

State Medical Board of Ohio

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August 14, 2008

Shelly Bade, M.D.
13348 Twin Wood Lane
Orlando, FL 32827

RE: Case No. 07-CRF-001

Dear Doctor Bade:

Please find enclosed certified copies of the Entry of Order; the Report and Recommendation of Gretchen L. Petrucci, Attorney Hearing Examiner, State Medical Board of Ohio; and an excerpt of draft Minutes of the State Medical Board, meeting in regular session on August 14, 2008, including motions modifying the Findings of Fact and Conclusions of the Hearing Examiner, and adopting an amended Order.

Section 119.12, Ohio Revised Code, may authorize an appeal from this Order. Such an appeal must be taken to the Franklin County Court of Common Pleas.

Such an appeal setting forth the Order appealed from and the grounds of the appeal must be commenced by the filing of an original Notice of Appeal with the State Medical Board of Ohio and a copy of the Notice of Appeal with the Franklin County Court of Common Pleas. Any such appeal must be filed within fifteen (15) days after the mailing of this notice and in accordance with the requirements of Section 119.12, Ohio Revised Code.

THE STATE MEDICAL BOARD OF OHIO

A handwritten signature in black ink, appearing to read "Lance A. Talmage MD".

Lance A. Talmage, M.D.
Secretary

LAT:jam
Enclosures

CERTIFIED MAIL NO. 91 7108 2133 3934 3487 3122
RETURN RECEIPT REQUESTED

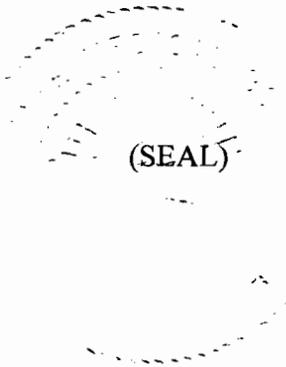
Cc: James D. Colner, Esq.
CERTIFIED MAIL NO. 91 7108 2133 3934 3487 3139
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Mailed 9-10-08

CERTIFICATION

I hereby certify that the attached copy of the Entry of Order of the State Medical Board of Ohio; Report and Recommendation of Gretchen L. Petrucci, State Medical Board Attorney Hearing Examiner; and excerpt of draft Minutes of the State Medical Board, meeting in regular session on August 14, 2008, including motions modifying the Findings of Fact and Conclusions of the Hearing Examiner, and adopting an amended Order; constitute a true and complete copy of the Findings and Order of the State Medical Board in the matter of Shelly Bade, M.D., Case No. 07-CRF-001, as it appears in the Journal of the State Medical Board of Ohio.

This certification is made by authority of the State Medical Board of Ohio and in its behalf.



A handwritten signature in black ink, appearing to read "Lance A. Talmage, M.D.".

Lance A. Talmage, M.D.
Secretary

August 14, 2008
Date

BEFORE THE STATE MEDICAL BOARD OF OHIO

IN THE MATTER OF

*

* CASE NO. 07-CRF-001

SHELLY BADE, M.D.

*

ENTRY OF ORDER

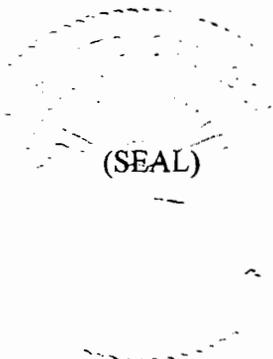
This matter came on for consideration before the State Medical Board of Ohio on August 14, 2008.

Upon the Report and Recommendation of R. Gregory Porter, State Medical Board Attorney Hearing Examiner, designated in this Matter pursuant to R.C. 4731.23, a true copy of which Report and Recommendation is attached hereto and incorporated herein, and upon the modification, approval and confirmation by vote of the Board on the above date, the following Order is hereby entered on the Journal of the State Medical Board of Ohio for the above date.

It is hereby ORDERED that:

- A. The amended motion of Shelly Bade, M.D., to dismiss the allegations pertaining to Patient 1 (on the basis of *res judicata* and collateral estoppel) is denied.
- B. Dr. Bade is REPRIMANDED.

This Order shall become effective immediately upon the mailing of the notification of approval by the Board.



Lance A. Talmage, M.D.
Secretary

August 14, 2008

Date

**REPORT AND RECOMMENDATION
IN THE MATTER OF SHELLY BADE, M.D.
CASE NO. 07-CRF-001**

The Matter of Shelly Bade, M.D., was heard by Gretchen L. Petrucci, Hearing Examiner for the State Medical Board of Ohio, on April 15 through 18, 2008.

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INTRODUCTION

Basis for Hearing

By letter dated October 10, 2007, the State Medical Board of Ohio [Board] notified Shelly Bade, M.D., that it intended to determine whether to take disciplinary action against her certificate to practice medicine and surgery in Ohio. The Board's action was based on allegations that, in her emergency room treatment of Patients 1 through 3 (as identified on a confidential Patient Key), Dr. Bade: (a) intubated and/or attempted to intubate the three patients despite the lack of appropriate clinical indications to do so; (b) failed to perform an appropriate workup and/or document an appropriate workup for various potential diagnoses; and/or (c) failed to promptly administer appropriate medications. Also, the Board identified specific examples of such conduct in relation to Dr. Bade's treatment of Patients 1-3.

The Board further alleged that Dr. Bade's acts, conduct, and/or omissions individually and/or collectively constitute "[a] departure from, or the failure to conform to, minimal standards of care of similar practitioners under the same or similar circumstances, whether or not actual injury to a patient is established," as set forth in Section 4731.22(B)(6), Ohio Revised Code. (State's Exhibit 6A)

On October 19, 2007, Dr. Bade requested a hearing. (State's Exhibit 6B)

Appearances at the Hearing

Nancy H. Rogers, Attorney General, by Kyle C. Wilcox, Assistant Attorney General, on behalf of the State of Ohio.

James D. Colner, Esq., on behalf of the Respondent, Shelly Bade, M.D.

EVIDENCE EXAMINED

Testimony Heard

Shelly Bade, M.D.
Michael C. Choo, M.D.
Mark S. Leder, M.D.
Jerome A. McTague, M.D., Esq.
David P. Katko, Esq.

Exhibits Examined

A. State's Exhibits

State's Exhibit 1: Certified copy of the medical records of Patient 1 from Children's Hospital of Columbus, and August 26, 2005, letter from the Board sending a subpoena for such records. [Admitted under seal.]

State's Exhibits 1A, 2, and 3: Certified copies of the medical records of Patients 1, 2 and 3, respectively, from Bucyrus Community Hospital. [Admitted under seal.]

State's Exhibit 4: Curriculum vitae of Michael C. Choo, M.D.

State's Exhibit 5: September 18, 2007, expert opinion letter of Dr. Choo.

State's Exhibits 6A-6E: Procedural exhibits. [Note: State's Exhibit 6A does not contain the referenced patient key, which was admitted under seal as State's Exhibit 7.]

State's Exhibit 7: Patient key. [Admitted under seal.]

State's Exhibit 8: Omitted page from the Bucyrus Community Hospital's medical records of Patient 1, which were admitted as State's Exhibit 1A. [Admitted under seal.]

State's Exhibits 9 and 10: State's initial and rebuttal closing arguments.

B. Respondent's Exhibits

Respondent's Exhibit A: February 19, 2008, expert opinion letter of Marc S. Leder, M.D.

Respondent's Exhibit B: Curriculum vitae of Dr. Leder.

Respondent's Exhibit C: March 3, 2008, expert opinion letter of Jerome A. McTague, M.D., J.D. [Redacted in part to obscure patient identity.]

Respondent's Exhibit D: Curriculum vitae of Dr. McTague

Respondent's Exhibit E: Certificate of Death of Patient 1. [Redacted in part to obscure patient identity.]

Respondent's Exhibit F: Not admitted.

Respondent's Exhibit G: Medical record of Patient 1 from MedFlight of Ohio. [Admitted under seal.]

Respondent's Exhibit H: Transcript of the September 8, 2004, deposition of Mark Luquette, M.D., in [*Patient 1's Father*], *Administrator of the Estate of [Patient 1] v. Shelly Bade, M.D., et al.*, Case No. 03-CV-0079, Crawford County Court of Common Pleas. [Redacted in part to obscure patient identity.]

Respondent's Exhibits I-K: Complaint, March 2, 2005, Judgment Entry, and Jury Verdict in *Estate of [Patient 1]*, *supra*. [Redacted in part to obscure patient identity.]

Respondent's Exhibit L: Portions of *PALS Provider Manual*, American Academy of Pediatrics and American Heart Association.

Respondent's Exhibit M: Portions of *Advanced Trauma Life Support for Doctors, Student Course Manual*, 7th Edition, American College of Surgeons Committee on Trauma.

Respondent's Exhibit N: Portions of *Trauma Management, an Emergency Medicine Approach*, 2001, by Ferrera, *et al.*

Respondent's Exhibit O: February 25, 2004, letter regarding Dr. Bade's participation in the course "Pediatric Airway Emergencies" at James A. Rhodes State College.

Respondent's Exhibit P: June 11, 2007, certificate from the American Board of Urgent Care Medicine awarding Dr. Bade with diplomate status.

Respondent's Exhibit T: Pages 285-286 of *Advanced Trauma Life Support for Doctors, Student Course Manual*, 7th Edition, American College of Surgeons Committee on Trauma.

Respondent's Exhibits V and W: Respondent's initial and rebuttal closing arguments.

PROFFERED EXHIBITS

Respondent's Exhibit Q: May 22, 2006, letter from the Secretary of the Board to Dr. Bade, with enclosures.

Respondent's Exhibit R: June 6, 2006, letter from Dr. Bade's counsel to a Board Enforcement Attorney.

Respondent's Exhibit S: March 9, 2007, letter from Dr. Bade's counsel to a Board Enforcement Attorney.

Respondent's Exhibit U: List of proffered questions for Mr. Katko.

MOTIONS TO DISMISS

Dr. Bade's *Res Judicata* and Collateral Estoppel Arguments

On March 7, as amended on March 26, 2008, Dr. Bade filed a motion to dismiss the allegations related to Patient 1 based on the legal doctrines of *res judicata* and collateral estoppel. On March 17, 2008, the State filed a memorandum in opposition to dismissal. By entry dated April 1, 2008, the Hearing Examiner deferred a ruling on the amended motion to dismiss, noting that the Hearing Examiner cannot dismiss the Board's allegations, but she can address the amended motion as part of her report and recommendation. On April 16, 2008, during the hearing, Dr. Bade renewed her amended motion to dismiss, which was taken under consideration. In addition, Dr. Bade raised the issue in her closing argument filed on May 19, 2008. The State addressed the issue in its closing argument filed on May 27, 2008. (Hearing Transcript [Tr.] at 360-361, 726; Respondent's Exhibit [Resp. Ex.] V; State's Exhibit [St. Ex.] 10)

Dr. Bade contends that the Board's allegations related to Patient 1 are barred, as a matter of law, by the doctrines of *res judicata* and collateral estoppel, which preclude relitigation by the same parties or their privies.

The Tenth District Court of Appeals recently explained that the doctrine of *res judicata* encompasses both claim preclusion and issue preclusion, promoting finality of judgments. *Zunshine v. Cott* (2008), 2008 Ohio App. LEXIS 1893. The Court stated that *res judicata* bars parties in privity from re-litigating facts or issues that they either litigated previously, "or had an opportunity to litigate * * * in a former action in a court of competent jurisdiction." *Zunshine, supra*, quoting *Postal Telegraph Cable Co. v. City of Newport, Ky.* (1918), 247 U.S. 464, 476. *Res judicata* is balanced with fundamental due process, which guarantees parties a meaningful opportunity to be heard. *Zunshine, supra*; see, also, *Whitehead v. Gen. Tel. Co.* (1969), 20 Ohio St.2d 108, 116, 254 N.E.2d 10.

Collateral estoppel (also known as issue preclusion) prevents parties from re-litigating facts or issues in a subsequent suit that were fully litigated in a prior suit. "Collateral estoppel applies when the fact or issue: (1) was actually and directly litigated in the prior action, (2) was passed upon and determined by a court of competent jurisdiction, and (3) when the party against whom collateral estoppel is asserted was a party in privity with a party to the prior action." *Zunshine, supra*, citing *Thompson v. Wing* (1994), 70 Ohio St.3d 176, 183.

In support of her argument, Dr. Bade alleges that the defense verdict rendered on March 2, 2005, in *[Patient 1's Father], Administrator of the Estate of [Patient 1] v. Shelly Bade, M.D., et al.*, Case No. 03-CV-0079, Crawford County Court of Common Pleas [civil case], is a bar to the Board's allegations involving Patient 1. In March 2003, the administrator of the estate of Patient 1 filed a complaint alleging that Patient 1 was injured by the negligence of Dr. Bade, as well as others. Furthermore, the complaint alleged that, as a result of that negligence, Patient 1 was severely injured, which ultimately caused his death. In particular, the complaint listed the alleged negligence as including but not being limited to:

- (a) failure to meet acceptable standards of care;

- (b) failure to properly diagnose and treat Patient 1;
- (c) failure to consult a specialist;
- (d) failure to have a specialist available;
- (e) failure to transfer Patient 1 to an appropriate facility;
- (f) failure to properly intubate Patient 1; and
- (g) failure to properly medicate/sedate Patient 1.

At the conclusion of the trial on March 2, 2005, the jury rendered a verdict in favor of Dr. Bade, among others. No appeal was pursued. (Resp. Exs. I, J)

Dr. Bade argues that the 2005 jury verdict is “a definitive judicial determination that [Dr. Bade’s] care and treatment of patient #1 was within the minimal standard of care” and, thus, the Board’s 2007 allegations against Dr. Bade regarding Patient 1 are precluded as a matter of law. The jury verdict was based on an interrogatory that asked whether Dr. Bade was “negligent in her care and treatment of Patient 1” and the jury answered that interrogatory in the negative. (Resp. Ex. K) Dr. Bade argues that “negligence,” in the context of the jury instruction, was the alleged violation of the standard of care. Dr. Bade states that, therefore, the precise issue of whether her treatment of Patient 1 was within the standard of care was expressly tried and adjudicated in her favor in the civil case. For the Board to “re-litigate” that issue in an effort to discipline her license would defeat the ends of justice, according to Dr. Bade.

Dr. Bade acknowledges that the Board’s action is a different cause of action and the Board seeks a different remedy than what was sought in the civil case, but she opines that the exact same facts and allegations are at issue in the Board matter as were fully litigated in the civil case. Therefore, Dr. Bade contends that the Board and the family of Patient 1 stand in privity for purposes of *res judicata* and collateral estoppel, and those allegations should be dismissed accordingly.

State’s Argument Contra *Res Judicata* and Collateral Estoppel

The State argues that the Board was not a party to the prior litigation, nor was it in privity with the estate of Patient 1, or otherwise part of the civil action. Also, the State argues that the issues and desired outcome in the civil case were not the same as those of this action: (a) injury and causation from the alleged negligence must have been established in the civil case, but are not required in the Board action; and (b) the civil case sought monetary damages, but the Board action involves the determination of Dr. Bade’s fitness to practice medicine in Ohio.

Moreover, the State argues that, even if the elements of *res judicata* and/or collateral estoppel were met, it would be contrary to public policy to preclude the Board from carrying out its duty of public protection. In other words, preventing the Board from carrying out its critical police power would contravene public protection.

Dr. Bade’s Lack of Evidence Argument and the State’s Argument Contra

Separately, Dr. Bade moved at the end of the hearing to dismiss the allegations related to Patients 1 through 3 based on a lack of evidence, including the lack of expert testimony to support the

allegations that Dr. Bade failed to meet the minimal standard of care pursuant to Section 4731.22(B)(6), Ohio Revised Code. (Tr. at 726-727) Dr. Bade argues that the State's expert admitted on cross-examination that Dr. Bade had met the standard of care in her treatment of Patients 1 through 3 and, therefore, the allegations should be dismissed.

The State disagreed, arguing that Dr. Choo modified his opinions when presented with facts that were not part of the medical records, or only made available at the hearing through Dr. Bade's testimony. The State contends that the additional facts should be given little, if any, weight.

SUMMARY OF THE EVIDENCE

All exhibits, even if not specifically mentioned, were thoroughly reviewed and considered by the Hearing Examiner prior to preparing this Report and Recommendation.

Background

1. Shelly Bade, M.D., obtained an undergraduate degree in 1976 from Stephens College in Columbia, Missouri. She attended the University of Hawaii for one year and then transferred to New York University Tisch School of the Arts, from which she obtained a master's degree in Fine Arts in 1982. For several years, Dr. Bade was a professional dancer and dance teacher in New York City. She explained that, as a teacher, she developed a kinesiology-based exercise course for persons with disabilities and chronic disorders, as a gentler alternative to many of the then-available exercise programs. Also at that time, she did "runway work" for some of the major designers. (Tr. at 38-40)
2. In 1988, she entered medical school at Wayne State University in Detroit, Michigan, and obtained her medical degree in 1992. Dr. Bade completed a one-year internship in emergency medicine and completed two years of residency training in emergency medicine at The Ohio State University [OSU]. Dr. Bade did not complete the final, third year of the emergency medicine residency training program. Dr. Bade explained that she had been told that there was not a third-year position for her; that the residency program did not want to offer her a third-year position. (Tr. at 40-42)

Dr. Bade testified that, during her training at OSU, she had quite a few rotations involving pediatric emergency medicine, and she had many rotations at Children's Hospital in Columbus. (Tr. at 43)

3. Dr. Bade holds active medical licenses in Florida and Ohio. In June 2007, Dr. Bade obtained certification from the American Board of Urgent Care Medicine. Dr. Bade explained that she does not qualify for emergency medicine board-certification because she has not completed a three-year residency program in emergency medicine. (Tr. at 37, 44, 658, 709-710; Resp. Ex. P)

4. Dr. Bade currently resides in Florida and intends to work at an urgent care facility. She also would like to study hyperbaric medicine. She has no plans to work in an emergency department or to return to Ohio. (Tr. at 655, 658-659, 672)
5. In 1995, Dr. Bade joined what is currently known as Premier Health Care Services Inc. [Premier], a company that, among other things, provides emergency medicine physicians for emergency departments in central Ohio. While employed by Premier between 1995 and 2005, Dr. Bade practiced emergency medicine at Morrow County Hospital from 1995 to 2000, and, from 2000 to 2005, at Bucyrus Community Hospital [BCH] in Crawford County, Ohio. (Tr. at 43, 44-46) While practicing at BCH, Dr. Bade had occasion to treat Patients 1 through 3. (Tr. at 51, 108, 129)
6. Dr. Bade stated that the emergency department at BCH handled roughly 8,000 to 10,000 patients each year. She explained that BCH is a smaller hospital that services the surrounding, small rural communities. Important to the treatment of Patients 1 through 3 in 2002 is that BCH was not a level I or level II pediatric trauma care center and, by law, could not admit Patients 1 through 3 as pediatric trauma patients.¹ (Tr. at 46-47, 452, 550)

When on duty at BCH, Dr. Bade was the only physician in the emergency department, with one or two registered nurses and a licensed practical nurse also on duty. A respiratory therapist and a pharmacist were also available to be called into the emergency room when needed. (Tr. at 47, 666)

The Expert Witnesses Presented at Hearing

Michael C. Choo, M.D.

7. Michael C. Choo, M.D., testified as an expert on behalf of the state. Dr. Choo obtained his undergraduate and medical degrees from Boston University in 1983 and 1987, respectively. He completed residency training at St. Vincent Medical Center/Toledo Hospital in an emergency medicine residency program in 1990. Between 1990 and 2007, he completed: (a) a fellowship in administration/emergency department management, (b) a “mini-residency” in occupational health and environmental medicine at the University of Cincinnati School of Medicine, (c) training in hyperbaric medicine from the Undersea & Hyperbaric Medical Society, and (d) a master’s degree in business administration from the University of Tennessee. Additionally, Dr. Choo is certified by the American Board of Emergency Medicine, and has been one of its oral board examiners since 2002. Dr. Choo also holds academic appointments and has been an instructor or professor at the Medical College of Ohio, Emergency Medicine Residency Program at St. Vincent Medical Center/Toledo Hospital, the University of Cincinnati School of Medicine, the University of Kentucky, Wright State University School of Medicine, and the Ohio Department of Public Safety. (St. Ex. 4; Tr. at 162-164, 166-169, 173, 175)

¹Although no direct evidence of BCH’s trauma care status in 2002 was presented, the physician witnesses did not question whether Patients 1 through 3 were pediatric trauma patients, and did not question the need to transfer them to another pediatric trauma care center. (See, e.g., Tr. at 222, 289, 452, 592, 596)

8. Currently, Dr. Choo is: (a) Chief of Staff and Chief of Emergency and Outpatient Services at Clinton Memorial Hospital in Wilmington, Ohio; (b) President/Chief Executive Officer of Professional Emergency Specialists of Southern Ohio, Inc. and of Professional Primary Care Services of Southern Ohio, Inc.; (c) Medical Director of the Heart Emergency Department at Dayton Heart Hospital; and (d) Medical Director of Business Health Service at Fayette County Memorial Hospital. He has received numerous awards and honors, and he has been a member of numerous medical-related committees. (St. Ex. 4; Tr. at 169-172, 174)
9. Dr. Choo noted that, during his residency and the following year, he had participated in the Life Flight program, and was responsible for patients during emergency medical flights. He also noted that, while teaching at St. Vincent Medical Center, he trained Dr. McTague, one of the other experts who testified in this matter. (Tr. at 164-165, 167)

Marc S. Leder, M.D.

