LIABILITY

Medical experts, Joshua Holden, M.D. and Daniel Adler, M.D. were consulted regarding the care and treatment rendered to the minor plaintiff by the defendants.

Their curriculum vitae are attached hereto at **Tabs E and F.**

It is Dr. Holden, M.D.'s opinion that Persistent variable and late decelerations in a fetal heart tracing, along with periods of minimal variability, place an infant at significantly increased risk for severe and permanent neurological injury. For this reason, the accepted standard of care in Massachusetts from 2016 through the present requires the average qualified obstetrician to promptly evaluate laboring mothers who are reported to have fetal heart rate decelerations, to discuss the need for emergent cesarean section if the tracing remains unresponsive to intrauterine resuscitation measures, and to emergently perform an emergent cesarean section if the tracing remains unresponsive.

The standard of care in Massachusetts from 2016 through the present requires the average qualified certified nurse midwife to recognize and appreciate nonreassuring fetal heart tracings which are unresponsive to intrauterine resuscitation, and immediately consult the attending obstetrician and inform him that cesarean delivery is indicated.

While labor nurses cannot perform cesarean sections, they can provide intrauterine resuscitation to improve fetal oxygenation and perfusion. Intrauterine resuscitation involves the administration of intravenous fluid boluses and oxygen to the mother, as well as maternal position changes. The standard of care in Massachusetts from 2016 through the present requires the average qualified registered nurse to recognize and appreciate nonreassuring fetal heart tracings, to perform all available intrauterine resuscitation measures with frequency, including maternal position changes and administration of maternal oxygen and fluid boluses, and to notify

the attending obstetrician of the need for emergent cesarean delivery when these measures fail to significantly improve the fetal heart tracing.

It is Dr. Adler's opinion that the presence of Category 2 fetal heart monitoring with decelerations are indicative of fetal compromise from partial prolonged hypoxia. From the point of view of a pediatric neurologist, these fetal heart monitoring patterns do not prove brain injury has occurred. But, at the same time, Category 2 fetal heart monitoring with decelerations require evaluation of the status of the fetus and if required, delivery of the fetus from an abnormal intrauterine environment.

Prolonged exposure to a hostile intrauterine environment places an infant at significantly increased risk for brain injury. In Dr. Adler's professional opinion, to a reasonable degree of medical certainty, the cause of Faolan's neurological injury was more likely than partial prolonged hypoxia on an intrauterine basis, as evidenced by the fetal heart rate abnormalities outlined by Joshua Holden, M.D. in his letter of 6/24/20.

LIABILITY OF THE DEFENDANT, TIMOTHY LEPORE, MD

After review of the relevant medical records, it is Dr. Holden, M.D.'s professional opinion, to a reasonable degree of medical certainty, that the care and treatment rendered to Faolan Wilkinson and his mother Candy by Timothy Lepore, M.D. on 6/2/16 deviated from the accepted standard of care at the time for the average qualified obstetrician when Dr. Lepore failed to: 1) promptly evaluate Mrs. Wilkinson at 11:05 a.m., when CNM Billings reported the fetal heart rate decelerations; 2) discuss the likely need for cesaraen delivery at that time with Mrs. Wilkinson, and plan for an emergent cesarean section if the tracing remained unresponsive to intrauterine resuscitation measures; and 3) emergently perform a cesarean section upon his actual arrival at 12:37 p.m., instead of delaying the uterine incision to 1:19 p.m.

As a direct result of Dr. Lepore's deviations from the accepted standard of care, as outlined above, Faolan was not delivered until 1:25 p.m., significantly increasing his risk for severe and permanent neurological injury. Had Dr. Lepore rendered care in accordance with the accepted standard of care, he would have promptly evaluated Mrs. Wilkinson at 11:05 a.m., when CNM Billings reported the fetal heart rate decelerations, he would have recognized the persistent pattern of variable and late decelerations along with periods of minimal variability at that time and would have discussed the plan for emergent cesarean if the tracing remained unresponsive to intrauterine resuscitation measures, and he would have then performed an emergent cesarean section at 11:20 a.m. when the tracing remained nonreassuring, thereby significantly reducing Faolan's risk for severe and permanent neurological injury.

In Dr. Adler's professional opinion, to a reasonable degree of medical certainty, Faolan's severe and permanent neurological injury is partial prolonged hypoxia as a direct result of the substandard care and treatment rendered to him by Dr. Lepore. Had Dr. Lepore rendered care in accordance with the accepted standard of care, and had Faolan been delivered sooner in time as outlined by Dr. Holden, Faolan more likely than not would have avoided prolonged exposure to a hostile intrauterine environment as well as the severe and permanent neurological injury with which he lives today.

