IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

MIDLAND STATE BANK, as guardian of the minor children and independent administrator of the Estate of JULIA CASTELLANOS, deceased,

Plaintiff,

v.

UNITED STATES OF AMERICA,

Defendant.

No. 18-cv-02775
Judge Franklin U. Valderrama

MEMORANDUM OPINION AND ORDER

On the afternoon of November 16, 2015, Julia Castellanos (Julia), 27 years old and 38 weeks pregnant, was shopping with her sister Gloria Castellanos (Gloria) for baby supplies when she noticed that she was bleeding. Gloria drove Julia to Mount Sinai Hospital, where Julia underwent an emergency Cesarean (C-section) procedure performed by Dr. Lemuel Shaffer (Dr. Shaffer). Disastrously, Julia's anesthesia provider, Certified Registered Nurse Anesthetist (CRNA) Mary Kammann (CRNA Kammann), intubated Julia in the esophagus rather than in the trachea, causing a deprivation of oxygen to Julia's brain. So, while the surgical team was delivering Julia's baby, Julia's vital signs plummeted, and she died a few days later. Plaintiff Midland State Bank (Midland), as guardian of Julia's minor children and independent administrator of her estate, filed this wrongful death and survival action against the United States of America (United States) pursuant to the Federal Tort

Claims Act, 28 U.S.C. § 2671, *et seq*., the Illinois Wrongful Death Act, and the Illinois Survival Act. R. 30, Am. Compl.[1] Midland alleges that Dr. Shaffer was negligent for, among other things, failing to be aware of Julia's vital signs during the C-section operation.

The Court held an eight-day bench trial beginning December 7, 2021, during which both fact and expert witnesses testified. *See* R. 132–39. Having considered the trial evidence and the parties' post-trial submissions, *see* R. 58, Defendant's Proposed Findings of Fact and Conclusions of Law (DPFFCL); R. 59, Plaintiff's Proposed Findings of Fact and Conclusions of Law (PPFFCL), the Court enters the following findings of fact and conclusions of law. *See* Fed. R. Civ. P. 52(a)(1) ("In an action tried on the facts without a jury or with an advisory jury, the court must find the facts specially and state its conclusions of law separately."). These findings are informed by the Court's credibility assessment of witnesses and the Court's weighing of the evidence. *See Johnson v. United States*, 65 F. Supp. 3d 595, 598 (N.D. Ill. 2014). As detailed below, the Court finds that Midland has not met his burden of proof on liability and enters judgment in favor of the United States.

I. Findings of Fact

"In a bench trial or hearing without a jury, the district court judge acts as both gatekeeper and factfinder." *Goodpaster v. City of Indianapolis*, 736 F.3d 1060, 1068 (7th Cir. 2013). The following findings of fact are based on the evidence submitted at

[1]Citations to the docket are indicated by "R." followed by the docket number or filing name, and where necessary, a page or paragraph citation. The Court refers to the trial transcripts for the entire trial (R. 140–55) collectively as "Tr."

trial and the parties' stipulated facts. *See Bernal v. NRA Group, LLC*, 2017 WL 4948544, *4 (N.D. Ill. 2017). To the extent that any findings of fact may be considered conclusions of law, they shall be deemed conclusions of law. The same is true with respect to conclusions of law which may be deemed findings of fact. *See id. See also In re. Lemmons & Company, Inc.*, 742 F.2d 1064, 1070 (7th Cir. 1984) ("The labels of fact and law assigned by the trial court are not controlling.").

a. The Parties

Plaintiff Midland is a citizen and resident of Yorkville, Kendall County, Illinois and is the duly appointed Guardian of the Minor Children and Independent Administrator of the Estate of Julia Castellanos, deceased, pursuant to the orders of the Circuit Court of Cook County, Illinois, Probate Division dated January 13, 2017. R. 106, Stip. ¶ 1.

The defendant is the United States, which is statutorily deemed to have employed Dr. Lemuel Shaffer because Dr. Shaffer worked at Access Community Health Network, a federally qualified healthcare center. Stip. ¶ 2.

b. Julia

Julia is the daughter of Jose and Alba Castellanos, and she was a first-generation American born into a family with proud Guatemalan heritage. Tr. 923–24, 1051–52, 1067. Julia grew up in the Chicagoland area and attended Lane Tech High School, where she participated in, among other activities, Acapella Choir and a dance club that would perform folkloric dance in the community. Tr. 492–94; Pl. Exh. 57; Pl. Exh. 58. Julia was a member of the Reserve Officer Training Corps (ROTC) all

four years of high school and entered numerous competitions. Tr. 494. In November 2015, Julia lived with her sisters, Albita and Gloria, her parents, Alba and Jose, her 22-month-old son, Daniel, Jr. (Junior), and her long-term partner, Daniel Klein (Klein) in a three-flat home in Cicero, Illinois. Tr. 63–64, 67.