10. Marc S. Leder, M.D., testified as an expert on behalf of Dr. Bade. Dr. Leder earned his undergraduate degree from State University of New York at Albany, and earned his medical degree from State University of New York at the Brooklyn Health Science Center in 1986 and 1990, respectively. He completed residency training in pediatrics in 1993 at the Orlando Regional Medical Center/Arnold Palmer Hospital for Children and Women. He then completed a two-year fellowship in pediatric emergency medicine in 1995 at Children's Hospital/The Ohio State University. He holds medical licenses in Florida, Massachusetts, and Ohio. He is certified by the American Board of Pediatrics in pediatric medicine, and he also holds subspecialty certification in pediatric emergency medicine from the same board. Dr. Leder has published a book chapter, numerous articles, teaching materials, and abstracts, many of which are related to pediatric sedation. He has provided numerous presentations, many of which have addressed intubation and sedation. Additionally, Dr. Leder was invited to be and still is a founding board member of the Pediatric Sedation Society, which advocates for the needs of children and "procedural sedation." (Resp. Ex. B; Tr. at 425-427)
11. Currently, Dr. Leder is: (a) Attending Physician at Children's Hospital in Columbus, (b) Associate Professor of Pediatrics at The Ohio State University College of Medicine, (c) Medical Director of the Emergency Communication Center at Children's Hospital in Columbus, and (d) Co-Director of the pediatric analgesia and sedation service at Children's Hospital in Columbus. (Resp. Ex. B. at 1; Tr. at 426-427)
12. Dr. Leder noted that, while in his fellowship program at Children's Hospital, he had provided training to Dr. Bade when she had participated in a rotation there. (Tr. at 426)
13. Dr. Leder further noted that, when first approached to provide an expert opinion in this matter, he was reluctant to participate, but after reviewing the medical records he felt "very strongly, after reviewing it, that the accusations were inaccurate, and that I could make a very strong argument to support that, and was quite taken aback by the language in the [notice of opportunity for hearing]." (Tr. at 432)

14. Dr. Leder estimated that, in his 15 years of emergency practice, he has intubated more than 100 pediatric emergency patients. (Tr. at 502)

Jerome A. McTague, M.D., J.D.

15. Jerome A. McTague, M.D., testified as an expert on behalf of Dr. Bade. Dr. McTague graduated from the University of Toledo in 1982 with a bachelor's degree. He attended the University of Illinois for one year in a graduate program in physical chemistry, and then attended the Washington University Medical School in St. Louis, Missouri, for the following four years. He obtained his medical degree in 1991. Dr. McTague completed a three-year residency in emergency medicine at the St. Vincent Medical Center in 1994. He then began practicing medicine in northwestern Ohio. He is board-certified in emergency medicine. Additionally, Dr. McTague entered the University of Toledo College of Law in 1995 and obtained his juris doctorate degree in 2001. (Resp. Ex. D; Tr. at 555-556)
16. Dr. McTague currently is: (a) Attending Physician in the St. Vincent Medical Center's Emergency Department; (b) Instructor at the St. Vincent Medical Center's Emergency Medicine Residency Program; (c) Ottawa County Coroner; (d) Associate Professor at the Medical College of Ohio; (e) Medical Director of Harris-Elmore EMS, Sandusky County EMS, and Sandusky Township EMS; (f) Sandusky County Deputy Coroner; (g) Director of Memorial Emergency Specialists, Inc.; and (h) Partner in the Law Office of Stephen Skiver, M.D., J.D. For a number of years, Dr. McTague was the medical director of the St. Vincent Life Flight and St. Vincent Mobile Life Units located in northwestern Ohio. (Resp. Ex. D; Tr. at 556-558)
17. Dr. McTague has intubated pediatric patients and teaches pediatric intubation. He estimated that, annually, he intubates between 30 and 100 pediatric patients. (Tr. at 557-558, 605, 612-613)
18. Dr. McTague represented Dr. Bade during the civil case filed by the Administrator of the Estate of Patient 1 in Crawford County in 2003. He explained, however, that his appearance in this proceeding was to provide his opinions as a result of his background, training and experience as an emergency medicine physician, not as an attorney. (Tr. at 561, 602, 632, 633)

Orotracheal Intubation

The Process

19. Drs. Choo, Leder and McTague noted that evaluation and management of the patient's airway is one of the most important roles of an emergency physician, and placement of a tracheal tube is an important skill for the emergency physician. (Tr. at 221, 518, 575, 612, 615-616, 618; Resp. Ex. A at 8) The publication, *Trauma Management: An Emergency Medicine Approach*, also reflects that airway control is a paramount aspect of trauma care. (Resp. Ex. N at 3)
20. Orotracheal intubation is the "insertion of a tube through the mouth into the trachea to serve as an airway." (Dorland's Illustrated Medical Dictionary, 27th Edition, 1988) Dr. Leder referred to the intubation process that most patients in the emergency room receive as "rapid

sequence intubation.” During this process, two to three medications are used: a sedative, a paralytic and an adjunctive agent. The Sellick maneuver is performed to prevent aspiration of gastrointestinal contents. A laryngoscope is used to push aside the tongue and look into the throat. A tracheal tube, formerly called an endotracheal tube, is inserted by the physician between the vocal cords in the larynx. (Tr. at 65-66, 152, 449-450, 543; Resp. Ex. L at 3)

21. Dr. Bade explained that the different medications used in the intubation process are based upon the patient’s size and age. She further explained that she had used a special tape measure called the Broselow Tape to identify the appropriate medications for the intubation and resuscitation of pediatric patients. (Tr. at 67, 665)
22. Dr. Bade and Dr. Leder both noted that there is a brief period of time during the intubation process when the patient is not breathing either on his/her own or by outside assistance. (Tr. at 152, 450)
23. Drs. Leder and McTague testified that placement of the orotracheal tube is challenging and it is not unusual to make multiple attempts to intubate a patient. Moreover, Dr. Leder explained that, generally, children’s conditions require fewer intubations but, because a child’s anatomy is different, it is more challenging to intubate a young patient if the physician is more skilled in *adult* intubation. Dr. McTague added that the standard of care does not require a physician to obtain every intubation the physician attempts or to be successful on the second or third attempts. (Tr. at 518-519, 523, 578-579, 613)

Neither Dr. Leder nor Dr. McTague found any significance in the facts and statistics associated with Dr. Bade’s inability to intubate Patients 1 through 3 on her first attempts, which will be outlined below. (Tr. at 520-521, 606-607, 614, 617)

When to Intubate – In General

24. The Pediatric Advanced Life Support [PALS] Provider Manual, which is part of the PALS course,² lists the following as indications for tracheal intubation:
 - Inadequate control of ventilation by the central nervous system.
 - Functional or anatomical airway obstruction.
 - Loss of protective airway reflexes (cough, gag).
 - Excessive work of breathing, which may lead to fatigue and respiratory failure.
 - Need for high peak inspiratory pressure (PIP) to maintain effective alveolar gas exchange.

²The PALS certification course is offered by the American Academy of Pediatrics and the American Heart Association, and addresses resuscitation skills. Certification lasts for two years. According to Dr. Leder, PALS is a leader in credentialing and training individuals in mostly resuscitation skills, and provides recognized pediatric intubation standards. (Tr. at 429)

- Need for airway protection and control of ventilation during deep sedation for diagnostic studies.
- Potential occurrence of any of the above if patient transport is needed.

(Resp. Ex. L at 3)³ Based on the above, there does not have to be manifest clinical symptoms of airway obstruction or a breathing problem before it may appropriate to intubate a patient. (Tr. at 626-627)

25. Both parties' witnesses also discussed, in general, the indications for intubating a patient emergently. Drs. Choo, Leder and McTague testified that it is acceptable and within prevailing emergency medicine standards to intubate patients *at risk* of losing their airway, because, later, the patients could potentially experience problems with breathing. (Tr. at 226-227, 453-454, 467, 626-627)

Moreover, the experts addressed certain medical conditions, patient's Glasgow Coma Scale [GCS] measurement(s), the need for transporting the patient, and the anticipated course of treatment as factors that impact the need for intubation.

26. Dr. Choo testified that orotracheal intubations in the emergency setting are done for several specific medical conditions: cardiac arrest; respiratory arrest; failure of pharyngeal reflexes (to prevent aspiration); inadequate oxygenation/hypoxia; inadequate ventilation that results in elevated CO₂/hypertachypnea; airway obstruction occurring from airway trauma and facial trauma; anticipated obstruction from cerebral edema or burns; and indications for head trauma. With head trauma, Dr. Choo explained that, intubation helps limit the swelling of the brain to prevent uncal herniation. (Tr. at 193-194, 223, 321)

27. The conscious state of the patient was addressed by Drs. Bade, Choo, and Leder as also having an impact upon the need for intubation. The GCS measures the neurological status of a patient. Dr. Bade and Dr. Choo stated that patients who are in a coma measure an 8 or less on the GCS and are in need of intubation. Clinical judgment is used to decide whether to intubate a patient with GCS levels above 8. Dr. McTague also concurred that clinical judgment is used in deciding whether to intubate a patient. (Tr. at 151, 225-226, 321, 472-473, 475-476, 634)

Dr. Choo testified that a change in a patient's GCS from 15 to 12 would not automatically necessitate intubation, but it would require the physician to be more vigilant, and frequently monitor and assess the patient's neurological status. Similarly, Dr. Leder stated that a waning GCS indicates that there is the potential that the GCS will continue to drop and, if tests have not been conducted, the physician must work on the belief that the worst possible potential may be present. (Tr. at 349, 472-473)

28. The need to transport a patient is another factor. Dr. Choo admitted that he has intubated patients, preemptively, for transport purposes but only because there was a concern for the

³The copy of the PALS Provider Manual admitted in the record does not include its copyright date, or other information that identifies the period of time when it was published.

loss of the patient's airway, for respiratory arrest, cardiac arrest, hypoxia or hypertachypnea. Without such indications, Dr. Choo opined that it is improper to intubate a patient "just for transport." Drs. Leder and McTague differed, and testified that it is often more appropriate to prophylactically intubate a patient to avoid an airway crisis while in transit. (Tr. at 226-227, 594; Resp. Ex. A at 14, 17)

29. Dr. Leder explained that, for patients at risk, it is preferred that the intubations occur in the hospital trauma suite:

It's generally taught in emergency medicine that, you know, you want to do everything that you can to establish the airway prior to transport, because a worst-case scenario is that the patient would deteriorate en route between facilities and then would need this procedure, and that would then be in not an ideal setting without proper backup if there was a complication.

So we are generally taught and trained to prevent those things from occurring by prophylactically intubating prior to transport in a patient that may need it, so that their airway is protected and that they can then have a safe transport so they don't have complications en route.

(Tr. at 454; see also Tr. at 468, 470, 483, 548 and Resp. Ex. T at 1) Drs. Choo and McTague expressed the same preference for conducting intubations in the emergency room, when indicated. (Tr. at 166, 289-290; Resp. Ex. C at 2)

Similarly, *Trauma Management* reflects that orotracheal intubation should be performed under "the most controlled circumstances," and a helicopter is not such a place. The manual also reflects that patients with borderline airways (i.e., patients with a high probability of losing the ability to maintain their airways) should be intubated before boarding the helicopter. (Resp. Ex. N at 3-4)

30. In addition, Drs. Leder and Choo concurred that an emergency patient's anticipated course of treatment is also a factor for assessing whether to intubate the patient preparatory to a transport. Essentially, this consideration is intended to have the patient in the best position to receive the anticipated course of treatment upon arrival at the trauma center. (Resp. Ex. A at 13-15; Tr. at 300)

The Risks of Intubation

31. Dr. Choo testified that the risks of intubation are: death, hypoxia (due to air going to the stomach), tachypnea, and injuries. He also mentioned that complications of orotracheal intubation are: (1) inability to intubate and (2) pharyngeal reflex due to stimulation of the pharynx, which can lead to laryngeal spasms and bronchospasms, and bradycardia (slowing of the heart beat). (Tr. at 195, 201, 204, 207)
32. Dr. Leder stated that the complications of emergent intubations are: aspiration, failure to successfully intubate, hypoxemia, tachycardia, bradycardia, intubating the esophagus, right

main stem intubation, left main stem intubation, vomiting, death, laryngospasm, bronchospasm, laryngeal trauma, airway perforation, and bleeding. If the patient were a trauma patient, other risks would include spinal cord or vertebrae column injury. (Tr. at 507, 509-510)

Additionally, Dr. Leder noted that, for patients who are pharmacologically paralyzed during the intubation process, the potential for complications may increase with each failed intubation attempt. (Tr. at 516)

33. Dr. McTague also described risks associated with intubation. He stated that the typical complication associated with intubation is injury to the patient due to abrasions and/or trauma related to the insertion and placement of the tube. Also, he noted that failure to intubate is an expected complication. (Tr. at 607-608)

Patient 1 (His initials are DMH)

The Events at BCH

34. On October 13, 2002, Patient 1 was a four and one-half month old male. His father brought him to the BCH emergency department at 9:12 a.m. Patient 1 remained at the BCH emergency department for approximately three and one-half hours under the care and treatment of Dr. Bade. (St. Ex. 1A at 3; Tr. at 52-54, 56-57, 688)

35. The nurse who handled Patient 1's arrival reflected the following in the medical record:

Admit to ER carried by father. States started yest. afternoon [with] fever (101° AX) Emesis x 2, fussy, occ. cough, ↓'d appetite. Normal elimination. Infant fussy, warm to touch. See N's notes.

(St. Ex. 1A at 3) The nurse noted that, at 9:12 a.m., Patient 1's temperature was 102.6 degrees (taken rectally), his pulse rate was 132 beats per minute, and his respiratory rate was 36 respirations per minute. Additionally, the nurse reflected that Patient 1 had received at home hyoscyamine and Tylenol. (St. Ex. 1A at 3)

36. Dr. Bade stated that, shortly thereafter, she had heard Patient 1 grunting and had learned that he had a high temperature. She explained that she had instructed the nurse(s) to move him to a critical care bed in the emergency department. (Tr. at 82, 688)
37. Dr. Bade testified that, approximately ten minutes after Patient 1's arrival, she had first evaluated Patient 1. (Tr. at 78) Dr. Bade explained that Patient 1's heart rate was checked again at this time, and it had increased to 250 beats per minute. She stated that the increase in heart rate indicated to her sepsis⁴ and sinus tachycardia.⁵ (Tr. at 79, 97)

⁴Dr. Bade explained that "sepsis" is an overwhelming infection. (Tr. at 97) Dr. Choo agreed, adding that it is an overwhelming infection that has evidence of multi-organ involvement. (Tr. at 339) Dr. Leder defined sepsis similarly, as an overwhelming lack of perfusion to the body organs secondary to an infectious process. (Tr. at 446)

- Dr. Bade testified that, during the physical examination of Patient 1, she had recognized the fever, and that Patient 1 was having difficulty breathing. She first ordered: a pulse oximetry reading, administration of Tylenol for the fever, and a breathing treatment to see if it would improve Patient 1's breathing. Dr. Bade testified that, during this physical examination, she further noticed supraclavicular retractions, intercostal retractions, the way Patient 1's stomach was moving, and his capillary refill. Next, she ordered a chest x-ray and an intravenous [IV] saline bolus⁶ "so we could improve this patient's circulation." Dr. Bade also noted that the nursing staff tried, during her physical examination of Patient 1, to measure his blood pressure, but was unsuccessful. (Tr. at 59, 78; 81, 688-690, 692)
38. Per Dr. Bade's request, Patient 1's oxygen saturation level in the bloodstream was measured, based on room air, and was found to be 98 percent. (St. Ex. 1A at 3; Tr. at 60-61)
39. Dr. Bade explained that, after she saw no improvement from the breathing treatment or the IV, she started to consider intubation. Dr. Bade had then spoken with the pharmacist, asked him to get antibiotics ready (rocephin 100 mg/kg) and to "draw up and get ready for possible intubation, if that action needed to be taken." Next, around 9:30 a.m., Dr. Bade consulted Children's Hospital in Columbus. Children's Hospital in Columbus agreed to accept the transfer of Patient 1, and arranged the helicopter transportation through MedFlight of Ohio. (Tr. at 64, 81, 94, 692, 696-698)
40. Between 9:30 and 9:55 a.m., the staff and Dr. Bade began preparing for the intubation (setting up equipment, preparing the medications, etc.). Also, another fluid bolus and oxygen were provided. (Tr. at 697-699)
41. The nurse's notes reflect that, at 9:55 a.m., Patient 1's pulse was "230s," his respiratory rate was 60, and he was crying/grunting. (St. Ex. 8; Tr. 62)
42. Dr. Bade used atropine, valium and vecuronium⁷ to intubate Patient 1. At the time the medications for the intubation began to be administered at 9:59 a.m., Patient 1's pulse rate was 229 and his oxygen saturation level in the bloodstream was 100 percent. (Tr. at 63, 66; St. Ex. 1A at 3; St. Ex. 8)

⁵"Sinus tachycardia" is a condition in which the heart rate is excessive, with the origin in the sinus node of the heart. (Dorland's Illustrated Medical Dictionary, 27th Edition, 1988; see also, Tr. at 339, 444)

⁶"Bolus" is a concentrated mass of pharmaceutical preparation given intravenously for diagnostic purposes. (Dorland's Illustrated Medical Dictionary, 27th Edition, 1988) Dr. Bade explained that the amount of a "bolus" is based upon a person's weight or age. (Tr. at 103)

⁷Vecuronium is a paralytic. Dr. Bade initially testified that vecuronium lasts for three to eight minutes. However, Dr. Choo testified that it lasts up to 30 minutes. Similarly, Dr. Leder testified that the dose of vecuronium that Patient 1 had received would have lasted from 15 to 30 minutes. Dr. Bade later testified that she had estimated that the vecuronium that she had ordered for Patient 1 would have a duration of three to eight minutes, but that Dr. Leder correctly indicated that vecuronium can last 15 to 30 minutes. (Tr. at 67, 146, 218, 493, 664, 665, 673-674)

43. At 10:01 a.m., intubation was first attempted by Dr. Bade, but unsuccessful. Bagging was provided. No new medications were provided for the second intubation attempt. At 10:05 a.m., a second intubation was attempted by Dr. Bade, but was unsuccessful. (Tr. at 694-695)
44. At 10:08, cardio pulmonary resuscitation [CPR] began. (Tr. at 700; St. Ex. 8)
45. At 10:38 a.m., the MedFlight transport arrived at BCH. Dr. Bade testified and the nurse's notes reflect that two intubations were attempted by a member of the MedFlight crew, and the second intubation was successful. The MedFlight report indicates that one intubation attempt was successful by a MedFlight crewman at 10:47 a.m. However, the MedFlight report also indicates that, prior to the 10:47 a.m. successful intubation, the crewman used the laryngoscope at 10:40 a.m., suctioned mucus and resumed bagging. (St. Ex. 1A, at 5, 55; Tr. at 681, 683-687; Resp. Ex. G at 1, 3)
46. For approximately two hours, Dr. Bade and the MedFlight crew continued resuscitation efforts. Shortly after noon, a pulse was obtained and CPR ceased. At 12:40 p.m., Patient 1 was transported by MedFlight helicopter to Children's Hospital in Columbus. The antibiotic, rocephin, was sent with and administered en route by the MedFlight crew. However, Patient 1 died the following day, October 14, 2002. (St. Ex. 1A at 4-7; St. Ex. 8; Resp. Ex. G)

Dr. Bade's Emergency Room Report Regarding Her Treatment of Patient 1

47. Dr. Bade testified that, immediately after Patient 1 was transported to Children's Hospital in Columbus, she had dictated a report of her treatment of Patient 1. (Tr. at 114) That report states in part:

PHYSICAL EXAMINATIONS: VITAL SIGNS: Temperature 102.6°F rectally, pulse 132 and respiratory rate 36. At initial evaluation by the nursing staff, pulse ox[i]metry was being attempted and it was not correlating. This physician heard this infant crying at an accelerated rate on every breath more than 60 times a minute and requested this patient be brought to a critical care bed. HEAD AND NECK: This patient appeared still with wet mucus membranes. He was wide-eyed, no conjunctivitis. He was mouth-breathing and grunting with every breath more than 60 times per minute. Tongue appeared normal. There were supraclavicular retractions, assisted abdominal breathing and rocking horse-type respirations. He was kept seated upright and reclining on father's abdomen, while he was in a 90° position. Fontanel was flat. Left tympanic membrane appeared erythematous, no bulging is noted, and no purulence. The right tympanic membrane is normal in appearance. There appears to be no lymphadenopathy at this time. CHEST WALL: Reported as retractions. There is moderate to poor air exchange on initial evaluation. HEART: Very tachycardic rhythm when placed on a monitor and is running at 250 beats per minute, respiratory rate is over 60 and pulse oximetry is 100% on his room air. ABDOMEN: No rashes or abnormalities.

EXTREMITIES: A 5-second capillary refill. He is moving all extremities vigorously. NEUROLOGICAL EXAM: He is inconsolable and appears toxic. Parents are at the bedside.