LIABILITY OF THE DEFENDANT, DEBORAH BILLINGS, CNM

After review of the relevant medical records, it is Dr. Holden, M.D.'s professional opinion, to a reasonable degree of medical certainty, that the care and treatment rendered to Faolan Wilkinson and his mother Candy byDeborah Billings, C.N.M. on 6/2/16 deviated from the accepted standard of care at the time for the average qualified certified nurse midwife when CNM Billings failed to recognize and appreciate the nonreassuring tracing which was

unresponsive to the attempted intrauterine resuscitation by 11:20 a.m., and when CNM Billings failed to immediately consult Dr. Lepore and inform him that cesarean delivery was indicated at that time.

As a direct result of CNM Billings' deviations from the accepted standard of care, as outlined above, Faolan was not delivered until 1:25 p.m., significantly increasing his risk for severe and permanent neurological injury. Had CNM Billings rendered care in accordance with the accepted standard of care, she would have recognized and appreciated the nonreassuring tracing which was unresponsive to the attempted intrauterine resuscitation by 11:20 a.m., she would have immediately consulted Dr. Lepore and informed him that cesarean delivery was indicated, Faolan would have been delivered by emergent cesarean section shortly after 11:20 a.m., and more likely than not, his likelihood for severe and permanent neurological injury would have been greatly reduced.

In Dr. Adler's professional opinion, to a reasonable degree of medical certainty, Faolan's severe and permanent neurological injury is partial prolonged hypoxia as a direct result of the substandard care and treatment rendered to him by CNM Billings. Had CNM Billings rendered care in accordance with the accepted standard of care, Faolan would have been delivered far sooner in time, he would have avoided prolonged exposure to a hostile intrauterine environment, and more likely than not, he would have avoided the severe and permanent neurological injury with which he lives today.

LIABILITY OF THE DEFENDANT, KATRINE SHECKELS, R.N.

After review of the relevant medical records, it is Dr. Holden, M.D.'s professional opinion, to a reasonable degree of medical certainty, that the care and treatment rendered to Faolan Wilkinson and his mother Candy byKatrine Sheckels, R.N. on 6/2/16 deviated from the

accepted standard of care at the time for the average qualified labor nurse when Nurse Sheckels performed inadequate intrauterine resuscitation measures in the presence of persistent fetal heart rate decelerations, repositioning Mrs. Wilkinson only once and failing to provide oxygen, and when Nurse Sheckels failed to notify the attending obstetrician regarding Mrs. Wilkinson's decelerations, instead notifying only the midwife.

As a direct result of Nurse Sheckels' deviations from the accepted standard of care, as outlined above, Faolan was not delivered until 1:25 p.m., significantly increasing his risk for severe and permanent neurological injury. Had Nurse Sheckels rendered care in accordance with the accepted standard of care, she would have provided oxygen and would have repositioned Mrs. Wilkinson at regular intervals, instead of doing so only once in about a 30 minute period, the obstetrician would have been aware of Mrs. Wilkinson's decelerations and would have planned for cesarean delivery if the tracing did not resolve within about an hour, and more likely than not, Faolan would have been delivered by emergent cesarean section shortly after 11:20 a.m., significantly reducing his likelihood for severe and permanent neurological injury.

In Dr. Adler's professional opinion, to a reasonable degree of medical certainty, Faolan's severe and permanent neurological injury is partial prolonged hypoxia as a direct result of the substandard care and treatment rendered to him by Nurse Sheckels. Had Nurse Sheckels rendered care in accordance with the accepted standard of care, Faolan would have been delivered far sooner in time as outlined by Dr. Holden, and Faolan would have avoided prolonged exposure to a hostile intrauterine environment, thereby more likely than not avoiding the severe and permanent neurological injury with which he lives today.

LIABILITY OF THE DEFENDANT, KATRINE SHECKELS, R.N.

After review of the relevant medical records, it is Dr. Holden, M.D.'s professional opinion, to a reasonable degree of medical certainty, that the care and treatment rendered to Faolan Wilkinson and his mother Candy byWendy Swasey, R.N. on 6/2/16 deviated from the accepted standard of care at the time for the average qualified labor nurse when Nurse Swasey performed inadequate intrauterine resuscitation measures in the presence of persistent fetal heart rate decelerations, failing to provide any oxygen, and when Nurse Swasey failed to notify the attending obstetrician regarding Mrs. Wilkinson's persistent decelerations and the nonreassuring fetal heart tracing which merited emergent cesarean delivery at 11:20 a.m.

