for the lau orders for infusion encounters at Primary Children's Hospital. I 2017, the electronic ordering process for infusions of medication in Intermountain facilities had not gone well, and nearly all site paper. I partnered with Continuous Improvement specialists to analysis of current state and thorough future-state planning and management activities. We successfully delivered electronic-or at Primary Children's Hospital Rapid Treatment Unit from day	aced legacy ed by physicians and re. Advocated for a use configuration. that patients of 5. Deemed onality and presented nd directing the unch of electronic Previous to October ons to be delivered es had reverted to perform in-depth I change rder-only infusions
2015 - 2017 Primary Children's Hospital Provider Adoption Lead for iCentr	ra Implementation
2015 - 2017 Member, Cerner Emergency Medicine Strategic Board	
2014 - 2017 Intermountain Healthcare iCentra EHR ED Development Team Transitions sub-team Lead. This group meets every 2 weeks to the Emergency Department software used at all 20 Intermounta emergency departments.	design and optimize
2013 - 2014PEM fellow scheduling	
2013PCH ED culture log followup	

### **PROFESSIONAL COMMUNITY ACTIVITIES**

2020 - Present	Stake Presidency 2nd Counselor, The Church of Jesus Christ of Latter-Day Saints,
2019	Director & Teacher, The Church of Jesus Christ of Latter-Day Saints, First Aid Merit Badge course for Boy Scouts aged 11-14. Taught 6 scouts First Aid and organized a course with 2 other instructors. Instruction on burns, injury avoidance, bleeding, fractures, CPR and other life-saving and injury stabilization skills
2018	Educator, The Church of Jesus Christ of Latter-Day Saints, I prepared and presented an interactive discussion and handout on emergency preparedness: "medications, storage, and hygeine in the time of an emergency to 35 persons as part of an hour-long emergency preparedness fair.
2018	Camp Physician, The Church of Jesus Christ of Latter-Day Saints, The Church of Jesus Christ of Latter-Day Saints, This is the weeklong young women's camp of the Bountiful East Stake, attended by 160 girls 12-18 years.
2016	Camp Physician, The Church of Jesus Christ of Latter-Day Saints, This is the weeklong young women's camp of the Bountiful East Stake, attended by 160 girls 12-18 years.

2015	Medical Chairperson, The Church of Jesus Christ of Latter-Day Saints, Chaired a comittee of four medical professions to provide on-site medical support and expertise for the Bountiful East Stakes' 2015 youth pioneer trek, consisting of 150 youth and 30 leaders. An overland hiking and camping effort covering 34 miles in 4 days with children of all abilities.
2014	Alumnus Mentor, Westminster College, Take a Griffin to lunch mentoring program: Camrin Rivera. Facilitate connections with student career interests.
2014 - 2015	Cubmaster, Boy Scouts of America, Organize monthly pack meetings, track rank advancement, serve as mentor to 8-11 year old boys and assist them if developing habits of service to family and community, citizenship, lifelong learning and physical fitness.
2013	Volunteer, Camp Hobe, Provided medical and leadership support at a weeklong camp for children with cancer and their siblings, assisting in fundraising and planning for future camps
2008	Educator, Salt Lake City School District, Eye Safety, Taught intermediate school-age children about eye injury prevention through didactic and hands-on activities in an effort to reduce incidence of preventable eye injury
2005 - 2008	Coach, Boy Scouts of America, Varisty Scouts, Provided first aid and backcountry medicine certification training, mentoring, community awareness and outdoor skills education to boys in the metro Salt Lake City area and supervised their large-scale youth-led service projects

## UNIVERSITY COMMUNITY ACTIVITIES University of Utah Health

2016 - Present	Advisory Committee Member, University of Utah Hospitals and Clinics, University of Utah CIO, CMIO, and IT meet with PCH EHR leadership including myself in my role as director of medical informatics to track the development of data interfaces between Intermountain iCentra and University Utah electronic data warehouses. Challenges and tasks include establishing data primacy and data transfer protocols.
2005	Student Representative, Health Professions Education Building, Selected by school of medicine leadership to help plan and emcee opening ceremony for the health professions education builiding
College Level	
2014 - 2015	Faculty Interviewer, School of Medicine Admissions Interview Committee, Interview prospective medical studentis in one-on-one and group interview settings
2013	Evaluator, School of Medicine, MS-II OSCE, physical exam standardized patient examination
2011 - 2016	Member, School of Medicine, Innovations in Undergraduate Medical Education Advisory Committee
2011 - 2014	Member, School of Medicine Curriculum Implementation Committee
2007 - 2008	Member, School of Medicine Curriculum Committee
2007 - 2008	Member, School of Medicine Admissions Interview Committee, Interviewed prospective medical students applying for admission

2004 - 2005	Class President, School of Medicine, First Year Medical School, Served as liaison for class disputes, curriculum redesign and social activities
Department Level	
2017 - 2018	Faculty Liaison, Pediatrics, University of Utah Faculty Liaison to Care Transformation Services. Set strategy, track and communicate progress, and help Intermountain deliver operational data, reports and improvements to Department of Pediatrics clinics scheduling processes and documentation driving clinical revenue
2016 - Present	Advisory Committee Member, Pediatrics, Ambulatory and Surgery Division Chiefs meeting: This regular meeting of academic divisions in the Department of Pediatrics invites me to present on iCentra-relation go-live preparedness, training expectations, timeline of go-live, and post go-live enhancements
2016 - Present	Advisory Committee Member, Pediatrics, EMR committee meeting: invited in advisory role for administrative implications of the new EHR on clinical operations
2015 - Present	Advisory Committee Member, Pediatrics, Communications Committee: invited member for iCentra EHR related communications srategy with referring and primary care providers and families.
2013 - Present	Member, Pediatrics, Pediatric residency QI curriculum committee. Assisted in development of Quality Improvement curriculum for pediatric residents of the University of Utah, including use of Institute for Healthcare Improvement (IHI) educational modules for didactic training.
2013 - Present	Faculty Interviewer, Pediatrics, Review and interview candidates for the Pediatric residency program at the University of Utah, Pediatric Education Enterprise
<b>Division</b> Level	
2014 - Present	Member, Pediatric Emergency Medicine, EMR IT committee. Worked to prepare Primary Children's Hospital ER and PEM group for iCentra electronic medical record, including particular efforts on care transitions including discharge, admission, inter-facility transfering of patients, prescription writing, quick orders, decision support tools and order sets.
2011 - Present	Applicant Interviewer, Pediatric Emergency Medicine, Interview pediatric emergency medicine fellow candidates

### SERVICE AT AFFILIATED INSTITUTIONS

2016 - Present	Advisory Committee Member, Intermountain Healthcare, Standing invitee to Medical Executive Committee to report on iCentra implementation development and progress, set expectations for PCH, and address concerns and questions.
2016 - 2018	Advisory Committee Member, Intermountain Healthcare, The Resident training committe was formed to address the needs of physician trainees for go-live and post-go-live training and re-training. I advise as well as develop computer based training for residents.
2016 - 2018	Advisory Committee Member, Intermountain Healthcare, Physician training committee meets every 2 weeks to plan for next phase physician training for the new Intermountain EHR. Strategy affects the entire Intermountain enterprise before and after EHR go-live.

2011 - 2019 Committee Member, Intermountain Healthcare, Intermountain Pediatric Emergency Collaborative, Development of a guideline to standardize the diagnostic workup of pediatric appendicitis

#### SERVICE AT PREVIOUS INSTITUTIONS

2010 - 2011 Member, Boston Medical Center/Boston Children's Hospital, QI Curriculum Committee

#### **CURRENT MEMBERSHIPS IN PROFESSIONAL SOCIETIES**

Academic Pediatric Association

American Academy of Pediatrics

American Academy of Pediatrics, Council on Clinical Information Technology

College of Healthcare Information Management Executives

#### **FUNDING**

**Past Grants** 

01/01/17 - 10/28/19	Glissmeyer Biosig Ii Jan 2017 Principal Investigator(s): Eric W. Glissmeyer Direct Costs: \$296,177 Total Costs: \$440,079 University Of Michigan Role: <u>Principal Investigator</u>
08/21/15 - 12/31/16	Glissmeyer Biosig II Sept 2014 Principal Investigator(s): Eric W. Glissmeyer Direct Costs: \$195,846 Total Costs: \$291,810 Wayne State University Role: Principal Investigator
07/01/10 - 06/30/11	Validation of a pediatric Quality Improvement Curriculum - Measuring the ability of the QI curriculum being implemented during the 2010-2011 BCRP academic year to improve residents' applied QI knowledge. Children's Hospital Program for Patient Safety and Quality (PPSQ) and Fred Lovejoy House-staff Research and Education Grant. Principal Investigator(s): Eric W. Glissmeyer Boston Children's Hospital Role: Principal Investigator
05/01/05 - 09/01/05	Investigated expression of key genes responsible for the vascular changes in Pulmonary Arterial Hypertension. Made initial observations of novel mechanisms of post-transcriptional regulation of the vasoconstricor peptide endothelin-1. Eccles Institute of Human Genetics, University of Utah School of Medicine Principal Investigator(s): Eric W. Glissmeyer National Institutes of Health Role: <u>Principal Investigator</u>

#### **RESEARCH EXPERIENCE**

2012 - Present Fellow-Institute for Healthcare Delivery Research – Intermountain Health Care. Leadership of projects within the Intermountain Pediatric Clinical Program, including appendicitis, diagnosis of UTI in febrile infants

2009 - 2011	<ul> <li>Children's Hospital Boston, Department of Cardiology, Mary P. Mullen, MD PhD</li> <li>Description of Emergency Department Visits in Patients with Pulmonary Hypertension</li> <li>Chart review of the clinical presentation of and care delivered to patients with pulmonary hypertension in the Children's Hospital Emergency Department</li> </ul>
2007 - 2008	Primary Children's Medical Center and University of Utah School of Medicine, Carrie L. Byington, MD Missed Serious Bacterial Infection in Febrile Infants Managed as Outpatients - Demonstrated that missed cases of infection were linked to inappropriate variability in management of febrile infants
2002 - 2008	<ul> <li>LDS Hospital, Department of Pulmonary and Critical Care Medicine, C.</li> <li>Gregory Elliott, MD</li> <li>Database and Translational Research in Pulmonary Arterial Hypertension (PAH)</li> <li>Developed the Utah Pulmonary Hypertension Database and investigated</li> <li>genotype-phenotype relationships in a nationwide cohort of patients with PAH, leading to publication of manuscript in Circulation.</li> </ul>
1997 - 1999	<ul> <li>LDS Hospital, Department of Pulmonary and Critical Care Medicine, Robert O. Crapo, MD</li> <li>Validation of spirometric devices and research in standard spirometric equations and DLCO accuracy testing.</li> <li>Managed the pulmonary spirometry research laboratory</li> </ul>

#### **TEACHING RESPONSIBILITIES/ASSIGNMENTS**

#### **Course and Curriculum Development**

2012 - 2013	Pediatric residency Quality Improvement Curriculum. Assisted in design a longitudinal quality improvement curriculum for University of Utah pediatric residents. Serve as mentor to residents for QI projects.
Course Lectures	
2014	Instructor, MD ID: Final MOSPE/OSCE, Office of the Dean/Medicine, : MS2016 M+R - Final MOSPE/OSCE
2013	Instructor, OSCE/Multi-station Clinical Exam, : MS2015 SMBJ - OSCE/Multi-station Clinical Exam
2013	Instructor, OSCE/Multi-station Clinical Exam, : MS2015 SMBJ - OSCE/Multi-station Clinical Exam
2012	Instructor, Bioinformatics Small Group Discussion, : MS2013 Acute Care Track - Bioinformatics Small Group Discussion
2008	Teaching Assistant, Physical Diagnosis, 4 students, University of Utah School of Medicine, 1 week course, 40 teaching hours
Clinical Teaching	

#### 2021 New Intern Pediatric Critical Care evaluation and treatment. With PALS certification on-hold at PCH in early 2021, I helped teach new interns PALS material outside of the PALS course, including assessment of critically ill patients, shared mental models of cardiac, respiratory, and shock scenarios.

2021	Case Simulation for Transition to Internship Course: spent 2 hours with 4th year medical students on simulation of pediatric assessment of patients in respiratory distress/asthma. Discussed team based care, shared mental models, and importance of roles and communication.
2021 - Present	Clinical Student Rounds: a 2-hour session in the emergency department with undergraduate pre-medical students, focused on teaching them initial clinical assessment of a sick infant and child. Discussed forming a differential diagnosis, demonstrated bedside ultrasound use, and obtaining a medical history and focused physical examination.
2015	Suturing Workshop for Pediatric Residents. 20 trainees present, taught in a small group of 3-4.
2014 - Present	Supervision of medical students, residents, and pediatric emegency medicine fellows in the emergency department and rapid treatment inpatient unit of Primary Children's Hospital
2012 - Present	Suturing technique instruction to pre-medical students enrolled in the University of Utah Academic Associates program. Once yearly.

### **Small Group Teaching**

2018	Instructor, BLS and PALS new provider course for Primary Children's Hospital housestaff
2018	BLS and PALS renewal course for PCH anesthesia staff
2017	Instructor, BLS and PALS renewal course for PCH Anesthesia physician staff
2016	PALS instructor: group of 6 PCH faculty and staff.
2016	iCentra reach - tutorial on how to view documents, MAR, and vital signs in patients seen at Intermountain facilities already on iCentra.
2016	University of Utah Emergency Medicine residency presentation on pseudoappendicits syndrome and workup of infectious gastroenteritis
2015	University of Utah Emergency Medicine residency lecture on pediatric inborn errors of metabolism
2015	University of Utah Emergency medicine Stump the Chumps presentation on Macrophage Activiation Syndrome
2015	Instructor, PALS renewal course, group of 6 nurses/staff.
2015	Instructor, PALS recertification course for PCH anesthesiology staff
2015	Invited presentation: Chair lift injuries and falls. PCH Trauma Morbidity and Mortality conference
2015	Logan Regional Hospital iCentra Physician training: instruction on use of launchpoint and ED-specific workflow
2014	Instructor, BLS and PALS new provider course for Primary Children's Hospital housestaff
2014	Case Presenter, University of Utah Emergency Medicine Residency, "Stump The Chumps" discussion on Aspirin overdose case
2014	Lecturer: Anaphylaxis. Primary Children's Hospital Advanced Shock Workshop, 30 trainees.
2014	Invited Panel Member: Bronchiolitis diagnosis and management. University of Utah Emergency Medicine Residency. 25 trainees.