When the patient was moved to a critical care bed, an IV was initiated and achieved after two attempts. IV fluid bolus of 70 ml was given at a 10 ml/kg ratio. He was given Tylenol 100 mg PR. Fluid bolus was repeated. Intubation medications were called for as well as Rocephin 100 mg/kg. The respiratory therapist gave an initial Albuterol aerosol. The patient remained tachycardic at 250 beats/minute, pulse oximetry was still 100 and he was still grunting with severe respiratory distress. Pretreatment with Atropine for rapid sequence induction was given at a 0.14 mg, Valium 2 mg, and Vecuronium 0.7 mg with good induction. A Miller laryngoscope was used for initial attempt at intubation. The patient was seen to have a sealed cleft palate from the front gingiva to the back. The epiglottis was bifid. There was mucus in the airway. Epiglottis was unable to be lifted due to its bifid morphology and a longer Miller laryngoscope blade was used. First attempt was aborted and respiratory therapy bagged the patient with 100% oxygen. The second attempt was made with a longer blade with a 3-0 ET tube and this also was not successful. The patient was oxygenation still at 100% with sedation. I chose to continue bagging to keep his oxygenation. At this point, I saw that his abdomen was distended and placed an OG tube and decompressed his stomach successfully. His stomach then became soft. The patient's heart rate then decreased into a bradycardia to 70 and then 40. I initiated CPR at this time. He was given a weight-based Atropine and followed 1 minute later by Epinephrine. There was no rapid increase in his heart rate. Rate was still 40. 5 minutes later, Atropine was repeated. CPR was continued. Pulse oximetry remained 90% or better. Another IV bolus 2 minutes later of Epinephrine was given. His heart rate went into the 70s for a brief period of time and then decreased gradually into a bradycardic rhythm. CPR was initiated again by myself. Epinephrine was then given IV push and an Epinephrine infusion was started. The patient remained in asystole and Atropine was repeated for the last time. Epinephrine infusions were increased methodically. The drip was a 1 mg/250 ml D5W and ultimately the Epinephrine drip was increased to 21 ml per hour. Med Flight arrived at this time and assisted in CPR. The initial OG tube was removed to facilitate proper visualization. On second attempt, the Med Flight attendant; Woody, did obtain a tracheal intubation. The patient maintained his pulse oximetry at 100%. He was still asystolic. I was then able to obtain a right femoral blood sample that was thought to be venous, it was dark in color and was a PH of 6.675, PCO2 of 102, PO2 24.8, and bicarb 11.2. We continued CPR. With this information, we gave a bicarb bolus as well as a third fluid bolus and an IO established in the left tibia by [Med] Flight attendant; Polly. The patient's saturations varied between 93 and 100%. Epinephrine bolus was again given but through the IO. There were occasional organized QRS complexes that would appear in 4 to 7 beats in a row and then disintegrate to

asystole. Repeat ABG was done and showed a PH of 6.68, PCO₂ 95, PO₂ 15.7, bicarb 10.6, and again this was a dark sample believed to be venous. We gave 2 more boluses through the IO. The PH then returned at 6.647, PCO₂ was 87, PO₂ 23.7, and bicarb was 9. Epinephrine infusion was systematically increased. The patient began having more organized QRS with longer duration than 7 beats. The Epinephrine infusion was increased to 21 at this time.

We then found a ventricular rhythm with a wider complex and an ST elevation on the monitor strip. CPR was stopped when a rate of 70 was noted. This rate did increase progressively within a 30 minute period. Pulse was noted, blood pressures were obtained at 66/30, and pulse oximetry was 93%. The patient was not responsive at this time. Med Flight staff had replaced a small OG tube with a larger OG tube and placed a Foley, as this physician was doing the ABGs. Epinephrine was maintained at 21 ml/hour infusion and one last ABG was obtained prior to transfer and showed a PH of 6.709, PCO₂ 43.4, PO₂ 119, and bicarb 5.2. I discussed this case four times with the attending physician at Columbus Children's Hospital; Dr. Mary Jo Bowman, throughout the Emergency Department course. I had discussed with the family every step of the way, the importance of all our actions, all our medications and reassured them that everything possible that we could be doing at this time was in process. All questions were answered to their apparent satisfaction.

Lab results returned showing a white blood cell count of 31.4, neutrophil count 56, bands are 7, lymphocyte count 28, and there was no anemia. Electrolytes were all normal with a glucose of 162 on his arrival. Rechecked Accu-Chek, during his Emergency Department resuscitation, showed an Accu-Chek level of 157. The patient had multiple blood gases that have been reported. He had blood cultures that are pending. A urinalysis was obtained after a Foley was placed and returned negative. Two chest x-rays had been obtained during his Emergency Department course. The initial chest x-ray shows mild cephalization and possible viral pneumonia in the upper lobes. There is no noted cardiomegaly, no dextrocardia, or any significant cardiac shadow abnormalities. There was no pleural effusion and no pneumothorax. After intubation by the Med Flight attendant, repeat chest x-ray was done and ET tube was above the carina yet in a good position. The chest x-ray shows no changes, no pneumothorax and good aeration. The patient was then flown to Columbus Children's Hospital. The last vital signs showed a heart rate of 158. He is bagged on 100% oxygen with 100% pulse oximetry, and blood pressure 87/34. Epinephrine IV infusion was being maintained. Total fluid bolus for this child is 310 ml. A discussion with the Columbus Children's Hospital attending is probable sepsis with respiratory arrest. * * *

(St. Ex. 1A at 55-57)

Dr. Choo's Approach to the Evaluation

48. Dr. Choo explained his approach to reviewing the medical records of Patient 1, as well as the medical records of Patients 2 and 3 as follows:

And as I review the chart, I take note of how the patient presented, you know, both from a perspective of the prehospital care, the nursing notes and the doctor's notes, of course, and then, you know, go through the chart, try to piece together a story that I can find to be logical so I can get a good picture in my mind as to how the patient presented, what was the surrounding circumstances that may have impacted the case, what was – what was the thinking and the thought process of the physician involved, and then whether the protocols or the diagnostic tests that were ordered seemed to follow some sort of a systematic way in working the patient up, and also in treating the patient. So, in essence, you know, I try to get a good picture as to the entry point of the patient, to the exit point, and see whether every step was systematic and made sense.

And if there is some issue or element that seems disjointed, or maybe out of place, or difficult to explain, then those things would be further investigated in a separate time.

And as I look at other cases, as I'm doing the review, if they seem to have some sort of a theme or some recurrence, then I become a lot more concerned and I'll summarize that in my report.

(Tr. at 186-188) Additionally, Dr. Choo explained that he had not focused on any past records or anything that occurred after the patients left the BCH emergency department because he felt that “those incidences or what happens outside the emergency department really is not relevant or germane” to his review. He explained that position as follows:

Well, it's not germane to my review because, you know, I'm – I'm looking at it from a perspective of the appropriateness of the assessment and the treatment, and the logic behind the physician's assessment and approach to the patient's care.

I believe that the decisions that are being made in the emergency department [are] being made by the physician at the time, and with information presented to the person at the time.

The decision that is being made is therefore being made with only the facts in front of you at the time, and not, you know, obviously the facts afterwards.

Hindsight is 20/20. I guess I feel if we knew all the answers beforehand, there wouldn't be a factor. But outcome does not dictate whether you did the right thing or the wrong thing.

The outcome really, to me, doesn't have any bearing. What does have a bearing to me is whether the physician who took care of the patient properly assessed the patient and made decisions that [were] appropriate given the circumstances that were presented to the patient – presented to the physician at the time.

(Tr. at 188-189; see also Tr. at 247-248, 253, 330)

Dr. Choo's Expert Opinion Regarding Dr. Bade's Treatment of Patient 1

49. After reviewing the medical records of Patient 1, Dr. Choo found that, to a reasonable degree of medical certainty, Dr. Bade deviated from the minimal standard of care because: (a) the documentation did not demonstrate that the indications for orotracheal intubation of Patient 1 existed at the time Patient 1 was intubated; (b) the abnormal vital signs cited by Dr. Bade did not justify the emergent intubation, but instead are indicative of supraventricular tachyarrhythmia [SVT]⁸ and, thus, warranted different treatment; (c) the documentation did not reflect Dr. Bade's consideration of abdominal conditions (such as incarcerated hernia, intussusception, metabolic disturbances like diabetic ketoacidosis, and meningitis) when Patient 1 presented with a history of fever, vomiting, distress and a prior diagnosis of "colic"; and (d) the antibiotic treatment ordered by Dr. Bade was not administered until almost four hours after arrival at BCH. As a result, Dr. Choo came to the conclusion that Dr. Bade did not understand the indications for orotracheal intubation. (Tr. at 181-182; St. Ex. 5 at 2-3)
50. Dr. Choo found that Patient 1 presented at the BCH emergency room with a fever, was unhappy, and had some respiratory symptoms. Dr. Choo found it odd that Patient 1 was given an aerosol treatment. Also, Dr. Choo found that, in light of the aerosol treatment, it was not unusual for the patient's heart rate to be elevated to 250 beats per minute. Likewise, Dr. Choo found that, since the child was being "worked on," it was not unusual for the breathing rate to become 60 respirations per minute. (Tr. at 191)
51. Dr. Choo could not discern from the documentation what lead Dr. Bade to "aggressively intubate the patient without doing some additional due diligence, meaning trying to decipher why the patient was having the symptoms that the patient had." Dr. Choo testified that he had believed that, prior to the first attempt to intubate, Patient 1 was in respiratory distress, but not severe respiratory arrest. Further, he stated that Dr. Bade's *testimony* described a higher degree of respiratory distress than he had gleaned from the medical record, but that higher degree of respiratory distress still did not justify intubation at the time that she first attempted it. Dr. Choo explained that, from his review of the medical records, he had thought

⁸Drs. Bade and Leder explained that SVT is an excessively high heart rate caused by an electric "short circuit" or abnormal pathway in the heart. The heart rate does not vary with activity, including crying. SVT can be tolerated by infants/children for 24 hours or more, although they may have difficulty eating and may perspire. (Tr. at 98-99, 443).

that Dr. Bade had been very concerned by the heart rate, and that she had intubated Patient 1 in order to treat the irregular heart rate. Dr. Choo stated that, instead, Dr. Bade should have first taken other measures, and in particular, a chest x-ray and blood gas evaluations. (Tr. at 192; 200, 342-343; see also Tr. at 282)⁹ In particular, Dr. Choo stated:

And so in this situation, I felt that you have a child – you have an infant who is having some symptoms of respiratory distress. And certainly, the fever, itself, does not seem to be, you know, the only reason that could cause tachypnea.

I would have thought that a – more workup would have been done to ensure that she knew – that the physician understands the etiology of the respiratory distress prior to acting on it; i.e., chest x-ray, a blood gas for sure.

And she did the right thing by getting the pulse-ox, which told me that the pulses [sic] was actually normal. So other reasons that you look for on a chest x-ray would be to look for that pneumonia we talked about, lung collapse – * * * other differential diagnoses that would help you to elucidate the reason for the respiratory distress.

And then, of course, the – the blood gas would certainly help you to identify whether the respiratory distress that you are seeing is a – is a compensatory mechanism rather than actual – the primary reason for the distress.

* * *

I guess what I'm trying to say is that when you have a respiratory distress appearance in a patient, that really all that is, is a symptom, and the question is why does this individual have that symptom, okay?

And the etiologies for those symptoms, some require intubation, others do not. And from my review of this particular case, I felt that there was no obvious indication, at the time that the intubation was attempted, to rule out the other reasons that could have caused the reason for the tachypnea and respiratory distress, * * *.

(Tr. at 199-201; see also Tr. at 228-229, 270) Dr. Choo acknowledged that grunting can be a sign of respiratory distress in infants, and is usually associated with hypoxia, alveolar collapse, pneumonia, or an airway obstruction. (Tr. at 196-197)

52. Before the hearing, Dr. Choo believed that the intubation was done because of Dr. Bade's concern for respiratory distress. At the hearing, Dr. Choo heard Dr. Bade testify that she had

⁹Dr. Bade obtained two chest x-rays of Patient 1 and had blood gas work done. The first chest X-ray was done before intubation and a second was taken after intubation. Blood was drawn prior to the first attempted intubation and after intubation. Blood gases were measured after the intubation and reflected in Patient 1's medical record. (St. Ex. 1A at 13, 19, 21, 25-33, 57)

consulted with Children's Hospital *before* deciding to intubate Patient 1. (Tr. at 272, 284) In light of her testimony, Dr. Choo stated that, if the intubation of Patient 1 had occurred in preparation for transport, his opinion would change:

Q. * * * You heard her testify that that's why she intubated this patient; that she was afraid that he would crash on the flight, and wanted to – because of signs and clinical indications of severe respiratory distress, and in order to protect the patient, she had the patient intubated after a consultation with Children's Hospital prior to and preparatory to a helicopter ride to Columbus.

Now, did you not get that from your review of the four corners of those records?

A. That was not at all mentioned.

Q. Okay. If that's the truth, okay, wouldn't that change your opinion, Dr. Choo, in evaluating my client and giving an opinion that could jeopardize her professional license?

A. If that was the main impetus for intubation, it would definitely change my perspective on my recommendation.

Q. And then would you agree with me that her decision to intubate the patient, Patient No. 1, was not below the standard of care?

A. The transportation component, no.

But I would like to add that it would be expected that she had done the workup to make sure there was no other reason that was affecting the individual to make it safe for the patient during transport. An example –

* * *

Meaning that if the physician intubated the patient for solely the purposes of sepsis, or in this case, my inference that it could be an SVT, then I would have a problem with that.

But if it's definitely based – solely based on transportation, assuming that there were other – assuming that the physician has screened to make sure there was no other catastrophic elements going on, that would change my perspective.

* * *

Q. Okay. And isn't that what she testified to today, Doctor?

- A. That's what she has claimed – Yes, that's what she said today.
- Q. And if you accept her sworn testimony today as being true, then you would agree that your opinion as to her treatment of Patient No. 1 should change and you should opine that she met the minimal standard of care, agreed?
- A. Assuming that – * * * Yes.

(Tr. at 284-287; see also Tr. at 351)

53. As noted above, Dr. Choo's second criticism with regard to Dr. Bade's treatment of Patient 1 was her interpretation of Patient 1's abnormal vital signs.¹⁰ In particular, Dr. Choo stated that the heart rate of 250 beats per minute was indicative of SVT, which would need to be treated via electrical cardioversion or medication conversion. Dr. Choo testified that, within a degree of medical certainty, Dr. Bade's failure to treat for SVT fell below the standard of care. Dr. Choo stated that he would have expected that either the physical examination or the physician's report would identify the thought process used to identify the reasons of the respiratory distress, but it did not. (St. Ex. 5 at 2; Tr. at 206, 208, 211, 212, 265-266, 271, 278)

However, Dr. Choo later acknowledged that, if Patient 1 did not have SVT as Dr. Choo had inferred from the medical record, he would no longer have a basis to make this second criticism. (Tr. at 278)

54. In his third criticism, Dr. Choo felt that Patient 1's history had not been adequately considered by Dr. Bade. He stated:

[T]he history of [the] 4 and ½ months old infant being recently diagnosed with "Colic" just two weeks prior to being seen in the emergency department with fever, vomiting, and distress – should have raised the clinician's suspicion for an abdominal pathology. * * * It is unusual for an infant to suddenly develop "colic around 4 and ½ months of age; and it is very critical for the clinician to have a high index of suspicion for other potentially life threatening conditions such as incarcerated hernia, intussusception, metabolic disturbances (diabetic ketoacidosis etc.), and meningitis especially when they present with fever and vomiting subsequent to being diagnosed with "colic."

Moreover, he stated during the hearing that, if the history was important enough to document, then it should have been considered as part of the differential diagnosis. Further, Dr. Choo opined that Dr. Bade did not adequately document the differential diagnosis considerations. (St. Ex. 5 at 3; Tr. at 214, 340, 254)

¹⁰As part of this second criticism, Dr. Choo commented about Dr. Bade's use of atropine during her attempts to intubate Patient 1. Dr. Leder responded to that comment in his report and testimony. However, the Board's notice of opportunity does *not* include any allegation regarding the use of atropine. Therefore, the Board should disregard the opinion evidence presented regarding that point.

55. With regard to Dr. Choo's last criticism in Dr. Bade's treatment of Patient 1, Dr. Choo stated that, if Dr. Bade's highest concern was sepsis at the time of Patient 1's presentation, the standard of care would have required that the antibiotic therapy be administered as soon as possible and, most certainly, within one hour after assessment. He noted too that the antibiotic should have been given before intubation. Dr. Choo had assumed, from his review of the medical record, that the antibiotics were not administered because Dr. Bade had decided to intubate Patient 1. However, Dr. Choo acknowledged that, once Patient 1 went into cardiac arrest, the resuscitation took priority over the administration of the antibiotics. (St. Ex. 5 at 3; Tr. at 214-215, 279-280, 341, 350, 351)

Dr. Bade's Opinion Regarding her Treatment of Patient 1

56. Dr. Bade responded to Dr. Choo's criticisms. First, Dr. Bade testified that she was very concerned about Patient 1's illness and knew she needed to have him transferred to another hospital. She explained that, at the time she first evaluated him, Patient 1 was experiencing respiratory distress, stating:

* * * when you have a patient who has been febrile, fever reported since the day before, with a temperature of 101 axillary, not rectal – they took the temperature underneath the arm, he reported, and that had gone on for 24 hours.

A temperature of 102.6 rectal in an infant this young, for that long, increases my suspicion that there is something seriously wrong and important.

When I saw the respiratory distress on examination, this enforced my concern for the severe illness of this patient.

(Tr. at 83) Dr. Bade also stated that she had made the decision to intubate Patient 1 when she had spoken with Children's Hospital the first time (around 9:30 a.m.). (Tr. at 94, 95) Dr. Bade explained how and why she decided to intubate Patient 1:

- A. I had been considering intubation because of the severe respiratory distress. And I had recognized and diagnosed the probable sepsis.

*I went and contacted, consulted with a doctor at Columbus Children's Hospital * * * Dr. Bowman, and we agreed that this patient needed intubation.*

I then decided to go ahead and start that intubation after consulting with her. She accepted transfer. She set up the actual Med Flight and got them alerted, and they were on their way.

- Q. Let me make sure this is clear for the record, though. You were responsible for this patient's care in the ER, correct?

A. Yes, I am.

Q. So it was your decision to intubate the patient, correct?

A. Yes, it is. But I also have to consider the receiving facility, the receiving physician. It's part of a logical pathway.

I need to have the patient accepted. I need to have transfer. I need to be able to stabilize that patient and confer with the accepting physician in this critically, critically ill patient.

Q. You're not saying it was Dr. Bowman's decision?

A. No, we agreed. * * *

(Tr. at 63-64, emphasis added; see also Tr. at 69, 696)

57. Dr. Bade elaborated upon the factors or indicators that she had observed and considered in her decision to intubate Patient 1:

I recognized the severe respiratory distress the patient went into. It was a dramatic change from what appeared to be a normal vital signs [sic] in the very beginning.

I appreciated this dramatic change in the respiratory effort. This is called respiratory distress. This worsened.

I could go into detail about the – what is a respiratory distress. My main concern was that this patient was in respiratory distress, and I didn't want that patient to go into respiratory arrest.

Now, in the chart I document grunting on every respiration. I say nasal flaring, supraclavicular retractions, intercostal retractions. This is the infant trying to suck air in at a very rapid rate with every muscle [he has] got. The abdomen starts rocking back and forth because it's trying to help.

(Tr. at 72)

58. Dr. Bade also addressed Dr. Choo's claim that Patient 1's symptoms indicated SVT and that she had failed erroneously to treat for SVT. Dr. Bade stated that Patient 1's high heart rate, alone, could have indicated SVT at the time she first evaluated him, but she had not believed it was SVT for several reasons: (a) Dr. Bade saw varying heart rates on the bedside heart monitor; (b) fever is not associated with SVT; (c) respiratory distress is not associated with

early SVT; and (d) sepsis is not associated with SVT. (Tr. at 97-98, 151) Additionally, she testified as follows:

Q. Did you consider SVT in this case to be a potential condition that Patient 1 was suffering from?

A. I didn't have to consider the SVT because I was reading the monitor. The monitor at the bedside showed me the heart rhythms, and the heart rates. They were varying. That doesn't happen with SVT. There were varying heart rates. As I said before, when I first examined this patient in the severe respiratory distress, there was a heart rate of 250. That was what I saw as a peak heart rate.

And after – And that's when they progressively decreased in a gradual manner, all the way down the rest of the course until we had to resuscitate this patient.

Q. Is there anything in the record that indicates that this heart rate was extremely variable, as you indicate?

A. No. Unfortunately, the central cardiac monitor – not just the one at the bedside, the one that records realtime continuous monitor heart rates for the entire time any patient is in that emergency department, that central monitor wasn't turned on.