c. Julia's Admission to Mount Sinai Hospital

On the afternoon of November 16, 2015, Julia, who was 27 years old and 38 weeks pregnant, was shopping with Gloria at Target for diapers when Julia noticed she was bleeding. Tr. 71. Gloria immediately drove Julia to the labor and delivery (L&D) department at Mount Sinai Hospital (Mount Sinai), where Julia had been receiving treatment from her obstetrician, Dr. Shaffer. Tr. 68–69, 71. Julia and Gloria arrived at Mount Sinai at approximately 7:00 p.m., and Julia checked into the L&D department at approximately 7:18 p.m. Tr. 74; Pl. Exh. 71. Coincidently, Dr. Shaffer came in for Mount Sinai's obstetrical service evening shift at 7:00 p.m. Tr. 261, 1143.

After checking in, Julia was taken to a triage room, while Gloria remained in the waiting room on the L&D floor. Tr. 74, 156, 990–91; Joint Exh. 1. At 7:35 p.m., Julia texted Gloria that her contractions were getting closer, and that she was still waiting to see a doctor. Tr. 74–75. At 7:39 p.m., Julia texted Gloria again, saying that she had been informed that the doctor would take a few more minutes to see her. *Id.*

d. Working Diagnosis of Suspected Placental Abruption

Dr. Kanika Sood (Dr. Sood), the chief obstetrics and gynecology resident at Mount Sinai, was alerted to an "emergent situation," which led her and Dr. Shaffer to assess Julia. Tr. 260, 266–67. When Dr. Sood and Dr. Shaffer arrived at Julia's

triage room, Julia was bleeding and Julia's fetal monitor showed decelerations and bradycardic (abnormally low) fetal heart rate. Tr. 267, 1151, 1380–81.

Drs. Sood and Shaffer suspected placental abruption. Tr. 268, 269, 1151. A placental abruption occurs when the placenta prematurely separates from the uterine wall. Tr. 268–69. Because the placenta provides the baby with oxygen from the mother (by way of blood passing from the uterus), placental abruption was a potentially life-threatening condition for the baby. Tr. 808, 1234–36. Placental abruption was also potentially life-threatening for Julia because it is associated with bleeding and hemorrhage. Tr. 1234–36. Dr. Shaffer, as the on-call attending obstetrician, made the call to perform an emergency C-section because of the grave risk that placental abruption presented to Julia and her baby. Tr. 1160, 1234–37 Joint Exh. 1 at JC0108. Dr. Shaffer took Julia to the operating room and the obstetrics department called a "Code Quick," which alerts hospital staff to the fact that there is an emergency, and that assistance is needed at a particular location. Tr. 285–86; Def. Exh. 20 at 20–21. The Code Quick requires certain providers to respond, including nursing staff, obstetrician-gynecologists, and a member of the anesthesia team. Def. Exh. 20 at 20.

e. Emergency C-Section Procedure

The surgical team for Julia's C-section procedure assembled in the operating room. The team included Nurse Yvonne Green, scrub tech Renata Neal, Drs. Shaffer and Sood, and CRNA Kammann. Tr. 189, 193, 203, 260, 1162. In the operating room, CRNA Kammann connected Julia to the anesthesia equipment, which included the

"Aespire View," the anesthesia machine, and the "CareScape," a patient monitor. Tr. 105–06, 211. The patient monitor provides the real time parameter data of the patient to the clinician, and it provides both audible and visual alarms if certain limits are exceeded for those parameters. Tr. 589.

CRNA Kammann stood near Julia's head and the patient monitor showing Julia's vital signs. Tr. 392–93, 1242. Drs. Shaffer and Sood stood on either side of Julia's abdomen, with Dr. Shaffer on Julia's left and Dr. Sood on Julia's right. Tr. 290, 297, 1237–41. Neal stood closer to Julia's feet to pass surgical instruments to the surgeons. Tr. 201, 205–06, 209–10, 291. A surgical drape separated Dr. Sood, Dr. Shaffer, and Neal from CRNA Kammann, at the head of the bed. Tr. 209–10, 295–97, 1238–39. The drape was clipped to two IV poles that were on either side of the hospital bed, and it rose to about the height of Dr. Shaffer's eyes. Tr. 209, 296, 387–88, 1238–41. The surgical drape is non-transparent, made of water-resistant material, and used to both keep the operative field sterile and to prevent spatter onto the anesthesia provider. Tr. 205, 213, 298, 1238–39. Due to the surgical drape, the surgeons and Neal were unable to see the anesthesia monitor. Tr. 209, 296–97, 1240–41.