2013	Instructor PALS renewal course for Primary Children's Hospital faculty/staff
2012 - 2013	Presenter at Division of Pediatric Emergency Medicine Morbidity and Mortality monthly conference. Case preparation and discussion preparation and lead.
2012	Instructor, PALS renewal course
2011	Small Group Discussion Facilitator, MS4 course in longitudinal preparation for internship, University of Utah School of Medicine
2011 - Present	Journal Club: alternating coverage of PEM-related articles supervising fellows in review of pertinent articles in JAMA, NEJM, Pediatrics, Journal of Pediatrics, Academic Emergency Medicine, American Journal of Emergency Medicine, Archives of Disease of Childhood, Pediatric Emergency Care, and other journals.
2010 - 2011	Senior Rounds presenter, Boston Children's Hospital, 5 conferences, 10-20 senior faculty and senior residents, in a case-based teaching format, and led discussion on evidence-based management and current research

#### Mentoring/Advising

Supervisor, University of Utah, Supervision of clinical care delivered by fellows in the emergency department of Primary Children's hospital, including supervision of invasive procedures, bedside ultrasound examination, and medical control of emergent transfer of patients by air ambulance service.
Advisor/Mentor, Julia Rawlings, University of Utah, Mentor and advise fellow's progress through meeting fellowship educational and research milestones and career development.
Trainee's Current Career Activities: Pediatric Emergency Medicine Faculty
Supervisor, University of Utah, Supervise care of patients in the emergency
department of Primary Children's Hospital, including suturing, abscess drainage, admission and discharge decisions, and family centered care.
Upper and Lower Gastrointestinal bleeding lecture to PEM colleagues, fellows, students.
Noon conference on Discharge Instructions and Orders. Followed by similar presentations with Hospitalist staff. Total 50 attendees
Computerized Provider Order Entry: preparing for iCentra. Lecutre to residents and trainees
Lecture to Academic Associate students in Pediatric Research courses: Fever in infants 0-60 days and Biosignatures II study
University of Utah Pediatric Emergency Medicine lecture: Pediatric Rashes in the ED. Given to University of Utah Emergency medicine residents, 30 attendees.
University of Utah Pediatric Emergency Medicine Lecture: The Febrile Infant. Given to Emergency Medicine residents of the University of Utah (30 attendees)

2016	University of Utah Pediatric Emergency Medicine lecture: Metabolic emergencies in Children in the ED. To emergency medicine residents, 30 attendees.
2015	University of Utah Pediatric Emergency Medicine Lecture: Pediatric Surgical Emergencies seen in the ED. Lecture of University of Utah Emergency Medicine residents, 30 attendees.
2014	University of Utah Pediatric Emergency Medicine lecutre: Congenital Heart Disease, Arrhythmias, Resuscitation in the ED. Given to University of Utah Emergency Medicine residents, 30 attendees.
2013	University of Utah Pediatric Emergency Medicine Lecture: Fratures of the Elbow. Given to emergency medicine resident of the University of Utah, 30 attendees.
2013	University of Utah Pediatric Emergency Medicine lecture: Pediatric Nephrology Sampler: Glomerulunephritis, Nephrotic Syndrome and HUS. To University of Utah Emergency Medicine residents, 30 attendees.
2012	University of Utah Pediatric Emergency Medicine Lecture: Urine Drug Screens: pitfalls and shortcomings. To University of Utah emergency medicine residents and University of Utah Pediatric medicine resdients. 30 attendees each lecutre.
2011	University of Utah Emergency Medicine Residency Lecturer. Fractures of the Elbow. Lecture given to St. Marks Hospital (SLC, UT) Residency program residents. 8 attendees.
2011	Case of The Week. Accidental head trauma in the newborn nursery, including risk factors for neonatal accidental falls, literature review, patient safety perspectives. Boston Medical Center, 40 facutly, 15 residents
2010 - 2011	Quality Improvement Curriculum Instructor. Assisted in teaching QI principles to PL2 pediatric residents as part of didactic sessions on topics based upon knowledge domains in Problem Based Learning and Improvement (PBLI) as outlined by the IHI, such as health care as a process and system, variation and measurement, and leading, following, and making changes in health care

#### **Internal Teaching Experience**

2017	DOPEM EBM lecture: becoming agents for change by choosing resilience
2016	Division of Pediatric Emergency Medicine Lecture: Computerized Physician Order Entry
2015	Division of Pediatric Emergency Medicine Lecture. iCentra: An ED provider view
2015 - 2017	iCentra Implementation knowledge sharing lecture. Given to PCH hospital IT committee, physician leadership, University of Utah leadership, Division of Pediatric Emergency Medicine. Main objective is communication of expectations around new EHR implementation. For administrators, frontline providers, IT leadership, and division/department chiefs.
2014	Division of Pediatric Emergency Medicine career development lecture: Biomedical Informatics. Audience is DOPEM faculty and staff. 15 attendees.
2013	Research in Progress: Performance of screening tests for urinary tract infection in febrile infants. Presented update on my research. Research meeting for all department of pediatrics faculty and staff, University of Utah School of Medicine. 25 attendees.
2012	Research in Progress: Performance of screening tests for urinary tract infection in febrile infants. Research meeting for all department of pediatrics faculty and staff, University of Utah School of Medicine. 25 attendees.

2012	Interesting Case Conference presentation: Division of Pediatric Emergency Medicine, University of Utah School of Medicine
2008 - 2009	Lecturer, Continuity Clinic Resident Core Conference, Children's Hospital Primary Care Clinic, 2 conferences, 10-14 faculty and residents

#### **Additional Teaching Contribution**

2017	Intermountain Leadership Conference, attended by invitation in my role as Director of Medical Informatics for the Primary Children's region.
2016	University of Utah Health Sciences Leadership Seminar I: Foundations of Leadership
2013	University of Utah School of Biomedical Informatics: courses in fundamentals of biomedical informatics (3 hours) and implementation of systems (3 hours)
2013	Data and Research Series Courses, Database design and querying, Oracle SQL training, Salt Lake City, UT
2008	Advanced Training Program in Health Care Delivery Improvement, Intermountain Healthcare, Salt Lake City, UT
2007 - 2008	Mentored Program in Pediatric Research, University of Utah School of Medicine, Salt Lake City, UT

#### CE Courses Developed

2016 - 2017	FirstNet emergency physician training course for iCentra EHR (Intermountain Healthcare). This course has been taught to hundreds of emergency physicians since January 2015 across Utah and Idaho. Course is taught approximately 25 times per year, 5-10 attendees per class. In-classroom trining has been converted to computer-based training modules now in use.
2016 - Present	FirstNet Computer-Based training. Intended for residents and physicians needing re-training or additional training. My role is in strategic design, course formatting, delivery, and review of content, incuding feedback and reformatting. Intermountain Healthcare. Initial deployment was June 2017. Audience is approximately 75 residents per academic year.
2017 - Present	This page contains video instructions on how to create and manage iCentra typed text macros called Auto-Text. For use by physicians and APCs throughout Intermoiuntain Healthcare. https://m.intermountain.net/knowledge/wiki-sites/icentra/ambulatoryproviderguide/ pages/create-and-manage-auto-text-training-video.aspx
2017 - Present	This page contains video instructions on how to create and use Care Team Lists in iCentra. These are critical to organizing admitted patients to PCH and this training is ued by attending physicians, advance practice clincians, fellows, and residents at Primary Children's Hospital https://m.intermountain.net/knowledge/wiki-sites/icentra/acuteproviderguide/pages /creating-and-using-care-team-lists.aspx
CE Courses Taught	
2014 - 2017	Thoracostomy tube placement simulation, pericardiocentesis simulation, needle thoracostomy simulation as part of the recurring Critical Procedures Course for members of the Division of Pediatric Emergency Medicine and housestaff

- 2017 Teach FirstNet, CPOE and Launchpoint to ED physicians. For physicians and APCs working in Intermountain EDs. Taught x1 to start off the Central Region teaching of EM physicans, effort in conjunction with training team. Class with 8 EM physicians, ultimately the course has been taught to >250 emergency physcians and APCs.
- 2017 FirstNet to EM residents, 30 attendees, coodinated with EM residency program. I have converted this course from in-person training to a computer based training course.

#### **PEER-REVIEWED JOURNAL ARTICLES**

- 1 Ryan S, Dudley NC, Schunk JE, Weng C, Skarda DE, Glissmeyer EW (2023). Reduced Computed Tomography for Appendicitis in Children after Implementation of Next-day Surgery Clinic Follow-up. Pediatr Qual Saf, 8(2), e641.
- Majan P, VanBuren JM, Tzimenatos L, Cruz A, Vitale M, Powell EC, Leetch AN, Pickett ML, 2. Brayer A, Nigrovic LE, Dayan P, Atabaki SM, Ruddy RM, Rogers AJ, Greenberg R, Alpern ER, Tunik MG, Saunders M, Muenzer J, Levine DA, Hoyle JD, Grisanti Lillis K, Gatttu J, EF, Borgialli D, Bonsu B, Blumberg S, Anders J, Roosevelt G, Browne LR, Schnadower D, Park G, Mistry RD, Glissmever EW, Cator A, Bogie A, Quayle KS, Ellison A, Balamuth F, Richards R, Ramilo O, Kupperman N (2022). Serious Bacterial Infections in Young Febrile Infants With Positive Urinalysis Results. Pediatrics, 150(4).
- 3. Glissmever EW, Ryan S, Dudley N, Schunk JE, Nielsen J, Weng C, Skarda D. (2020). An Administrative Data-based Surrogate Definition Identifies Children Evaluated Beyond Physical Examination for Suspected Appendicitis. Pediatr Qual Saf, 5(6), e343.
- Glissmeyer EW, Ryan S, Dudley NC, Schunk JE, Nielsen J, Weng C, Skarda DE (2020). An 4. Administrative Data-based Surrogate Definition Identifies Children Evaluated Beyond Physical Examination for Suspected Appendicitis. Pediatr Oual Saf, 5(6), e343.
- 5. Glissmeyer EW, Metzger RR, Bolte R (2018). Chair Lift Falls and Injuries in Children. Pediatr *Emerg Care*, *34*(2), 106-108.
- Doupnik SK, Ziniel SI, Glissmeyer EW, Moses JM (2017). Validity and Reliability of a Tool to 6. Assess Quality Improvement Knowledge and Skills in Pediatrics Residents. J Grad Med Educ, 9(1), 79-84.
- 7. Curfman AL, Glissmever EW, Ahmad FA, Korgenski EK, Blaschke AJ, Bvington CL, Miller AS (2016). Initial Presentation of Neonatal Herpes Simplex Virus Infection. J Pediatr, 172, 121-126.e1.
- Glissmeyer EW, Ziniel S, Moses, J (2014). When is a change an improvement? Use of the Quality 8. Improvement Knowledge Application Tool (OIKAT) in assessing pediatric resident OI education. JGrad Med Educ, 6(2), 284-291.
- Glissmeyer EW, E. Kent Korgenski, Jacob Wilkes, Jeff E. Schunk, Xiaoming Sheng, Anne J. 9. Blaschke and Carrie L. Byington (April 28, 2014). Dipstick Screening for Urinary Tract Infection in Febrile Infants. Pediatrics.
- 10. Elliott CG, Glissmeyer EW, Havlena GT, Carlquist J, McKinney JT, Rich S, McGoon MD, Scholand MB, Kim M, Jensen RL, Schmidt JW, Ward K (2006). Relationship of BMPR2 mutations to vasoreactivity in pulmonary arterial hypertension. Circulation, 113(21), 2509-15.
- Machado RD, Koehler R, Glissmeyer E, Veal C, Suntharalingam J, Kim M, Carlquist J, Town M, 11. Elliott CG, Hoeper M, Fijalkowska A, Kurzyna M, Thomson JR, Gibbs SR, Wilkins MR, Seeger W, Morrell NW, Gruenig E, Trembath RC, Janssen B (2006). Genetic association of the serotonin transporter in pulmonary arterial hypertension. Am J Respir Crit Care Med, 173(7), 793-7.
- 12. White J, Hopkins RO, Glissmeyer EW, Kitterman N, Elliott CG (2006). Cognitive, emotional, and

quality of life outcomes in patients with pulmonary arterial hypertension. Respir Res, 7(1), 55.

- 13. Machado RD, Aldred MA, James V, Harrison RE, Patel B, Schwalbe EC, Gruenig E, Janssen B, Koehler R, Seeger W, Eickelberg O, Olschewski H, Elliott CG, Glissmeyer E, Carlquist J, Kim M, Torbicki A, Fijalkowska A, Szewczyk G, Parma J, Abramowicz MJ, Galie N, Morisaki H, Kyotani S, Nakanishi N, Morisaki T, Humbert M, Simonneau G, Sitbon O, Soubrier F, Coulet F, Morrell NW, Trembath RC (2006). Mutations of the TGF-beta type II receptor BMPR2 in pulmonary arterial hypertension. *Hum Mutat*, 27(2), 121-32.
- 14. White J, Hopkins RO, **Glissmeyer EW**, Kitterman N, Elliott CG (2006). Cognitive, emotional, and quality of life outcomes in patients with pulmonary arterial hypertension. *Respir Res*, 7, 55.

#### **BOOK CHAPTERS**

 Glissmeyer EW, Nelson DS (2015). Coma and Altered Level of Conciousness. In Bachur, Shaw, Chamberlain, Lavelle Nagler, Shook (Eds.), *Textbook of Pediatric Emergency Medicine* (7e, pp. 99-108). Wolters Kluwer/Lippincott Williams and Wilkins.

#### ADDITIONAL PUBLICATIONS

#### Commentary

1. Boggs W, **Glissmeyer EW**, Schroeder A, Roberts KB (May 27, 2015). Urinalysis contributes to urinary tract infection diagnosis in young infants.

#### **Case Reports**

- 1. Macak, R; Glissmeyer, EW (2021). Stuck at the top of his Mouth: *Hard palate foreign body removal in the pediatric population* http://epmonthly.com/article/stuck-at-the-top-of-his-mouth/..
- 2. Ferros M, Steimle M, **Glissmeyer EW** (2020). Not So Soft: *A case report of pediatric rubber bullet injury* Also featured on HIPPO education at: https://www.youtube.com/watch?v=POeAUTHrtm0..

#### Multimedia

- Glissmeyer EW (October 1, 2016). ED FirstNet Overview: This video provides a high-level overview of the functionality of FirstNet, LaunchPoint, and the ED Workflow for providers. [Web], Salt Lake City, UT: Intermountain Healthcare. Available: https://ebu.intermountainhealthcare.org/video/vod/default.aspx?f=http://mediaflash.intermountain.n et:1935/ivodcache/\_definst\_/path01/vod/smil:Ambulatory\_ED\_FirstNet\_Overview\_20160621.smil/ playlist.m3u8&t=ED%20FirstNet%20Overview.
- Glissmeyer EW, Porter J (October 1, 2016). Ambulatory overview: This is a brief introduction to the layout and interface of iCentra use in an Ambulatory setting. [Video], Salt Lake City, UT: Intermountain Healthcare. Available: https://ebu.intermountainhealthcare.org/video/vod/default.aspx?f=http://mediaflash.intermountain.n et:1935/ivodcache/\_definst\_/path01/vod/smil:Ambulatory\_Overview\_20160621.smil/playlist.m3u8 &t=Ambulatory%20Overview.
- 3. **Glissmeyer EW** (October 1, 2016). mPages Overview: This video briefly summarizes new features and functionality that have been added to Workflow pages with the mPages 6.0 update. [Web], Salt Lake City, UT: Intermountain Healthcare. Available: https://ebu.intermountainhealthcare.org/video/vod/default.aspx?f=http://mediaflash.intermountain.n et:1935/ivodcache/\_definst\_/path01/vod/smil:mPages\_Overview\_20160622.smil/playlist.m3u8&t= mPages%200verview.

- 4. **Glissmeyer EW**, Sandweiss D (October 1, 2016). Quick Visits: This video discusses QuickVisits, which streamline the discharge process for providers of patients with common, uncomplicated medical conditions. [Web], Salt Lake City, UT: Intermountain Healthcare. Available: https://ebu.intermountainhealthcare.org/video/vod/default.aspx?f=http://mediaflash.intermountain.n et:1935/ivodcache/\_definst\_/path01/vod/smil:QuickVisits.smil/playlist.m3u&&t=Quick%20Visits.
- 5. Boggs W (April 30, 2014). Dipstick may be adequate screen for urinary tract infection in febrile infants [Web], New York: Reuters Health. Available: http://www.pediatricsconsultant360.com/story/dipstick-may-be-adequate-screen-urinary-tract-infect ion-febrile-infants.

#### **POSTER PRESENTATIONS**

2023	Improving Same-Day Access in Pediatric Primary Care. Poster on achievement of improved fill rates in pediatric same-day clinic in general pediatric setting staffed by pediatric emergency medicine providers.
2019	Not Just Papercuts - Removing Unnecessary Alerts Saves Real Caregiver Time
2016	<b>Glissmeyer EW</b> , Ryan, Wang, Sheng, Schunk J, Dudley N, Skarda. <i>Next-Day</i> <i>Surgery Clinic Followup and ED Resource Utilization in Patients Evaluated for</i> <i>Appendicits</i> . Poster session presented at Pediatric Academic Societies, Baltimore, MD.
2016	<b>Glissmeyer EW</b> , Ryan, Wang, Sheng, Schunk JE, Dudley N, Skarda. <i>Decreasing</i> <i>CT Utilization Without Increasing Ultrasond Utilization in Evaluating Appendicitis</i> . Poster session presented at Pedatric Academic Societies, Baltimore, MD.
2005	<b>Glissmeyer EW</b> , Martinez M, Zimmerman G. <i>Endothelial Cells (EC) Alter the</i> <i>Expression of Key Genes Responsible for the Vascular Changes in Pulmonary</i> <i>Arterial Hypertension (PAH)</i> . Poster session presented at Medical Student Research Program Meeting, University of Utah School of Medicine, Salt Lake City, UT.
2004	<b>Glissmeyer EW</b> , Havlena GT, Schmidt JW, Carlquist J, Baxter B, Elliott CG. <i>Genetic and Clinical Characteristics of 103 Patients With Primary Pulmonary</i> <i>Hypertension</i> . Poster session presented at Westminster College Undergraduate Research Fair, Salt Lake City, UT.