(Tr. at 99-100; see also Tr. at 147-148, 150) Dr. Bade explained that, because the central cardiac monitor was not operating before the intubation process began, Patient 1's medical record from BCH does not contain his heart rate monitor readings taken before the intubation process began. (Tr. at 148-50)

59. With regard to Dr. Choo's third criticism about consideration of abdomen-related conditions, Dr. Bade noted that the focus of her dictation was to summarize Patient 1's course of treatment at BCH for the "benefit of the receiving hospital;" it was not a narrative of all of the possibilities of what his condition could have been. She stated: "I didn't document what wasn't going on and all possibilities." (Tr. at 106, 107-108)

On Patient 1's medical record, Dr. Bade reflected her impressions of Patient 1's condition, or the working diagnosis that she had had at the time. She explained that she had completed that portion in the medical record after Patient 1's arrival at BCH and before he was transferred. She listed: (1) pediatric respiratory arrest; (2) febrile illness;¹¹ and (3) sepsis. She further stated that she did not discuss or address any other conditions in the medical report because she had not felt that there were other conditions "going on." (St. Ex. 1A at 3; Tr. 59-60, 102, 105, 106)

¹¹Dr. Bade testified that "febrile illness" is a fever illness or fever sickness. (Tr. at 102)

60. Also, Dr. Bade disagreed that incarcerated hernia and intussusception, as mentioned by Dr. Choo, were indicated in Patient 1's case:

- Incarcerated hernia: Dr. Bade stated that incarcerated hernia occurs when a segment of the bowel becomes impinged and the blood supply is stopped, becoming necrotic. In other words, an incarcerated hernia is a piece of the bowel that gets stuck. She agreed that an incarcerated hernia has similar symptoms to Patient 1's symptoms, but she did not consider that condition because she did not have any family history to support an incarcerated hernia and because the physical examination did not support an incarcerated hernia. (Tr. at 106, 107)
- Intussusception: Dr. Bade testified that intussusception occurs when the bowel is "sucked into itself, kind of like rolling a stocking down over itself." She agreed that intussusception has similar symptoms to Patient 1's symptoms, but she did not consider that condition because she did not have any family history that would have lead her to consider it. (Tr. at 107)

61. With respect to Dr. Choo's fourth criticism, Dr. Bade noted that she took the following affirmative steps to treat sepsis:

- (a) Ordering the IV and a fluid bolus in order to increase and improve Patient 1's circulation, since sepsis can cause a circulatory collapse.
- (b) Ordering a second fluid bolus after the first bolus did not result in any improvement upon Patient 1's condition.
- (c) Ordering the antibiotic rocephin.

(Tr. at 103-104) Dr. Bade explained that she had ordered the antibiotic, but Patient 1's condition then worsened and other actions took priority over dispensing the antibiotic. As a result, the antibiotic was not given until Patient 1 was en route to Children's Hospital. (Tr. at 104)

Dr. Leder's Expert Opinion Regarding Dr. Bade's Treatment of Patient 1

62. Dr. Leder concluded that Dr. Bade's treatment of Patient 1 met the minimal standard of care. He addressed each of Dr. Choo's criticisms. (Tr. at 439, 543; Resp. Ex. A at 2-12)

63. First, with regard to the contention that there lacked appropriate clinical indications to justify intubation, Dr. Leder stated that the description of Dr. Bade's physical examination of Patient 1, along with the laboratory results that were available, is "consistent with that of a patient in extremis (likely sepsis) where attention to definitive airway management is indicated particularly in anticipation of the need for stabilizing the patient prior to transport to a tertiary center for definitive care." He found that Patient 1 was at risk of respiratory failure without intubation. (Resp. Ex. A at 8; see also Tr. at 449, 451-454)

Additionally, Dr. Leder concluded that Dr. Bade handled the failed intubation appropriately and within the standard of care. (Tr. at 543) Dr. Leder stated:

Orotracheal intubation is a skill that sometimes is unsuccessful in even the most experienced hands. Intubation attempts can be made even more challenging if there are anatomic variations to the patient's airway. The Emergency Department Physician in this case reported that the intubation attempts were complicated by an anatomic variant of the epiglottis that was verified at autopsy * * *. Thus in the case of a difficult intubation such as this, having a plan in place in the event of intubation failure is of utmost importance. * * * In this case [bag-valve-mask] BVM ventilation by an experienced Respiratory Therapist was continued until successful tracheal intubation upon the second attempt by a member of the Med-Flight crew. BVM ventilation during the resuscitation appears adequate as described in the medical record. Oxygenation also appears appropriate with O₂ saturation documented in the 90 to 100% range throughout the course of the resuscitation per the medical record. The arterial blood gas (ABG) samples obtained are challenging to interpret as the first sample was obtained at 11:02 am approximately 57 minutes after the first intubation attempt (10:05 am) and thus may reflect either poor ventilation at the time the blood gas was obtained (13 minutes after the 10:49 am successful tracheal intubation) or an overall poor perfusion state with a lactic acidosis secondary to the prolonged resuscitation.

(Resp. Ex. A at 9-10)

64. Dr. Leder disagreed with Dr. Choo's claim that Dr. Bade should have recognized and treated Patient 1 for SVT, rather than sinus tachycardia. He reached that conclusion for several reasons:
- (a) The patient record demonstrates heart rate variability (Patient 1's heart rate varied – 132 beats per minute at 9:12 a.m., “230s” at 9:55 a.m., and 250 at another time), which would not typically be associated with SVT.
 - (b) It would be “highly unusual” for a patient of this age with SVT to not present with a heart rate greater than 220 beats per minute, and to deteriorate in a matter of minutes into SVT with poor perfusion.
 - (c) This patient's history was consistent with sinus tachycardia because the patient did not have prior episodes of SVT and the patient did not present with “impending congestive heart failure with low cardiac output (i.e., sweating with feeds).”
 - (d) The nurses' notes suggest that the respiratory albuterol aerosol therapy was begun before the reported heart rate of “230s” at 9:55 a.m. He further stated that the albuterol would “acutely increase the heart rate synergistically with the hyoscyamine which the infant was taking secondary to reported colic.”

- (e) There was no history of Wolff-Parkinson-White conduction disturbance with a reentry circuit.¹²

(Resp. Ex. A at 2-4) Dr. Leder concluded that Dr. Bade should not be at fault for withholding treatment for SVT and her practice was within the standard of care in this regard. Moreover, Dr. Leder stated that, in his opinion, Dr. Bade would have fallen below the standard of care if she had given cardioversion to treat SVT. (Resp. Ex. A at 7; Tr. at 441-443, 447-448)

65. Dr. Leder also addressed the abdominal etiologies referenced by Dr. Choo. Dr. Leder stated that there was no report of an incarcerated hernia from the parents upon changing his diaper, and it was not present upon physical examination at BCH and, therefore, Dr. Leder concluded that Dr. Bade cannot be critiqued for not addressing something that was not present. Similarly, Dr. Leder stated that there was no report of painful episodes from the parents, and no symptoms of intussusception were present upon physical examination at BCH. Additionally, he points out that intussusception was not found at autopsy. As to diabetic ketoacidosis [DKA], Dr. Leder noted that the blood work and urinalysis do not support a diagnosis of DKA. Dr. Leder stated that he considered the other conditions mentioned by Dr. Choo to be “way low on the list of possible differential considerations,” and were not conditions that mandated consideration. (Resp. Ex. A at 11-12; Tr. at 460, 462, 539)

In Dr. Leder’s view, Patient 1 met the criteria for sepsis because of the fever, poor perfusion, ill appearance, and respiratory distress, and was managed for what he had, which was fever and signs of sepsis. Dr. Leder also noted that Patient 1 ultimately was diagnosed with sepsis. Dr. Leder opined that the standard of care requires very thoughtful considerations in the care of the patient, and requires the physician to “go through a litany of possibilities, but you do not document all of those.” Dr. Leder described Dr. Bade’s report as “very good.” (Tr. at 460, 462, 446)

66. With regard to the argument that Dr. Bade failed to provide timely antibiotic treatment, Dr. Leder points out that the medical record reflects that Dr. Bade had ordered antibiotics within one hour of Patient 1’s presentation to BCH, which is within the standard of care for considering antibiotic treatment in a patient who appears septic or toxic. Dr. Leder also noted that “hold” was written next to the rocephin order on the medical record, reflecting the other more urgent medications being needed because Patient 1 was suffering cardio-respiratory arrest and agreed that other medications would take priority. Dr. Leder further opined that it is not unusual for antibiotics to be administered during the transport of a critically ill patient. Furthermore, Dr. Leder stated that the goal is to have the antibiotic administered as ordered, and the physician has to do his/her best to verify that the order is carried out. (Resp. Ex. A at 10-11; Tr. at 457-459, 535-536)

¹²Dr. Leder also pointed to other information in the Children’s Hospital medical records of Patient 1 as further support for finding that the elevated heart rate was consistent with sinus tachycardia and not SVT. (Resp. Ex. A at 5) This other information was gathered subsequent to Dr. Bade’s treatment of Patient 1.

Dr. McTague's Expert Opinion Regard Dr. Bade's Treatment of Patient 1

67. Dr. McTague stated that Dr. Bade's treatment of Patient 1 met the minimal standard of care. Dr. McTague noted that he had reached this conclusion based upon his review of Patient 1's medical records, the autopsy report and the death certificate. He testified that he did not base his conclusions upon any information he may have received while representing Dr. Bade in the civil suit. (Resp. Ex. C at 2; Tr. at 566-567)
68. First, Dr. McTague stated that Dr. Bade made the correct diagnostic impression of Patient 1. Like Drs. Choo and Leder, Dr. McTague found that Patient 1 was in respiratory distress. (Tr. at 574) However, Dr. McTague pointed out that those vital signs changed for the worse, and, upon taking that into consideration, Dr. McTague concluded that it would have been below the standard of care to not have considered intubation of Patient 1, stating:

* * * [T]his is a four-month-old child that is toxic, that is septic, and [who] presents and worsens during the emergency department stay. That is absolutely – That's the highest priority that [the] emergency physician has to address.

(Tr. at 575) He further stated that Dr. Bade had made the appropriate choice to intubate Patient 1 when the child deteriorated further and had to be transported to Children's Hospital, stating: "This was not a child which was able to be cared for at Bucyrus Community Hospital, and so she was moving in that direction of a very sick infant. And her choices and her judgment and her decision to intubate were entirely appropriate." Dr. McTague also concluded that Dr. Bade met the standard of care after the intubation became difficult. He explained that gaining the intubation is not the measure of success; rather, it is controlling the airway. Dr. McTague found that Dr. Bade had controlled Patient 1's airway even though she was not able to intubate him. (Resp. Ex. C at 1; Tr. at 569-571, 577)

69. Furthermore, Dr. McTague stated that Dr. Bade made the correct diagnostic impression of Patient 1 and correctly did not treat for SVT for three reasons. First, Dr. McTague concluded that Patient 1's febrile condition did not support a finding of SVT. Dr. McTague stated that, a vast majority of the time, patients only have one diagnosis that accounts for the entire presentation. Because Patient 1 had a fever and SVT does not ever have a fever associated with it, Dr. McTague concluded that Dr. Bade correctly did not treat for SVT. Second, Dr. McTague concluded that the tachypnea/retractions/grunting and severe respiratory distress would lead a reasonable physician to conclude that Patient 1 was infectious and consistent with sepsis. Third, Patient 1's heart rate varied, which is not seen in a patient with SVT. (Resp. Ex. C at 2; Tr. at 572-573)¹³

¹³Like Dr. Leder, Dr. McTague also pointed to other information in the Children's Hospital medical records of Patient 1 as further support for finding that the elevated heart rate was consistent with sinus tachycardia and not SVT. (Resp. Ex. C at 2) This other information was gathered subsequent to Dr. Bade's treatment of Patient 1.

70. With regard to consideration of abdominal etiologies and a lack of documentation thereof, Dr. McTague found that Dr. Bade had met the standard of care in developing her diagnostic impression, and he described Dr. Bade's report as superlative. In particular, he stated:

She has two and a half pages of typewritten notes that describe in detail what occurred to this patient during the hospital stay there in her emergency department.

The specific questions that Dr. Choo raised in his report address diagnoses which I would not consider to be part of this differential of this child that presented. He mentioned specifically a number of abdominal complaints. This is not a patient that presented with any abdominal complaint in the history at all, either obtained by Dr. Bade or by the nursing staff.

This was a child that presented with a febrile illness, chief complaint was fever. That's what they told the nursing staff, as well. They described emesis, or vomiting, and cough, and in fact, described – the nurse describes normal elimination, which means the bowel movements were normal. But there was nothing here to indicate a concern of an intussusception or a bowel obstruction.

Those are matters which – and, again, they would be refuted by the history, or the history isn't something that makes you think of those as possible diagnoses.

(Tr. at 582-583) He expounded upon this opinion, explaining that Patient 1's presentation in the emergency department (fever, vomiting, cough and later, respiratory distress) is "not something that would bring to mind the history of colic as a contributing factor" and, therefore, it did not appear to Dr. McTague that an abdominal issue was involved. However, he conceded that vomiting is a symptom of intussusception and incarcerated hernia. (Tr. at 640-644)

71. Finally, with respect to Dr. Choo's criticism about the antibiotics, Dr. McTague found that Dr. Bade had appropriately ordered antibiotics for Patient 1 and was within the standard of care in doing so. He further stated that the standard of care does not require that ordered antibiotics be given within a particular period of time for a patient like Patient 1. He agreed that the antibiotics should have been given as ordered by Dr. Bade, but Patient 1 had deteriorated thereafter, and his resuscitation took priority over the administration of the antibiotics. (Resp. Ex. C at 2; Tr. at 580-581)

Autopsy Report and Death Certificate

(This evidence was gathered subsequent to Dr. Bade's treatment of Patient 1.)

72. An autopsy of Patient 1 was conducted on October 16, 2002. The report indicates that organ damage from hypoxemia occurred.¹⁴ Also, the report states in part:

Interestingly, ischemic damage to the liver (centrilobular necrosis) is not seen, but zone one necrosis is. It was more prominent in the right lobe and exists as scattered single cell necrosis and bands of necrotic cells at the limiting plate. This lesion is viewed as having a toxic etiology, namely, from a bacterial sepsis or from an exogenous toxin.

Blood cultures at Bucyrus [C]ommunity [H]ospital as well as post mortem cultures of the blood, lungs, and cerebrospinal fluid were all negative. A tracheal aspirate at Children's Hospital grew *Streptococcus viridans*. A culture of the middle ear (taken after brain removal) grew rare *Lactobacillus* species and a few *Bacteroides fragilis* group. All of these likely represent contaminants. Histologic examination of the middle ear specimens did show purulent exudate in the mastoid air cells (side not specified) confirming an otitis media. However, no meningitis was noted on examination of the brain, and the CSF culture as stated above was negative. Thus, while sepsis fits the clinical presentation, the source of the sepsis can not be established with certainty. Initial laboratory studies in Bucyrus [Community Hospital] did show a white count of 31,400 (56% PMN, 7% bands) and a thrombocytosis of 894,000. This could be indicative of sepsis or a non-specific acute phase response.

The infant had a prescription for hyoscyamine for colic. This is an anti-cholinergic drug that in excess can produce fever, irritability and tachycardia. The parents report administering the correct dosage, and these symptoms are non-specific, also expected in a toxic condition like sepsis. * * *

Attempts to understand the tachycardia included a thorough examination of the heart, including evaluation of the coronary arteries and microscopic examination of the conduction system. These studies did not show a pathologic process that could explain the tachycardia, however, the right coronary artery had an abnormal origin. Rather than being centered in the sinus, it was posteriorly placed adjacent to where the valve cusp attaches to the aorta. It is notable that in one series of anomalous coronary arteries * * * 27 of 1200 (2.2%) hearts in a collection of congenital heart disease were found to have

¹⁴Dr. McTague testified that, for Patient 1, it was not an airway failure that caused hypoxemia in Patient 1; it was a failure of the whole system failing from the overwhelming infection. Essentially, Patient 1's blood pressure fell, his heart rate increased and his respiratory rate increased. He was not able to circulate enough of his blood to get enough oxygen to his tissues, resulting in hypoxemia. (Tr. at 609, 638)

anomalous coronary arteries, and 17 (59%) of these patients had a “sudden death”. The possibility that this infant’s [sic] aberrant origin of his right coronary artery could have played a major role in his arrest can not be underscored too heavily. The fibrous plaques and medial calcifications in the aorta appear to be incidental findings. The significance of the endocardial thickening in the left atrium is not clear, although it deserves mention that endocardial fibroelastosis is associated with sudden death.

In conclusion, this infant sustained significant hypoxemia during a prolonged resuscitation that resulted in multi-organ failure and brain death. The inciting event is not clear. His clinical presentation and autopsy findings support a toxemia, possibly a culture negative sepsis.¹⁵ Complications secondary to his anomalous coronary artery must be considered, but the significance of the finding in this particular case can not be further assessed.

(St. Ex. 1 at 129-131) The death certificate, as supplemented, listed the immediate cause of death as toxemia and “probable culture negative sepsis.” (Resp. Ex. E at 2)

Patient 2 (His Initials are DT)

The Events at BCH

73. On April 3, 2002, Patient 2 was 17 months old. His mother brought him to the BCH emergency room at 2:27 p.m. Patient 2 remained at the BCH emergency department for slightly more than one hour under the care and treatment of Dr. Bade. (St. Ex. 1A at 3; Tr. at 52-54, 56-57, 700)

74. The nurse who handled Patient 2’s arrival reflected the following in the medical record:

To ER carried per mother’s arms. [With] BPD. His falling from second story window landing on concrete. Abrasion to [left] forehead 2X2 in. Slightly bleeding. Bruises to [left] forearm. Abrasions to both arms, abd, [left] UQ, legs. Moves all extremities XY, crying. Lung sounds clear Bilat. (+) peripheral pulses. Abd. Soft. Immediate C-collar + B. Board.

(St. Ex. 2 at 3) At the time of Patient 2’s arrival, his pulse was 125 beats per minute, and his respiratory rate was noted as “crying,” and his oxygen saturation level in the bloodstream was 96 percent. (St. Ex. 2 at 3; Tr. at 110)

75. It is not clear exactly when Dr. Bade initially examined Patient 2. However, Dr. Bade found multiple injuries upon her physical examination of Patient 2. She stated that the following were her important findings at that time: injuries around the head; injury where the spleen is

¹⁵Dr. Leder explained that a “culture negative sepsis” is a clinical condition consistent with sepsis, but the fluids cultures do not grow a bacteria or virus. In such a circumstance, he stated that the patient could still have sepsis, but the nature of the sepsis is not determined. (Tr. at 546)

located; injury on his back, in the flank, torso and ribs; blood at the nose; and a broken left arm. (Tr. at 111, 116-117)

In addition, Patient 2's medical record does not identify when Dr. Bade contacted Children's Hospital in Columbus. Dr. Bade testified that, after she had assessed Patient 2, she had contacted Children's Hospital for acceptance of his transfer because Patient 2 "in no way belonged in Bucyrus emergency department for any extended period of time." Instead, she stated that Patient 2 needed to be moved to a Level 1 pediatric trauma center. (Tr. at 115, 117-118)

Moreover, Patient 2's medical record does not identify when he had two chest x-rays taken, but the second one took place after the successful intubation, which is discussed below. (St. Ex. 2 at 29-31)

76. At 2:30 p.m., the nurse's notes reflect that Patient 2 was crying and not consolable. Shortly thereafter, the nurse's notes reflect that Patient 2 was crying and was "pulling arms and legs." (St. Ex 2 at 5)
77. At 2:45 p.m., the intubation medications began to be administered. Dr. Bade used versed and pancuronium. Dr. Bade suctioned "a lot of blood" from his airway during the first attempt, but was not successful in intubating Patient 2. Bagging was done and a second attempt to intubate Patient 2 at 2:49 p.m. was successful. (Tr. at 702, 713; St. Ex 3 at 3, 5)
78. At 3:15 p.m., Dr. Bade had a CT scan taken of Patient 2's head. The CT scan revealed that there was no bleeding in the brain, no cerebral contusion or hemorrhages, and no skull fractures. (St. Ex. 2 at 3, 27; Tr. at 123, 124)
79. At 3:35 p.m., the MedFlight transport arrived and took Patient 2 to Children's Hospital in Columbus. (St. Ex. 2, at 5)

Dr. Bade's Emergency Room Report Regarding Her Treatment of Patient 2

80. Dr. Bade testified that, immediately after Patient 2 was transported to Children's Hospital in Columbus, she had dictated a report of her treatment of Patient 2. (Tr. at 113, 114) That report states in part:

HISTORY OF PRESENT ILLNESS: * * * It was reported to this physician, they thought he might have fallen from a second floor window. Mother had transported this infant to the Emergency Department on her own and carried him in, in her arms. The child initially appeared to be alert, angry and moving all extremities. Glasgow coma scale of 15. * * *

PHYSICAL EXAM: On arrival the patient is tachycardic at 125, pulse oximetry is 96% on room air, and respiratory rate is rapid. He is crying with each breath. Blood pressure is obtained at 136/78 initially. Blood pressure, as

well as the tachycardic heart rate between 169 and 142, remained stable throughout his Emergency department evaluation and care for immediate transfer. This patient required critical care by all team members, as well as this physician, for approximately 1 hour. Significant in his evaluation is the fact that he was [pupils equal, round, reactive to light, extraocular movements intact]. He was not following commands. He was not cooperative. He was combative. There is blood at bilateral nares. No nasal bridge deformity noted. There is an abrasion over the left supraorbital region with no hematoma appreciated and no step off. Scalp shows no other abrasions, contusions or hematomas. External ear canals and tympanic membranes are normal in appearance. There is no hemotympanum. NECK: C-spine was immediately held by nursing staff and he was secured to a backboard. CHEST WALL: Abrasions over the left anterior ribs, as well as the left upper quadrant of the abdomen. The patient had guarding with crying with his abdominal muscles and, at this time, there does not appear to be any rebound. There is also an abrasion over the right flank. Chest wall shows no other traumas, ecchymoses, or lacerations. There is no asymmetric movement. Trachea is midline. LUNGS: Clear to auscultation bilaterally from base to apex anteriorly. HEART: Tachycardic rhythm, no murmur. ABDOMEN: As described, he is an uncircumcised, male and dry diaper is noted. RECTAL EXAM: Guaiac negative at this time. EXTREMITIES: Significant deformity at the left distal radius. He pulls this extremity away to pain and is guarding this extremity. He does have spontaneous movement of all digits and normal pulses. There is pain to palpation of the distal radius but not of the shoulder or elbow regions. NEUROLOGICAL EXAM: Initially, of crying and being appropriate. The crying became more methonacal [sic]. He was inconsolable and became more combative. Because of his combative nature, a C-spine immobilization became more difficult.