As a direct result of Nurse Swasey's deviations from the accepted standard of care, as outlined above, Faolan was not delivered until 1:25 p.m., significantly increasing his risk for severe and permanent neurological injury. Had Nurse Swasey rendered care in accordance with the accepted standard of care, she would have performed more consistent intrauterine resuscitation measures to include the administration of maternal oxygen, she would have recognized and appreciated the nonreassuring tracing which was unresponsive to intrauterine resuscitation at 11:20 a.m. and would have alerted Dr. Lepore to the need for emergent cesarean section, Dr. Lepore would have performed the cesarean section shortly thereafter, and more likely than not, Faolan's likelihood for severe and permanent neurological injury would have been greatly reduced.

In Dr. Adler's professional opinion, to a reasonable degree of medical certainty, Faolan's severe and permanent neurological injury is partial prolonged hypoxia as a direct result of the substandard care and treatment rendered to him by Nurse Swasey. Had Nurse Swasey rendered care in accordance with the accepted standard of care, Faolan would have been delivered far

sooner in time as outlined by Dr. Holden, he would have avoided prolonged exposure to a hostile intrauterine environment, and more likely than not, he would have avoided the severe and permanent neurological injury with which he lives today.

ARGUMENT

Massachusetts General Laws, Chapter 231, §60B and the subsequent case law set forth both the scope and limits of this Tribunal's function in reviewing a claim of medical malpractice. The task of the Medical Malpractice Tribunal is a "narrow" one, in which "the tribunal should simply examine the evidence proposed to be offered on behalf of the patient to determine whether that evidence, 'if properly substantiated, is sufficient to raise a legitimate question of liability appropriate for judicial inquiry or whether the plaintiff's case is merely an unfortunate medical result." Feliciano v. Attanucci, 95 Mass.App.Ct.. 34, 37-38, (2019), quoting MGL c231, §60B. If the plaintiff's Offer of Proof is sufficient to raise a legitimate question of liability, the plaintiffcan proceed further without a bond; if not, the plaintiffmay pursue his claim only by posting a bond of Six Thousand ($6,000.00) Dollars.

The Supreme Judicial Court held in Little v. Rosenthal, 382 N.E.2d 1017, 1039 (1978), that in evaluating evidence submitted by the plaintiffin a medical malpractice claim, "the tribunal's task should be compared to a trial judge function in ruling on a defendant's motion for a directed verdict," although these standards are not "one and the same." Kopycinski v. Aserkoff, 410 Mass. 410, 415, (1991). Because the Tribunal's assessment occurs before completion of discovery and full vetting of the plaintiff's theories through *Lanigan* motions, §60B "explicitly contemplates that a plaintiff's offer of proof to the tribunal need not meet the full evidentiary burden of proof at trial; instead, the offer of proof, taken in the light most favorable to the plaintiff, need only be sufficient to raise a legitimate question of liability, with

proper evidentiary substantiation to follow." Feliciano, 95 Mass.App.Ct., at 38 (emphasis supplied).

Under this standard, a finding for a defendant in a medical malpractice case should be entered, "only when (in) considering the evidence most favorable to the plaintiffs, it is still insufficient to support a verdict in his favor." Demarzo v. S & P Realty Corp., 306 N.E.2d 432 (1974). All evidence favorable to the plaintiff– including the expert opinion letter – must be accepted as being true. Extrinsic evidence is not required to substantiate the factual statements in an expert's' opinion, and "a factually based statement by a qualified expert, without more, is sufficient to meet the tribunal standard." Booth v. Silva, 36 Mass.App.Ct. 16, 21 (1994). The Tribunal is not to engage in weighing the evidence or determining credibility, Keppler v. Tufts, 38 Mass.App.Ct. 587, 589 (1995), and "[a]ny factual dispute as to the meaning of the record is for the jury." Rahilly v. North Adams Regional Hosp., 36 Mass.App.Ct. 714, 723 (1994).

As it pertains to the Tribunal's assessment of causation, "not a great deal is required to fend off a directed verdict on the issue of causation. It is enough to adduce evidence that there is a greater likelihood or probability that the harm to the plaintiff flowed from conduct for which the defendant was responsible." Joudrey v. Nashoba Community Hosp., Inc., 32 Mass.App.Ct. 974, 976 (1992).