#### **ORAL PRESENTATIONS**

#### **Meeting Presentations**

International	
2020	September 2020 Online presentation during COVID-19 pandemic with the American Academy of Pediatrics' conference. Presentation on removing unneccessary EHR dosing weight and allergies alert and savings in physician, nurse and other healthcare personnell time.
2020	Success Story: Resident Submit Note Workflow at Intermountain Healthcare. Shared with worldwide Cerner clients how we have streamlined resident documentation and avoided failures in notes being sent to attending MDs to sign.
2019	Cerner Pediatric Leadership Council meeting presentation
2019	Demonstration to worldwide Cerner pediatric hospital clients of how to use Query-Based Notification lists for alerting of key personnell of patient use of their facilities.

2018	Cerner Heath Conference 2018: Pediatric patients aren't small adults: how Intermountain supports subspecialties
2018	QuickVisits - a tool to enhance discharge efficiency. Collaborated with David Sandweiss MD on development of the tool and presentation of the content.
2013	Comparison of Urine Dipstick to Dipstick Plus Microscopy for Identification of Urinary Tract Infection In Febrile Infants
National	
2019	Invited presentation to Cerner Academic Council: Submit Note Workflow to improve resident documentation
2014	Chair Lift Related Ski and Snowboarding Related Injuries - retrospective study from the trauma registry of the Utah Pediatric Trauma Database. Platform presentation at the Western Pediatric Trauma Conference, San Diego, CA.
2013	Comparison of Urine Dipstick to Dipstick Plus Microscopy for Identification of Urinary Tract Infection In Febrile Infants. Pediatric Academic Societies' Research Meeting, Washington DC
2008	Missed Serious Bacterial Infection in Febrile Infants Managed as Outpatients. Pediatric Academic Societies' Research Meeting, Honolulu, HI
2006	The Relationship of BMPR2 Mutations to Vasoreactivity in Pulmonary Arterial Hypertension. Pulmonary Hypertension Association Bi-annual meeting, Minneapolis, Minnesota
1999	Comparison of NHANES III Spirometry Reference Equations With Four Previous Spirometry Reference Studies. Western Student Medical Research Forum, Carmel, California

#### **Invited/Visiting Professor Presentations**

#### National

2014

Webinar presentation on Mulitidisciplinary experience with an appenidcitis diagnostic guideline using the Pediatric Appendicitis Score at Primary Children's Hospital. Webinar presentation to 150 online and 150 offline participants from 30 freestanding children's hospitals with the Children's Hospital Association Appendicitis Collaborative.

#### **Grand Rounds Presentations**

2017

Preparing for the iCentra implementation: focused on helping providers have a smooth transition. Objectives were to identify benefits and challenges of EMR implementation, review training and go-live support plan, use ZeroHarm safety principles to navigate change, identify local physician advocates, and describe how frontline providers can contribute to improving the system.

#### **Outreach Presentations**

2016	Health Educator, The Church of Jesus Christ of Latter-Day Saints, Taught Basic
	Life Support Skills to young women ages 12-18 in preparation for a summer camp
2015	Health Educator, The Church of Jesus Christ of Latter-Day Saints, Taught basic
	life support skills to the young women as part of their personal progress program.

2015	Speaker & Discussion Facilitator, Primary Children's Hospital, Speaker & Discussion Facilitator, Primary Children's Hospital, Moderator, Primary Children's Hospital, Intermountain Moms facebook page discussion moderator. Lead online discussion on Head Injuries, concussions and prevention. Addressing sports, play, and motor vehicle crashes, on scheduled chat using facebook with page with >52K likes. Generated 11 comments, 6 likes.
2014	Speaker & Discussion Facilitator, Primary Children's Hospital, Intermountain Moms facebook page discussion moderator. Lead online discussion on Summer safety: prevention of submersion injury, sun safety, and ride-on vehicle safety, on scheduled chat using facebook with page with >52K likes. Generated 14 comments, 29 likes.
2013	Speaker & Discussion Facilitator, Primary Children's Hospital, Moderator, Primary Children's Hospital, Intermountain Moms facebook page discussion moderator. Lead online discussion on Immunizations, addressing common myths and misinformation, on scheduled chat using facebook with page with >52K likes. Generated 64 comments, 6 likes.

#### **OTHER SCHOLARLY ACTIVITIES**

#### Additional Research/Scholarship Contributions

2018 - Present Following on successes with WIN32 scheduling softare and workflow improvements from early 2017, I am leading similar work beginning September 2018 for all other Department of Pediatrics and University of Utah clinics using Cerner Practice Management (CPM) scheduling software. This will be a significant effort but anticipated to improve workflows for office staff in >80 clinics at PCH, and hundereds of clinics outside PCH at Intermountain. Major areas of focus include queue loading times, block appointment scheduling (multiple appointment types in 1 day at 1 time) and enhanced appointment filtering and suggesting ability for schedulers. 2018 - Present Cerner Referral Management Software optimization: The Department of Pediatrics clinics chose to utilize an integrated software approach for incoming referrals, but after iCentra implementation have struggled with slow loading times of the software. Beginning September 2018, I am working with Cerner and Intermountain leadership to escalate these needed changes to executive leadership, describe the changes needed, and deliver the needed improvements or, alternatively, evaluate other options.

2018	Incomplete physician notes and orders. With the implementation of a new EMR, PCH has struggled to complete physician notes in a timely fashion and this has had a deleterious impact on billing and chart completion rates. There are financial as well as compliance implications to this. While the compliance implications are managed by PCH HIM, with reminders to physicians, previous to May 2018 we did not have adequate reports of these problems. I worked with University Medical Billing and Intermountain EDW data experts to build a report that is divisible by physician division and document type, allowing division and department leadership to have visbiilty into missing notes and therefore lost revenue opportunities. I continue to work with the medical director for medical affairs and PCH HIM to improve these deficient chart rates. These efforts have impact beyond the department of pediatrics at a University-wide level and for physicians outside the University, such as private pediatric specialists, and pediatric primary care providers who admit patients to PCH.
2017 - Present	Important Patient Notifications A component by this name exists in nearly every workflow Mpage viewed by physicians and nurses. But prior to July 2018, there has been poor standardization of this component across specialties and it had hundreds of different configurations, thus we could not rely that highly important information shown there would be seen by caregivers. I led a team to standardize the configuration of this component, including which high risk problems and diagnoses would show, for how many years, a compromised documents alert, critical documents list, Accountable care organization designation alert, and patient demographics and contact information. We are optimizing this component over time but July 2018 the main standardization effort went into effect
2017 - 2018	Department of Pediatrics Cardiology Scheduling Optimization. After iCentra implementation, it was determined that fundamental changes in software and changes to staffing of schedulers and scheduler workflow was required to improve patient access to Department of Pediatrics clinics to improve patient access, reduce call waiting time, and improve patient experience. Pre-work call abandonment rate (% of time inbound calls hung up while waiting to be answered) exceeded 50%. This work focused principally on those clinics using WIN32 Cerner scheduling software. I worked wth Cerner and Intermountain leadership to deliver software changes and Departmen of Pediatrics leadership to deliver workflow changes that resulted in significant measurable improvements in inbound call abandonment rates to <5%, and template fill percentage for pediatric specialty outpatient clinics. Some of these changes had positive spillover effect to other clinics, resuting in call abandonment rates that were lower than pre-iCentra implementation rates.

2017	Anticoagulation alert Prior to iCentra implementation we had regular but infrequent preventable bleeding events during surgical procedures, which happened when a patient was taken to the OR from an inpatient bed, on medications known to cause bleeding risk, but the surgical teams did not recognize that risk or acknowledge those medications as being received by the patient. I begain work in 2017 with a multidiciplinary team including pharmacy, surgical services, and surgeon representation to develop an alert that fires when a patient receiving an anticoagulant/antiplatelet agent from a defined list of agents is about to have a PEDSURG powerplan ordered on that patient. This provides the ordering provider and alert that the patient is on xyz anticoagulant and when its last dose was. This provides real-time decision support to ordering providers to help avoid patient harm. This alert fires across all sites for all patients having PEDSURG powerplans ordered on them, so has impact outside PCH, the University, and across Intermountain's 22 hospitals.
2016 - 2017	Pediatric weight-based dosing enhancements. Prior to iCentra go-live at PCH, I outlined a plan to have the top 100 most frequently ordered inpatient medications and outpatient prescriptions built as common order sentences, allowing for easier, and safer medication dosing in the inpatient setting and in outpatient prescribing. While these dosing sentences are valuable to clinicians, this work on optimizing weight-based medication ordering is ongoing.
2016 - Present	Infusion optimization. Delivery of infusion medications is a high-complexity, frequent, and high-cost operation. Before Primary Children's this workflow proved to be one of the most difficult challenges in implementation of iCentra, between the scheduling, medication preparation, communication, and care delivery changes that a new EMR brought with it. Once we decided to utilize Day of Treatment powerplans for this care delivery instead of a paper process used in much of Intermountain, work began in earnest to standardize workflows and orders. I engaged subject matter experts from genetics, rheumatology and other disciplines and helped outline workflows for the complex workflows between scheduling, pharmacy, ordering providers, prior authorization, nurses, and physicians.Ultimately, we have successfully delivered thousands of infusions, made changes where necessary to the workflows, and are expanding the "Primary Children's way" of infusions to Riverton and Utah Valley Hospitals for pediatric patients.
2016 - Present	Common Powerplans as Quickorders One challenge presesented by Computerized Physician Order Entry includes knowing the right orders to select. Health unit coordinators (HUCs) and clerks often provided this translation for us in a pre-iCentra hand-written or paper-witten order world. To make it easier for providers to select the msot common powerplans they will use, we have worked with medical and surgical specialties to provide a list of most commonly used powerplans on their QuickOrders pages to make the selection of appropriate powerplans more reliable. This contributes to utilization of best practices and consensus driven care processes. This work has been completed for all medical and surgical specialties and recent optimization efforts have revised those listings for Pediatric Hematology/Oncoloyg, for Pediatric Hospitalists, Pedaitric Critical Care, Pediatric Urology, Pediatric Orthopedics, and Pediatric Endocrinology, with more to follow.

2016 - 2017	Orderset conversion to powerplans. Over 150 ordersets were converted to powerplans in perparation for iCentra go-live at PCH. Some are simple, others complex, but all represent practice standards, expert consensus, best evidence, and local preference/workflow adaptations. I formed a physician review committee, and regularly tracked the progress of the build of these plans, including determining the resourcing needed for pharmacy and clinical workflow expertise. While there was an initial uplift of effort requird for EMR go-live, we have continued this effort and built an additional 7 powerplans since go-live as needs arise. These powerplans represent best practice guidelines and are available to physicians outside PCH, and outside the Univesity across Intermountain's hospitals and clinics.
2016 - Present	Encouranging best practices in computerized physician order entry (CPOE) By carefully designing the options presented to physicians during computerized order entry, we can encourage best practices in diagnostic test ordering. This is an ongoing effort, and examples to date of where we have designed CPOE to "make it easy to do the right thing" inclues Clostridium difficile testing (3/18), and insurance-based outpatient prescription tiered coverage display (2/17). My particular involvement in these examples include physician input on design, prioritizatin of the technical build effort, and acceptance testing (validation that the change achieves the desired effect and does not add burden to the physician).
2014 - 2015	.er common list I led a months-long optimization project with Intermounain pharmacy leadershp to provide all 20 emergency departments throughout Intermountain (soon to be 21) with a standardized most frequent prescription list. Such lists were utilized, in various forms as shared favorite lists in the Intermountain legacy electronic medical record HELP2. We examined prescribing data from Intermountain emergency departments, and pharmacy and emergency physician leadership to develop a list of >1000 order sentences, including pediatric weight-based sentences, that are automatically and immediately filtered for the use of th emergency physician, improving accuracy in prescripting and reducing prescription-writing errors. These have also included considerations of liquid medication volume dosing, with built-in rounding rules that make the prescription reasonably deliverable by non-healthcare professionals (like parents of our pedatric patients). This work continues now with intermittent optimizations.

2014 - Present Support of Adademic missions of the University and Department of Pediatrics financial. Optimization electronic medical record is part of any healthcre enterprise business and care delivery system. I have advocated for an arranged for Intellectual Service Agreements for approximately 70 University of Utah physicians and about 5 advance practice clinicians, including 59 from the Department of Pediatrics. The hourly rate of \$100 does not compensate physician time entirely to relieve them from equivalent time in clinical activity, but this administrative work is important to our operational efficiency and business and we benefit thereby as well. I arranged for configuration meetings by specialty, track configuration design of all medical and surgical specialties, and continue to engage a diverse body of physician advocates for EMR optimization. These are the number of hours reimbursed for physician engagement in EMR work over the last 4 years: 2014: 1057 2015: 1817 2016: 4303 2017: 6350

# RESPONDENT'S ADMITTED EXHIBITS

1	<b>BEFORE THE BOARD OF</b>	MEDICAL EXAMINERS	
2	OF THE STATE	OF NEVADA	
3	* * *	* *	
4			
5	In the Matter of Charges and Complaint	Case No. 23-29251-1	
6	Against:	FILED	
7	JASON HOWARD LASRY, M.D.,	MAR - 8 2023	
8	Respondent.	NEVADA STATE BOARD OF MEDICAL EXAMINERS	
9		By:	
10	COMPL	AINT	
11	The Investigative Committee <sup>1</sup> (IC) of the Nevada State Board of Medical Examiners		
12	(Board), by and through William P. Shogren, Deputy General Counsel and attorney for the IC,		
13	having a reasonable basis to believe that Jason Howard Lasry, M.D. (Respondent) violated the		
14	provisions of Nevada Revised Statutes (NRS) Chapter 630 and Nevada Administrative Code (NAC)		
15	Chapter 630 (collectively, the Medical Practice Act), hereby issues its Complaint, stating the IC's		
16			
17	1. Respondent was at all times relative	e to this Complaint a medical doctor holding an	
18	-		
19	originally licensed by the Board on June 7, 2004.		
20		female at the time of the events at issue.	
21		ed to Respondent for medical care at Humboldt	
22	General Hospital in Winnemucca, Nevada, after b	eing bitten by a snake on her left knee earlier in	
23	the day.		
24	•	Hospital, Patient A had an elevated heart rate,	
25	indicating tachycardia. Patient A also had prog	ressive swelling of her left leg, where two (2)	
26		The second state of the state o	
27	Complaint was authorized for filing, was composed of Bo	te Board of Medical Examiners, at the time this formal ard members Bret W. Frey, M.D., Carl N. Williams, Jr.,	
28	M.D., and Col. Eric D. Wade, USAF (Ret.). <sup>2</sup> Patient A's true identity is not disclosed herein to protect her privacy, but is disclosed in the Patient Designation served upon Respondent along with a copy of this Complaint.		
	1 of	6	

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7 8 9 10 **OFFICE OF THE GENERAL COUNSEL** 11 Nevada State Board of Medical Examiner 12 13 (775) 688-2559 Reno, Nevada 14 15

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puncture marks were observed on her left knee and had muscle weakness in her left leg, including 1 the inability to move the affected leg on her own. 2

Patient A's stay at Humboldt General Hospital totaled close to three (3) hours. 5. During this time, Patient A's heart rate measured from 149 beats per minute to 154 beats per minute, indicating continued tachycardia. 5

Respondent documented Patient A's vital signs but did not document Patient A's 6. blood pressure measurements. Respondent's notes during Patient's A presentation did not discuss a recognition of Patient A's continued tachycardia.

Respondent spoke with the hospitalist at Humboldt General Hospital, who 7. expressed preference to have Patient A transferred to another facility with a higher level of care.