PROCEDURE: This child was given sedation initially of Valium 4 mgs IV push and did not improve his combativeness. He was then prepared for intubation with Versed 2 mgs and Pancuronium of 1 mg. Intubation was successful on second attempt. The first attempt showed that there was a copious amount of bright red blood in the airway that needed suctioning. Patient had a 4.0 ET tube placed without any complication. Chest x-ray obtained showed the ET tube advanced down the right mainstem bronchus, it was advanced back 1 cm and re-x-ray shows good inflation of both lung fields. After ET tube had been placed, lung fields had been checked, abdomen showed no complication, there was a distended stomach, at this time, an NG tube was placed at intimate low wall suction to decompress the gastric air. IV had been in place on his immediate arrival. A splint was placed to his left forearm. A CT scan was obtained of his head and shows no obvious intracranial bleed at this time. All of these x-rays were copied and sent with the patient to Children's Hospital. * * *

- DIAGNOSIS:**
1. Major trauma.
 2. Head injury.
 3. Left thorax abrasions, contusions.
 4. Left forearm fracture.
 5. Rule out cerebral contusion versus external¹⁶ injury.
 6. Rule out intraabdominal hemorrhage.
 7. Rule out cervical injury.

(St. Ex. 2 at 33; Tr. 115, 703-704)

Dr. Choo's Expert Opinion Regarding Dr. Bade's Treatment of Patient 2

81. After reviewing the medical records of Patient 2, Dr. Choo found that, like Patient 1, Dr. Bade deviated from the minimal standard of care because the documentation did not demonstrate that Dr. Bade had understood the indications for orotracheal intubation for Patient 2. Dr. Choo noted that, within 23 minutes of Patient 2's arrival, he was orotracheally intubated. Dr. Choo found that Patient 2 presented for an "acute trauma evaluation" and that airway control is a paramount step in managing pediatric emergencies, including trauma victims. However, Dr. Choo concluded that Patient 2's medical record did not document or exhibit any clear evidence of meeting any of the indications for pediatric orotracheal intubation, stating further that "there was no clear evidence of any increased intracranial pressure from head trauma as well as no evidence of any airway compromise." (Tr. at 181, 219; St. Ex. 5 at 3, 4)

Dr. Choo also pointed out that there was no evidence of any respiratory distress or failure or any concern for respiratory decompensation at the time Dr. Bade intubated Patient 2. Rather, Dr. Choo stated that Patient 2 had "within normal" vital signs and pulse oximetry. (Tr. at 297)

82. Dr. Choo acknowledged that Patient 2 needed to be transferred to Children's Hospital because of the nature of the trauma. (Tr. at 222, 289) Yet, Dr. Choo believed that an extensive workup should have been done prior to any decision to intubate Patient 2, and Dr. Bade's actions fell below the standard of care for that reason. Dr. Choo testified:

And certainly the child may have had a head injury from the history, as well as the findings. But again, indications for intubation – emergent intubation in head injury is not so much the head injury, but it's to treat cerebral edema and potential herniation.

* * *

So in this situation there was no evidence of any explicit criteria that would indicate emergent intubation, and I would have done the diagnostic workup

¹⁶Dr. Bade hand-wrote her diagnostic impressions in Patient 2's record as well. In her fifth impression, she had written "versus axonal injury," not "versus external injury" as is contained in the dictated report. (St. Ex. 3 at 3) It is not clear from the record which term was intended.

that she had done before attempting to perform any procedure that unfortunately is notably with some complications.

(Tr. at 223-224) Dr. Choo explained that the diagnostic evaluation needed was: a head CT scan and an assessment of the systems, such as abdomen and pelvis. (Tr. at 343-344)

83. Dr. Choo admitted that Patient 2's Glasgow coma scale measurement had dropped, and that change could be consistent with a moderate head or brain injury. (Tr. at 297) Dr. Choo explained why even the change in the GCS did not justify intubation of Patient 2 at the time it took place:

Q. And do you agree with Dr. Leder that ten to 20 percent of moderate brain injuries will deteriorate or lapse into coma?

A. That's a statistically quoted percentage.

Q. So if a patient with a moderate head injury is going to be transported from a rural hospital like Bucyrus, to a trauma center by – in Columbus, by helicopter, and you've got a ten to 20 percent risk of the patient falling into [a] coma from a moderate brain injury, doesn't reasonable prudence require that the physician get the patient intubated so he can be safely transported and to avoid the risk of falling into a coma?

A. Not that early. I think the diagnostic test has to be done. And the reason for that is because you're still talking about ten percent.

* * *

Q. Well, in the emergency room, Doctor – we have already [gone] over this – you don't always have time to do all the diagnostic tests that you would otherwise do if the patient was being admitted into the hospital, right?

A. I agree.

Q. And a patient – And when the Life Flight is sent and the patient's going to be transported by Life Flight, and it takes ten, 20 to 30 minutes for the helicopter to get from Columbus to Bucyrus, that may not give you the time you might otherwise want to use to have a lot of tests done, right?

A. Yes.

Q. And you've got to make decisions. You're on the front line. And Dr. Bade was on the front line with Patient No. 2, wasn't she?

A. Yes.

Q. And she made clinical decisions in an effort to provide the best safety she could for that patient, didn't she?

A. Yes.

Q. And isn't that what the standard of care requires, Doctor, that an emergency room doctor do everything they can to provide for the safety of their patient?

A. Yes.

Q. And that's particularly true when they are being transported to a trauma center in a helicopter?

A. That's particularly true in every situation where you do the best you can to provide safety for the patient.

And that's the specific reason why I have a problem with this case, in that the intubation criteria was not met. And the individual's placed, I believe, in more of a potential harm's way due to the fact that there was no clinical indication to do it this early.

(Tr. at 297-299)

84. Moreover, Dr. Choo acknowledged that one of the basic criteria for assessing whether a patient should be intubated preparatory to a transport is the anticipated clinical course of care for that patient. However, he disagreed that Dr. Bade's decision to intubate Patient 2 preparatory to being transferred to Children's Hospital was necessary in light of the anticipated clinical course of treatment at Children's Hospital. He disagreed on the basis that no intubation would have been needed at Children's Hospital since the CT scan was normal. (Tr. at 300-301)

85. Next, Dr. Choo testified that, from his review of the medical records, he believed that Dr. Bade had intubated Patient 2 because of the head injury and the potential for other injuries, not because of the transport. (Tr. at 307) Dr. Choo stated that, if the intubation of Patient 2 had occurred in preparation for transport, his opinion would change and her actions would not fall below the minimum standard of care:

Q. Put the medical records aside and remember the sworn testimony of this woman.

* * *

That if you take her observations and her testimony at face value, and that she was trying to err on the side of caution to prepare this patient for transport, don't you agree –

* * *

Do you recall her testifying to that affect, Dr. Choo?

- A. I recall that she testified that she was – she understood that the child needed to be transported to a trauma center.
- Q. And if that was the basis for her decision to intubate the child, was it appropriate to intubate when she intubated Patient No. 2? * * * Given the reasons that she gave for that, based upon her clinical evaluation of the patient.
- A. I still have some issues with the timing of the intubation. But I have to concede to the fact that it would have been acceptable.
- Q. If Med Flight had been ordered prior to the intubation, and you understand the timing in which the Med Flight personnel would be arriving, do you still believe that the intubation was done too early?
- A. Yes.
- Q. Early or late, if you accept her testimony and the reasons why she made that decision, and her clinical findings, and knowing as you know, that when the call comes for the helicopter, the helicopter is coming and you've got to get the patient ready for the helicopter, then will you agree that her treatment of Patient No. 2 was within the minimal standard of care?
- A. I would have to say it's a judgment call. But the fact of the matter was that the timing is still some concern for me.
- Q. Despite the timing concerns, you have now told – acknowledged it was a judgment call. And shouldn't you give Dr. Bade the benefit of the doubt in a case like this when it's a judgment call, that she's on the front line and she deserves the benefit of the doubt when it's a judgment call that close?
- A. I would just reiterate what I said earlier that if, indeed, the pure intent behind intubation was for transportation, even though there [were] no

clear objective findings, although I have some problem with the timing, that I would have to concede.

(Tr. at 308-310)

Dr. Bade's Opinion Regarding her Treatment of Patient 2

86. Regarding her decision to intubate Patient 2, Dr. Bade admitted that, when she chose to intubate Patient 2, his pulse oximetry was 96 percent and that is an appropriate oxygen saturation level. However, she stated that she did not want the oxygen saturation level to change and there was a potential for Patient 2 to lose his airway during transport. Specifically, Dr. Bade noted that Patient 2's behavior changed: he was not cooperative, he became more combative, he pulled his extremity away to pain and was guarding that extremity, and his crying became more methodical. Although Dr. Bade did not include a new GCS number in her report, she pointed out that she did describe, in a narrative format, a change in the motor component of the GCS. She testified that this narrative description indicates that Patient 2's GCS became a 12. (Tr. at 110, 118-119, 120; St. Ex. 2 at 33)

Dr. Bade testified that the main reason she chose to intubate Patient 2 was to secure his airway for the emergency transfer to Children's hospital. Specifically, Dr. Bade stated: "I did not want him to lose his airway in transport. I was very concerned about his – the level of consciousness. He already has some mental status changes. I don't want him having more problems in a helicopter. And also, I was assessing the increased risk in internal bleeding. This patient needed to be stabilized as much as possible in the best place before he was placed in a helicopter." She further stated: "I went through all procedures and protocols as necessary. I knew this patient had to move, and move fast. Then I went and I intubated." (Tr. at 120, 123)

87. Dr. Bade considers her decision to intubate Patient 2 to have been a very prudent decision. In addition, the following exchange took place at hearing:

Q. Would you make that same clinical decision for any child that you were transferring to another hospital?

A. No.

* * * I wouldn't intubate children that have to be transferred. I intubate when it's appropriate. This is a significant trauma, and a Level 1 trauma;¹⁷ fall from a height, multiple injuries, decreasing mental status, and has to be transported as fast as possible.

¹⁷Dr. Bade explained her belief that Ohio law at that time defined a fall from a height as a "Level 1 trauma" or major trauma, and that Patient 2's symptoms supported that classification as well. (Tr. at 126-127)

I am going to, for the benefit of that patient, and maybe err on the side of caution, protect him.

Q. So would you agree you did it as a precautionary measure?

A. Yes.

(Tr. 121-122)

Dr. Leder's Expert Opinion Regarding Dr. Bade's Treatment of Patient 2

88. Dr. Leder disagreed with Dr. Choo's criticism and, instead, found that Dr. Bade's intubation of Patient 2 was appropriate. (Resp. Ex. A at 15; Tr. at 463)

89. Dr. Leder found that there were clinical signs of a head injury, abdominal injury, and neck trauma in Patient 2. In particular, Dr. Leder described a Glasgow coma score of 12 to be a moderate brain injury. He also noted that, with moderate brain injuries, there is a 10 to 20 percent chance that the patient will fall into a coma. Also, Dr. Leder testified that Patient 2 had some signs of respiratory distress (tachypnea) at the time he was intubated. (Resp. Ex. A at A-16; Tr. at 464-465, 529)

90. Moreover, Dr. Leder stated that Dr. Choo has overlooked an additional factor in the decision to intubate Patient 2: the anticipated clinical course. Dr. Leder contended that the anticipated clinical course "must be assessed in determining the need for definitive airway management in this patient." Dr. Leder added that the nature of the trauma suffered is part and parcel to determining what to expect and what to do for the patient. (Resp. Ex. A at 13; Tr. at 466, 547)

Dr. Leder further explained that Patient 2 had not had a full evaluation and the extent of his injuries was not known. Also, Dr. Leder found that he was at risk for compromise and the emergency room physician had to assume the worst. Therefore, in his view, Patient 2 needed more attention to avoid airway compromise and it was within the standard of care to intubate Patient 2 prior to the CT scan and preparatory to the transfer to Children's Hospital. In Dr. Leder's view when the patient is a multiple trauma patient, there is a definite need for further diagnostic studies, and there is a definite need for patient transport. Dr. Leder stated that "it is often more appropriate to prophylactically intubate the patient in the Emergency Department to avoid an airway crisis in the radiology suite or during the inter-hospital transfer." In Patient 2's circumstance, Dr. Leder concluded that Dr. Bade's decision to intubate Patient 2 was within the "local standard of care." (Resp. Ex. A at 14-15; Tr. at 464)

Dr. Leder's explained his use of the term "local standard of care", stating that "physicians are held to what they're capable of doing in the setting they're in. So the standard of care when I practice in a rural or community hospital may be different than if you're in a city where you have all the subspecialists available to help you. * * * The standard of care is different depending on where you practice. * * * You would expect more from a tertiary center like Children's [Hospital] than you would from a smaller hospital, because of the resources

available.” He further stated that his use of “local standard of care” is synonymous with judging a physician based on the “minimal standards of care of similar practitioners under the same or similar circumstances.” (Tr. at 545-546, 552)

91. Dr. Leder disagreed with Dr. Choo’s contention that the risks of intubating Patient 2 outweighed the benefits at the time he was intubated. (Tr. at 470)

Dr. McTague’s Expert Opinion Regard Dr. Bade’s Treatment of Patient 2

92. Dr. McTague opined that Dr. Bade had met the standard of care in her treatment of Patient 2, including her decision to intubate him prior to the CT scan. Dr. McTague agreed with Dr. Bade’s decision to prophylactically/preemptively intubate Patient 2, and to order a CT scan of Patient 2. (Tr. at 596, 626)
93. Dr. McTague expressed surprise at Dr. Choo’s criticism of Dr. Bade’s intubation of Patient 2, stating:

Bucyrus [Community Hospital] is not a trauma center. This patient had to be transferred by state law and by any criteria as a “fall from a height” would have necessitated the highest level of concern. Dr. Bade appropriately secured the airway of this child prior to transfer and clearly met the standard of care for such a traumatic injury. * * * The potential in this case for significant head injury is high and a rapid deterioration should be anticipated. * * * Intubation within the stable environment of the ER is encouraged, appropriate, and one I personally made for decades working in a community hospital. This intubation, even if considered unnecessary in hindsight, is entirely, and completely appropriate as a precautionary measure for the emergency stabilization of this patient.

(Resp. Ex. C at 2-3; Tr. at 591-592, 642) Furthermore, Dr. McTague referred to the Advanced Trauma Life Support [ATLS] guidelines¹⁸ as stating that early orotracheal intubations with adequate oxygenation and ventilation are indicated to avoid progressive central nervous system damage. In his view, there were multiple indications of potential central nervous system damage in Patient 2. (Resp. Ex. C at 3; Tr. at 624)

94. Additionally, Dr. McTague noted that, in this case, there are two factors that may have made it more difficult for Dr. Bade to have intubated Patient 2: (a) the patient was immobilized with a hard, C-spine collar; and (b) there was a copious amount of blood in the airway. (Tr. at 595)

¹⁸ATLS is a certification course offered by the American College of Surgeons that addresses management of traumas. Certification lasts for five years. According to Dr. Leder, ATLS is a leader in credentialing and training individuals in pediatric intubation and provides recognized pediatric intubation standards. (Tr. at 428, 429)

Patient 3 (Her Initials are SLS)

The Events at BCH

95. On June 9, 2002, Patient 3 was 12 years old. She was brought by ambulance to the BCH emergency room prior to 4:55 p.m. (the arrival time in the medical record is obscured). Patient 3 remained at the BCH emergency department for at least two and one-half hours under the care and treatment of Dr. Bade. (St. Ex. 3 at 3, 23; Tr. at 130-131)

96. The nurse who handled Patient 3's arrival reflected the following in the medical record:

Admitted per ambulance cart fully immobilized. Involved in 3 car [motor vehicle accident]. States See nurse notes.

(St. Ex. 3 at 3) At the time of Patient 3's arrival, her pulse was 139 beats per minute, and her respiratory rate was 28. (St. Ex. 3 at 3; Tr. at 131)

97. Dr. Bade explained that she initially had evaluated Patient 3 and had had a plan in place. She recalled moving on to other patients, but the nurse had brought Dr. Bade back for reevaluation because Patient 3's presentation changed. Dr. Bade agreed that Patient 3 had changed. (Tr. at 139)

98. The nurse's notes reflect that the following took place sometime before 4:55 p.m.:

Becoming combative unable to state where in car she was sitting. States "my stomach." Disoriented. Will not answer questions. Shouting foul language and struggling [with] board straps. C/O head + abd pain. Mom present. Airway patent. C/O nausea # 14 NG tube placed per Dr. Bade. Verified placement + to [illegible]. Very combative.

(St. Ex. 3 at 7)

99. The intubation process began at 4:55 p.m. Dr. Bade used succinylcholine,¹⁹ versed, and vecuronium to intubate Patient 3. The first attempt was not successful because visualization was obscured with the c-collar in place. No additional medications were given prior to the second attempt at 5:12 p.m., which was successful. (Tr. at 146; St. Ex. 3 at 3, 7, 25)

100. Dr. Bade ordered a CT scan of Patient 3's head. Sometime between 5:10 and 5:40 p.m., Patient 3 went to the Imaging Services Department of BCH. Dr. Bade testified that she accompanied Patient 3 to the CT scanner and read the scan as it was happening. The results indicated a normal brain. Dr. Bade stated that she was "relieved" that no intracranial hemorrhage, contusions or skull fractures were found, but she said that the CT scan left her with a very big concern. She stated that she went immediately to the telephone and contacted

¹⁹Dr. Bade estimated that the effects of succinylcholine last for approximately five minutes. (Tr. at 146-147) Dr. Choo stated that it lasts three to eight minutes. (Tr. at 218) Dr. Leder testified that it typically lasts six to nine minutes, depending upon the dosage. (Tr. at 494)

Children's Hospital because she had "wanted to be able to report to the physician that would be receiving the patient that I didn't see any bleed or fracture. That way he would have full understanding that a neurosurgeon wouldn't need to be there upon this patient's landing to their facility." (St. Ex. 3 at 7, 21; Tr. at 133-135, 144, 156)

101. Patient 3's medical record does not indicate exactly when Dr. Bade first contacted Children's Hospital in Columbus for the transfer of Patient 3. Children's Hospital agreed to accept the transfer of Patient 3. At 7:30 p.m., Patient 3 was transferred to Children's Hospital via a mobile ground unit. (St. Ex. 3 at 9)

Dr. Bade's Emergency Room Report Regarding Her Treatment of Patient 3

102. Dr. Bade testified that, immediately after Patient 3 was transported to Children's Hospital in Columbus, she had dictated a report of her treatment of Patient 3. (Tr. at 113, 114) That report states in part:

HISTORY OF PRESENT ILLNESS: * * * The patient does not remember if she had her seatbelt on or not. Another child, who is being seen, states that she believes that both of them in the back seat did have their seatbelts on. No other serious injuries from this MVA were noted. There were no deaths and no other transports to trauma hospitals. The patient was appropriate at the scene with a Glasgow coma scale of 15. * * * On arrival here to the Emergency Department, she was appropriate with the nursing staff and physician with a Glasgow coma scale of 15. * * * She did have, a "bump on the head", and reported the hematoma on the right occipital region with no bleeding. There has been no tenderness, blurred vision, chest discomfort, difficulty breathing, abdominal pain or difficulty in moving her extremities. Thereafter the initial exam, she was maintained in a C-collar due to her C-spine tenderness and strapped back onto the board more securely. She became then verbally confused to the nursing staff. The physician was called over and had noted that she also was very repetitive. She became combative and perseverating. The choice of words for her answers [was] inappropriate nouns. No swearing and no direct eye contact was ever initiated from the patient. Mother was then, at the time, at the bedside and was unable to calm the patient and verified that this was very abnormal behavior for her.

* * *

PHYSICAL EXAM: This patient had a high possibility of clinically significant lif[e]-threatening injuries, as well as cervical trauma injuries and required critical care attention throughout the entire Emergency Department stay by the staff. The entire stay was, approximately, 2½ hours. On arrival her pulse is 139, respiratory rate 28, and blood pressure 147/69. Prior to her discharge, she had a blood pressure of 158/60, heart rate of 139, and a pulse oximetry of 99% by 100% bagging through her ET tube. Head and neck initially shows that she was [pupils equal, round, reactive to light. Extraocular

movements intact.] There was a mild 4 cm x 4 cm, right occipital parietal hematoma with no associated laceration. There was no severe tenderness to palpation. * * * She had been moving her extremities fully on initial examination and, when her combative state persisted, they were violently moving. She was restrained gently until sedation was initiated. Initially, she showed no focal deficits. She was speaking in full sentences, alert and oriented x 3, and asking for her mother and giving us her mother's work number.