The plaintiff's evidence before this Tribunal clearly would not entitle the defendant to a directed verdict. The plaintiff's Offer of Proof consists of the following documents:

A. Pioneer Women's Health records dated 10/29/15 to 6/2/16;

B. Baystate Franklin Medical Center records dated 6/2/16 to 7/15/17 including the fetal heart monitor tracings;

C. Baystate Franklin Medical Center records dated 6/2/16 to 7/15/17 including the fetal heart monitor tracings;

D. Baystate Franklin Medical Center records dated 6/2/16 to 7/15/17 including the fetal heart monitor tracings;

E. Expert Letter and Curriculum Vitae of Joshua Holden, M.D.; and

F. Expert Letter and Curriculum Vitae of Daniel Adler, M.D

Certainly, if a jury were to accept the testimony of the Plaintiff's experts as true – as the Tribunal must for the purpose of this hearing – it would be warranted in returning a verdict for the plaintiff.

In order to establish liability in a medical malpractice case, the Plaintiff's must present evidence to establish: (1) the breach of duty owed by the defendant; and (2) a causal relationship between that breach and the damages allegedly suffered. Civitarese v. Gorney, 358 Mass. 652 (1971); Bernard v. Menicks, 340 Mass. 296 (1960). The Plaintiff's Offer of Proof, including the expert reports of Dr. Holden and Dr. Adler clearly satisfies both of these requirements:

First, in treating the minor plaintiff, the Plaintiff's expert reports state that the standard of care due to Faolan Wilkinson was not met by defendants. Based on their review of the relevant medical records, Dr. Holden, and Dr. Adler conclude that, in their professional opinion, to a reasonable degree of medical certainty, the care and treatment rendered to Faolan Wilkinson by Timothy Lepore, MD, Deborah Billings, CNM, Katrine Sheckels, RN, and Wendy Swasey, RN fell below the accepted standard of care for the average qualified obstetrician, certified nurse midwife and registered nurse.

Second, a causal link between the defendant's negligence and the injury suffered is also discussed by Dr. Holden and Dr. Adler. They state that as a direct result of the defendant's negligence, Faolan Wilkinson suffered severe and permanent neurological injury with which he lives today.

CONCLUSION

The standard, which this Tribunal is bound to follow, requires that all rational inferences be resolved in the Plaintiff's favor and that this Tribunal accept as true all evidence favorable to the plaintiff. Under this standard, "the defendant, in fact, is taken to have conceded the truth" of the Plaintiff's evidence. See, *Smith & Zobel, Rules Practice, 8 Mass. Prac., Series, p. 203.* Based upon the Offer of Proof submitted by the plaintiffand in light of the foregoing standards, the plaintiffrespectfully submits that there is a legitimate question of liability presented and that theplaintiffshould be allowed to proceed further without the imposition of a statutory bond.

Respectfully submitted,
The plaintiff,
By hisattorney,

Robert M. Higgins

Robert M. Higgins
BBO# 567229
Barrie S. Duchesneau
BBO# 673794
LUBIN & MEYER, P.C.
100 City Hall Plaza
Boston, MA 02108
(617) 720-4447

COMMONWEALTH OF MASSACHUSETTS

HAMPDEN, ss.

SUPERIOR COURT DEPARTMENT OF
THE TRIAL COURT
Civil Action No. 2179CV00227

FAOLAN WILKINSON, PPA KEVIN WILKINSON,
Plaintiff,
V.
TIMOTHY LEPORE, M.D., DEBORAH BILLINGS, C.N.M, KATRINE SHECKELS, R.N., AND WENDY SWASEY, R.N.,
Defendants.

PLAINTIFF'S OFFER OF PROOF

Respectfully submitted,
The plaintiff,
By his attorney,

Robert M. Higgins

Robert M. Higgins
BBO# 567229
Barrie S. Duchesneau
BBO# 673794
LUBIN & MEYER, P.C.
100 City Hall Plaza
Boston, MA 02108
(617) 720-4447

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SUPERIOR COURT DEPARTMENT OF
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FAOLAN WILKINSON, PPA KEVIN WILKINSON,
Plaintiff,
V.
TIMOTHY LEPORE, M.D., DEBORAH BILLINGS, C.N.M, KATRINE SHECKELS, R.N., AND WENDY SWASEY, R.N.,
Defendants.

PLAINTIFF'S OFFER OF PROOF

In this medical malpractice action, the plaintiff, Faolan Wilkinson, ppa Kevin Wilkinson, seeks to recover for the severe and permanent personal injuries suffered by Faolan Wilkinson as a result of the negligent care and treatment rendered tohimby the defendants, Timothy Lepore, MD, Deborah Billings, CNM, Katrine Sheckels, RN, Wendy Swasey, RN.

Specifically, the plaintiff alleges that the care and treatment rendered to Faolan Wilkinson by Timothy Lepore, MD, Deborah Billings, CNM, Katrine Sheckels, RN, and Wendy Swasey, RN inJune 2016 fell below the accepted standard of care for the average qualified obstetrician, certified nurse midwife and registered nurse when they failed to ensure a cesarean section was timely performed.