Respondent then spoke with a physician at Renown Regional Medical Center 8. (Renown) in Reno, Nevada. It was then arranged to have Patient A transferred from Humboldt General Hospital to Renown. Initially, it was decided to transport Patient A via helicopter, but then the decision was made to transport Patient A via ground ambulance.

Respondent did not document that he spoke with any other physicians regarding 9. Patient A's snake bite.

During Patient A's entire time at Humboldt General Hospital on May 9, 2020, 10. 17 Respondent elected not to provide an antivenom injection to Patient A, although the appropriate 18 antivenom was available at Humboldt General Hospital on the day of Patient A's arrival. 19

The first documented blood pressure measurement on May 9, 2020, was taken by 11. 20 Emergency Medical Services prior to Patient A's departure from Humboldt General Hospital. 21 Patient A's blood pressure reading was 59/40, indicating low blood pressure (hypotension). 22

Prior to transferring Patient A by ambulance, Respondent failed to administer the 12. 23 appropriate antivenom, despite clear evidence of Patient A's critical life signs and uncompensated 24 shock. 25

Despite clear evidence of Patient A's medical instability, Respondent transferred 13. 26 Patient A from Humboldt General Hospital to Renown via ground ambulance, whereupon 27 Patient A expired on May 13, 2020, as a result of the snake bite. 28

1	<u>COUNT I</u>		
2	NRS 630.301(4) - Malpractice		
3	14. All of the allegations contained in the above paragraphs are hereby incorporated by		
4	reference as though fully set forth herein.		
5	15. NRS 630.301(4) provides that malpractice of a physician is grounds for initiating		
6	disciplinary action against a licensee.		
7	16. NAC 630.040 defines malpractice as "the failure of a physician, in treating a		
8	patient, to use the reasonable care, skill, or knowledge ordinarily used under similar		
9	circumstances."		
10	17. As demonstrated by, but not limited to, the above-outlined facts, Respondent failed		
11	to use the reasonable care, skill or knowledge ordinarily used under similar circumstances when		
12	rendering medical services to Patient A, by failing to recognize hypotension and tachycardia in a		
13	patient who had been bitten by a snake, and by failing to treat her diminishing condition, failure of		
14	which led to Patient A's expiration.		
15	18. By reason of the foregoing, Respondent is subject to discipline by the Board as		
16	provided in NRS 630.352.		
17	<u>COUNT II</u>		
18	NRS 630.306(1)(b)(2) - Violation of Standards of Practice Established by Regulation –		
19	Failure to Consult		
20	19. All of the allegations contained in the above paragraphs are hereby incorporated by		
21	reference as though fully set forth herein.		
22	20. Violation of a standard of practice adopted by the Board is grounds for disciplinary		
23	action pursuant to NRS 630.306(1)(b)(2).		
24	21. NAC 630.210 requires a physician to "seek consultation with another provider of		
25	health care in doubtful or difficult cases whenever it appears that consultation may enhance the		
26	quality of medical services."		
27	22. Respondent failed to timely seek consultation with regard to Patient A's medical		
28	condition on May 9, 2020 and Respondent should have consulted with a medical toxicologist to		
	3 of 6		

# OFFICE OF THE GENERAL COUNSEL Nevada State Board of Medical Examiners 9600 Gateway Drive Reno, Nevada 89521 (775) 688-2559

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(775) 688-2559

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address the doubtfulness of the diagnosis of Patient A's medical condition and such a timely
 consultation would have confirmed or denied such a diagnosis and may have enhanced the quality
 of medical care provided to Patient A with regard to the need for antivenom and other therapies.

23. By reason of the foregoing, Respondent is subject to discipline by the Nevada State Board of Medical Examiners as provided in NRS 630.352.

#### <u>COUNT III</u>

#### NRS 630.3062(1)(a) - Failure to Maintain Appropriate Medical Records

24. All of the allegations contained in the above paragraphs are hereby incorporated by reference as though fully set forth herein.

25. NRS 630.3062(1)(a) provides that the "failure to maintain timely, legible, accurate and complete medical records relating to the diagnosis, treatment and care of a patient" constitute grounds for initiating discipline against a licensee.

26. Respondent failed to maintain complete and proper medical records relating to the diagnosis, treatment and care of Patient A, by failing to document his actions when he treated Patient A, whose medical records were not timely, legible, accurate, and complete. Respondent's medical records were not accurate and complete by failing, on May 9, 2020, to note a recognition of Patient A's elevated heart rate (tachycardia), or a recognition of Patient A's continued tachycardia, despite treatment with IV fluids, or a recognition of Patient A's low blood pressure (hypotension).

20 27. By reason of the foregoing, Respondent is subject to discipline by the Board as 21 provided in NRS 630.352.

22 WHEREFORE, the Investigative Committee prays:

1. That the Board give Respondent notice of the charges herein against him and give
him notice that he may file an answer to the Complaint herein as set forth in
NRS 630.339(2) within twenty (20) days of service of the Complaint;

26 2. That the Board set a time and place for a formal hearing after holding an Early
27 Case Conference pursuant to NRS 630.339(3);

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OFFICE OF THE GENERAL COUNSEL Nevada State Board of Medical Examiners 9600 Gateway Drive Reno, Nevada 89521 (775) 688-259	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	<ul> <li>Sof 6</li> </ul>

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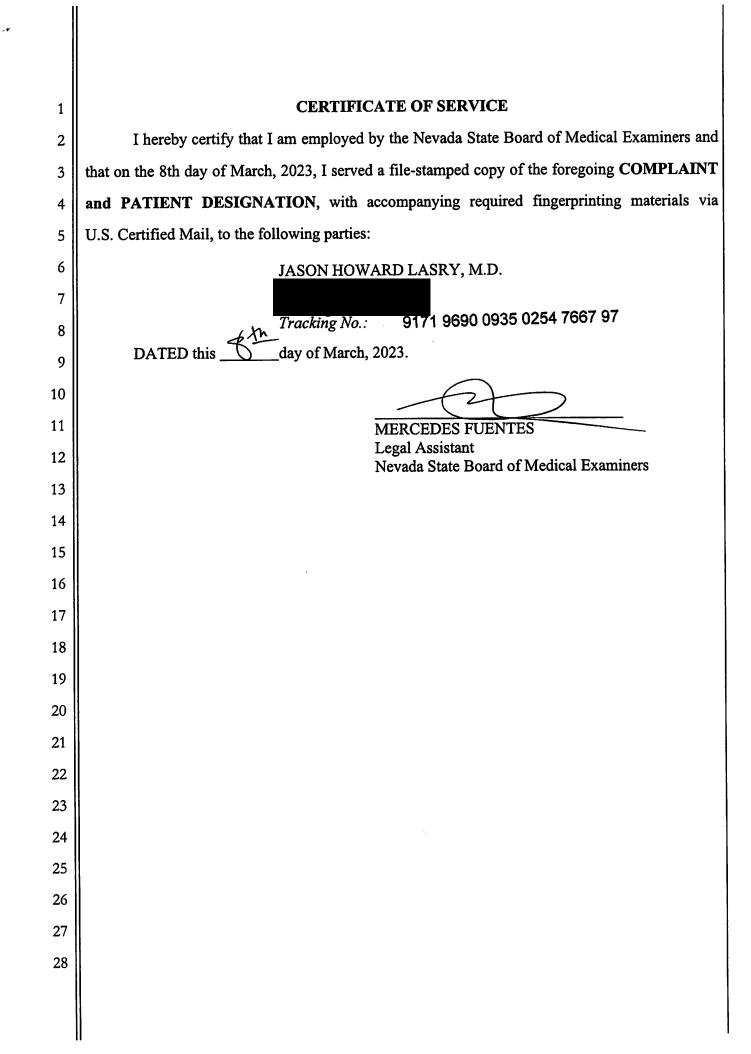
11				
1	VERIFICATION			
2	STATE OF NEVADA )			
3	: ss. COUNTY OF WASHOE			
4	Bret W. Frey, M.D., having been duly sworn, hereby deposes and states under penalty of			
5	perjury that he is the Chairman of the Investigative Committee of the Nevada State Board of			
6	Medical Examiners that authorized the Complaint against the Respondent herein; that he has read			
7	the foregoing Complaint; and that based upon information discovered in the course of the			
8	investigation into a complaint against Respondent, he believes that the allegations and charges in			
9	the foregoing Complaint against Respondent are true, accurate and correct.			
10	DATED this 8th day of March, 2023.			
11	INVESTIGATIVE COMMITTEE OF THE NEVADA STATE BOARD OF MEDICAL EXAMINERS			
12	R			
13	By: BRET W. JREY, M.D.			
14	Chairman of the Investigative Committee			
15				
16				
17	Mercedes Eventesma			
18	Fuentesmo medboardinv.gov.			
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OFFICE OF THE GENERAL COUNSEL Nevada State Board of Medical Examiners 9600 Gateway Drive Reno, Nevada 89521 (775) 688-2559

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1	BEFORE THE BOARD OF MEDICAL EXAMINERS OF THE STATE OF NEVADA * * * * *
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	OF THE STATE OF NEVADA *****         In the Matter of Charges and Complaint Against         Case No. 23-29251-1         FILED         MAR 2 9 2023         JASON HOWARD LASRY, M.D., Respondent.         MAR 2 9 2023         NEVADA STATE BOARD OF MEDICAL EXAMINEDS By:         JASON HOWARD LASRY, M.D.'S ANSWER TO COMPLAINT         COMES NOW, Respondent JASON HOWARD LASRY, M.D., by and through his counsel of record, ROBERT C. McBRIDE, ESQ. and CHELSEA R. HUETH, ESQ., of the law firm of McBRIDE HALL and for his Answer to the State of Nevada Board of Medical Examiners' (hereinafter "Board") Complaint, admits, denies, and alleges as follows: <ol> <li>This answering Respondent admits those allegations contained in Paragraph 1 of the Board's Complaint.</li> <li>This answering Respondent states that he does not have sufficient knowledge or information upon which to base a belief as to the truth of the allegations contained in Paragraph 2 of the Board's Complaint, and upon said grounds denies each and every allegation contained therein.</li> <li>This answering Respondent states that he does not have sufficient knowledge or information upon which to base a belief as to the truth of the allegations contained in Paragraph 3 of the Board's Complaint, and upon said grounds denies each and every allegation contained therein.</li></ol>
<ul> <li>21</li> <li>22</li> <li>23</li> <li>24</li> <li>25</li> <li>26</li> <li>27</li> <li>28</li> </ul>	<ul> <li>b) the Board's Complaint, and upon said grounds denies each and every unegation contained therein.</li> <li>4. This answering Respondent states that he does not have sufficient knowledge or information upon which to base a belief as to the truth of the allegations contained in Paragraph 4 of the Board's Complaint, and upon said grounds denies each and every allegation contained therein.</li> <li>5. This answering Respondent states that he does not have sufficient knowledge or information upon which to base a belief as to the truth of the allegations contained therein.</li> </ul>

1 of the Board's Complaint, and upon said grounds denies each and every allegation contained 2 therein.

6. This answering Respondent states that he does not have sufficient knowledge or information upon which to base a belief as to the truth of the allegations contained in Paragraph 6 of the Board's Complaint, and upon said grounds denies each and every allegation contained therein.

7 7. This answering Respondent states that he does not have sufficient knowledge or 8 information upon which to base a belief as to the truth of the allegations contained in Paragraph 7 9 of the Board's Complaint, and upon said grounds denies each and every allegation contained 10 therein.

11 8. This answering Respondent states that he does not have sufficient knowledge or 12 information upon which to base a belief as to the truth of the allegations contained in Paragraph 8 13 of the Board's Complaint, and upon said grounds denies each and every allegation contained 14 therein.

15 9. This answering Respondent states that he does not have sufficient knowledge or 16 information upon which to base a belief as to the truth of the allegations contained in Paragraph 9 17 of the Board's Complaint, and upon said grounds denies each and every allegation contained 18 therein.

19 10. This answering Respondent states that he does not have sufficient knowledge or 20 information upon which to base a belief as to the truth of the allegations contained in Paragraph 10 21 of the Board's Complaint, and upon said grounds denies each and every allegation contained 22 therein.

23 24

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11. This answering Respondent states that he does not have sufficient knowledge or information upon which to base a belief as to the truth of the allegations contained in Paragraph 11 25 of the Board's Complaint, and upon said grounds denies each and every allegation contained 26 therein.

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1 12. This answering Respondent states that he does not have sufficient knowledge or 2 information upon which to base a belief as to the truth of the allegations contained in Paragraph 12 3 of the Board's Complaint, and upon said grounds denies each and every allegation contained 4 therein. 5 13. This answering Respondent states that he does not have sufficient knowledge or 6 information upon which to base a belief as to the truth of the allegations contained in Paragraph 13 7 of the Board's Complaint, and upon said grounds denies each and every allegation contained 8 therein. 9 COUNT I 10 NRS 630.301(4) (Malpractice) 11 14. Answering Paragraph 14 of the Board's Complaint, Respondent repeats each and 12 every response to Paragraphs 1 through 13, inclusive, and incorporates the same by reference as 13 though set forth fully herein. 14 15. Answering Paragraph 15 of the Board's Complaint, this answering Respondent 15 admits that Nevada Revised Statute Section 630.301(4) provides that malpractice of a physician is 16 grounds for initiating disciplinary action against a licensee but specifically denies committing 17 malpractice. 18 16. Answering Paragraph 16 of the Board's Complaint, this answering Respondent 19 admits that Nevada Administrative Code Section 630.040 defines malpractice but specifically 20 denies committing malpractice. 21 17. This answering Respondent denies the allegations contained in Paragraph 17 of the 22 Board's Complaint. 23 This answering Respondent denies the allegations contained in Paragraph 18 of the 18. 24 Board's Complaint. 25 111 26 111 27 28

1	<u>COUNT II</u>	
2	NRS 630.306(1)(b)(2) – Violation of Standards of Practice Established by Regulation –	
3	Failure to Consult	
4	19. Answering Paragraph 19 of the Board's Complaint, Respondent repeats each and	
5	every response to Paragraphs 1 through 18, inclusive, and incorporates the same by reference as	
6	though set forth fully herein.	
7	20. Answering Paragraph 20 of the Board's Complaint, this answering Respondent	
8	admits that Nevada Revised Statute Section 630.306(1)(b)(2) provides that violation of a standard	
9	of practice adopted by the Board is grounds for disciplinary action, but specifically denies violating	
10	a standard of practice adopted by the Board.	
11	21. Answering Paragraph 21 of the Board's Complaint, this answering Respondent	
12	admits that NAC 630.210 requires a physician to seek consultation with another provider of health	
13	care in doubtful or difficult cases whenever it appears that consultation may enhance the quality of	
14	medical services but denies failing to seek timely consultation with another provider of health care.	
15	22. This answering Respondent denies the allegations contained in Paragraph 22 of the	
16	Board's Complaint.	
17	23. This answering Respondent denies the allegations contained in Paragraph 23 of the	
18	Board's Complaint.	
19	<u>COUNT III</u>	
20	(NRS 630.3062(1)(a) – Failure to Maintain Appropriate Medical Records	
21	24. Answering Paragraph 24 of the Board's Complaint, Respondent repeats each and	
22	every response to Paragraphs 1 through 23, inclusive, and incorporates the same by reference as	
23	though set forth fully herein.	
24	25. Answering Paragraph 25 of the Board's Complaint, this answering Respondent	
25	admits that NRS 630.3062(1)(a) provides that the failure to maintain timely, legible, accurate and	
26	complete medical records relating to the diagnosis, treatment, and care of a patient adopted by the	
27	Board is grounds for initiating disciplinary action against a licensee but specifically denies failing	
28		