Julia's emergency C-section procedure began at approximately 8:00 p.m. Tr. 302. CRNA Kammann gave Julia 200 milligrams of Propofol, an anesthetic that induces unconsciousness. Tr. 174, 1385; Joint Exh. 1 at JC0209. After administering the Propofol, CRNA Kammann gave Julia 200 milligrams of Succinylcholine, a paralytic that facilitates intubation. Tr. 175, 1326–27, 1385; Joint Exh. 1 at JC0209.

CRNA Kammann then intubated Julia at approximately 8:04 p.m. Joint Exh. 1 at JC0054. It was not unusual for a CRNA to administer general anesthesia during an emergency C-section. Tr. 389–90, 1244, 1294. In fact, Mount Sinai's written anesthesia policy provides that the hospital's anesthesia providers, which includes CRNAs, "shall" be able to intubate a patient and administer general anesthesia during an emergency. Def. Exh. 19 at 16; Tr. 1298–1300.

Tragically, however, and unbeknownst to Drs. Sood and Shaffer, who were standing on the other side of the surgical drape, CRNA Kammann intubated Julia in the esophagus rather than the trachea. Tr. 1363–65, 1529. The consequence of an esophageal intubation is to deprive the brain of oxygen. Tr. 978, 1390. Julia's vital signs accordingly plummeted within one minute of intubation and never improved. Julia's end-tidal carbon dioxide levels, which measure the level of carbon dioxide that is released at the end of an exhaled breath, fell to zero, when normal levels are around 30 to 40. Tr. 1372; Joint Exh. 2 at 1–5. Julia's blood oxygen levels, moreover, which reflected the level of oxygen saturation in Julia's blood, dropped from 96 percent to 58 percent within one minute, and then to 12 percent within two minutes. Tr. 1376; Joint Exh. 2 at 1. For the next eight minutes, no blood oxygen saturation was recorded at all. Tr. 1377; Joint Exh. 2 at 3. Blood oxygen saturation was recorded only four times during Julia's surgery, and all of the recorded levels were critically low. Tr. 1377–78; Joint Exh. 2 at 3–5 (showing values of 39, 18, 59, and 67). Normal blood oxygen levels during surgery are 95 to 100 percent. Tr. 1376. Julia's heartrate further dropped from between 130 and 136 beats per minute to 80 beats per minute, then to

the 40s and 50s, then the 30s, then the 20s, and finally to 0. Joint Exh. 2 at 1–5; Tr. 1380. Finally, Julia did not have any measurable blood pressure immediately after intubation and throughout most of the C-section procedure. Joint Exh. 2 at 1–5; Tr. 1382–83.

Despite these plummeting vitals, CRNA Kammann, who was responsible for monitoring Julia's vitals, did not raise any concerns to the surgical team; instead, CRNA Kammann indicated that the surgery should proceed. Tr. 685–87, 815, 1165–66, 1372–73, 1475–76, 1564, 1570. Consequently, Dr. Sood made the first abdominal incision shortly after intubation. Tr. 1165–66. At about 8:10 p.m., Drs. Shaffer and Sood delivered Julia's baby, using a vacuum extractor. Tr. 306, 1166–68; JX 1 at JC0054–56. Julia's newborn son, Patrick, was healthy, and Drs. Shaffer and Sood turned their attention back to Julia. Tr. 233, 1168–69.

f. Uterine Atony

In order to provide oxygen and blood to a fetus, the volume of blood in a pregnant woman's body increases. Tr. 318. In a pregnant mother at term, the volume of blood flowing to the uterus is as much 500 to 700 ccs per minute, which means that in the span of four minutes, blood in the volume of a two-liter bottle is flowing to a pregnant woman's uterus. Tr. 757–58, 1611. Blood continues to flow from the arteries to the uterus even as a baby is being delivered. Tr. 319–20. For the blood flow to stop, the uterus must contract, which causes compression of the blood vessels and triggers clotting mechanisms, acting as a tourniquet. Tr. 224–25, 1180, 1628. Customarily, after delivery, a patient's uterus will naturally contract and is expected to recover

tone in a few minutes. Tr. 316–17, 1628. Uterine atony—the failure of the uterus to contract after delivery—is the single most common cause of postpartum hemorrhage (excessive bleeding). Tr. 819, 1256–57; Pl. Exh. 3 at 2.

After Drs. Shaffer and Sood delivered Julia's baby and the placenta, Julia received intravenous Pitocin, a standard medication used after delivery that typically causes the uterus to contract. Tr. 316, 317, 321, 1177–78; Joint Exh. 1 at JC0056. However, Julia's uterus was not contracting; it was flaccid. Tr. 323. Dr. Shaffer began massaging Julia's uterus, which is another first-line intervention that typically causes the uterus to contract, and expected Julia's uterus to regain firmness and begin contracting in two to five minutes. Tr. 228–30. Julia's uterus did not contract, so Dr. Shaffer diagnosed Julia with uterine atony, another obstetrical emergency due to the risk of hemorrhage. Tr. 847, 1177. However, Dr. Shaffer did not observe unusually heavy or active bleeding; Julia had uterine atony without hemorrhage. Tr. 236, 1200.