The plaintiff further alleges that as a direct result of these deviations from the accepted standard of care, Faolan Wilkinson suffered injury resulting in cerebral palsy.

This written portion of the Plaintiff's Offer of Proof consists of the following items which will be offered at the trial of this action:

A. Pioneer Women's Health records dated 10/29/15 to 6/2/16;

B. Baystate Franklin Medical Center records dated 6/2/16 to 7/15/17 including the fetal heart monitor tracings;

C. Baystate Franklin Medical Center records dated 6/2/16 to 7/15/17 including the fetal heart monitor tracings;

D. Baystate Franklin Medical Center records dated 6/2/16 to 7/15/17 including the fetal heart monitor tracings;

E. Expert Letter and Curriculum Vitae of Joshua Holden, M.D.; and

F. Expert Letter and Curriculum Vitae of Daniel Adler, M.D

This written portion of the Plaintiff's Offer of Proof also contains an argument that the plaintiffhas satisfied the requirements of M.G.L. c. 231 §60B in that this action presents a legitimate question of liability appropriate for further judicial review.

STATEMENT OF FACTS

Faolan's mother, Candy Wilkinson, delivered him at 38 6/7 weeks gestation. **(D2)** She was 41 years old and was a G5, P3 prior to his birth. **(D2)** Her estimated date of confinement (EDC) was 6/10/16. **(B10)** Mrs. Wilkinson's past obstetric history includes a normal spontaneous vaginal delivery (NSVD) in 1992, a primary low transverse cesarean section (LTCS) for fetal heart rate decelerations and meconium in 1994, and a vaginal birth after cesarean (VBAC) in 1995. **(B10)** Faolan was her first child with her husband Kevin Wilkinson. **(B10)** Mrs. Wilkinson's personal past medical history included anemia, chronic back pain, and supraventricular tachycardia for which she declined metoprolol. **(B12)** Her past surgical history included her cesarean section and cholecystectomy. **(B13)** Mrs. Wilkinson was employed as an adult foster care nurse. **(B10)**

On 6/2/16 at 1:30 a.m., Mrs. Wilkinson woke to a gush of clear fluid. **(B10)** She then had uterine contractions (UCs) all night and presented to her obstetrician's office in the morning,

shortly after 9:00 a.m. (**A5, B10**) A vaginal examination (VE) showed 3/80/-1. (**A5**) She was sent to Baystate Franklin Medical Center. (**B10**) External fetal heart rate monitoring was initiated at 10:02 a.m. by Katrine Sheckels, R.N. (**B18, C1**) At 10:07 a.m., Nurse Sheckels noted that there were variable decelerations of the fetal heart rate (FHR) to the 70s which recovered to the 120s with slow return to the baseline in the 140s. (**B18**) Nurse Sheckels notified Deborah Billings, C.N.M. (**B18**) At 10:09 a.m., CNM Billings came in to view the strip and discuss the plan with Mrs. Wilkinson. (**B18**) At 10:13 a.m., laboratory studies were drawn and Nurse Sheckels noted that there were variable decelerations after each UC. (**B18**) At 10:15 a.m., Nurse Sheckels noted that the FHR was 145 with minimal variability, no accelerations, and variable decelerations. (**B17**) Mrs. Wilkinson was in semi-fowlers at that time. (**B17**)

At 10:16 a.m., CNM Billings returned to the room to view the strip. (**B18**) Mrs. Wilkinson had a variable deceleration to the 70s and was repositioned to her left side. (**B18**) At 10:22 a.m., Nurse Sheckels noted that a #18g angio was inserted into Mrs. Wilkinson's left wrist. (**B18**) Nurse Sheckels identified late or variable decelerations after each UC and noted that an IV fluid bolus was starting. (**B18**) At 10:30 a.m., Nurse Sheckels noted that the FHR was 140 with minimal variability, no accelerations, and variable and late decelerations. (**B17**)

An obstetrics admission note was signed at 10:34 a.m. by CNM Billings, who noted that there were deep variable decelerations after each UC to the 70s before Mrs. Wilkinson was turned to her left side, and after turning the decelerations only went down to the 120s every five minutes. (**B10, B14**) CNM Billings noted that she discussed the variable decelerations and concerns and reviewed the rationale for a cesarean section if it became necessary, but there is no indication that she notified an obstetrician regarding the decelerations at that time. (**B15**) Mrs. Wilkinson was then admitted for active labor. (**B14**) At 10:35 a.m., Nurse Sheckels gave report

to Wendy Swasey, R.N. **(B18)** Of note, Nurse Sheckels had only performed one position change and had not administered any oxygen as a form of intrauterine resuscitation. **(B17, B18)** At 10:42 a.m., CNM Billings came in again to review the strip. **(B18)** At 10:45 a.m., Nurse Swasey documented a FHR of 140 with minimal variability, no accelerations, and variable and late decelerations. **(B17)** The IV bolus was continuing to infuse and she repositioned Mrs. Wilkinson from her left side to her right side. **(B17)**