1	to maintain timely, legible, accurate, and complete medical records relating to the diagnosis,			
2	treatment, and care of a patient.			
3	26. This answering Respondent denies the allegations contained in Paragraph 26 of the			
4	Board's Complaint.			
5	27. This answering Respondent denies the allegations contained in Paragraph 27 of the			
6	Board's Complaint.			
7	FIRST AFFIRMATIVE DEFENSE			
8	Respondent alleges that The Nevada State Board of Medical Examiners' Complaint on file			
9	herein fails to state a claim upon which relief can be granted.			
10	SECOND AFFIRMATIVE DEFENSE			
11	N.R.S. 630.301(4) is in whole or in part, void for vagueness, violative of Respondent's due			
12	process rights under the Constitutions of the State of Nevada and the United States of America, and			
13	can serve as no basis for discipline of Respondent.			
14	THIRD AFFIRMATIVE DEFENSE			
15	The Nevada State Board of Medical Examiners has failed to comply with the requirements			
16	of N.R.S. 630, et seq. and N.A.C. 630 et seq.			
17	FOURTH AFFIRMATIVE DEFENSE			
18	Respondent fully performed and discharged all obligations owed to the patient, including			
19	satisfying the requisite standard of care to which the patient was entitled.			
20	FIFTH AFFIRMATIVE DEFENSE			
21	If a violation occurred it was the result of intervening and/or superseding events, factors,			
22	occurrences, or conditions, which were in no way caused by Respondent, and for which Respondent			
23	is not responsible.			
24	SIXTH AFFIRMATIVE DEFENSE			
25	All possible affirmative defenses may not have been alleged herein so far as sufficient facts			
26	were not available after reasonable inquiry upon filing of this answering Respondent's Answer and,			
27	8			
28				

1	therefore, this answering Respondent reserves the right to amend his Answer to include additional		
2	affirmative defenses, if subsequent investigation so warrants.		
3	SEVENTH AFFIRMATIVE DEFENSE		
4	Each and every service rendered to the patient by this answering Respondent was expressly		
5	and/or impliedly consented to and authorized by the patient and/or the patient's authorized		
6	representative on the basis of a full and complete disclosure to the patient of all material facts known		
7	or reasonably believed be true concerning the patient's physical condition and the appropriate		
8	alternative procedures available for treatment of such condition.		
9	EIGHTH AFFIRMATIVE DEFENSE		
10	The Nevada State Board of Medical Examiners' Complaint is time barred.		
11	WHEREFORE, the Respondent prays that The Nevada State Board of Medical Examiners		
12	take nothing by way of the Complaint on file herein; and that Respondent recover all costs and		
13	attorneys' fees incurred.		
14			
15			
16	DATED this 27 <sup>th</sup> day of March 2023. McBRIDE HALL		
17			
18	By: <u>/s/ Chelsea R. Hueth</u> ROBERT C. McBRIDE, ESQ.		
19	Nevada Bar No.: 7082 CHELSEA R. HUETH, ESQ.		
20	Nevada Bar No.: 10904 8329 W. Sunset Road, Suite 260		
21	Las Vegas, Nevada 89113 Attorneys for Respondent		
22	Jason Howard Lasry, M.D.		
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1	CERTIFICATE OF SERVICE	
2	I hereby certify that on the 27 <sup>th</sup> day of March 2023, I served a true correct copy of <b>JASON</b>	
3	HOWARD LASRY, M.D.'S ANSWER TO COMPLAINT, by sending via electronic mail and	
4	via United States mail to the following:	
5	William P. Shogren, Esq.	
6	Nevada State Board of Medical Examiners	
7	9600 Gateway Drive Reno, NV 89521	
8	<u>shogrenw@medboard.nv.gov</u> Attorneys for the Investigative Committee	
9		
10		
11	<u>/s/ Lauren Smith</u> An Employee of McBride Hall	
12	An Employee of Webride Han	
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#### JOHN LEVIN MD INC FACEP

#### EMERGENCY MEDICINE/FAMILY PRACTICE



#### CURRICULUM VITAE



#### EDUCATION

1972	Bachelor of Science-Cum Laude
	University of California Los Angeles
1973-74	Masters Program-Anatomy
	University of California Los Angeles
1977	Doctor of Medicine
	University of California Irvine
1978	InternshipRotating: Major and Minor Trauma,
	Pediatrics, ICU, Ob/Gyn, Emergency Medicine, Surgery
1986	Board Certification Emergency Medicine
1996	Board Re-Certification Emergency Medicine
2006	Board Re-Certification Emergency Medicine
2016	Board Re-Certification Emergency Medicine

#### PROFESSIONAL ASSOCIATIONS/CERTIFICATIONS

American College of Emergency Medicine American Board of Emergency Medicine American Association of Emergency Medicine California Association of Emergency Physicians Advanced Cardiac Life Support Advanced Trauma Life Support Pediatric Advanced Life Support Base Station Physician California Medical Board Review Expert

#### COMMITTEES

Emergency Medicine Committee Pediatric Medicine Committee Family Practice Committee Ethics Committee

#### **PROFESSIONAL EXPERIENCE**

Emergency Medicine full time since 1979 Teaching of Residents, Interns, Medical Students, Nurses, Paramedics National Medico/legal expert since 1986 Defense and Plaintiff in the following areas: Emergency Medicine, Pediatrics, Family Medicine, Trauma, Paramedic Care, Pediatrics, Emergency Department Operations

#### LECTURES

Upon request

#### HOSPITAL APPOINTMENTS

2003-present Glendale Memorial Hospital

- 2011-present Monterrey Park Hospital
- 2011-present Whittier Community Hospital
- 1991-present Arcadia Methodist Hospital
- 1992-2000 Intercommunity Hospital
- 1986-1992 Doctors Hospital of Lakewood
- 1981-1989 St. Mary's Trauma Center
- 1980-1986 Glendora Hospital
- 1980-1982 Beverly Hills Hospital

#### MISCELLANEOUS

1984 Olympic Medical Physician/Director

#### LICENSURE

California G38638

#### Jason Lasry, MD

Board Certified Emergency Physician A Professional Corporation



#### **Curriculum Vitae**

Education:

Emergency Medicine Residency Orlando Regional Medical Center Orlando, FL July 2000 – June 2003

M.D., Sackler School of Medicine New York State / American Program Tel Aviv University, Israel September 1996 – May 2000

B.Sc., McGill University Montreal, Quebec, Canada September 1989 – May 1993

#### **Experience**:

Emergency Medicine Staff La Paz Regional Hospital 1200 Mohave Rd, Parker, AZ 85344 10/2020 – Present

Emergency Medicine Staff Canyon Vista Medical Center 5700 E. Highway 90 Sierra Vista, AZ. 85635 12/2021 – Present

Emergency Medicine Staff Northwest Medical Center 6200 N. La Cholla Blvd. Tucson, AZ. 85741 09/2022 - Present Emergency Medicine Staff South Lyon Medical Center 213 S Whitacre St Yerington, NV 89447 May 2021 – August 2022

Emergency Medicine Staff Desert View Hospital 360 S Lola Ln, Pahrump, NV 89048 July 2018 – January 2021

Emergency Medicine Staff Humbolt General Hospital 118 E Haskell St. Winnemucca, NV 89445 May 2019 – May 2020

Emergency Medicine Staff Sunrise Hospital and Medical Center 3186 S Maryland Pkwy Las Vegas, NV 89109 October 2018 – September 2019

Emergency Medicine Staff St. Rose Dominican Hospitals 3001 St. Rose Parkway Henderson, NV 89052 December 2004 – October 2018

Emergency Medicine Staff Huntington Memorial Hospital Pasadena, CA July 2003 – November 2004

Certificates: American Board of Emergency Medicine, expires 12/31/2024 NV Medical License, Exp: 06/30/2025 AZ Medical License: 61976, Exp: 06/06/2024 ACLS Provider, expires 04/2024 PALS Provider, expires 04/2024 BLS Provider, expires 04/2024 ATLS Provider, expires 05/2025 DEA NV, expires 03/2024 DEA AZ, expires: 03/21/2026

**Professional:** American Academy of Emergency Medicine American College of Emergency Physicians Physicians for Human Rights Languages: English (mother-tongue) Spanish (spoken) French (fluent spoken and written)

Personal:

U.S. Citizen Canadian born Married

Interests:

Case Review and Quality Assurance.

**References:** 

Jonathan Woolery, MD c/o: Emergency Department La Paz Regional Hospital 1200 Mohave Rd Parker, AZ 85344 mediclaco@hotmail.com 949-378-8250

Elisha Bremmer, MD c/o: Emergency Department La Paz Regional Hospital 1200 Mohave Rd Parker, AZ 85344 ebremmer@pnwu.edu 910-489-1580

Nicholas Leaver, MD c/o: Emergency Department 3001 St. Rose Pkwy. Henderson, NV 89052 <u>nicholasleaver@gmail.com</u> 646-409-7579

Roger Martinez, MD c/o: Emergency Department 3001 St. Rose Pkwy. Henderson, NV 89052 <u>Roger.martinez@gmail.com</u> 702-302-3794

Lance Allgower, DO c/o: Emergency Department 3001 St. Rose Pkwy. Henderson, NV 89052 <u>Ifallgower@gmail.com</u> 702-673-0500

# MEDICAL RECORDS

This exhibit contains personal medical information, records of a patient or other personal identifying information that is confidential and otherwise protected from disclosure to the public pursuant to NRS 622.310.



	1	<b>BEFORE THE BOARD OF</b>	MEDICAL EXAMINERS	
	2	OF THE STATE	OF NEVADA	
	3	* * *	* *	
	4			
	5	In the Matter of Charges and Complaint	Case No. 23-29251-1	
	6	Against:	FILED	
	7	JASON HOWARD LASRY, M.D.	MAR 2 9 2023	
	8	Respondent.	NEVADA STATE BOARD OF	
	9		By:	
	10	PROOF OF	<u>SERVICE</u>	
	11	I, Mercedes Fuentes, Legal Assistant for t	he Nevada State Board of Medical Examiners,	
	12	hereby certify that on March 8, 2023, I sent a	filed-stamped copy of the COMPLAINT and	
	13	<b>PATIENT DESIGNATION,</b> along with required	fingerprinting materials to:	
intron (c)	14	JASON HOWARD LASRY, M.D.		
2	15			
	16	via U.S. Certified Mail, tracking no. 91719690093	350254766797. Tracking for this parcel shows	
	17	that notice was left for pickup of the certified mailing and that it has not been claimed.		
	18	See Exhibit 1.		
	19	On March 20, 2023, Respondent left a voi	cemail on my phone (775-324-9380) indicating	
	20	that he received the filed formal complaint and wanted to know the next steps of proceeding		
	21	forward.		
	22	On March 23, 2023, I received a mailing from Respondent that contained a completed		
	23	fingerprint card and fingerprinting waiver.		
	24		id pick up the certified mailing and the tracking	
	25	information, by error, has not been updated. For the reasons listed above, service is believed to be		
	26	///		
	27	///		
	28	///		

OFFICE OF THE GENERAL COUNSET 3 4 5 6 7 7 8 9 10 11 12 9 9 10 11 12 9 10 11 12 13 14 15 16 17 15 16 17 15 16 17 12 13 14 15 16 17 12 13 14 15 16 17 12 13 14 15 16 17 12 13 14 15 16 17 18 19 10 12 13 14 15 16 17 18 19 10 12 13 14 15 16 17 18 19 10 12 13 14 15 16 17 18 19 10 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 28 28 28 28 28 28 28 28 28	effectuated upon Respondent and the Complaint, Patient Designation and fingerprinting materials are considered served. DATED this day of March, 2023. MERCEDES FUENTES Legal Assistant Nevada State Board of Medical Examiners
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## **EXHIBIT 1**

### **EXHIBIT 1**

### **USPS Tracking**<sup>®</sup>

Tracking Number:

9171969009350254766797

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Out for Delivery LAS VEGAS, NV 89134 March 10, 2023, 6:10 am

Arrived at Post Office LAS VEGAS, NV 89134 March 10, 2023, 5:13 am

Arrived at USPS Regional Facility LAS VEGAS NV DISTRIBUTION CENTER March 9, 2023, 4:47 pm

Arrived at USPS Regional Facility RENO NV DISTRIBUTION CENTER Remove X

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FAQs

1	BEFORE THE BOARD OF MEDICAL EXAMINERS OF THE STATE OF NEVADA * * * * *
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	OF THE STATE OF NEVADA *****         In the Matter of Charges and Complaint Against         Case No. 23-29251-1         FILED         MAR 2 9 2023         JASON HOWARD LASRY, M.D., Respondent.         MAR 2 9 2023         NEVADA STATE BOARD OF MEDICAL EXAMINEDS By:         JASON HOWARD LASRY, M.D.'S ANSWER TO COMPLAINT         COMES NOW, Respondent JASON HOWARD LASRY, M.D., by and through his counsel of record, ROBERT C. McBRIDE, ESQ. and CHELSEA R. HUETH, ESQ., of the law firm of McBRIDE HALL and for his Answer to the State of Nevada Board of Medical Examiners' (hereinafter "Board") Complaint, admits, denies, and alleges as follows: <ol> <li>This answering Respondent admits those allegations contained in Paragraph 1 of the Board's Complaint.</li> <li>This answering Respondent states that he does not have sufficient knowledge or information upon which to base a belief as to the truth of the allegations contained in Paragraph 2 of the Board's Complaint, and upon said grounds denies each and every allegation contained therein.</li> <li>This answering Respondent states that he does not have sufficient knowledge or information upon which to base a belief as to the truth of the allegations contained in Paragraph 3 of the Board's Complaint, and upon said grounds denies each and every allegation contained therein.</li></ol>
<ul> <li>21</li> <li>22</li> <li>23</li> <li>24</li> <li>25</li> <li>26</li> <li>27</li> <li>28</li> </ul>	<ul> <li>b) the Board's Complaint, and upon said grounds denies each and every unegation contained therein.</li> <li>4. This answering Respondent states that he does not have sufficient knowledge or information upon which to base a belief as to the truth of the allegations contained in Paragraph 4 of the Board's Complaint, and upon said grounds denies each and every allegation contained therein.</li> <li>5. This answering Respondent states that he does not have sufficient knowledge or information upon which to base a belief as to the truth of the allegations contained therein.</li> </ul>

1 of the Board's Complaint, and upon said grounds denies each and every allegation contained 2 therein.

6. This answering Respondent states that he does not have sufficient knowledge or information upon which to base a belief as to the truth of the allegations contained in Paragraph 6 of the Board's Complaint, and upon said grounds denies each and every allegation contained therein.

7 7. This answering Respondent states that he does not have sufficient knowledge or 8 information upon which to base a belief as to the truth of the allegations contained in Paragraph 7 9 of the Board's Complaint, and upon said grounds denies each and every allegation contained 10 therein.

11 8. This answering Respondent states that he does not have sufficient knowledge or 12 information upon which to base a belief as to the truth of the allegations contained in Paragraph 8 13 of the Board's Complaint, and upon said grounds denies each and every allegation contained 14 therein.

15 9. This answering Respondent states that he does not have sufficient knowledge or 16 information upon which to base a belief as to the truth of the allegations contained in Paragraph 9 17 of the Board's Complaint, and upon said grounds denies each and every allegation contained 18 therein.

19 10. This answering Respondent states that he does not have sufficient knowledge or 20 information upon which to base a belief as to the truth of the allegations contained in Paragraph 10 21 of the Board's Complaint, and upon said grounds denies each and every allegation contained 22 therein.

23 24

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11. This answering Respondent states that he does not have sufficient knowledge or information upon which to base a belief as to the truth of the allegations contained in Paragraph 11 25 of the Board's Complaint, and upon said grounds denies each and every allegation contained 26 therein.