Because postpartum bleeding can be delayed, Dr. Shaffer continued to treat Julia's uterine atony by injecting two doses of Pitocin directly into Julia's uterus. Tr. 325–26, 410, 846, 1181–82, 1257–58. Then, at approximately 8:15 p.m., and again at approximately 8:30 p.m., Dr. Shaffer directed CRNA Kammann to administer Hemabate, another medication that usually causes the uterus to contract. Tr. 326, 334, 1184–86, 1270; Joint Exh. 1 at JC0037. All the while, Drs. Shaffer and Sood continued to massage Julia's uterus. Tr. 1183, 1186; Joint Exh. 1 at JC0056. One

surgeon would massage the uterus while the other would hold open Julia's abdomen at the incision site. Tr. 1259–60.

Dr. Shaffer became concerned about Julia's persistent uterine atony and wondered whether there might be a problem with blood flow, or perfusion, to the uterus. Tr. 1263–64. Dr. Shaffer accordingly asked CRNA Kammann whether everything was "okay up there." Tr. 1189–90, 1263–64. CRNA Kammann responded that everything was "fine" or "okay." Tr. 1201, 1264. Dr. Shaffer interpreted CRNA Kammann's response to mean that Julia's vital signs were stable, so he ruled out perfusion as a possible cause of Julia's uterine atony. Tr. 1201–02, 1264, 1265. Given CRNA Kammann's indication that Julia's vitals were stable, Dr. Shaffer could not explain why Julia's uterus remained flaccid. Tr. 236, 1265.

Dr. Sood similarly asked CRNA Kammann for Julia's blood pressure. Tr. 405–06. Specifically, Dr. Sood wanted to know if another medication, Methergine, would be inappropriate due to hypertension. Tr. 405–06. CRNA Kammann replied that Julia's blood pressure was "113 over 60," and that the patient was "okay." Tr. 339, 382; Joint Exh. 1 at JC0056. Dr. Sood understood CRNA Kammann to mean that Julia's vital signs were stable. Tr. 382–83, 397, 407. That was far from the case, however. At the time when Julia's recorded blood pressure was 113/60, her heartrate was 36, there was no recorded oxygen saturation, and there was no end-tidal carbon dioxide. Joint Exh. 2 at 4.

At some point after 8:30 p.m., when the second dose of Hemabate was administered, Dr. Shaffer decided it was safe to close Julia's uterus in light of the

lack of active bleeding. Tr. 1203–04, 1265–66. Closing Julia's uterus took about ten minutes. Tr. 374. At no time during the C-section procedure or during the treatment of the uterine atony did CRNA Kammann communicate any concerns to Dr. Shaffer or the rest of the surgical team about Julia's vital signs. Tr. 397, 1266.

Observing that the C-section procedure was nearing its end, Nurse Green asked CRNA Kammann whether the anesthesiologist on duty should be paged for purposes of completing the procedure records. Tr. 482–83. CRNA Kammann did not respond and when Nurse Green asked the question again, CRNA Kammann shrugged her shoulders. Tr. 482–83. Nurse Green called the unit clerk and asked the clerk to page the on-call anesthesiologist, Dr. Domingo Osunero (Dr. Osunero). Tr. 484, 487. Dr. Osunero received the page at 8:36 p.m. and proceeded to the obstetrics operating room. Tr. 1525–26.

g. Code Blue

When Dr. Osunero arrived, at approximately 8:40 p.m., he approached the head of Julia's bed, where CRNA Kammann and the anesthesia monitor were located. Joint Exh. 1 at JC0054; Tr. 1526. Dr. Osunero observed that Julia's EKG readings were flat, her heartrate was zero, her oxygen saturation was zero, and there was no end-tidal carbon dioxide. Tr. 1527. Dr. Osunero asked CRNA Kammann, who was staring at Julia's vitals monitor, what was happening. Tr. 347, 1527. CRNA Kammann did not state that anything was wrong. Tr. 347, 1527.[2] Seeing that the

[2]Dr. Osunero testified that CRNA Kammann "was just staring at the monitor" and nodded her head without answering audibly when Dr. Osunero asked her what the problem was. Tr. 1527. Dr. Sood testified that CRNA Kammann responded that Julia was "fine" when Dr. Osunero inquired about Julia's vitals. Tr. 346–47.

opposite was true, Dr. Osunero determined that Julia had been intubated in her esophagus, reintubated Julia, and called a "Code Blue." Tr. 1205, 1527–29; Joint Exh. 1 at JC0054. A Code Blue is transmitted over the overhead speakers at Mount Sinai when a patient's heart stops and CPR is needed. Tr. 430.