* * *

PROCEDURE: The patient was becoming combative and a danger to herself. C-spine control was of the up most concern at this time, other than the possibility of there being a closed head injury. The patient had an IV started, NG tube was placed because of threats of vomiting. She had then been given Versed 10 mgs IV push and Succinylcholine 60 mgs IV push with good sedation. A 7 tube was attempted at first and visualization, of course with a C-collar in place, was obscured. Attempt was not successful and she was rebagged. A second attempt was made with a 5 tube easily and breath sounds were auscultated symmetrically. A chest x-ray was obtained to confirm tube placement. Throughout her radiology studies, she required Vecuronium 6 mgs IV push and Valium 10 mgs IV push and a repeat Vecuronium to have enough sedation for all of her studies. The patient remained on a monitor, a Foley was in place and oxygenation remained 100%. Vecuronium was repeated prior to her transfer to Children's Hospital. Dr. Schmerler was contacted at Columbus Children's Hospital and accepted her for transfer, and suggested a Medflight Mobile Unit. This was agreeable to the parents, who were at the bedside. All questions were answered to their apparent satisfaction.

This patient required 1 ½ [hours] of critical care.

DIAGNOSIS:

1. Status-post MVA.
2. Right scalp hematoma.
3. Head injury.
4. Rule out intracranial injury versus concussive syndrome.²⁰

(St. Ex. 3 at 23-25; Tr. at 706-707)

²⁰Dr. Bade explained that, in her initial notes on Patient 3's chart, she had written rule out "Axonal injury," which was more specific and more accurate than intracranial injury, as contained in her final emergency room report. (St. Ex. 3 at 3; Tr. at 132, 707)

Dr. Choo's Expert Opinion Regarding Dr. Bade's Treatment of Patient 3

103. After reviewing the medical records of Patient 3, Dr. Choo found that, like Patients 1 and 2, Dr. Bade deviated from the minimal standard of care because the documentation did not demonstrate that Dr. Bade had understood the indications for orotracheal intubation for this patient. (Tr. at 181)
104. Dr. Choo noted that Patient 3 had abnormal vital signs, presenting with tachycardia, tachypnea and hypertension, hyperventilation, and carpopedal spasms.²¹ Dr. Choo considered the abnormal vital signs to be supported by the clinical presentation of Patient 3. Dr. Choo stated, however, that Patient 3 did not show any obvious objective indications for intubation and, therefore, to have intubated Patient 3 when Dr. Bade did was below the standard of care. Dr. Choo clarified that Dr. Bade chose to “perform a procedure that put the patient at a higher risk than benefit for the given situation at hand.” However, Dr. Choo admitted that, from the outcome perspective, there were no adverse effects from Dr. Bade’s decision, and in that respect Dr. Bade met the standard of care of doing no harm to the patient. (Tr. at 231-233, 324, 334-335)

Specifically, Dr. Choo wrote in his report:

[Patient 3]’s medical records did not document or exhibit any clear evidence of meeting any of the * * * indications for pediatric endotracheal [intubation]; in fact, despite the medical documentation of the change in the behavior of the patient in the emergency department – her GSC was still around 12 and did not meet the criteria for intubation which is deemed to be 8 or less. Furthermore, there was neither clinical evidence of any increased intracranial pressure from the potential head injury nor any evidence of impaired airway protection or patency.

(St. Ex. 5 at 5)

105. Dr. Choo explained that, in his view, there were no clear indications for intubation because: (a) the method of injury was not significant for severe head injury, (b) there was no evidence of any significant GCS findings that would warrant emergent intubation, and (c) potential brain swelling was not documented as the basis for the intubation. Dr. Choo clarified that a head injury, by itself, does not warrant intubation unless there’s a concern for loss of pharyngeal reflex, airway protection, cerebral edema, or hemorrhage. (Tr. at 234, 319, 320)

Furthermore, Dr. Choo testified that the change in Patient 3’s behavior could be a sign of head injury and a change in the GCS, but he stated that “the only time that you worry about agitation and confusion needing intubation would be [with] hypoxia.” Such was not the case

²¹Dr. Choo explained that carpopedal spasms cause your hands to draw up because you are breathing so quickly, your metabolism undergoes “derangement,” and your body spasms. (Tr. at 231)

with Patient 3 because there was objective evidence of protective airway reflexes. (Tr. at 234-235)

106. Next, Dr. Choo stated that, in general, a combative, uncooperative patient needing a CT scan is, without other conditions, not an indication for intubation. Rather, Dr. Choo stated that Patient 3 could have gotten the CT scan with some sedation and, if the CT scan results justified the intubation, then proceed with intubation. (Tr. at 234-235, 236-238, 242, 324)
107. Dr. Choo testified that he has intubated intoxicated patients in preparation of a CT scan, but found Patient 3's situation was not akin, as set forth below:

Q. Okay. That if she was worried about the patient being combative and aspirating and having a deteriorating mental state, isn't that a justified reason for having the patient intubated, to err on the side of caution for this patient to go into the CT scan to avoid those kind[s] of risks?

A. Not in this situation, no.

Q. Not in this situation?

But in the situation of someone intoxicated, you believe in your subjective practice it's okay?

A. I believe that when someone is intoxicated there is a clear indication for loss of airway control, so it would be prudent to err on the side to intubate, yes.

(Tr. at 317-318)

108. In comparing his opinions for intubation of Patients 2 and 3, Dr. Choo stated:

Q. That if you give Dr. Bade the benefit of the doubt and you accept her sworn testimony today as being true, that she was exercising clinical judgment on the front line dealing with a patient that she was concerned about, not only for going through a CT scan, but also to prepare for transfer, if you accept her sworn testimony as true, and give her the benefit of the doubt, Dr. Choo, wouldn't you agree that her care and treatment of Patient No. 3 met the minimal standard of care?

A. This situation, I have to disagree, because the other case we talked about had other factors that would warrant – or would be more apt to err on the side of error for transport.

But in this particular situation there was only a concern for head injury. And head injury, in this situation, by itself, does not indicate – does not meet the criteria for intubation.

And if the CT was done and was normal, the person could have been transferred via Life Flight or ambulance, but would not have to be intubated to do so, to do it safely for this particular situation.

(Tr. at 327-328)

Dr. Bade's Opinion Regarding her Treatment of Patient 3

109. Dr. Bade admitted that, during Patient 3's time at BCH, she did not demonstrate an inability to breath, show any signs of respiratory arrest or have any alarming or poor pulse oximetry readings. However, Dr. Bade did not intubate Patient 3 because of concerns with her breathing or oxygenation. (Tr. at 146)
110. Rather, it was the change in Patient 3's consciousness that indicated the need for additional testing and transport. Dr. Bade explained that Patient 3's head injury and the changes in her mental status could have been life threatening. Dr. Bade testified that she did not identify a GCS number in her report, but her description of Patient 3's behaviors indicated a drop to a GCS of 12 from Patient 3's prior GCS of 15. Moreover, Dr. Bade noted that she had discussed the changes with Patient 3's mother and changed her treatment plan because the patient changed her presentation. (Tr. at 139-141, 143, 156, 159; St. Ex. 3, at 23)
111. Dr. Bade explained her thinking as follows:

I made the decision to emergently intubate this patient because I needed to secure her airway. I needed to be able to transport her and CT scan her head emergently, stat, because I needed to know if there was any intracranial bleeding, if there was a fracture that was occult, not easily recognized.

She wasn't able to cooperate, wasn't following commands, wouldn't be able to lie still for the CT scanner. And if she had so drastically changed her mental status from a 15 to a 12, I did not want her to progress all the way down to an 8, where it obviously is a severe brain injury, without me protecting her airway.

(Tr. at 143-144; see also Tr. at 155) Dr. Bade also stated that she would not have been able to have the CT scan done effectively if she had not intubated Patient 3, and Dr. Bade did not want to wait to conduct the CT scan because she needed the scan to determine why Patient 3's condition was worsening before it deteriorates further. (Tr. at 156)

Dr. Leder's Expert Opinion Regarding Dr. Bade's Treatment of Patient 3

112. Dr. Leder concluded that Dr. Bade's intubation of Patient 3 met the minimal standard of care. Although Dr. Leder acknowledged that Patient 3 did not have any indications of respiratory distress or problems with breathing in the emergency room, her head injury and her anticipated course of treatment justified intubation. (Resp. Ex. A at 17; Tr. at 533)
113. More specifically, Dr. Leder noted that the deterioration in Patient 3's mental status, the comments of Patient 3's mother, and the fact that the mother was not able to calm Patient 3 were important factors that would have lead him to err on the side of believing that Patient 3 may have a significant head injury. As a result, Dr. Leder found that the anticipated course of treatment for Patient 3 would include: (a) diagnostic evaluations (head CT and radiographic imaging of the c-spine after securing c-spine immobilization); (b) possible operation room care if an intracranial pathology warranted; and (c) inter-hospital transport. Given the concern for a significant brain injury in Patient 3, Dr. Leder concluded that the decision to intubate her was within the local standard of care. Furthermore, Dr. Leder described Dr. Bade's decision to intubate Patient 3 as a prudent decision. (Resp. Ex. A at 18; Tr. at 472, 474, 532-533)
114. In addition, Dr. Leder disagreed with Dr. Choo's contention that Patient 3 should have been sedated prior to the CT scan. Dr. Leder testified that it is *not* the standard of care in a trauma patient to do "procedural sedation"; instead, the standard of care is to protect the patient's airway by intubation before the procedure. In support of that position, Dr. Leder stated that, for the trauma patients requiring sedation, ATLS states they should be intubated because sedation does not protect the airway (sedation puts the airway at greater risk). (Tr. at 477, 482; Resp. Ex. T at 1)

Finally, Dr. Leder noted that the results of the CT scan are rarely available before physicians have to decide whether to intubate a patient; rather, the decision to intubate is typically made before the patient goes elsewhere for testing, et cetera. (Tr. at 548-550)

Dr. McTague's Expert Opinion Regarding Dr. Bade's Treatment of Patient 3

115. Similarly, Dr. McTague concluded that Dr. Bade's decision to intubate Patient 3 was a safer approach because this trauma patient had a deteriorating mental status and required transport to a pediatric trauma center. He concluded that Dr. Bade met the standard of care by intubating Patient 3 before the CT scan. Dr. McTague stated in his report: "To have transported [Patient 3] to Columbus Children's [Hospital] *by ground* without a secure airway would have been far more dangerous and unsafe for the patient than the treatment chosen. Dr. Bade again has demonstrated the proper concern for patient safety and consequently has met the standard of care for emergent trauma care." (Tr. at 641; Resp. Ex. C at 3, emphasis in original)

Dr. McTague further noted that Patient 3 was transported to Children's Hospital by ground, which is a much longer trip than by air, and Dr. Bade was responsible for Patient 3 during the transport. (Tr. at 598)

116. Like Dr. Leder, Dr. McTague disagreed with Dr. Choo's suggestion that Patient 3 should only have been sedated prior to the CT scan. He explained that sedation helps calm the patient, but also takes away the patient's safety mechanism guarding the patient's airway. Additionally, Dr. McTague stated that having intubated Patient 3 before the CT scan helped secure a better, more detailed scan because she was less able to move around. (Tr. at 599-600)

Additional Information in Medical Treatises Regarding the Treatment of Trauma Patients and Intubation

117. The *Manual of Emergency Airway Management* indicates the following regarding intubations:

If doubt exists as to whether the patient requires intubation, error should occur on the side of intubating the patient. It is better to intubate the patient, manage the ventilation and the patient for a period of time, and then extubate the patient [than] to leave the patient without a secure airway and permit an irreversible catastrophe.

(Resp. Ex. A at 14-15, quoted in Dr. Leder's expert report) Dr. Leder testified that this manual is an authoritative text dealing with the subject of intubation, and is consistent with other texts, his medical training, and the standard of care. (Tr. at 469)

118. In relation to GCS scores, ATLS indicates that a trauma patient with a GCS score less than 15 is one indication for the need to transfer the patient to a Level 1 trauma center. (Resp. Ex. T at 2; Tr. at 483)

Moreover, ATLS states that a moderate brain injury exists when the patient's GCS score is between 9 and 13. In all such cases, a CT head scan is to be obtained and the patient is to be admitted to a facility capable of definitive neurosurgical care. (Resp. Ex. M at 4)

119. With regard to a combative patient with an altered level of consciousness, ATLS states as follows:

Management of the combative or uncooperative patient with an altered level of consciousness is difficult and fraught with hazards. The patient is often in a supine position, immobilized, and has wrist/leg restraints applied. *If sedation is required, the patient should be intubated.*

(Resp. Ex. T at 1, emphasis added.)

120. With regard to the transport of a pediatric trauma patient, the PALS Provider Manual states that, before transporting a child, the referring and the receiving physicians should communicate as frequently as dictated by changes in the patient's status. They should discuss recommendations for management of the patient and mode of transport. Before transport, providers should:

- *Secure the patient's airway*

- Stabilize the patient's respiratory status
- Secure all intravenous or intraosseous lines
- Assess and document neurologic status
- Stabilize fractures
- Assess and document circulation proximal and distal to each fracture
- Immobilize the child's spine

(Resp. Ex. L at 7, emphasis added.)

Additional Testimony from Dr. Bade

121. Dr. Bade testified that, in her 10 years of emergency room practice, she had seen only a small number of very significant pediatric trauma cases. However, she had handled thousands of less significant pediatric trauma cases. Dr. Bade stated that she had ordered the intubation of six or seven pediatric patients; it was not her practice to automatically intubate a pediatric trauma patient. (Tr. at 124-125, 154)
122. Dr. Bade agreed that it is important to document the time of events in the emergency room medical records so that it can reflect when procedures were done, when symptoms change and when medications are provided. However, she further stated that it is most important in the emergency room to "get to the patient as fast as possible, assess them, and get the plan in place"; and documenting the exact time when events occurred is secondary. (Tr. at 112)
123. Additionally, Dr. Bade agreed that she did not document any times when specific actions were taken in the treatment of Patient 2. She acknowledged this shortcoming, stating: "I can be criticized for not documenting more completely. Dictation is always open for improvement. Documentation is always an area where we can make improvements." (Tr. at 113)
124. In February 2004, Dr. Bade completed a review of Pediatric Airway Emergencies at James A. Rhodes State College in Lima, Ohio. That course covered: airway anatomy, selection and use of airway adjuncts, and pediatric intubation. Scenarios and simulations were demonstrated regarding routine pediatric intubations, rapid sequence pediatric intubations and pediatric intubation in difficult situations. Dr. Bade stated that she had thought it was prudent to take the course because of the lawsuit involving Patient 1. (Resp. Ex. O; Tr. at 667, 676)

FINDINGS OF FACT

1. On October 13, 2002, Patient 1, a four and one-half month old male infant, presented to the Emergency Department at Bucyrus Community Hospital [BCH] with symptoms of fever, vomiting, fussiness, decreased appetite, and a reported heart rate of 132 beats per minute. On October 14, 2002, Patient 1 expired.
 - (a) In her care of Patient 1, Shelly Bade, M.D., unsuccessfully attempted to orotracheally intubate Patient 1. At the time Dr. Bade attempted to intubate Patient 2, there were

appropriate clinical indications to justify the attempted intubation. Those appropriate clinical indications were:

- Excessive work of breathing, which may have lead to fatigue and respiratory failure.

This was documented at 9:55 a.m. in the nurse's notes as crying/grunting, shortly before the intubation medications began to be administered. Additionally, this is supported by statements in Dr. Bade's emergency room report regarding her earlier physical examination of Patient 1 as follows: "He was mouth-breathing and grunting with every breath more than 60 times per minute. Tongue appeared normal. There were supraclavicular retractions, assisted abdominal breathing and rocking horse-type of respirations. * * * Very tachycardic rhythm when placed on a monitor and is running at 250 beats per minute, respiratory rate is over 60 * * * he was still grunting with severe respiratory distress. Pretreatment with Atropine for rapid sequence induction * * *." This was also supported by the testimony of Dr. McTague, who concluded that Patient 1 was in severe respiratory distress. This was further supported by Dr. Bade's testimony at hearing.

- Potential loss of the airway in the transport of Patient 1 to Children's Hospital, which had earlier accepted his transfer and arranged the MedFlight of Ohio transport of Patient 1. This was supported by the documented statement in the medical record that Dr. Bade had spoken with a physician at Children's Hospital, the arrival time of the MedFlight transport, and Dr. Bade's testimony at hearing.

In addition, it is reasonable to accept that, prior to the attempted intubation, Children's Hospital had been contacted by Dr. Bade and it had agreed to accept the transfer of Patient 1 in the manner described by Dr. Bade because of the arrival time of the MedFlight transport and the preliminary information contained in the MedFlight medical record. Likewise, even though Patient 1's medical record does not identify when Dr. Bade first contacted Children's Hospital or the details of that conversation, based upon other facts in Dr. Bade's emergency room report, it is reasonable to accept that a pediatrician from Children's Hospital had agreed with the need for intubation of Patient 1 in the manner described by Dr. Bade.

In light of these findings of fact, the State's evidence regarding a lack of justification for the attempted intubation of Patient 1 was not persuasive.

- (b) In Dr. Bade's care of Patient 1, she did not administer appropriate treatment for supraventricular tachyarrhythmia [SVT], such as immediate electrical cardioversion or medication conversion with Adenocard. The State's evidence demonstrates that

Patient 1 presented at the time of Dr. Bade's physical examination with an indication of SVT, which was an excessive heart rate of 250 beats per minute.

The testimony presented by both of Dr. Bade's experts convincingly established that, although Patient 1 presented at the time of Dr. Bade's physical examination with an indication of SVT, Patient 1 also presented with contraindications of SVT: (a) fever, which was documented in the medical record; (b) an arrival heart rate of 132 beats per minute, followed shortly thereafter with a heart rate of 250 beats per minute, which was documented in the medical record; (c) another heart rate in the "230s", which was documented in the medical record; and (d) varying heart rates on the bedside heart rate monitor, which was supported by Dr. Bade's testimony.

- (c) In Dr. Bade's care of Patient 1, she did not provide timely antibiotic treatment for her presumed concern for possible sepsis. Dr. Bade did timely order the administration of antibiotic treatment for her concern for sepsis – that order, for rocephin, was made well within the first hour of Patient 1's arrival at BCH at 9:12 a.m. and Dr. Bade's initial examination of Patient 1. The administration of the antibiotic treatment was placed on hold. The testimony from all expert witnesses establishes that the lengthy resuscitation efforts (which includes administration of medications) took priority over the administration of the antibiotic treatment. Rocephin was sent with and administered after 12:40 p.m. by the MedFlight of Ohio crew, while transporting Patient 1 to Children's Hospital in Columbus.

The evidence does not address any concern that Dr. Bade may have with respect to potential meningitis.

- (d) In Dr. Bade's care of Patient 1, she did not evaluate and/or document considerations for incarcerated hernia, intussusception, and intestinal anomalies that can have similar presentations to those of Patient 1.

Patient 1's medical record establishes that he presented with a history of "normal elimination"; a family history that did not suggest incarcerated hernia, intussusception, and/or intestinal anomalies; and the physical examination did not suggest them.

2. On April 3, 2002, Patient 2, a 17-month old male infant presented to the Emergency Department at BCH after a fall from a second-story window to the concrete ground. Patient 2 presented with a reported heart rate of 125 beats per minute, crying and alert, with a Glasgow coma scale of 15, with pulse oximetry of 96 percent on room air, and clear lung fields with good peripheral pulses.

In Dr. Bade's care of Patient 2, she orotracheally intubated Patient 2. At the time Dr. Bade intubated Patient 2, the evidence is convincing that there were appropriate clinical indications to justify the intubation, which were:

- Indications of head trauma (the history reflected a fall from a second-story window onto concrete, and the physical evaluation noted an abrasion on his forehead and blood at the nares). All three experts acknowledged that head trauma was present.
- Patient 2's mental status deteriorated, consistent a moderate brain injury. This is supported by evidence from the State's expert and one of Dr. Bade's experts.
- Patient 2 became "more combative" and initial sedation did not improve his combativeness. This is supported by the medical record.
- Potential loss of the airway in the transport of Patient 2 out of the Emergency Department to another area of BCH and also to Children's Hospital, which had earlier accepted his transfer and arranged the MedFlight of Ohio transport of Patient 2. This was supported by the medical record and Dr. Bade's testimony at hearing.
- The anticipated course of treatment for Patient 2 at Children's Hospital would have included additional diagnostic testing. The expert testimony regarding additional diagnostic testing from Dr. Leder was more persuasive than the State's evidence on this point. It does not appear reasonable to accept that the CT scan of Patient 2 at BCH would suffice for the receiving trauma center, given the history of the trauma, Patient 2's combative behavior, and the documented injuries.

3. On June 9, 2002, after having been involved in a three-car motor vehicle accident, Patient 3, a 12-year old female, presented to the Emergency Department at BCH with a Glasgow coma scale of 15 and no other serious injuries were initially noted.