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1 12. This answering Respondent states that he does not have sufficient knowledge or 2 information upon which to base a belief as to the truth of the allegations contained in Paragraph 12 3 of the Board's Complaint, and upon said grounds denies each and every allegation contained 4 therein. 5 13. This answering Respondent states that he does not have sufficient knowledge or 6 information upon which to base a belief as to the truth of the allegations contained in Paragraph 13 7 of the Board's Complaint, and upon said grounds denies each and every allegation contained 8 therein. 9 COUNT I 10 NRS 630.301(4) (Malpractice) 11 14. Answering Paragraph 14 of the Board's Complaint, Respondent repeats each and 12 every response to Paragraphs 1 through 13, inclusive, and incorporates the same by reference as 13 though set forth fully herein. 14 15. Answering Paragraph 15 of the Board's Complaint, this answering Respondent 15 admits that Nevada Revised Statute Section 630.301(4) provides that malpractice of a physician is 16 grounds for initiating disciplinary action against a licensee but specifically denies committing 17 malpractice. 18 16. Answering Paragraph 16 of the Board's Complaint, this answering Respondent 19 admits that Nevada Administrative Code Section 630.040 defines malpractice but specifically 20 denies committing malpractice. 21 17. This answering Respondent denies the allegations contained in Paragraph 17 of the 22 Board's Complaint. 23 This answering Respondent denies the allegations contained in Paragraph 18 of the 18. 24 Board's Complaint. 25 111 26 111 27 28

1	<u>COUNT II</u>	
2	NRS 630.306(1)(b)(2) – Violation of Standards of Practice Established by Regulation –	
3	Failure to Consult	
4	19. Answering Paragraph 19 of the Board's Complaint, Respondent repeats each and	
5	every response to Paragraphs 1 through 18, inclusive, and incorporates the same by reference as	
6	though set forth fully herein.	
7	20. Answering Paragraph 20 of the Board's Complaint, this answering Respondent	
8	admits that Nevada Revised Statute Section 630.306(1)(b)(2) provides that violation of a standard	
9	of practice adopted by the Board is grounds for disciplinary action, but specifically denies violating	
10	a standard of practice adopted by the Board.	
11	21. Answering Paragraph 21 of the Board's Complaint, this answering Respondent	
12	admits that NAC 630.210 requires a physician to seek consultation with another provider of health	
13	care in doubtful or difficult cases whenever it appears that consultation may enhance the quality of	
14	medical services but denies failing to seek timely consultation with another provider of health care.	
15	22. This answering Respondent denies the allegations contained in Paragraph 22 of the	
16	Board's Complaint.	
17	23. This answering Respondent denies the allegations contained in Paragraph 23 of the	
18	Board's Complaint.	
19	<u>COUNT III</u>	
20	(NRS 630.3062(1)(a) – Failure to Maintain Appropriate Medical Records	
21	24. Answering Paragraph 24 of the Board's Complaint, Respondent repeats each and	
22	every response to Paragraphs 1 through 23, inclusive, and incorporates the same by reference as	
23	though set forth fully herein.	
24	25. Answering Paragraph 25 of the Board's Complaint, this answering Respondent	
25	admits that NRS 630.3062(1)(a) provides that the failure to maintain timely, legible, accurate and	
26	complete medical records relating to the diagnosis, treatment, and care of a patient adopted by the	
27	Board is grounds for initiating disciplinary action against a licensee but specifically denies failing	
28		

1	to maintain timely, legible, accurate, and complete medical records relating to the diagnosis,			
2	treatment, and care of a patient.			
3	26. This answering Respondent denies the allegations contained in Paragraph 26 of the			
4	Board's Complaint.			
5	27. This answering Respondent denies the allegations contained in Paragraph 27 of the			
6	Board's Complaint.			
7	FIRST AFFIRMATIVE DEFENSE			
8	Respondent alleges that The Nevada State Board of Medical Examiners' Complaint on file			
9	herein fails to state a claim upon which relief can be granted.			
10	SECOND AFFIRMATIVE DEFENSE			
11	N.R.S. 630.301(4) is in whole or in part, void for vagueness, violative of Respondent's due			
12	process rights under the Constitutions of the State of Nevada and the United States of America, and			
13	can serve as no basis for discipline of Respondent.			
14	THIRD AFFIRMATIVE DEFENSE			
15	The Nevada State Board of Medical Examiners has failed to comply with the requirements			
16	of N.R.S. 630, et seq. and N.A.C. 630 et seq.			
17	FOURTH AFFIRMATIVE DEFENSE			
18	Respondent fully performed and discharged all obligations owed to the patient, including			
19	satisfying the requisite standard of care to which the patient was entitled.			
20	FIFTH AFFIRMATIVE DEFENSE			
21	If a violation occurred it was the result of intervening and/or superseding events, factors,			
22	occurrences, or conditions, which were in no way caused by Respondent, and for which Respondent			
23	is not responsible.			
24	SIXTH AFFIRMATIVE DEFENSE			
25	All possible affirmative defenses may not have been alleged herein so far as sufficient facts			
26	were not available after reasonable inquiry upon filing of this answering Respondent's Answer and,			
27	8			
28				

1	therefore, this answering Respondent reserves the right to amend his Answer to include additional		
2	affirmative defenses, if subsequent investigation so warrants.		
3	SEVENTH AFFIRMATIVE DEFENSE		
4	Each and every service rendered to the patient by this answering Respondent was expressly		
5	and/or impliedly consented to and authorized by the patient and/or the patient's authorized		
6	representative on the basis of a full and complete disclosure to the patient of all material facts known		
7	or reasonably believed be true concerning the patient's physical condition and the appropriate		
8	alternative procedures available for treatment of such condition.		
9	EIGHTH AFFIRMATIVE DEFENSE		
10	The Nevada State Board of Medical Examiners' Complaint is time barred.		
11	WHEREFORE, the Respondent prays that The Nevada State Board of Medical Examiners		
12	take nothing by way of the Complaint on file herein; and that Respondent recover all costs and		
13	attorneys' fees incurred.		
14			
15			
16	DATED this 27 <sup>th</sup> day of March 2023. McBRIDE HALL		
17			
18	By: <u>/s/ Chelsea R. Hueth</u> ROBERT C. McBRIDE, ESQ.		
19	Nevada Bar No.: 7082 CHELSEA R. HUETH, ESQ.		
20	Nevada Bar No.: 10904 8329 W. Sunset Road, Suite 260		
21	Las Vegas, Nevada 89113 Attorneys for Respondent		
22	Jason Howard Lasry, M.D.		
23			
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1	CERTIFICATE OF SERVICE	
2	I hereby certify that on the 27 <sup>th</sup> day of March 2023, I served a true correct copy of <b>JASON</b>	
3	HOWARD LASRY, M.D.'S ANSWER TO COMPLAINT, by sending via electronic mail and	
4	via United States mail to the following:	
5	William P. Shogren, Esq.	
6	Nevada State Board of Medical Examiners	
7	9600 Gateway Drive Reno, NV 89521	
8	<u>shogrenw@medboard.nv.gov</u> Attorneys for the Investigative Committee	
9		
10		
11	<u>/s/ Lauren Smith</u> An Employee of McBride Hall	
12	An Employee of Webride Han	
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* * * * * APR - 4 20		ARD OF MEDICAL EXAMI E STATE OF NEVADA	FILED
In the Matter of Charges and Complaint Against JASON HOWARD LASRY, M.D., Respondent.			APR - 4 2023
In the Matter of Charges and Complaint Against JASON HOWARD LASRY, M.D., Respondent.			NEVADA STATE BOA
Complaint Against Early Case Conference Date: April 14, 2023 @ 10:30 a.m. JASON HOWARD LASRY, M.D., Respondent. ORDER SCHEDULING EARLY CASE CONFERENCE TO: William P. Shogren Deputy General Counsel Nevada State Board of Medical Examiners 9600 Gateway Drive Reno, Nevada 89521 Jason Howard Lasry, M.D. c/o Robert C. McBride, Esq. and Chelsea R. Hueth, Esq. McBride Hall 8329 West Sunset Road, Ste 260 Las Vegas, NV 89113 NOTICE IS HEREBY GIVEN that, in compliance with NRS 630.339(3), an Early Case Conference will be conducted on April 14, 2023 beginning at the hour of 10:30 a.m. The Ear Case Conference will be held via conference call. The conference call number is 1-605-475-22 and the access code is 8792457. <sup>1</sup> ' NRS 630.339(3) provides as follows: Within 20 days after the filing of the answer, the parties shall hold an early case conference at which parties and the hearing officer appointed by the Board or a member of the Board must preside. At the early Within 20 days after the filing of the answer, the parties shall hold an early case conference at which parties and the hearing officer appointed by the Board or a member of the Board must preside. At the early	L. I. Matter of Charges and	Case No. 23-29251-1	
JASON HOWARD LASRY, M.D., Respondent. ORDER SCHEDULING EARLY CASE CONFERENCE TO: William P. Shogren Deputy General Counsel Nevada State Board of Medical Examiners 9600 Gateway Drive Reno, Nevada 89521 Jason Howard Lasry, M.D. c/o Robert C. McBride, Esq. and Chelsea R. Hueth, Esq. McBride Hall 8329 West Sunset Road, Ste 260 Las Vegas, NV 89113 NOTICE IS HEREBY GIVEN that, in compliance with NRS 630.339(3), an Early Ca Conference will be conducted on April 14, 2023 beginning at the hour of 10:30 a.m. The Ea Case Conference will be held via conference call. The conference call number is 1-605-475-22 and the access code is 8792457. <sup>1</sup> <sup>1</sup> NRS 630.339(3) provides as follows: Within 20 days after the filing of the answer, the parties shall hold an early case conference at which parties and the hearing officer appointed by the Board or a member of the Board must preside. At the early			ate: April 14, 2023
ORDER SCHEDULING EARLY CASE CONFERENCE         P:       William P. Shogren Deputy General Counsel Nevada State Board of Medical Examiners 9600 Gateway Drive Reno, Nevada 89521         Jason Howard Lasry, M.D. c/o Robert C. McBride, Esq. and Chelsea R. Hueth, Esq. McBride Hall 8329 West Sunset Road, Ste 260 Las Vegas, NV 89113         NOTICE IS HEREBY GIVEN that, in compliance with NRS 630.339(3), an Early Case onference will be conducted on April 14, 2023 beginning at the hour of 10:30 a.m. The Earlies See Conference will be held via conference call. The conference call number is 1-605-475-222 d the access code is 8792457. <sup>1</sup> IRS 630.339(3) provides as follows:         Within 20 days after the filing of the answer, the parties shall hold an early case conference at which parties and the hearing officer appointed by the Board or a member of the Board must preside. At the earlies		<i>w</i> 10.50 <i>u</i>	
<ul> <li>O: William P. Shogren Deputy General Counsel Nevada State Board of Medical Examiners 9600 Gateway Drive Reno, Nevada 89521 Jason Howard Lasry, M.D. c/o Robert C. McBride, Esq. and Chelsea R. Hueth, Esq. McBride Hall 8329 West Sunset Road, Ste 260 Las Vegas, NV 89113</li> <li>NOTICE IS HEREBY GIVEN that, in compliance with NRS 630.339(3), an Early Cas Conference will be conducted on April 14, 2023 beginning at the hour of 10:30 a.m. The Ear Case Conference will be held via conference call. The conference call number is 1-605-475-22 and the access code is 8792457.<sup>1</sup></li> <li>NRS 630.339(3) provides as follows: Within 20 days after the filing of the answer, the parties shall hold an early case conference at which parties and the hearing officer appointed by the Board or a member of the Board must preside. At the early case conference at which parties and the hearing officer appointed by the Board or a member of the Board must preside. At the early case conference at which parties and the hearing officer appointed by the Board or a member of the Board must preside. At the early case conference at the conference case conference</li></ul>	Respondent.		
Deputy General Counsel Nevada State Board of Medical Examiners 9600 Gateway Drive Reno, Nevada 89521 Jason Howard Lasry, M.D. c/o Robert C. McBride, Esq. and Chelsea R. Hueth, Esq. McBride Hall 8329 West Sunset Road, Ste 260 Las Vegas, NV 89113 NOTICE IS HEREBY GIVEN that, in compliance with NRS 630.339(3), <u>an Early Ca</u> <u>Conference will be conducted on April 14, 2023 beginning at the hour of 10:30 a.m.</u> The Ea Case Conference will be held via conference call. The conference call number is 1-605-475-222 and the access code is 8792457. <sup>1</sup> <sup>1</sup> NRS 630.339(3) provides as follows: Within 20 days after the filing of the answer, the parties shall hold an early case conference at which parties and the hearing officer appointed by the Board or a member of the Board must preside. At the early	ORDER SCHED	ULING EARLY CASE CONFERENC	E
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parties and the hearing officer appointed by the Board or a member of the Board must preside. At the e	with the only a floor the filling of	the answer, the parties shall hold an early case	e conference at which the
	parties and the hearing officer appointed by the Board or a member of the B		nust preside. At the early
<ul> <li>(a) Set the earliest possible hearing date agreeable to the parties and the hearing officer, panel of the Board, the Board, including the estimated duration of the hearing:</li> </ul>	(a) Set the earliest possible hearing the Board, including the estimate	g date agreeable to the parties and the hearing off ated duration of the hearing:	icer, panel of the Board or

The scheduled Early Case Conference shall be attended by the parties in person or by any party's legal counsel of record and will be conducted by the undersigned Hearing Officer to discuss and designate the dates for the Pre-Hearing Conference and Hearing and the other procedural matters established in NRS 630.339. The parties must also provide an estimate, to the nearest hour, of the time required for presentation of their respective cases.

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At the Pre-Hearing Conference, in accordance with NAC 630.465,<sup>2</sup> each party shall provide the other party with a copy of the list of witnesses they intend to call to testify, including therewith, the qualifications of each witness so identified and a summary of the testimony of each witness. If a witness is not on the list of witnesses, that witness may subsequently not be allowed to testify at

11 12 (b) Set dates: 13 (1) By which all documents must be exchanged; (2) By which all prehearing motions and responses thereto must be filed; 14 (3) On which to hold the prehearing conference; and (4) For any other foreseeable actions that may facilitate the timely and fair conduct of the matter. 15 (c) Discuss or attempt to resolve all or any portion of the evidentiary or legal issues in the matter; 16 (d) Discuss the potential for settlement of the matter on terms agreeable to the parties; and (e) Discuss and deliberate any other issues that may facilitate the timely and fair conduct of the matter. 17 18 <sup>2</sup> NAC 630.465 provides as follows: 19 1. At least 30 days before a hearing but not earlier than 30 days after the date of service upon the physician or physician assistant of a formal complaint that has been filed with the Board pursuant to NRS 630.311, unless 20 a different time is agreed to by the parties, the presiding member of the Board or panel of members of the Board or the hearing officer shall conduct a prehearing conference with the parties and their attorneys. All 21 documents presented at the prehearing conference are not evidence, are not part of the record and may not be filed with the Board. 22 2. Each party shall provide to every other party a copy of the list of proposed witnesses and their qualifications 23 and a summary of the testimony of each proposed witness. A witness whose name does not appear on the list of proposed witnesses may not testify at the hearing unless good cause is shown. 24 3. All evidence, except rebuttal evidence, which is not provided to each party at the prehearing conference 25 may not be introduced or admitted at the hearing unless good cause is shown. 26 4. Each party shall submit to the presiding member of the Board or panel or to the hearing officer conducting the conference each issue which has been resolved by negotiation or stipulation and an estimate, to the nearest 27 hour, of the time required for presentation of its oral argument. 28

the Hearing unless good cause is shown for omitting the witness from said list.<sup>3</sup> Likewise, all evidence, except rebuttal evidence, that is not provided to each party at the Pre-Hearing Conference may also not be introduced or admitted at the Hearing unless good cause is shown.

Counsel for the Nevada State Board of Medical Examiners and the Respondent shall keep undersigned Hearing Officer advised of each issue which has been resolved by negotiation or stipulation, if any.

ACCORDINGLY, NOTICE IS HEREBY GIVEN that the possible sanctions authorized by NRS 630.352, NAC 630.555, and NRS 622.400 upon a finding of guilt to one or more of the Counts raised in said Board Complaint include the following:

10 A. Placement on probation for a specified period on any of the conditions specified
11 in an order issued by the Board;

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Administration of a public reprimand;

13 C. Placement of a limitation on Respondent's practice, or exclusion of one or more
14 specified branches of medicine from Respondent's practice;

15 D. Suspension of Respondent's license for a specified period or until further order
16 of the Board;

E. Revocation of Respondent's license to practice medicine;

F. A requirement that Respondent participate in a program to correct alcohol or

19 drug dependence or any other impairment;

21

G. A requirement that there be specified supervision of Respondent's practice;

H. A requirement that Respondent perform public service without compensation;

22

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I. A requirement that Respondent take a physical or mental examination, or an

23 || examination testing Respondent's competence;

- 24 ] J. A requirement that Respondent fulfill certain training or educational
- 25 requirements, or both, as specified by the Board;
- 26

<sup>3</sup> In identifying a patient as a witness the parties are cautioned to omit from any pleadings filed with undersigned Hearing Officer any addresses, telephone numbers, social security numbers, or other personal information regarding such individual and to confine their submissions in this regard to the name of the witness, the relevancy of any testimony sought to be elicited from that witness, and a summary of the anticipated testimony.