Dr. Shaffer began chest compressions and CPR. Tr. 348–49, 1205–06; Joint Exh. 1 at JC0054. Julia was eventually resuscitated and was taken to the intensive care unit. Joint Exh. 1 at JC0054; Tr. 536–37. Julia, however, never regained consciousness and died on November 19, 2015. Tr. 958, 999–1000, 1431.

h. Alarms

There is no evidence that Dr. Shaffer heard or ignored anesthesia alarms during the emergency C-section. None of the medical providers who testified at trial heard unusual alarms during Julia's emergency C-section. Tr. 213, 412–13, 484–85, 1267. The electronic clinical logs from the anesthesia machine were overwritten. Tr. 617. There is likewise no printed record showing what alarms may or may not have been triggered during Julia's C-section. Tr. 617–18. The clinical logs and printed record are sources of information that investigators for the monitoring equipment manufacturer (General Electric) examine when they are trying to determine whether there was an alarm malfunction. Tr. 617–18. The witness from General Electric, Paul Reinholz, did not offer any opinion about whether alarms sounded during Julia's surgery.

To the extent alarms may have sounded, the Court finds that it is more likely true than not that CRNA Kammann silenced them. A clinician can repeatedly silence

all audible alarms on the anesthesia monitor by hitting the "audio pause" button. Tr. 619–20, 622. In this circumstance, the only "breakthrough" alarms that might sound are for three heart arrhythmias: asystole, ventricular tachycardia, and ventricular fibrillation. Tr. 622–23. Midland has not demonstrated that Julia had these conditions. There is no breakthrough alarm for bradycardia, which Julia did have. Tr. 623. In the absence of any evidence that alarms sounded and were ignored, the anesthesia monitor's alarms are not relevant to Midland's claims.

i. Autopsy

Forensic Pathologist Marta Helenowski, MD (Dr. Helenowski), performed an autopsy on Julia on November 21, 2015. Tr. 958. Dr. Helenowski concluded that Julia developed anoxic encephalopathy (pathology or injury to the brain as a result of a reduced supply of, or complete lack of, oxygen for a period of time) and hypoxic ischemic cardiomyopathy[3] during the operative procedure as a result of prolonged hypoxia (low oxygen) due to improper esophageal intubation. Pl. Exh. 22 at 7; Tr. 570, 978. Dr. Helenowski further concluded that Julia subsequently suffered other complications, including disseminated intravascular coagulopathy, a condition that causes bleeding and clotting at the same time, and acute kidney/liver injury. Pl. Exh. 22 at 7; Tr. 570, 978.

[3]Ischemia "means that an organ (*e.g.*, the heart) is not getting enough blood and oxygen." U.S. Nat'l Library of Med., 7 Ischemic Heart Disease (2010), https://www.ncbi.nlm.nih.gov/books/NBK209964/ (last visited Sep. 27, 2022). Ischemic cardiomyopathy "describes ineffective blood pumping by the heart as a result of ischemic damage to the myocardium." U.S. Nat'l Library of Med., Ischemic Cardiomyopathy (2022), https://www.ncbi.nlm.nih.gov/books/NBK537301/ (last visited Sep. 27, 2022).

j. Expert Testimony

i. Midland's Experts

1. Dr. Afshan Hameed

Afshan Hameed, MD, (Dr. Hameed) appeared as Midland's OB/GYN expert. Dr. Hameed is Board Certified in OB/GYN, Maternal Fetal Medicine, Internal Medicine, and Cardiology. Tr. 737. Dr. Hameed is also a Health Sciences Professor at the University of California, Irvine. Tr. 738. Dr. Hameed has privileges at the University of California, Irvine and several satellite and community hospitals in Orange County, California. Tr. 738. Dr. Hameed practices within the Department of Obstetrics and Gynecology and Division of Maternal Fetal Medicine, in high-risk obstetrics, and is engaged in the daily clinical practice of taking care of patients. Tr. 739. In addition, Dr. Hameed has been part of the Maternal Mortality Review in the State of California. Tr. 742. In this role, Dr. Hameed reviewed events resulting in maternal mortality from any cause to establish causation and to identify preventable mortality incidents. Tr. 749–50. At trial, Dr. Hameed offered several opinions regarding the applicable standard of care in this case and causation, which are discussed further below.