In Dr. Bade's care of Patient 3, she orotracheally intubated Patient 3 on a second attempt. At the time that Dr. Bade first attempted to orotracheally intubate and at the time she successfully intubated Patient 3, there were appropriate clinical indications to justify the intubation. Those appropriate clinical indications are:

- Patient 3's Glasgow coma scale was 15, but the medical record indicates that her mental status deteriorated. All three expert witnesses acknowledged that Patient 3's mental status had dropped.
- Patient 3 became "very combative." This is supported by the medical record and Dr. Bade's testimony.
- Patient 3's mother was not able to calm her, and had stated to Dr. Bade that her daughter's behavior was not normal. This is supported by the medical record.
- Patient 3 needed a CT scan of the head, which required transport out of the Emergency Department to another area of BCH and required

sedation of Patient 3 to be successful. All three experts accepted that sedation was needed for an appropriate CT scan of Patient 3's head.

- Potential loss of the airway in the transport of Patient 3 out of the Emergency Department to another area of BCH. This is supported by the medical record and Dr. Bade's testimony.

The evidence from the State does not support a finding that Patient 3 should only have been sedated (and not intubated) for the CT scan of her head. Testimony from one of Dr. Bade's experts was convincing that, if sedation was required for the procedure, the patient should have been intubated so that the patient's airway was protected.

CONCLUSIONS OF LAW

1. Dr. Bade's acts, conduct, and/or omissions in the treatment of Patient 1, as set forth in Finding of Fact 1(a), do not constitute "[a] departure from, or the failure to conform to, minimal standards of care of similar practitioners under the same or similar circumstances, whether or not actual injury to a patient is established," as set forth in Section 4731.22(B)(26), Ohio Revised Code.

Dr. Bade's acts, conduct, and/or omissions in the treatment of Patient 1, as set forth in Finding of Fact 1(b), do not constitute "[a] departure from, or the failure to conform to, minimal standards of care of similar practitioners under the same or similar circumstances, whether or not actual injury to a patient is established," as set forth in Section 4731.22(B)(26), Ohio Revised Code. It was not a failure to conform to the minimal standards by not treating for SVT when SVT was contraindicated.

Dr. Bade's acts, conduct, and/or omissions in the treatment of Patient 1, as set forth in Finding of Fact 1(c), do not constitute "[a] departure from, or the failure to conform to, minimal standards of care of similar practitioners under the same or similar circumstances, whether or not actual injury to a patient is established," as set forth in Section 4731.22(B)(26), Ohio Revised Code. Although Dr. Bade timely ordered the antibiotic treatment and it was not given until after 12:40 p.m., as set forth in Finding of Fact 1(c), the intervening resuscitation of Patient 1 properly delayed the administration of the antibiotic treatment for two hours. It was not a failure to conform to the minimal standards to have sent the antibiotic treatment with the MedFlight transport for administration more than 30 minutes after resuscitation efforts ceased.

Dr. Bade's acts, conduct, and/or omissions in the treatment of Patient 1, as set forth in Finding of Fact 1(d), do not constitute "[a] departure from, or the failure to conform to, minimal standards of care of similar practitioners under the same or similar circumstances, whether or not actual injury to a patient is established," as set forth in Section 4731.22(B)(26), Ohio Revised Code. It was not a failure to conform to the minimal standards by not evaluating or documenting considerations for incarcerated hernia, intussusception and intestinal anomalies given the history presented and the physical examination.

Nevertheless, because the Board did not previously have before it all of the information that was presented during the hearing, the Board was substantially justified in pursuing the allegations set forth in 1(a) of the notice of opportunity for hearing.

2. Dr. Bade's acts, conduct, and/or omissions in the treatment of Patient 2, as set forth in Finding of Fact 2, do not constitute "[a] departure from, or the failure to conform to, minimal standards of care of similar practitioners under the same or similar circumstances, whether or not actual injury to a patient is established," as set forth in Section 4731.22(B)(26), Ohio Revised Code. Nevertheless, because the Board did not previously have before it all of the information that was presented during the hearing, the Board was substantially justified in pursuing this allegation.
3. Dr. Bade's acts, conduct, and/or omissions in the treatment of Patient 3, as set forth in Finding of Fact 3, do not constitute "[a] departure from, or the failure to conform to, minimal standards of care of similar practitioners under the same or similar circumstances, whether or not actual injury to a patient is established," as set forth in Section 4731.22(B)(26), Ohio Revised Code. Nevertheless, because the Board did not previously have before it all of the information that was presented during the hearing, the Board was substantially justified in pursuing this allegation.

LEGAL ISSUES

As reflected earlier in this Report and Recommendation, in March 2003, in *[Patient 1's Father], Administrator of the Estate of [Patient 1] v. Shelly Bade, M.D., et al.*, Case No. 03-CV-0079, Crawford County Court of Common Pleas, the administrator of the estate of Patient 1 filed a complaint alleging that Patient 1 was injured by the negligence of Dr. Bade, as well as others. Furthermore, the complaint alleged that, as a result of that negligence, Patient 1 was severely injured, which ultimately caused his death. In particular, the complaint listed the alleged negligence as including but not being limited to:

- (a) failure to meet acceptable standards of care;
- (b) failure to properly diagnose and treat Patient 1;
- (c) failure to consult a specialist;
- (d) failure to have a specialist available;
- (e) failure to transfer Patient 1 to an appropriate facility;
- (f) failure to properly intubate Patient 1; and
- (g) failure to properly medicate/sedate Patient 1.

On March 2, 2005, the jury in *Estate of Patient 1* rendered a verdict in favor of Dr. Bade, among others. That verdict was based on the determination by the jury that Dr. Bade was not "negligent in her care and treatment of Patient 1." No appeal was pursued.

The doctrine of *res judicata* prevents parties in privity from relitigating the claims and issues that were determined in a prior action. In other words, under the doctrine of *res judicata*, "[a] valid, final

judgment rendered upon the merits bars all subsequent actions based upon any claim arising out of the transaction or occurrence that was the subject matter of the previous action.” *State ex rel. Denton v. Bedinghaus* (2003), 98 Ohio St.3d 298, quoting *Grava v. Parkman Twp.* (1995), 73 Ohio St.3d 379, syllabus.

The doctrine of collateral estoppel is more restrictive. It prevents the relitigation of legal or factual issues that were determined in a prior action even though the subsequent action is a different cause of action or proceeding. "Collateral estoppel applies when the fact or issue: (1) was actually and directly litigated in the prior action, (2) was passed upon and determined by a court of competent jurisdiction, and (3) when the party against whom collateral estoppel is asserted was a party in privity with a party to the prior action." *Zunshine v. Cott* (2008), 2008 Ohio App. LEXIS 1893, citing *Thompson v. Wing* (1994), 70 Ohio St.3d 176, 183

Neither *res judicata* nor collateral estoppel requires dismissal of the Board’s allegations against Dr. Bade as they related to Patient 1. This conclusion is reached for the following reasons:

- a. The two actions are not the same claims. As set forth in Finding of Fact 4, there was no allegation that Dr. Bade violated Section 4731.22(B)(6), Ohio Revised Code, in *Estate of [Patient 1]*. Moreover, the Estate of Patient 1 sought monetary damages as a direct and proximate result of negligence. Before a plaintiff can prevail in a negligence action, it must be shown "that the defendant breached a duty owed to the plaintiff and that the breach was the proximate cause of plaintiff's injuries." *Orndorff, v. Aldi, Inc.* (1996), 115 Ohio App.3d 632, at 635. The instant action is based on the Board’s exclusive statutory authority to seek to discipline a certificate due to the alleged violation of Section 4731.22(B)(6), Ohio Revised Code, for which no causation or injury need to be proved. The elements of the negligence action are not the same as the elements of the Board’s action.
- b. The Board was not a party or in privity with any of the parties in *Estate of [Patient 1]*.
- c. Nothing in Section 4731.22, Ohio Revised Code, precludes the Board’s action when a civil negligence action is decided prior to the Board’s action.
- d. The jury verdict in *Estate of [Patient 1]*, as set forth in Finding of Fact 5, found in favor of Dr. Bade on the basis that she was not “negligent in her care and treatment of [Patient 1].” That verdict does not identify the particular basis for that conclusion by the jury, and, as a matter of law, it cannot be presumed that the jury specifically determined that Dr. Bade was not negligent because she did not depart from, or fail to conform to, minimal standards of care of similar practitioners under the same or similar circumstances, whether or not actual injury to a patient is established.
- e. Public policy warrants a finding that the Board’s allegations related to Patient 1 cannot be dismissed on the basis of *res judicata* and/or collateral estoppel. There is no time period in the Ohio Revised Code that required the Board to bring the disciplinary action against Dr. Bade. The Board should not be penalized and prevented from

carrying out its duty to protect the public because it did not bring a disciplinary action prior to a civil suit by a patient or his relatives.

* * * * *

The State argues that the orotracheal intubation procedure has to be used “in response to observable, immediate danger to the patient’s ability to breathe.” Dr. Bade argues that she intubated Patients 1-3 in response to observable, immediate dangers to the patients and in preparation of transport out of the BCH Emergency Department (to a level 1 pediatric trauma center and/or for testing in another area of the hospital). The Hearing Examiner found Dr. Bade’s testimony regarding the events for Patients 1-3 to be credible, particularly her testimony regarding: (1) the time in which she first contacted Children’s Hospital after first evaluating Patient 1; (2) the conversation she had with the pediatric physician at Children’s Hospital, during which it accepted transfer of Patient 1 and agreed with intubation; and (3) her observations of Patient 1’s condition when she first evaluated him.

The Hearing Examiner questions the State’s evidence. Certain aspects of the medical records appeared to have been weighed more readily than others, which explains the criticisms raised but does not necessarily validate them. For example, the State relied heavily on Patient 1’s stated history of colic, but appears to have overlooked the stated history of normal elimination. Similarly in Patient 1’s case, Dr. Bade’s report was interpreted to mean that she had intubated Patient 1 because of his heart rate. However, her report describes his respiratory distress, circulatory difficulties and excessive heart rate – all in the same paragraph. That report does not state that Dr. Bade intubated Patient 1 because of his excessive heart rate. Moreover, when other facts regarding the patients’ transport were highlighted at hearing, the State’s position altered on certain issues. As a result, the Hearing Examiner was not convinced, by a preponderance of the evidence, that the State’s position should be accepted.

The Hearing Examiner agrees, in general, with the State’s contention that more and better documentation in the medical records would have been advisable. It certainly would have provided a greater explanation for Dr. Bade’s thought process and decision-making in these cases. Moreover, the times at which events took place (demonstrating a clear chronology) in the post-reports are warranted. However, the Board’s allegation regarding documentation was much more specific – it alleges a failure to document consideration of certain medical conditions. Based on the testimony of Dr. Bade and her experts, the Hearing Examiner did not find consideration of those medical conditions to have been warranted, given Patient 1’s history, the family history and the physical examination. For that reason, the Hearing Examiner recommends that the allegation regarding documentation be dismissed.

Dr. Leder’s interpretation of the minimal standard of care also bears mentioning. He is not correct that the minimum standard of care in Ohio varies, depending upon the locale in which you are practicing. By definition, there would be no “minimal standard” if the standard of care changes from hospital to hospital, etc. Dr. Leder also testified, however, that he had evaluated Dr. Bade’s treatment of Patients 1-3 based on the “minim[al] standards of care of similar practitioners under the same or

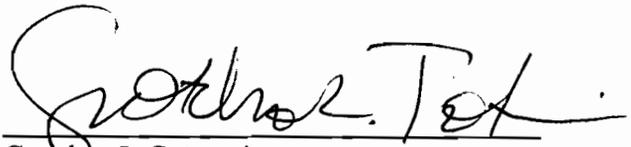
similar circumstances.” To the extent that Dr. Leder based his opinions on the theory that BCH had its own minimal standard of care, those opinions are rejected.

PROPOSED ORDER

It is hereby ORDERED that:

- A. The amended motion of Shelly Bade, M.D., to dismiss the allegations pertaining to Patient 1 (on the basis of *res judicata* and collateral estoppel) is denied.
- B. It is hereby ORDERED that the allegations against Dr. Bade, as set forth in the October 10, 2007, notice of opportunity for hearing, are DISMISSED.

This Order shall become effective immediately upon the mailing of the notification of approval by the Board.



Gretchen L. Petrucci
Hearing Examiner

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EXCERPT FROM THE DRAFT MINUTES OF AUGUST 13 & 14, 2008

REPORTS AND RECOMMENDATIONS AND PROPOSED FINDINGS AND PROPOSED ORDERS

Dr. Varyani announced that the Board would now consider the Proposed Findings and Proposed Orders appearing on its agenda. He asked whether each member of the Board had received, read and considered the hearing record; the findings of fact, conclusions and proposed orders; and any objections filed in the matters of: Shelly Bade, M.D.; Eugene Allan Brewer, M.D.; William David Leak, M.D.; Brian Frederic Griffin, M.D.; Kyle Elliott Hoogendoorn, D.P.M.; Parisa Khatibi, M.D.; and William W. Nucklos, M.D.; and the Proposed Findings and Proposed Orders in the matters of John A. Halpin, M.D.; and Frank Murray Strasek, D.P.M. A roll call was taken:

ROLL CALL:	Mr. Albert	- aye
	Dr. Egner	- aye
	Dr. Talmage	- aye
	Dr. Suppan	- aye
	Dr. Madia	- aye
	Mr. Browning	- aye
	Mr. Hairston	- aye
	Dr. Stephens	- aye
	Dr. Mahajan	- aye
	Dr. Steinbergh	- aye
	Dr. Varyani	- aye

Dr. Varyani asked whether each member of the Board understands that the disciplinary guidelines do not limit any sanction to be imposed, and that the range of sanctions available in each matter runs from dismissal to permanent revocation. A roll call was taken:

ROLL CALL:	Mr. Albert	- aye
	Dr. Egner	- aye
	Dr. Talmage	- aye
	Dr. Suppan	- aye
	Dr. Madia	- aye
	Mr. Browning	- aye
	Mr. Hairston	- aye

Dr. Stephens - aye
Dr. Mahajan - aye
Dr. Steinbergh - aye
Dr. Varyani - aye

Dr. Varyani noted that, in accordance with the provision in Section 4731.22(F)(2), Revised Code, specifying that no member of the Board who supervises the investigation of a case shall participate in further adjudication of the case, the Secretary and Supervising Member must abstain from further participation in the adjudication of these matters. They may, however, participate in the matter of Dr. Khatibi, as that case is not disciplinary in nature and concerns only the doctors' qualifications for licensure. In the matters before the Board today, Dr. Talmage served as Secretary and Mr. Albert served as Supervising Member.

The original Proposed Findings and Proposed Orders shall be maintained in the exhibits section of this Journal.

.....

Dr. Egner arrived at some point during the following discussion.

SHELLY BADE, M.D.

Dr. Varyani directed the Board's attention to the matter of Shelly Bade, M.D. He advised that objections were filed by both Dr. Bade and Assistant Attorney General Wilcox to Hearing Examiner Petrucci's Report and Recommendation and were previously distributed to Board members.

DR. STEINBERGH MOVED TO APPROVE AND CONFIRM MS. PETRUCCI'S FINDINGS OF FACT, CONCLUSIONS OF LAW, AND PROPOSED ORDER IN THE MATTER OF SHELLY BADE, M.D. MR. HAIRSTON SECONDED THE MOTION.

Dr. Varyani stated that he would now entertain discussion in the above matter.

Dr. Steinbergh stated that this is a case of the emergency room physician in Bucyrus who was accused of some aggression in regards to intubating children. Dr. Steinbergh stated that it was felt that she intubated too quickly, and that her reasons for intubating in these three cases was that she was preparing the patients for transport. Dr. Steinbergh stated that the first child died and the parents sued both Dr. Bade and the hospital, and Dr. Bade was exonerated in that case. Dr. Steinbergh stated that during her review, she really did have a lot of questions as to whether or not Dr. Bade rushed to judgment on these children who, under most circumstances, had good oxygen saturation levels and were not in respiratory distress.

Dr. Steinbergh stated that she did have some difficulty with this case. She stated that Dr. Bade's records did not justify her actions. Dr. Steinbergh stated that she would like to hear from anesthesiologists on the

Board who intubate quite often and see what their feelings were about this case.

Dr. Madia stated that, regarding Patient 1, the child Dr. Bade attempted to intubate to facilitate the transport of the child from Bucyrus to Columbus Children's Hospital (CCH), the drug she used, Vecuronium, is a long-acting drug. If you cannot intubate, the patient stops breathing and they cannot breathe for 20 to 30 minutes. According to testimony, it seems that Dr. Bade did not know that the drug lasts 20 to 30 minutes. Dr. Bade stated that the drug works for three to five minutes, which is wrong. Dr. Madia stated that there was no urgent situation that required Dr. Bade to intubate right then and there. Even if the child needed to be intubated for transport, he questioned why Dr. Bade didn't wait for the transport to come to intubate. Dr. Madia stated that if she would have waited for transport to come, she would have had some experts' help from the trauma team with the helicopter. Dr. Madia stated that, in his judgment, she rushed to intubate and she didn't know how long the medicine she used lasts.

Dr. Madia continued that it is very difficult to intubate a small child. He stated that in the emergency room, anesthesia staff will always make sure that they have help in case they get into trouble. In some cases, the anesthesiologist will take the child into the operating room to intubate.

Dr. Varyani stated that there were three experts who testified in this case: one expert was from northwest Ohio and two were from CCH. Dr. Varyani stated that whenever Dr. Bade referred children, they were referred to CCH. Dr. Varyani stated that not only were the dosages of the drugs Dr. Bade used inappropriate, but it is not uncommon that the first attempt at intubation fails. He added that there are short-acting medications and long-acting medications. The one drug, succinylcholine, anesthesiologists no longer try to use because of the side-effects. If you're going to intubate in a hurry, it takes one minute to come on and five minutes to come off and you're breathing again in case you're not successful.

Dr. Varyani stated that Patient 1, who was a few months old, did not need intubation; however, intubation was justified because the experts at CCH wanted the baby to be intubated. Dr. Varyani stated that there were two other children she was also told to transport and neither of them required intubation. Dr. Varyani stated that Dr. Bade justified the intubation on the basis of transport only.

Dr. Varyani stated that in all three cases, when Dr. Bade intubated, the drugs that she used for the facilitation of intubation were inappropriate. Concerning the sedation medications used for all three cases, Dr. Varyani stated that Dr. Bade used dosages that were way beyond the normal dosages used for the patients' ages.

Dr. Varyani stated that Patient 1 did not need intubation, but you could argue for intubation for transport purposes. He stated that he doesn't believe that either Patient 2 or Patient 3 should have been intubated, even for transport.

Dr. Varyani added that his particular concern was with Patient 3. Patient 3 was over ten years old, and had come to the emergency room after a motor vehicle accident. Patient 3 was doing fine, but was a little dazed. Dr. Varyani stated that, according to the records he reviewed, the Glasgow coma scale, which

initially was 15, went down to 12. Dr. Bade then decided to intubate. Once again, CCH also says that they wanted Dr. Bade to intubate the patient. Dr. Varyani stated that he really doesn't feel that this patient should have been intubated.

Dr. Varyani again stated that his concern in this case was that the medications used for the facilitation of intubation and sedation for intubation were way out of proportion.

Dr. Steinbergh stated that the concept that Dr. Bade has this discussion with physicians at CCH was, in her mind, still questionable. She didn't feel that the record reflected it. She stated that that was Dr. Bade's testimony at hearing, but the records didn't reflect that

Dr. Steinbergh stated that one of the things that she didn't particularly like is that one of Dr. Bade's experts, Dr. McTague, who is also an attorney, represented her at the civil trial. He then came to this hearing, took off his J.D. hat and put on his M.D. hat, and was an expert witness for Dr. Bade. Dr. Steinbergh stated that she felt that this was a conflict, and she didn't like that.

Dr. Steinbergh stated that the other question she has has to do with Dr. Bade's background and training, and why she was in the emergency room to begin with, doing that kind of care and making those kinds of judgments, and whether or not she was providing the minimal standard of care "for that area," as one of Dr. Bade's experts stated. Dr. Steinbergh stated that the Board knows that the standard of care is the same throughout the state of Ohio, and its expectations are that physicians will provide care in the same way throughout the state. Dr. Steinbergh noted that one of Dr. Bade's witnesses felt that Dr. Bade did the best that she could under her circumstances. Dr. Steinbergh stated that Dr. Bade trained at Ohio State and was in her second ER year, when they did not offer her a third-year position and, therefore, she could not become board certified. Dr. Steinbergh stated that she felt that that was significant. There was no evidence that Dr. Bade intended to go back for a third year so that she could get board certified. Instead, with those two years of training she went to work as a solo practitioner, although not a solo practitioner in the literal sense of those words, but she was working alone in the emergency room of a small town. Dr. Steinbergh stated that patients expect the same kind of care in that emergency room as they would expect if they came to Columbus, Cincinnati or Cleveland. Dr. Steinbergh stated that she doesn't think that Dr. Bade was trained enough to handle some of these cases. She added that it's interesting that Dr. Bade now resides in Florida, and her goal is to work in an urgent care center, and she indicates that she'd like to study hyperbaric medicine. Dr. Bade indicates that she has no plans to work in an emergency room or to return to Ohio.