1	K. A fine not to exceed \$5,000.00;
2	L. A requirement that the Respondent pay all costs incurred by the Board relating
3	to this disciplinary proceeding, as more fully set forth in NRS 622.400.
. 4	DATED this 31st day of March 2023.
5	By: Device Helstend Fag
6	Patricia Halstead, Esq. Hearing Officer
7	(775) 322-2244
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1	<b>BEFORE THE BOARD OF MEDICAL EXAMINERS</b>	
2	OF THE STATE OF NEVADA	
2	* * * *	
4		
5	In the Matter of Charges and Case No. 23-29251-1	
6	Complaint AgainstHearing Date: September 21, 2023 through September 22, 2023 @ 8:30 a.m.	
7	JASON HOWARD LASRY, M.D., FILED	
8	Respondent. APR 1 4 2023	
9 10	NEVADA STATE BOARD OF MEDICAL	
11	SCHEDULING ORDER By:	
12	TO: William P. Shogren Deputy General Counsel	
13	Nevada State Board of Medical Examiners	
14	9600 Gateway Drive Reno, Nevada 89521	
15	Jason Howard Lasry, M.D.	
16	c/o Robert C. McBride, Esq., Chelsea R. Hueth, Esq., and/or	
17	Olivia Campbell, Esq.	
18	8329 West Sunset Road, Ste 260 Las Vegas, NV 89113	
19	In compliance with NAC 630.465, a pre-hearing conference will be conducted on June 27,	
20	2023, beginning at the hour of 10:00 a.m., Pacific Standard Time, and will be held via a	
21	conference call. Unless directed otherwise prior to the scheduled date and time of the pre-hearing	
22	conference, the conference call number will be 1-605-475-2200 and the access code will be	
23	8792457. The parties shall participate in the conference call by and through counsel and the	
24	conference will be conducted before the undersigned hearing officer.	
25	By the pre-hearing conference, each party shall provide the other party with a copy of the	
26	list of witnesses he or she intends to call to testify, including the witness' qualifications as well as	
27	a brief summary of the witness' anticipated testimony. If a witness is not included in the list of	
28	witnesses, that witness may not be allowed to testify at the hearing unless good cause is shown.	
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Likewise, all documentation sought to be relied upon at the formal hearing shall be identified and any documentation not already exchanged pursuant to NRS 622A.330 shall be exchanged. If at the formal hearing any party seeks to rely upon documentation not previously produced as ordered, such documentation will not be permitted unless good cause is shown.

Any and all pre-hearing motions shall be served and submitted to the undersigned hearing officer on or before July 31, 2023. Any oppositions or responses thereto shall be served and submitted to the undersigned hearing officer on or before August 14, 2023. Any and all replies shall be served and submitted to the below hearing officer on or before August 24, 2023.

The formal hearing in this matter is hereby scheduled for September 21, 2023 through 9 September 22, 2023, starting at 8:30 a.m. on each date. Unless otherwise determined, Counsel 10 for the IC and the undersigned hearing officer shall attend from the Reno office of the Nevada 11 State Board of Medical Examiners, 9600 Gateway Drive, Reno, Nevada 89521. Respondent and 12 counsel on his behalf may attend from the Las Vegas Office of the Nevada State Board of 13 Medical Examiners, 325 E. Warm Springs Road, Suite 225, Las Vegas, Nevada 89119. Unless 14 stipulated to, permission for the remote appearance by any witness must be sought from and 15 approved by the undersigned hearing officer, and any such request shall be in writing and 16 submitted on or before August 24, 2023. 17

Following the hearing, the undersigned hearing officer will submit to the Board written
findings and recommendations pursuant to NRS 622A.300 that, pursuant to NAC 630.470, will
include a synopsis of the testimony taken at the hearing as well as a recommendation on the
veracity of witnesses if there is conflicting evidence or if credibility of witnesses is a determining
factor. Thereafter the Board will render its decision. NAC 630.470.

Should the parties deem a status conference necessary at any juncture of the proceeding,
they shall coordinate at least three proposed dates and times and may jointly email the
undersigned hearing officer with the proposed dates and times and request a status conference and
state the basis for the request.

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1	Both parties shall keep the undersigned hearing officer apprised of each issue that has been
2	resolved by negotiation or stipulation or any other change in the status of this case.
2 3	DATED this 14th day of April 2023.
3 4	By:
5	Patricia Halstead, Esq. Hearing Officer
6	(775) 322-2244
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	<u>CERTIFICATE OF SERVICE</u>
2	I certify that on this day, I personally delivered or mailed, postage pre-paid, at Reno, Nevada, a true file-stamped copy of the foregoing SCHEDULING ORDER addressed as follows:
3	
4	William P. Shogren Deputy General Counsel
5 6	Nevada State Board of Medical Examiners 9600 Gateway Drive
7	Reno, Nevada 89521
8	Jason Howard Lasry, M.D.
9	c/o Robert C. McBride, Esq., Chelsea R. Hueth, Esq., and/or
10	Olivia Campbell, Esq. 8329 West Sunset Road, Ste 260
· 11	Las Vegas, NV 89113
12	DATED this 17th day of April 2023.
13	$\int dz$
14	Signature
15 16	Mercedes Frentes
10	Mercedes treates Print
18	Legal Assistant Title
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	1	<b>BEFORE THE BOARD OF MEDICAL EXAMINERS</b>		
	2	OF THE STATE OF NEVADA		
	3 ****			
	5	In the Matter of Charges and Complaint	Case No. 23-29251-1	
	6	Against:	FILED	
	7	JASON HOWARD LASRY, M.D.	JUN 2 1 2023	
	8	Respondent.	NEVADA STATE BOARD OF MEDICAL EXAMINERS	
	9		Ву:	
1	10	PREHEARING CONFERENCE STA	FEMENT OF THE INVESTIGATIVE	
1	11	COMMITTEE OF THE NEVADA STAT	<u>'E BOARD OF MEDICAL EXAMINERS</u>	
1	12	The Investigative Committee (IC) of th	ne Nevada State Board of Medical Examiners	
1	13	(Board) submits the following Prehearing Conference Statement in accordance with		
6662-880 (c/ )	14	NAC 630.465 and the Hearing Officer's Scheduling Order filed April 14, 2023.		
Ë 1	15	I. LIST OF WITNESSES		
1	16	The IC lists the following witnesses whom it may call at the hearing on the charges in the		
1	17	Complaint against Respondent filed herein:		
1	18	a. Kristi Barbieri, Investigator Nevada State Board of Medical Ex	zaminers	
	19	9600 Gateway Drive Reno, NV 89521		
2	20	1010, 114 07521		
4	21	Ms. Barbieri, or her designee, is expected to verify documentary evidence obtained during		
4	22	the investigation of this case and testify regarding	, the investigation of this matter.	
4	23	b. Eric W. Glissmeyer, M.D. c/o Nevada State Board of Medica	1 Examiners	
24		9600 Gateway Drive Reno, NV 89521		
25				
4	26	Dr. Glissmeyer is expected to testify regarding his review of this case and Respondent's		
	27	care of Patient A.		
	28	///		
		1 c	of 3	

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Jason Howard Lasry, M.D.
 c/o Chelsea Hueth, Esq.
 McBride Hall
 8329 West Sunset Road, Ste. 260
 Las Vegas, NV 89113

Dr. Lasry is expected to testify as to his conduct and to respond to the allegations in the Complaint.

d. All witnesses identified by Respondent in his prehearing conference statement and/or in any subsequent amended, revised, or supplemental prehearing conference statement, or list of witnesses disclosed by Respondent of persons he may call to testify at the hearing herein.

The IC reserves the right to amend and supplement this list as required for prosecution of this case.

### **II. LIST OF EXHIBITS**

The IC lists the following exhibits that it may introduce at the hearing on the charges in the Complaint against Respondent filed herein. Additionally, the IC reserves the right to rely on all exhibits listed in Respondent's prehearing conference statement and any supplement and/or amendment thereof.

	EXHIBIT NO.	DESCRIPTION	BATES RANGE (NSBME)
	1	NSBME Formal Complaint, (Dated March 8, 2023)	001-007
	2	Proof of Service (Formal Complaint), (Dated March 29, 2023)	008-012
	3	NSBME Allegation Letter, Patient A (Dated July 19, 2021)	013-014
3	4	Response to NSBME Allegation Letter (Dated August 18, 2021)	015-017
	5	Humboldt General Hospital Request Letter and Custodian of Records Affidavit	018-020
	6	Patient A Medical Records, Humboldt General Hospital	021-087

# OFFICE OF THE GENERAL COUNSEL Nevada State Board of Medical Examiners 9600 Gateway Drive Reno, Nevada 89521 (775) 688-2559

	8	
7	7 Renown Hospital Request Letter and Custodian of Records Affidavit	
8	Patient A Medical Records, Renown Hospital	091-111
9	Patient A Death Certificate	112
10	Europe PMC Funders Group: Normal Ranges of Heart Rate and Respiratory Rate in Children from Birth to 18 Years: A Systematic Review of Observational Studies (March 2011)	113-128
11	Clinical Practice Statement: How Should Native Crotalid Envenomation Be Managed in the Emergency Department? (September 2020)	129-131
12	Wilderness & Environmental Medicine: Wilderness Medical Society Practice Guidelines for the Treatment of Pitviper Envenomations in the United States and Canada (2015)	132-147
13	UpToDate: Bites by Crotaline Snakes (Rattlesnakes, Water Moccasins [Cottonmouths], or Copperheads) in the United States: Management (August 2022)	148-159
14	Curriculum Vitae of Eric W. Glissmeyer, M.D.	160-179
The	IC reserves the right to amend and supplement this list as required for	or prosecutio
this case.		
DA	TED this 21st day of June, 2023.	
	INVESTIGATIVE COMMITTEE OF THE NEVADA STATE BOARD OF MEDICAL	EXAMINEI
	1. 1.1 Plan	
	By: WILLIAM P. SHOGREN	
	Deputy General Counsel 9600 Gateway Drive	
	Reno, NV 89521	
	Tel: (775) 688-2559 Email: <u>shogrenw@medboard.nv.gov</u> Attorney for the Investigative Committee	
	3 of 3	

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1	CERTIFICATE OF SERVICE
2	I hereby certify that I am employed by the Nevada State Board of Medical Examiners and
3	that on the 21st day of June, 2023, I served a file-stamped copy of the foregoing <b>PREHEARING</b>
4	CONFERENCE STATEMENT OF THE INVESTIGATIVE COMMITTEE OF THI
5	NEVADA STATE BOARD OF MEDICAL EXAMINERS with accompanying Exhbits 1-14
6	via Fed Ex 2-Day Mail, to:
7	JASON HOWARD LASRY, M.D.
8	c/o Chelsea R. Hueth, Esq.
9	McBride Hall 8329 W Sunset Road, Suite 260
10	Las Vegas, NV 89113
11	Tracking No.: 7725 1907 4962
12	A copy of the IC's Prehearing Conference Statement and Exhibits was also sent by U.S. regular
13	mail to:
14	PATRICIA HALSTEAD, ESQ
15	615 S. Arlington Avenue
15 16	Reno, NV 89509
16	Reno, NV 89509 Hearing Officer
16 17	Reno, NV 89509 Hearing Officer
16 17 18	Reno, NV 89509 Hearing Officer
16 17 18 19	Reno, NV 89509 Hearing Officer DATED this $21^{51}$ day of June, 2023.
16 17 18 19 20	Reno, NV 89509 Hearing Officer DATED this <u>J</u> day of June, 2023. MERCEDES FUENTES
16 17 18 19 20 21	Reno, NV 89509 Hearing Officer DATED this $21^{51}$ day of June, 2023.
16 17 18 19 20 21 22	Reno, NV 89509 Hearing Officer DATED this <u>J</u> <sup>51</sup> day of June, 2023. MERCEDES FUENTES Legal Assistant
16 17 18 19 20 21 22 23	Reno, NV 89509 Hearing Officer DATED this <u>J</u> <sup>51</sup> day of June, 2023. MERCEDES FUENTES Legal Assistant
<ol> <li>16</li> <li>17</li> <li>18</li> <li>19</li> <li>20</li> <li>21</li> <li>22</li> <li>23</li> <li>24</li> </ol>	Reno, NV 89509 Hearing Officer DATED this <u>J</u> <sup>51</sup> day of June, 2023. MERCEDES FUENTES Legal Assistant
16 17 18 19 20 21 22 23 24 25	Reno, NV 89509 Hearing Officer DATED this <u>J</u> <sup>SJ</sup> day of June, 2023. MERCEDES FUENTES Legal Assistant
16 17 18 19 20 21 22 23 24 25 26	Reno, NV 89509 Hearing Officer DATED this <u>J</u> <sup>51</sup> day of June, 2023. MERCEDES FUENTES Legal Assistant
16 17 18 19 20 21 22 23 24 25	Reno, NV 89509 Hearing Officer DATED this <u>J</u> <sup>51</sup> day of June, 2023. MERCEDES FUENTES Legal Assistant

1	BEFORE THE BOARD OF MEDICAL EXAMINERS OF THE STATE OF NEVADA
2	* * * *
3	In the Matter of Charges and ) Case No. 23-29251-1
4	Complaint Against
5	JASON HOWARD LASRY, M.D., JUN 2 5 2023
6	Respondent. ) NEVADA STATE BOARD OF MEDICADEXAMINERS
7	JASON HOWARD LASRY, M.D.'S PREHEARING DISCLOSURE
8	COMES NOW, Respondent JASON HOWARD LASRY, M.D., by and through his counsel
9	of record, ROBERT C. McBRIDE, ESQ. and CHELSEA R. HUETH, ESQ., of the law firm of
10	McBRIDE HALL and submits the following Prehearing Conference Statement in accordance with
11	NAC 630.465 and the Hearing Officer's Scheduling Order filed April 14, 2023:
12	I. LIST OF WITNESSES
13	1. Jason Lasry, M.D.
14	c/o Robert C. McBride, Esq. Chelsea R. Hueth, Esq.
15	McBRIDE HALL 8329 W. Sunset Road, Suite 260
16	Las Vegas, NV 89113
17	(702) 792-5855
18	Respondent will testify regarding the care and treatment provided to Patient A, his customs
19	and practice, and his medical records documenting Patient A's care and treatment. He will also
20	provide testimony regarding the Board's Complaint and the allegations therein. Respondent will
21	also testify that he complied with the standard of care for treating a pediatric snake bite in an
22	emergency setting.
23	
24	2. John Levin, M.D., FACEP c/o Robert C. McBride, Esq.
25	Chelsea R. Hueth, Esq. McBRIDE HALL
26	8329 W. Sunset Road, Suite 260 Las Vegas, NV 89113
27	(702) 792-5855
28	