2. Dr. John Downs

John Downs, MD (Dr. Downs), a board-certified anesthesiologist, with a subspecialty certification in Critical Care Medicine, testified as the anesthesiology expert for Midland. Tr. 633. Dr. Downs presently has a courtesy appointment at the University of Florida in the Department of Anesthesiology and Critical Care

Medicine, and an Associate's Appointment at the Moffitt Cancer Hospital in Tampa, Florida. Tr. 633–34. His numerous credentials are further detailed in his Curriculum Vitae. Pl. Exh. 77a. At trial, Dr. Downs offered an opinion on whether Julia suffered from anesthesia awareness on November 16, 2015.[4]

ii. United States' Experts

1. Dr. Philip Samuels

Philip Samuels, MD (Dr. Samuels), is a board-certified OB/GYN who testified on behalf of the United States. Tr. 1550; Def. Exh. 3. Dr. Samuels works at the Ohio State University, Wexler Medical Center, in Columbus, Ohio, and until September 2021, was the OB/GYN residency director at the Ohio State University. Dr. Samuels held that position for 24 years and was the longest serving OB/GYN residency director in the country. Tr. 1551–52. Dr. Samuels also served as the director of Ohio State's maternal fetal medicine fellowship program for 25 years. Tr. 1551–52. Dr. Samuels has taught medical residents about the diagnosis and treatment of placental abruption, the procedures for performing emergency C-sections, and the diagnosis and treatment of uterine atony. Tr. 1553–54. He was an examiner for the OB/GYN board certification process for 25 years and maintains an active clinical practice. Tr. 1554, 1556–57. At trial, Dr. Samuels offered numerous opinions about the applicable

[4]Because the Court finds that Midland has not met its burden with respect to liability, the Court need not further discuss Dr. Down's anesthesia awareness testimony, which goes to Midland's damages assertions. *See* PPFFCL at 104. The Court likewise does not discuss the testimony of either party's damages experts.

standard of care and ultimately opined that Dr. Shaffer did not breach the standard of care in this case. *See, e.g.*, Tr. 1559, 1587–88, 1582–95, 1598.

2. CRNA Lori Anderson

CRNA Lori Anderson (CRNA Anderson) testified as the United States' expert nurse anesthetist. CRNA Anderson has practiced medicine for 25 years and is chair of the nursing anesthesia program at Rosalind Franklin University. Tr. 1450, 1453. She trains students how to provide anesthesia care during C-sections, has had an active clinical practice at numerous hospitals, and has administered anesthesia during hundreds of C-sections. Tr. 1450–54. CRNA Anderson is also the vice president of the national board that sets standards for CRNA certification. Tr. 1455–56. At trial, CRNA Anderson offered various opinions about a nurse anesthetist's qualifications and capabilities, including that a nurse anesthetist is qualified and capable of administering medication for uterine atony. *See, e.g.*, Tr. 1465–66.

3. Dr. Daniel Rubin

Daniel Rubin, MD (Dr. Rubin), is an anesthesiologist and associate professor of anesthesia and critical care at the University of Chicago. Tr. 1357–58. Dr. Rubin is board certified in the specialties of anesthesiology and critical care medicine. Tr. 1359; Def. Exh. 1. Dr. Rubin also holds the title of Associate Quality Chief for the Department of Anesthesiology at the University of Chicago, and has held that role since approximately 2013. Tr. 1359–60. Dr. Rubin further has a clinical practice, in which he provides anesthesia services in the general operating rooms and on-call primarily in the obstetrics area. Tr. 1361. At trial, Dr. Rubin offered opinions about,

among other things, the surgical drape and setup of an operating room during obstetric surgeries, Julia's intubation and vital signs, CRNA Kammann's breach of the standard of care, and anesthesia awareness. *See, e.g.*, Tr. 1364–65, 1368, 1372, 1385–86.

II. Conclusions of Law

a. Jurisdiction

The Court has subject matter jurisdiction over this medical malpractice action, which is brought pursuant to the Federal Tort Claims Act (FTCA). 28 U.S.C. § 1346(b). Venue is proper because the acts giving rise to Midland's claims occurred within this District. Stip. ¶ 4; 28 U.S.C. § 1391.

b. Legal Standards

Midland brings this lawsuit under the FTCA. The FTCA "is a limited waiver of the United States' sovereign immunity." *Luna v. United States*, 454 F.3d 631, 634 (7th Cir. 2006). The FTCA provides a remedy for "personal injury or death caused by the negligent or wrongful act or omission" of Government employees while acting within the scope of their employment. 28 U.S.C. § 1346(b)(1). The FTCA incorporates the law of the place where the act or omission allegedly occurred, which in this case is Illinois, *id.* § 1346(b); *Donais v. United States*, 232 F.3d 595, 598 (7th Cir. 2000), and imposes liability "under circumstances where the United States, if a private person, would be liable to the claimant in accordance with the law of the place where the act or omission occurred." *Morisch v. United States*, 653 F.3d 522, 530 (7th Cir. 2011) (internal quotation marks and citations omitted). In this case, the United

States is potentially liable only for the negligence of its "deemed" employee, Dr. Shaffer, not for any shortcomings of Mount Sinai or its staff. 42 U.S.C. § 233(g).