Dr. Steinbergh stated that those were issues she had in mind as she reviewed Dr. Bade's case, and she doesn't feel comfortable dismissing charges in this case. She indicated that she thinks that there is a question of minimal standards here.

Dr. Egner arrived during the previous discussion.

Dr. Egner stated that she feels differently than Dr. Steinbergh. Dr. Egner stated that it's not that Dr. Bade

worked in an emergency room with absolutely no training. She was two thirds of the way through a residency. Dr. Egner stated that she's not saying that it doesn't give some cause for concern why she didn't finish or go back to a different program, but Dr. Bade is in a different situation than an ER doctor in Columbus, Cincinnati or Cleveland in that these really sick kids had to be airlifted or taken by ambulance to Columbus. Dr. Egner stated that to take that responsibility at the time they leave your ER, that you are still responsible for them until they hit Ohio State, takes a different mindset in that you want them to be as stable as possible. If you're talking to the transport team at the hospital you're going to send the patient to, and you told them what the situation is, and you feel that the most stable thing to do is to intubate these kids so that their airways and their breathing is not a problem on a helicopter – Dr. Egner stated that she would much rather the ER doctor be a little more aggressive in keeping an airway open and that the child is breathing than the risk of having to intubate in air. Dr. Egner stated that she doesn't see clearly that the intubations were unindicated.

Concerning Dr. Bade's decision to not practice as an ER physician any more, Dr. Egner asked, why would she? She stated that Dr. Bade has been sued for a terrible case in which she wasn't at fault. Now she's before the Medical Board. Dr. Egner stated that she would say "I'm not putting myself in such a high liability position anymore, I'm going to go work at an urgent care." Dr. Egner stated that she doesn't think that that's unreasonable.

Dr. Egner stated that she agrees with the Report and Recommendation. She doesn't think that what Dr. Bade did is at the level of a violation or that she practiced below minimal standards.

Dr. Stephens asked the anesthesiologists to address the dosage of the medicines Dr. Bade used.

Dr. Varyani stated that he believes that in the first case Dr. Bade used 3 mg of Vecuronium, which is a non-depolarizing muscle relaxant that usually lasts between 20 and 30 minutes. She also used about 3 mg of Versed in a child a few months' old.

Dr. Varyani stated that in the next case, an adolescent, she used Pavulon, which he uses once a year. Dr. Varyani commented that he works five days a week. He stated that Pavulon is a muscle relaxant that starts in about three to five minutes and the paralysis lasts at least an hour and a half.

Dr. Varyani stated that, concerning Patient 1, the airlift was justified. Dr. Varyani added that, despite the testimony of the expert from a metropolitan area, who said that the patient did not need to be intubated, he does not fault Dr. Bade for intubating the patient. He indicated, however, that he did have a problem with the doses used. He agreed with Dr. Egner that, if he needed to transport a few-month-old child, and if he was comfortable with intubation, he would have used a lower dose of Vecuronium and a lower dose of Versed. Dr. Varyani stated that it is true that you're not always successful intubating the first time. Unfortunately, that's what happened to the baby. Dr. Bade was not able to intubate the first or second time. That little baby was intubated by the flight team anyway. There was too long a time when the baby was not oxygenated. Dr. Varyani stated that he won't fault anyone because he wasn't there. Dr. Varyani stated that the intubation of one of the babies was justified because of a CT scan or MRI.

Concerning Patient 3, Dr. Varyani noted that the patient was transported by an ambulance, not a helicopter. The patient was in an accident, lost consciousness and was a little dazed. Dr. Varyani stated that the Glasgow coma scale is going to go down by three points. Dr. Varyani stated that he doesn't think that intubation was justified in this case. The patient was breathing fine and everything was fine. The patient was transported from Bucyrus to CCH in a van. Why would that patient be intubated? Dr. Varyani stated that whenever you intubate, especially someone who is not an anesthesiologist who intubates every day, it is very hard and there is always a chance that you're going to miss the airway. If you don't have oxygenation for three minutes, bad things are going to happen. Dr. Varyani stated that this was three attempts.

Dr. Varyani concluded by stating that the intubation of Patient 1 was justified, he could reconcile for intubation for Patient 2, but he cannot for Patient 3. Dr. Varyani stated that he knows that Dr. Bade is at the level where she's giving up her career, and he understands Dr. Egner's argument, but he's kind of mixed because the dosages used were way out of whack and Dr. Bade didn't know what she was doing.

Dr. Stephens commented that she remembers when she, personally, was given two mg of Versed, and she weighed a lot more. She suggested that three mg for a baby is too much.

Dr. Varyani stated that it is a lot and it was very inappropriate.

Dr. Stephens stated that that is black and white, it's science.

Dr. Varyani added that he couldn't justify using Pavulon in the operating room.

Dr. Amato stated that he agrees, partially, with Dr. Steinbergh that the standard of care should be the same throughout the state, no matter where you are. However, in some situations, the rural hospitals deserve a much higher degree of physician in that ER. He stated that in any major city in the state, if the ER doctor gets into a little bit of trouble and needs help, he or she has a multitude of residents available to help out. The rural hospitals do not have that. Dr. Amato stated that Dr. Bade was in a situation where she should have recognized that she was over her head and that she didn't have the backup. Even if Dr. Bade's not going to return to Ohio or work in an ER, if it's a mindset of working above one's level of knowledge or comfort, will she do it again, perhaps not in an intubation environment, but in a similar situation?

Dr. Madia stated that the way he looks at it, the doses of muscle relaxant and sedation were out of whack. In one case she gave the patient eight mg of Versed and 10 mg of Valium.

Dr. Madia stated that his second concern is that none of those cases needed intubation "right now." He is familiar with Bucyrus Hospital and knows that it has an anesthesiologist on call and available. Dr. Bade had enough time to ask for the anesthesiologist on call to help. Dr. Madia stated that, with small children, sometimes anesthesiologists even ask for help. That's a judgment issue. Did the patient need intubation right then and there? No, all three of them did not. If she felt intubation was necessary, she had help

available and she didn't ask for that help.

Dr. Madia stated that the doses that Dr. Bade used shows that she doesn't know what kind of dosage she should be using.

Dr. Varyani stated that he has worked in ERs. When you have a child with an airway emergency, the ER would call the anesthesiologist on call, and the anesthesiologist would see the child. If it was a case of respiratory distress or strider, he would call an ENT surgeon, get the operating room ready, and the tracheotomy set would be ready. Dr. Varyani stated that the standard of care is that, if you have a child in respiratory distress, who does not need to be intubated right away, call for help, prepare things, and then you attempt. You don't just go ahead and do it and hope for the best.

Dr. Varyani stated that he's not the one who was there, so he's not the one to make that decision. Maybe when she called CCH and they told her to intubate the child, he would have said that he's not good at intubation in adults. In pediatrics, he would have asked for help. Two hands sometimes cannot do an intubation properly. There are fluids and blood. If you try to intubate once and fail, there is so much swelling, so much fluid in the throat, that it just becomes hard. Even in adults it's hard, but in pediatrics, it's unbelievable.

DR. MADIA MOVED TO TABLE THE REPORT AND RECOMMENDATION IN THE MATTER OF SHELLY BADE, M.D., TO PREPARE AN ALTERNATIVE ORDER. DR. STEINBERGH SECONDED THE MOTION. All members voted aye. The motion carried.

Dr. Egner asked whether it would be brought off the table today. Dr. Steinbergh stated that it should. She stated that she will talk to Ms. Debolt about crafting an alternative order.

When the matter was removed from the table, copies of a proposed amendments were distributed to Board members to review prior to the discussion and vote.

Dr. Varyani noted a typographical error in the second paragraph of paragraph (b) of the alternative Findings of Fact.

Dr. Egner at this time apologized for arriving late for the discussion. She asked whether or not the Board discussed whether the antibiotic treatment was delayed and whether that made a difference.

Dr. Varyani stated that the Board did not discuss that. It discussed mostly intubation.

Dr. Egner stated that she would take that out. She stated that she thought that Dr. Bade's explanation for that was perfectly reasonable. This patient was failing, and giving antibiotics takes on a lesser priority. The antibiotics were sent on the Medflight. The charge was that Dr. Bade did not provide timely antibiotic treatment, and she thinks that there's a reasonable explanation.

Dr. Steinbergh stated that that was one of the charges. She added that the explanation is included in the Findings of Fact. She felt that the Finding of Fact indicates that Dr. Bade did not unnecessarily delay.

Mr. Wilcox stated that he did find what he thinks is another clerical error. He referred to the alternative Conclusions of Law, noting that paragraph 1 of the Conclusions of Law should read as follows:

Dr. Bade's acts, conduct, and/or omissions in the treatment of Patients 1, 2 and 3, as set forth in Findings of Fact 1(a), 2, and 3 constitute "[a] departure from, or the failure to conform to, minimal standards of care of similar practitioners under the same or similar circumstances, whether or not actual injury to a patient is established," as set forth in Section 4731.22(B)(6), Ohio Revised Code.

Dr. Varyani agreed with Mr. Wilcox's correction.

DR. STEINBERGH MOVED TO AMEND THE PROPOSED FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER IN THE MATTER OF SHELLY BADE, M.D., BY SUBSTITUTING THE FOLLOWING:

FINDINGS OF FACT

1. On October 13, 2002, Patient 1, a four and one-half month old male infant, presented to the Emergency Department at Bucyrus Community Hospital [BCH] with symptoms of fever, vomiting, fussiness, decreased appetite, and a reported heart rate of 132 beats per minute. On October 14, 2002, Patient 1 expired.
 - (a) In her care of Patient 1, Shelly Bade, M.D., unsuccessfully attempted to orotracheally intubate Patient 1. At the time Dr. Bade attempted to intubate Patient 2, there were no emergency clinical indications to justify the attempted intubation. Dr. Bade had the time and should have obtained assistance from other, more experienced personnel at BCH or awaited arrival of the MedFlight of Ohio transport.
 - (b) In Dr. Bade's care of Patient 1, she did not administer appropriate treatment for supraventricular tachyarrhythmia [SVT], such as immediate electrical cardioversion or medication conversion with Adenocard. The State's evidence demonstrates that Patient 1 presented at the time of Dr. Bade's physical examination with an indication of SVT, which was an excessive heart rate of 250 beats per minute.

The testimony presented by both of Dr. Bade's experts convincingly established that, although Patient 1 presented at the time of Dr. Bade's physical examination with an indication of SVT, Patient 1 also presented with

contraindications of SVT: (a) fever, which was documented in the medical record; (b) an arrival heart rate of 132 beats per minute, followed shortly thereafter with a heart rate of 250 beats per minute, which was documented in the medical record; (c) another heart rate in the “230s”, which was documented in the medical record; and (d) varying heart rates on the bedside heart rate monitor, which was supported by Dr. Bade’s testimony.

- (c) In Dr. Bade’s care of Patient 1, she did not provide timely antibiotic treatment for her presumed concern for possible sepsis. Dr. Bade did timely order the administration of antibiotic treatment for her concern for sepsis – that order, for rocephin, was made well within the first hour of Patient 1’s arrival at BCH at 9:12 a.m. and Dr. Bade’s initial examination of Patient 1. The administration of the antibiotic treatment was placed on hold. However, the testimony from all expert witnesses establishes that the lengthy resuscitation efforts (which includes administration of medications) took priority over the administration of the antibiotic treatment. Rocephin was sent with and administered after 12:40 p.m. by the MedFlight of Ohio crew, while transporting Patient 1 to Children’s Hospital in Columbus.

The evidence does not address any concern that Dr. Bade may have with respect to potential meningitis.

- (d) In Dr. Bade’s care of Patient 1, she did not evaluate and/or document considerations for incarcerated hernia, intussusception, and intestinal anomalies that can have similar presentations to those of Patient 1.

Patient 1’s medical record establishes that he presented with a history of “normal elimination”; a family history that did not suggest incarcerated hernia, intussusception, and/or intestinal anomalies; and the physical examination did not suggest them.

2. On April 3, 2002, Patient 2, a 17-month old male infant presented to the Emergency Department at BCH after a fall from a second-story window to the concrete ground. Patient 2 presented with a reported heart rate of 125 beats per minute, crying and alert, with a Glasgow coma scale of 15, with pulse oximetry of 96 percent on room air, and clear lung fields with good peripheral pulses.

In Dr. Bade’s care of Patient 2, she orotracheally intubated Patient 2. At the time Dr. Bade intubated Patient 2, the evidence is convincing that there were no emergency clinical indications to justify the intubation. Dr. Bade had the time and should have obtained assistance from other, more experienced personnel.

3. On June 9, 2002, after having been involved in a three-car motor vehicle accident, Patient 3, a 12-year old female, presented to the Emergency Department at BCH with a Glasgow coma scale of 15 and no other serious injuries were initially noted.

In Dr. Bade's care of Patient 3, she orotracheally intubated Patient 3 on a second attempt. At the time that Dr. Bade first attempted to orotracheally intubate and at the time she successfully intubated Patient 3, there were no emergency clinical indications to justify the intubation. Dr. Bade had the time and should have obtained assistance from other, more experienced personnel.

CONCLUSIONS OF LAW

1. Dr. Bade's acts, conduct, and/or omissions in the treatment of Patients 1, 2 and 3, as set forth in Findings of Fact 1(a), 2, and 3 constitute "[a] departure from, or the failure to conform to, minimal standards of care of similar practitioners under the same or similar circumstances, whether or not actual injury to a patient is established," as set forth in Section 4731.22(B)(6), Ohio Revised Code.
2. Dr. Bade's acts, conduct, and/or omissions in the treatment of Patient 1, as set forth in Finding of Fact 1(b), 1(c) and 1(d) do not constitute "[a] departure from, or the failure to conform to, minimal standards of care of similar practitioners under the same or similar circumstances, whether or not actual injury to a patient is established," as set forth in Section 4731.22(B)(6), Ohio Revised Code. It was not a failure to conform to the minimal standards by not treating for SVT when SVT was contraindicated. Although Dr. Bade timely ordered the antibiotic treatment and it was not given until after 12:40 p.m., as set forth in Finding of Fact 1(c), the intervening resuscitation of Patient 1 properly delayed the administration of the antibiotic treatment for two hours. Also, it was not a failure to conform to the minimal standards to have sent the antibiotic treatment with the MedFlight transport for administration more than 30 minutes after resuscitation efforts ceased. It was not a failure to conform to the minimal standards by not evaluating or documenting considerations for incarcerated hernia, intussusception and intestinal anomalies given the history presented and the physical examination.

Nevertheless, because the Board did not previously have before it all of the information that was presented during the hearing, the Board was substantially justified in pursuing the allegations set forth in 1(b), 1(c) and 1(d) of the notice of opportunity for hearing.

PROPOSED ORDER

It is hereby ORDERED that:

- A. The amended motion of Shelly Bade, M.D., to dismiss the allegations pertaining to Patient 1 (on the basis of res judicata and collateral estoppel) is denied.
- B. Dr. Bade is REPRIMANDED.

This Order shall become effective immediately upon the mailing of the notification of approval by the Board.

DR. MADIA SECONDED THE MOTION. A vote was taken:

ROLL CALL:	Mr. Albert	- abstain
	Dr. Egner	- aye
	Dr. Talmage	- abstain
	Dr. Suppan	- aye
	Dr. Madia	- aye
	Mr. Browning	- aye
	Mr. Hairston	- aye
	Dr. Amato	- aye
	Dr. Stephens	- aye
	Dr. Mahajan	- aye
	Dr. Steinbergh	- aye
	Dr. Varyani	- aye

The motion carried.

DR. STEINBERGH MOVED TO APPROVE AND CONFIRM MS. PETRUCCI'S FINDINGS OF FACT, CONCLUSIONS OF LAW, AND PROPOSED ORDER, AS AMENDED, IN THE MATTER OF SHELLY BADE, M.D. DR. MADIA SECONDED THE MOTION. A vote was taken:

ROLL CALL:	Mr. Albert	- abstain
	Dr. Egner	- aye
	Dr. Talmage	- abstain
	Dr. Suppan	- aye
	Dr. Madia	- aye
	Mr. Browning	- aye
	Mr. Hairston	- aye
	Dr. Amato	- aye
	Dr. Stephens	- aye
	Dr. Mahajan	- aye
	Dr. Steinbergh	- aye
	Dr. Varyani	- aye

The motion carried.

State Medical Board of Ohio

30 E. Broad Street, 3rd Floor, Columbus, OH 43215-6127



Richard A. Whitehouse, Esq.
Executive Director

(614) 466-3934
med.ohio.gov

October 10, 2007

Shelly Bade, M.D.
13348 Twin Wood Lane #2102
Orlando, FL 32837

Dear Doctor Bade:

In accordance with Chapter 119., Ohio Revised Code, you are hereby notified that the State Medical Board of Ohio [Board] intends to determine whether or not to limit, revoke, permanently revoke, suspend, refuse to register or reinstate your certificate to practice medicine and surgery, or to reprimand you or place you on probation for one or more of the following reasons:

- (1) During the period in or about 2002, in the routine course of your practice, you undertook the treatment of Patients 1-3, as identified on the attached Patient Key (Patient Key confidential and to be withheld from public disclosure).

In your emergency room treatment of Patients 1-3, you intubated and/or attempted to intubate these patients despite the lack of appropriate clinical indications to do so. Further, you failed to perform an appropriate work up and/or document an appropriate work up for various potential diagnoses; and/or you failed to promptly administer appropriate medications to patients.

Examples of such conduct include, but are not limited to, the following:

- (a) On or about October 13, 2002, Patient 1, a four-and-one-half month-old male infant, presented to the Emergency Department with symptoms of fever, vomiting, increased fussiness, decreased appetite, crying and a reported heart rate of 250 beats/minute. Despite indications of supraventricular tachyarrhythmia, you failed to administer appropriate treatment such as immediate electrical cardioversion or medication conversion with Adenocard. Further, you unsuccessfully attempted to orotracheally intubate Patient 1 despite the lack of appropriate clinical indications to justify intubation. In addition, you failed to provide timely antibiotic treatment for your presumed concern for potential sepsis or meningitis in this patient. Furthermore, you did not evaluate and/or document your considerations for those conditions such as incarcerated

Mailed 10-11-07

hernia, intussusception, and intestinal anomalies that can have similar presentations. On or about October 14, 2002, Patient 1 expired.

- (b) On or about April 3, 2002, Patient 2, a 17-month-old male infant presented to the Emergency Department after a “presumably” unwitnessed fall from a second story window to the concrete ground. Patient 2 presented with a reported heart rate of 125 beats/minute, crying and alert, with a Glasgow Coma Scale of 15, a pulse oximetry of 96% on room air and clear lung fields with good peripheral pulses. In your care of Patient 2, you orotracheally intubated Patient 2 despite the lack of appropriate clinical indications to justify intubation.
- (c) On or about June 9, 2002, after having been involved in a three car motor vehicle accident, Patient 3, a 12-year-old female, presented to the Emergency Department with a Glasgow Coma Scale of 15, and no other serious injuries noted. In your care of Patient 3, you orotracheally intubated Patient 3 on a second attempt despite the lack of appropriate clinical indications to justify intubation.

Your acts, conduct, and/or omissions as alleged in paragraph (1) above, individually and/or collectively, constitute “[a] departure from, or the failure to conform to, minimal standards of care of similar practitioners under the same or similar circumstances, whether or not actual injury to a patient is established,” as that clause is used in Section 4731.22(B)(6), Ohio Revised Code.

Pursuant to Chapter 119., Ohio Revised Code, you are hereby advised that you are entitled to a hearing in this matter. If you wish to request such hearing, the request must be made in writing and must be received in the offices of the State Medical Board within thirty days of the time of mailing of this notice.

You are further advised that, if you timely request a hearing, you are entitled to appear at such hearing in person, or by your attorney, or by such other representative as is permitted to practice before this agency, or you may present your position, arguments, or contentions in writing, and that at the hearing you may present evidence and examine witnesses appearing for or against you.

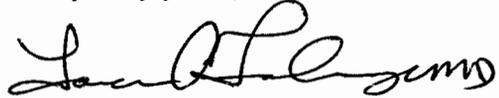
In the event that there is no request for such hearing received within thirty days of the time of mailing of this notice, the State Medical Board may, in your absence and upon consideration of this matter, determine whether or not to limit, revoke, permanently revoke, suspend, refuse to register or reinstate your certificate to practice medicine and surgery or to reprimand you or place you on probation.

Please note that, whether or not you request a hearing, Section 4731.22(L), Ohio Revised Code, provides that “[w]hen the board refuses to grant a certificate to an

applicant, revokes an individual's certificate to practice, refuses to register an applicant, or refuses to reinstate an individual's certificate to practice, the board may specify that its action is permanent. An individual subject to a permanent action taken by the board is forever thereafter ineligible to hold a certificate to practice and the board shall not accept an application for reinstatement of the certificate or for issuance of a new certificate."

Copies of the applicable sections are enclosed for your information.

Very truly yours,



Lance A. Talmage, M.D.
Secretary

LAT/DPK/flb
Enclosures

CERTIFIED MAIL #91 7108 2133 3931 8317 5034
RETURN RECEIPT REQUESTED

cc: James D. Colner, Esq.
Shumaker, Loop & Kendrick, LLP
41 South High Street
Suite 2400
Columbus, OH 43215

CERTIFIED MAIL #91 7108 2133 3931 8317 5027
RETURN RECEIPT REQUESTED