The anesthesiologist came in the room at 10:50 a.m. to place the epidural. **(B18)** The EFM was turned off and Mrs. Wilkinson got up to use the bathroom (BR). **(B18)** At 11:00 a.m., Mrs. Wilkinson was sitting up for epidural placement and Nurse Swasey noted that the FHR was 145 with moderate variability, no accelerations, and variable decelerations. **(B17-18)**

At 11:05 a.m., CNM Billings noted that the FHR was category 2 with minimal to moderate variability and variable decelerations with each UC now to the 100s to 110s. **(B16)** She noted that she discussed the decelerations with Mrs. Wilkinson and her husband and that anesthesia and the obstetrician were aware. **(B16)** Mrs. Wilkinson was getting her epidural anesthesia at the time of this note. **(B16)** At 11:15 a.m., Mrs. Wilkinson remained sitting for her epidural. **(B17)** CNM Billings was in the room and reviewed the strip at 11:20 a.m. **(B18)**

I have reviewed Mrs. Wilkinson's fetal heart monitor tracings dated 6/2/16. In Dr. Holden's professional opinion, to a reasonable degree of medical certainty, there was a nonreassuring pattern of persistent variable and late decelerations within the tracing, along with periods of minimal variability. This pattern was evident when Mrs. Wilkinson arrived at the hospital. The standard of care required consistent and persistent administration of intrauterine resuscitation measures, which were insufficiently utilized in Mrs. Wilkinson's time at the hospital up until this point. By 11:20 a.m., in the presence of persistent variable decelerations

despite the intrauterine resuscitation measures that were utilized, the standard of care required emergent cesarean section.

At 11:23 a.m., epidural placement was complete and the FHR was noted to be 140 with variable and late decelerations. **(B18)** At 11:30 a.m., Nurse Swasey noted that the FHR was 145 with minimal variability, no accelerations, and variable and late decelerations. **(B17)** Mrs. Wilkinson had been repositioned to semi-fowlers. **(B17)** A VE timed 11:40 a.m. revealed that Mrs. Wilkinson's cervix was stretching to 5 cm. **(B18)** At 11:43 a.m., she was repositioned to her right side, CNM Billings had left the room, and the decelerations continued per Nurse Swasey. **(B18)**

At 11:45 a.m., Nurse Swasey noted that the FHR was 145 with minimal variability, no accelerations, and variable and late decelerations. **(B17)** She repositioned Mrs. Wilkinson to her right side. **(B17)** At 12:00 p.m., Nurse Swasey noted that the FHR was 140 with minimal variability, no accelerations, and variable and late decelerations. **(B17)** CNM Billings came in to the room and viewed the strip. **(B18)** Nurse Swasey noted that there continued to be variable and late decelerations with decreased variability. **(B18)** CNM Billings discussed amnioinfusion and Mrs. Wilkinson was agreeable. **(B18)**

At 12:15 p.m., Nurse Swasey noted that the FHR was 140 with minimal variability, no accelerations, and variable and late decelerations. **(B17)** At 12:20 p.m., Mrs. Wilkinson was resting on her left side. **(B18)** An SVE was done and revealed 8 cm dilatation. **(B18)** The amnioinfusion was started with 500 cc and a bolus was administered. **(B18)** Mrs. Wilkinson was found to have bloody show. **(B18)** At 12:30 p.m., Nurse Swasey noted that the FHR was 130 with minimal variability, no accelerations, and variable and late decelerations. **(B17)** CNM Billings was in the room reviewing the strip at 12:35 p.m. and Nurse Swasey noted that the FHR

was down to the 70s to 80s at that time. (**B18**) She repositioned Mrs. Wilkinson to her left side. (**B18**) Obstetrician Timothy Lepore, M.D. came in to view the strip at 12:37 p.m. (**B18**) Scalp stimulation was attempted by CNM Billings at 12:38 p.m. and there was no FHR acceleration. (**B18**) A SVE revealed 8 cm dilatation. (**B18**) At 12:41 p.m., CNM Billings and Dr. Lepore left the room to discuss the plan. (**B18**) Dr. Lepore then came back in at 12:43 p.m. and discussed the plan for a cesarean section. (**B18**) Mrs. Wilkinson was agreeable. (**B18**) The consent for the section was timed 13 minutes earlier, at 12:30 p.m. (**B85**) The reason for the cesarean section was the nonreassuring fetal heart rate (NRFHR). (**D2**)