Midland brings its claims under the Illinois Wrongful Death Act, 740 ILCS 180/1, 180/2, 180/2.1 and the Illinois Survival statute, 755 ILCS 5/27-6. The Illinois Wrongful Death Act provides a cause of action, "[w]henever the death of a person shall be caused by wrongful act, neglect or default, and the act, neglect or default is such as would, if death had not ensued, have entitled the party injured to maintain an action and recover damages in respect thereof." 740 ILCS 180/1; *Williams v. Manchester*, 888 N.E.2d 1, 10 (Ill. 2008) ("An injury resulting from the wrongful act, neglect, or default of another gives the victim, if she survives the injury, a right of action; if the victim dies, the [Wrongful Death] Act transfers the right of action to the victim's personal representative."). The Wrongful Death Act "incorporates into the statutory right of action the familiar concepts of tort liability—negligence, contributory negligence, and the like." *Williams*, 888 N.E.2d at 12.

The Illinois Survival statute allows a representative of the decedent to assert statutory and common-law actions that had accrued to the decedent before death. *Myers v. Heritage Enters., Inc.*, 773 N.E.2d. 767, 768–69 (Ill. App. Ct. 2002); 755 ILCS 5/27-6. The statute allows the representatives of the Estate to prosecute a claim for personal injury that the decedent could have brought if she lived. *Patch v. Glover*, 618 N.E.2d 583, 591 (Ill. App. Ct. 1993).

Here, Midland claims wrongful death by medical malpractice. Under Illinois law, a medical malpractice plaintiff must establish the following elements: "(1) the

standard of care in the medical community by which the [medical provider's] treatment was measured; (2) that the [medical provider] deviated from the standard of care; and (3) that a resulting injury was proximately caused by the deviation from the standard of care." *Vargas v. United States*, 430 F. Supp. 3d 500, 510 (N.D. Ill. 2019) (citations omitted). Additionally, a plaintiff generally "must present expert testimony to establish all three elements." *Id.* (internal quotation marks omitted) (quoting *Wilbourn v. Cavalenes*, 923 N.E.2d 937, 949 (Ill. App. Ct. 2010)). Finally, each element must be proven by a preponderance of the evidence, "otherwise referred to as the 'more probably true than not true' standard." *Johnson*, 65 F. Supp. 3d at 606 (citing *Holton v. Mem'l Hosp.*, 679 N.E.2d 1202, 1207 (Ill. 1997)).

c. Standard of Care

In medical negligence cases, "the standard of care is the relevant inquiry by which we judge a physician's actions." *Neade v. Portes*, 739 N.E.2d 496, 502 (Ill. 2000). Under Illinois law, a medical provider must "possess and apply the knowledge, skill, and care which a reasonably well-qualified physician in the same or similar community would bring to a similar case." *Wilbourn v. Cavalenes*, 923 N.E.2d 937, 953 (Ill. Ct. App. 2010) (quotation omitted). So, a physician breaches the standard of care only when he fails to use the reasonable skill that a physician would ordinarily use and would bring to a similar case. *Vargas*, 430 F. Supp. 3d at 510.

Put simply, "[t]he standard of care in a medical professional negligence case is to act as would an ordinarily careful professional." *Johnson v. Armstrong*, --- N.E. ---, 2022 IL 127942, ¶ 52 (Ill. 2022) (internal quotation marks and citations omitted).

Usually, "expert testimony is required to establish what an ordinarily careful professional would do in a given situation 'because jurors are not skilled in the practice of medicine and would find it difficult without the help of medical evidence to determine any lack of necessary scientific skill on the part of the physician.'" *Id.* (quoting *Walski v. Tiesenga*, 381 N.E.2d 279 (Ill. 1978)). Yet, "where defendant's conduct is so grossly negligent or the treatment so common that a layman could readily appraise it, no expert testimony is necessary." *Id.*

Midland asserts that the expert medical testimony of Dr. Hameed established the standard of care for Dr. Shaffer's care and treatment of Julia. PPFFCL at 97.[5] Beyond stating that Dr. Hameed's testimony sets out the standard of care, however, Midland's proposed conclusions of law do not further articulate the standard of care. As a result, the Court has done its best to discern Midland's position on the standard of care from its proposed findings of fact regarding Dr. Hameed's testimony.[6] In its proposed findings of fact, Midland highlights Dr. Hameed's testimony that the standard of care required:

- Interdisciplinary communication between the members of the patient's surgical team;

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[5]Midland also suggests that the medical testimony of its expert, Dr. Downs, established the standard of care applicable to Dr. Shaffer. However, as the Court has already ruled, when addressing the United States' Motion *in Limine* No. 2, Dr. Downs lacks the adequate education, skill, and training to opine as to the standard of care required of an OB-GYN in an emergency C-section context. *See* R. 128.