1		John	Levin, M.D., FACEP is board certified in emergency medicine and has been retained	
2	as an	expert	by Respondent. Dr. Levin is expected to testify that Dr. Lasry met the standard of	
3	care.	Dr. Le	evin will further testify about his opinions regarding the facts of the case and their	
4	relatio	on to his	s medical specialties. Dr. Levin will also address the opinions of any expert designated	
5	by the	e Board	of Medical Examiners, which comment upon the care and treatment provided by Dr.	
6	Lasry			
7 8		Respo	ondent reserves the right to call as expert witnesses any and all of the Board's	
9				
10	designated expert witness(es) or any other witness designated by any other party. Respondent			
11				
12		ther reserves the right to amend and supplement this list as discovery continues and as necessary rebuttal and/or impeachment. LIST OF EXHIBITS		
13	II.	LIST	<b>COF EXHIBITS</b>	
14		1.	Board of Medical Examiners of the State of Nevada Complaint filed March 8, 2023.	
15		2.	Respondent Jason Howard Lasry, M.D.'s Answer to Complaint filed March 29,	
16			2023.	
17		3.	John Levin, M.D., FACEP's Curriculum Vitae.	
18		4.	Jason Lasry, M.D.'s Curriculum Vitae.	
19		5.	Medical Records from Humboldt General Hospital (HGH 000001-000078).	
20		6.	Audio of Transfer Center Call # 2 (1 minute, 46 seconds in length).	
21		7.	Audio of Transfer Center Call # 2 (2 minutes, 38 seconds in length).	
22 23		8.	Certificate of Custodian of Records for Renown Health Transfer Center recordings.	
23			exhibits produced in this disclosure can be downloaded from the link below:	
25				
26		<u>https:</u>	//mcbridehall56.sharefile.com/d-s7b8816c3e94b4e1a83bedb12e6bdca4d	
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1	Respondent reserves the right to use any and all of the documents, exhibits, reference	
2	materials and records disclosed by the Board or any other party. Respondent further reserves the	
3	right to amend and supplement this list as necessary for rebuttal and/or impeachment.	
4		
5	DATED this 26 <sup>th</sup> day of June 2023.	
6	McBRIDE HALL	
7		
8	By: <u>/s/ Chelsea R. Hueth</u> ROBERT C. McBRIDE, ESQ.	
9	Nevada Bar No.: 7082 CHELSEA R. HUETH, ESQ.	
10	Nevada Bar No.: 10904 8329 W. Sunset Road, Suite 260	
11	Las Vegas, Nevada 89113 Attorneys for Respondent Jason Howard Lasry, M.D.	
12	Jason Howard Lasry, M.D.	
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1	CERTIFICATE OF SERVICE	
2	I hereby certify that on the 26 <sup>th</sup> day of June 2023, I served a true correct copy of <b>JASON</b>	
3	HOWARD LASRY, M.D.'S PREHEARING DISCLOSURE, by sending via electronic mail	
4	and via Fedex overnight mail to the following:	
5	William P. Shogren, Esq.	
6 7	Nevada State Board of Medical Examiners 9600 Gateway Drive	
8	Reno, NV 89521 shogrenw@medboard.nv.gov	
9	Attorneys for the Investigative Committee	
10		
11	/s/ Lauren Smith	
12	An Employee of McBride Hall	
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	6	FIL	ED
	7	JUN 2	2 2023
	8	NEVADA STA	TE BOARD OF
	9	Dy:	<u>~</u>
GENERAL COUNSEL of Medical Examiners ateway Drive Nevada 89521 5) 688-2559	10		Addient Engeningen
COUN niners	11		
LAL C al Exar 21 21	12		
THE GENER/ tate Board of Medical 9600 Gateway Drive Reno, Nevada 89521 (775) 688-2559	13		
	14		Smpanying Exhibits
OF THE ada State Boa 9600 G Reno, (77	15	JASON HOWARD LASRY, M.D.	
24	16 17	c/o Chelsea K. Hueth, Esq.	
OFFICE Nev	17	8329 W Sunset Road, Suite 260	
0	18		- 22 2023 at 11.05
	20		<i>22, 2023, at</i> 11.03
	20	ma	
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	24	Nevada State Board of Medical Ex	kaminers
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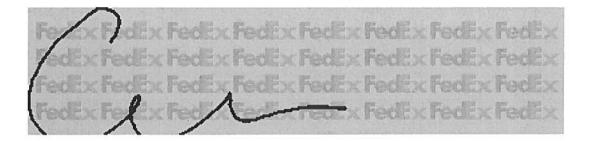
# **EXHIBIT 1**

# **EXHIBIT 1**



The following is the proof-of-delivery for tracking number: 772519074962

Delivery Information:					
Status:	Delivered	Delivered To:	Receptionist/Front Desk		
Signed for by:	A.MACK	<b>Delivery Location:</b>	8329 W. SUNSET RD		
Service type:	FedEx 2Day				
Special Handling:	Deliver Weekday; Adult Signature Required		LAS VEGAS, NV, 89113		
		Delivery date:	Jun 22, 2023 11:05		
Shipping Information:					
Tracking number:	772519074962	Ship Date:	Jun 21, 2023		
		Weight	0.5 LB/0.23 KG		
Recipient: Chelsea R. Hueth, Esq. 8329 W Sunset Road, S LAS VEGAS, NV, US, 8	uite 260	<b>Shipper:</b> Mercedes Fuentes, Nev 9600 Gateway Drive Reno, NV, US, 89502	vada State Board of Med Exam		



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		5:
1	<b>BEFORE THE BOARD OF</b>	MEDICAL EXAMINERS
2	OF THE STAT	E OF NEVADA
3	***	e <del>W</del> W
4		
5	In the Matter of Charges and Complaint	Case No. 23-29251-1
6	Against:	FILED
7	JASON HOWARD LASRY, M.D.,	JUL 1 3 2023
8	Respondent.	NEVADA STATE BOARD OF MEDICAL EXAMINERS
9		By:
10	STIPULATION AND ORDER TO HAV	E WITNESSES APPEAR REMOTELY
11	By agreement of the parties, William P. S	hogren, on behalf of the Investigative Committee
12	(IC) of the Nevada State Board of Medical E	xaminers (Board) and Chelsea R. Hueth, Esq.,
13	counsel for Respondent Jason Howard Lasry, her	
14	1. The IC may have its previously d	isclosed witness, Dr. Eric W. Glissmeyer, appear
15	remotely, by Zoom or similar videoconference	platform, for the formal hearing currently set in
16	this matter for September 21, 2023 through Septe	mber 22, 2023.
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2. Respondent may have his previously disclosed witness, Dr. John Levin, appear 1 remotely, by Zoom or similar videoconference platform, for the formal hearing currently set in 2 this matter for September 21, 2023 through September 22, 2023. 3 IT IS SO STIPULATED. 4 DATED this 11th day of July, 2023. DATED this 11th day of July, 2023. 5 MCBRIDE HALL INVESTIGATIVE COMMITTEE OF THE 6 NEVADA STATE BOARD OF MEDICAL 7 **EXAMINERS** 8 By: /s/ Chealsea R. Hueth 9 Bv: WILLIAM P. **&**HOGREN CHELSEA R. HUETH, ESQ 10 8329 West Sunset Road, Ste. 260 Deputy General Counsel Las Vegas, NV 89113 9600 Gateway Drive 11 Tel: (702) 792-5855 Reno, NV 89521 Email: crhueth@mcbridehall.com Tel: (775) 688-2559 12 Attorney for Respondent Email: shogrenw@medboard.ny.gov 13 Jason Howard Lasry, M.D. Attorney for the Investigative Committee (775) 688-2559 14 Based on the terms of this Stipulation to Have Witnesses Appear Remotely, as agreed 15 16 currently scheduled from September 21, 2023 through September 22, 2023. 17 IT IS HEREBY ORDERED. 18 DATED this 12th day of July, 2023. 19 20 21 By: 22 PATRICIA HALSTEAD, ESQ. Hearing Officer 23 24 25 26 27 28

	1	<b>BEFORE THE BOARD OF</b>	MEDICAL EXAMINERS
	2	OF THE STATI	
	3	* * *	
	4		
	5	In the Matter of Charges and Complaint	Case No. 23-29251-1
	6	Against:	FILED
	7	JASON HOWARD LASRY, M.D.	JUL 2 5 2023
	8	Respondent.	NEVADA STATE BOARD OF
	9		By:
1	10	FIRST SUPPLEMENTAL PREHEAF	NING CONFERENCE STATEMENT
GENERAL COUNSEL do f Medical Examiners ateway Drive Nevada 89521 s) 688-2559	11	OF THE INVESTIGATIVE COMMITT	EE OF THE NEVADA STATE BOARD
F THE GENERAL COU State Board of Medical Examiners 9600 Gateway Drive Reno, Nevada 89521 (775) 688-2559	12	OF MEDICAL	EXAMINERS
RAL lical Ex rive 9521 9	13	The Investigative Committee (IC) of th	e Nevada State Board of Medical Examiners
THE GENER. te Board of Medical 9600 Cateway Drive Reno, Nevada 89521 (775) 688-2559	14	(Board) submits the following First Supplemental	Prehearing Conference Statement in accordance
THE G tate Board 9600 Gate Reno, Ne (775) (	15	with NAC 630.465 and the Hearing Officer's Sch	eduling Order filed April 14, 2023.
OF TH ada State 96 Re	16	I. LIST OF WITNESSES	
r-1 2	17	The IC lists the following witnesses who	n it may call at the hearing on the charges in the
OFFICE Ne	18	Complaint against Respondent filed herein:	
•	19	a. Kristi Barbieri, Investigator	
	20	Nevada State Board of Medical Ex 9600 Gateway Drive	aminers
	21	Reno, NV 89521	
	22	Ms. Barbieri, or her designee, is expected	to verify documentary evidence obtained during
	23	the investigation of this case and testify regarding	, the investigation of this matter.
	24	b. Eric W. Glissmeyer, M.D.	
	25	c/o Nevada State Board of Medica 9600 Gateway Drive	I Examiners
	26	Reno, NV 89521	
	27	Dr. Glissmeyer is expected to testify reg	arding his review of this case and Respondent's
	28	care of Patient A.	
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c. Jason Howard Lasry, M.D.
c/o Chelsea Hueth, Esq.
McBride Hall
8329 West Sunset Road, Ste. 260
Las Vegas, NV 89113

Dr. Lasry is expected to testify as to his conduct and to respond to the allegations in the Complaint.

d. All witnesses identified by Respondent in his prehearing conference statement and/or in any subsequent amended, revised, or supplemental prehearing conference statement, or list of witnesses disclosed by Respondent of persons he may call to testify at the hearing herein.

The IC reserves the right to amend and supplement this list as required for prosecution of this case.

### II. LIST OF EXHIBITS

The IC lists the following exhibits that it may introduce at the hearing on the charges in the Complaint against Respondent filed herein. Additionally, the IC reserves the right to rely on all exhibits listed in Respondent's prehearing conference statement and any supplement and/or amendment thereof.

EXHIBIT NO.	DESCRIPTION	BATES RANGE (NSBME)
1	NSBME Formal Complaint, (Dated March 8, 2023)	001-007
2	Proof of Service (Formal Complaint), (Dated March 29, 2023)	008-012
3	NSBME Allegation Letter, Patient A (Dated July 19, 2021)	013-014
4	Response to NSBME Allegation Letter (Dated August 18, 2021)	015-017
5	Humboldt General Hospital Request Letter and Custodian of Records Affidavit	018-020
6	Patient A Medical Records, Humboldt General Hospital	021-087

	Renown Hospital Request Letter and Custodian of Records	
7	Affidavit	088-90
8	Patient A Medical Records, Renown Hospital	091-111
9	Patient A Death Certificate	112
10Europe PMC Funders Group: Normal Ranges of Heart Rate and Respiratory Rate in Children from Birth to 18 Years: A Systematic Review of Observational Studies (March 2011)11Clinical Practice Statement: How Should Native Crotalid Envenomation Be Managed in the Emergency Department? (September 2020)		113-128
		129-131
12	Wilderness & Environmental Medicine: Wilderness Medical Society Practice Guidelines for the Treatment of Pitviper Envenomations in the United States and Canada (2015)	132-147
13	UpToDate: Bites by Crotaline Snakes (Rattlesnakes, Water Moccasins [Cottonmouths], or Copperheads) in the United States: Management (August 2022)	
14	Curriculum Vitae of Eric W. Glissmeyer, M.D.	160-179
15 Curriculum Vitae of Eric W. Glissmeyer, M.D., updated June 1, 2023		180-200
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1	The IC reserves the right to amend and supplement this list as required for prosecution of	
2	this case.	
3	DATED this 25th day of July, 2023.	
4	INVESTIGATIVE COMMITTEE OF THE	
5	NEVADA STATE BOARD OF MEDICAL EXAMINERS	
6	By: Will Jogla	
7	WILLIAM P. SHOGREN Deputy General Counsel	
8	9600 Gateway Drive Reno, NV 89521	
9	Tel: (775) 688-2559	
10	Email: <u>shogrenw@medboard.nv.gov</u> Attorney for the Investigative Committee	
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1	CERTIFICATE OF SERVICE
2	I hereby certify that I am employed by the Nevada State Board of Medical Examiners and
3	that on the 25th day of July, 2023, I served a file-stamped copy of the foregoing FIRST
4	SUPPLEMENTAL PREHEARING CONFERENCE STATEMENT OF THE
5	INVESTIGATIVE COMMITTEE OF THE NEVADA STATE BOARD OF MEDICAL
6	<b>EXAMINERS</b> with accompanying Exhibit 15 via Fed Ex 2-Day Mail, to:
7	JASON HOWARD LASRY, M.D. c/o Chelsea R. Hueth, Esq.
8	McBride Hall 8329 W Sunset Road, Suite 260
9	Las Vegas, NV 89113
10	Tracking No.: 7728 4045 3101
11	A copy of the IC's First Supplemental Prehearing Conference Statement and Exhibit was also sent
12 13	by U.S. regular mail to:
13	
14	PATRICIA HALSTEAD, ESQ 615 S. Arlington Avenue
15	Reno, NV 89509 Hearing Officer
17	
18	DATED this $25^{10}$ day of July, 2023.
19	
20	
21	MERCEDES FUENTES Legal Assistant
22	Nevada State Board of Medical Examiners
23	
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	1	<b>BEFORE THE BOARD OF</b>	F MEDICAL EXAMINERS	
	2	OF THE STAT	E OF NEVADA	
	3	* * *	* * *	
	4			
	5	In the Matter of Charges and Complaint	Case No. 23-29251-1	
	6	Against:	FILED	
	7	JASON HOWARD LASRY, M.D.	JUL 27 2023	
	8	Respondent.	NEVADA STATE BOARD OF	
	9		MEDICAL EXAMINERS By:	
7 THE GENERAL COUNSEL State Board of Medical Examiners 9600 Gateway Drive Reno, Nevada 89521 (775) 688-2559	10	PROOF OF SERVICE		
	11	I, Mercedes Fuentes, Legal Assistant for the Nevada State Board of Medical Examiners,		
	12	hereby certify that on July 25, 2023, I	sent a filed-stamped copy of the FIRST	
	13	SUPPLEMENTAL PREHEARING CO	NFERENCE STATEMENT OF THE	
E GENE) Soard of Medi 0 Gateway Dr 10, Nevada 89 (775) 688-2559	14	INVESTIGATIVE COMMITTEE OF THE NEVADA STATE BOARD OF MEDICAL		
[THE GENER te Board of Medic: 9600 Gateway Driv Reno, Nevada 8955 (775) 688-2559	15	EXAMINERS, along with accompanying Exhibit 15 to:		
OF THE ada State Boa 9600 G Reno, (77)	16		NT ACRY MD	
OFFICE Nev	17	JASON HOWARD LASRY, M.D. c/o Chelsea R. Hueth, Esq.		
OFF	18	McBride Hall 8329 W Sunset Ro	ad, Suite 260	
	19	Las Vegas, NV 89	·	
	20	via Fed Ex 2-Day Mail, tracking no. 772840453	101 and was delivered on July 26, 2023, at 09:44	
	21	a.m. See Exhibit 1.		
	22	DATED this $day of July, 2023.$		
	23		22	
	24		RCEDES FUENTES	
	25		al Assistant vada State Board of Medical Examiners	
	26			
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# **EXHIBIT 1**

# **EXHIBIT 1**



Dear Customer,

The following is the proof-of-delivery for tracking number: 772840453101

Delivery information:				
Status:	Delivered	Delivered To:	Receptionist/Front Desk	
Signed for by:	A.ANASTASIA	<b>Delivery Location:</b>	8329 W SUNSET RD STE 260	
Service type:	FedEx 2Day			
Special Handling:	Deliver Weekday; Adult Signature Required		LAS VEGAS, NV, 89113	
		Delivery date:	Jul 26, 2023 09:44	
Shipping Information:				
Tracking number:	772840453101	Ship Date:	Jul 25, 2023	
		Weight:	0.5 LB/0.23 KG	
<b>Recipient:</b> Chelsea R. Hueth, Esq., McBride Hall 8329 W Sunset Road, Suite 260 LAS VEGAS, NV, US, 89113		<b>Shipper:</b> Mercedes Fuentes, Nevada State Board of Med Exam 9600 Gateway Drive Reno, NV, US, 89502		