Mrs. Wilkinson's FHR continued to have late and variable decelerations with decreased variability. (**B18**) At 12:45 p.m., Nurse Swasey noted that the FHR was 125 with minimal variability, no accelerations, and variable and late decelerations. (**B17**) At 12:58 p.m., Nurse Swasey documented continued late decelerations and repositioned Mrs. Wilkinson to her right side. (**B18**) The amnioinfusion was removed by CNM Billings at 12:59 p.m. (**B18**) At 1:00 p.m., Nurse Swasey noted the FHR was 120 with minimal variability and variable and late decelerations. (**B17**) Nurse Swasey took Mrs. Wilkinson off of the monitor at 1:03 p.m. and moved her to the operating room (OR). (**B18**) She arrived in the OR at 1:06 p.m. (**B88**)

Dr. Lepore's operative note reflects a procedure time of 1:00 p.m. (**B86**) This is contradicted by the perioperative record, which establishes the arrival into the OR at 1:06 p.m. and the incision time of 1:19 p.m. (**B88**) The uterine incision time was 1:19 p.m. (**B88**) On entry into the uterus, the fluid was bloody. (**B87**) Terminal meconium was present. (**D2**) Baby Faolan Wilkinson was delivered at 1:25 p.m. (**B88**) Cord gases were collected. (**B88**) The arterial gas sample was timed 1:42 p.m. (**D76**) PH and bicarbonate could not be calculated. (**D76**) The pCO2 was 53 (normal: 36-46), and the pO2 was 25 (normal: 80-96). (**D76**) A venous cord blood gas

result was timed 2:27 p.m. (**D76**) The pH and bicarbonate were found to be below the reportable range. (**D76**) The pCO2 was 53 and the pO2 was 30. (**D76**)

Faolan was brought to the nursery. He was grunting and retractions with breathing and nasal flaring. (**D3**) His oxygen saturations were never above 90% in the OR, and stayed 85-89% in the nursery at greater than 10 minutes of life. (**D3**) He was placed on 2L nasal cannula (NC) 100% with slow improvement in his saturations to the mid-90s. (**D3**) He was then weaned over the first two hours of life to room air (RA), with improvement in his respiratory effort and cessation of signs of respiratory distress. (**D3**) A chest x-ray (CXR) was performed and showed a possible tiny anterior pneumothorax, but was otherwise normal. (**D3**) Laboratory studies showed low platelets, normal hemoglobin and hematocrit (H&H), reassuring white cell count (WCC) and differential with normal CRP. (**D3**)

During this time, Faolan's point of care (POC) glucose was 31 mg/dL. (**D3**) An IV was placed and Faolan was started on D10W at 80 CKD with a bolus given of 2 cc/kg. (**D3**) After one hour, his POC glucose remained 31, and a second bolus of 2 cc/kg was given. (**D3**) They then increased his D10W to 100 CKD. (**D3**) It was noted that Faolan was asymptomatic throughout and he was moving all of his extremities normally. (**D3**) The cause of Faolan's hypoglycemia was felt to possibly be related to peripartum stressors. (**D4**) His respiratory distress was noted to be related to either transitioning, or acute delivery stress in the setting of late decelerations and a possible placental abruption. (**D4**)

A blood culture was taken on 6/3/16. It had no growth at the 5 day mark. (**D82**) Faolan remained on IV dextrose, which was slowly weaned down to 6 cc/hr. (**D100**) Serum glucoses were stable for the most part in the low 60 mg./dl range. (**D100**) Faolan's platelet count fell from 102,000 to a low of 67,000 on 6/5/16. (**D100**) Liver enzymes were elevated, consistent with

hypoxic injury to the liver. **(D52)**There was no clinical evidence of bleeding. **(D100)** Faolan was feeding well at the breast and received supplemental formula. **(D100)**

Placental pathology revealed incomplete membranes with the membrane rupture site being indeterminate. **(B89)** There was moderate acute chorioamnionitis. **(B89)** The body of the placenta featured multiple thromboinfarcts, paracentral and marginal, measuring 2 cm in greatest dimension. **(B89)**

Overnight, he had tremulousness, with intermittent tremors of both upper extremities which were producible with stimulation and extinguishable by touch when spontaneous. **(D100)** These had occurred despite normal blood sugars. **(D100)** Serum calcium was pending. **(D100)** Electrolytes were drawn the morning of 6/5/16, and were notable for a sodium level of 129. **(D100)**

Faolan remained hypoglycemic and the physicians at Baystate Franklin Medical Center felt there was not a clear cause. **(D101)** This became compounded by hyponatremia and worsening thrombocytopenia, as well as his new tremors. **(D101)** Taken together, the findings were concerning for a hypoxic injury. **(D101)** His NRFHR with decels was noted as well as his cord gas pH which was below reportable range. **(D101)** Initially it was felt that this did not fit with his clinical picture at the time. **(D101)** Nonetheless, hypoxic injury remained on the differential and further workup was necessary. **(D101)** Transfer to a neonatal intensive care unit (NICU) was planned. **(D103)**

Faolan was then transferred to Baystate Medical Center, and he arrived at approximately 3:00 p.m. on 6/5/16. **(E1)** Examination following his arrival revealed that his left thumb was held to his palm. **(E11)** His left hand was jittering both spontaneously and when elicited, and self-extinguished in a few seconds or was halted by a gentle touch. **(E11)**

On 6/6/16, Faolan underwent an EEG which was normal. **(E31, E46)** He then underwent an MRI on 6/8/16, ordered to evaluate for hypoxic injury, which revealed restricted diffusion **(E47-48)** on the right side of the brain predominantly in the right parietal lobe, with involvement of the posterior right frontal lobe and right temporal lobe as well as the thalamus with associated loss of normal signal in the right corticospinal tract. **(E48)** It was within the right MCA territory. **(E48)** There was associated hemorrhage mostly in the parietal lobe. **(E48)** There was no generalized mass effect. **(E48)**

Faolan was then examined by a neurologist who found him to have a very subtle increase in tone in his left upper extremity compared to the right. **(E31)** His left hand was held in a fisted thumb position. **(E31)** The right hand was held open. **(E1)** His deep tendon reflexes were asymmetric and more prominent in the left upper and lower extremities with some spread to adjacent reflexes. **(E31)** There was a prominent finger jerk in the left hand. **(E31)** The crossed adductor reflexes were present bilaterally but more prominent on the left. **(E31)** His Moro reflex was subtly asymmetric. **(E31)** He had an asymmetric tonic neck reflex which was more prominent with his head to the left than to the right. **(E31)** The neurologist noted that the majority of perinatal strokes were thought to be due to embolic phenomenon, more likely from the placenta. **(E31)** Risk factors included but were not limited to placental abnormalities and asphyxia. **(E31)** A workup was planned, including an MRA to rule out arterial structural abnormality or large vessel stenosis, as well as echocardiogram, thrombophilia workup, and placental pathology examination. **(E32)**

The brain MRA was obtained on 6/9/16. **(E47)** The study was limited due to motion. **(E47)** Because of this motion, there was no vessel cut off in the circle of Willis. **(E47)** The internal carotid arteries were patent and normal in caliber. **(E47)** Both middle cerebral arteries

and branches were visualized such that the radiologist was able to classify them as patent and normal in caliber. (**E47**) The anterior cerebral arteries were patent. (**E47**) The vertebral arteries, basilar artery, superior cerebellar arteries, and posterior cerebral arteries were patent. (**E47**) There was predominantly fetal origin of both PCAs with hypoplastic P1 segments. (**E47**) The hemorrhagic right parietal infarct was partially imaged. (**E47**) Overall, the MRA was noted to be normal, specifically with patent right MCA and branches. (**E47**)

The hematologic/thrombophilia workup, including anti-cardiolipin antibodies, were negative. (**E56, G4**) The echocardiogram was read to have normal cardiac anatomy, chamber sizes, valvular, and systolic function other than mild interventricular septal hypertrophy. (**E61**) There was a patent foramen ovale with left-to-right shunt. (**E61**) Patent ductus arteriosus was ruled out. (**E61**)

At the time of Faolan's discharge from the hospital on 6/10/16, his problem list included hypoxic ischemic encephalopathy and neonatal stroke. (**E60**)

Faolan began walking at 15 months and shortly after his 2nd birthday he was saying 20 words. (**G1**) His receptive language was good at that time. (**G1**) Early intervention raised concern for autism, and Faolan was noted to have a strong family history for this; however, his parents did not identify any repetitive behaviors, and Faolan had good eye contact and was very demanding of attention. (**G1**) He was noted to have a left hemiparesis due to his perinatal infarct. (**G2**)

At the age of 2 years, 10 months, Faolan was noted to have left spastic hemiplegic cerebral palsy secondary to his right middle cerebral artery infarct. (**H1**) He had abnormal posture and abnormal gait, favoring his right lower extremity and right upper extremity. (**H2**)