[6]Midland submitted over 90 pages of proposed factual findings. PPFFCL at 1–97. *See United States v. Dunkel*, 927 F.2d 955, 956 (7th Cir. 1991) ("Judges are not like pigs, hunting for truffles buried in briefs."). While the Court's task was made more difficult by the lack of analysis in Midland's proposed conclusions of law, it made no difference in the outcome of the case.

- The obstetrician to have "situational awareness," which Dr. Hameed defined as looking at the patient as a whole and considering the whole scenario without having tunnel vision;

- The obstetrician to have knowledge of the patient's vital signs either by asking the anesthesia provider for a numeric vital sign value or by looking at the monitors, instead of relying on the anesthesia provider's statement that everything was "fine" or "okay";

- The attending anesthesiologist on call to be paged once the baby was delivered and uterine atony was discovered; and

- The obstetrician to undertake a comprehensive evaluation of the patient, in light of the continued atony with no bleeding.

Id. at 30–39.

The United States presents an opposing standard of care and directs the Court to, among other evidence in the record, the testimony of its expert witness, Dr. Philip Samuels. DPFFCL at 20–32.

The Court first addresses a threshold issue regarding the admissibility of Dr. Samuels' testimony and then turns to Midland's standard of care assertions.

i. Admissibility of Dr. Samuels' Testimony

At the close of trial, Midland argued that Dr. Samuels' opinions should be stricken because he did not state his opinions "to a reasonable degree of medical certainty." Tr. 1689–90. While Midland does not appear to raise the issue in its post-trial submission, the Court addresses the subject briefly for the sake of clarity and completeness.

Federal rules, not state law, "govern the admissibility of expert evidence in suits under the FTCA." *Love v. United States*, 17 F.4th 753, 756 (7th Cir. 2021). Under the Federal Rules of Evidence, a witness "who is qualified as an expert by knowledge,

skill, experience, training, or education may testify in the form of an opinion" if: "(a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue; (b) the testimony is based on sufficient facts or data; (c) the testimony is the product of reliable principles and methods; and (d) the expert has reliably applied the principles and methods to the facts of the case." Fed. R. Evid. 702. Thus, Rule 702, the federal rule on the admissibility of expert opinions, does not require an expert to state her opinion "to a reasonable degree of medical certainty" for the opinion to be admissible. Whether the plaintiff has met its burden to establish proximate cause to a reasonable degree of medical certainty, *see, e.g., Simmons v. Garces*, 763 N.E.2d 720, 731 (Ill. 2002), is a separate question.

The Court further agrees with the United States, *see* DPFFCL at 18, that even if there were some requirement for Dr. Samuels to state his opinion to a reasonable degree of medical certainty, Midland failed to timely and properly object on that basis. "[A] party must make a proper objection at trial that alerts the court and opposing party to the specific grounds for the objection." *United States v. Davis*, 15 F.3d 1393, 1406 (7th Cir. 1994). "A timely and proper objection apprises the court of the precise nature of the alleged error so the court has an opportunity to rectify any shortcoming." *Id*. at 1406–07.

During Dr. Samuels' direct exam, Midland objected approximately twenty times by stating "form" and offered no explanation for the objection. Tr. 1562, 1568–72, 1585–86, 1588, 1590, 1592–95, 1597–99, 1601, 1606–07. Counsel for the United

States eventually asked, "Could I have a little bit of context? I am happy to cure the question." Tr. 1589. The Court stated that it interpreted the objection as to leading. Tr. 1589. Midland said nothing to correct the Court's understanding. Tr. 1589. Instead, Midland waited until the United States had rested its case and then belatedly offered to explain the basis for its objection "[f]or purposes of preserving our record[.]" Tr. 1689–90. However, Midland's "vague, unspecific" objections preserved "nothing." *Davis*, 15 F.3d at 1406; *see also United States v. Bowling*, 952 F.3d 861, 868 (7th Cir. 2020). Moreover, when counsel for United States requested more information, Midland's silence ensured that the alleged issue could not be cured (as could have been done, easily, with two questions). *See, e.g.*, Tr. 642. Thus, apart from the fact that there is no legal basis for barring Dr. Samuels' testimony, Midland's objection was not made in accordance with the Federal Rules of Evidence and was therefore waived. Dr. Samuels' standard of care opinions will not be stricken.

ii. Paging of On-Call Attending Anesthesiologist

The standard of care, contends Midland, required Dr. Shaffer to page the attending anesthesiologist on call after Julia's baby had been delivered, when Drs. Shaffer and Sood diagnosed Julia with uterine atony. PPFFCL at 31–32. In support, Midland points to Dr. Hameed's testimony that "[o]nce the baby was delivered in that high-risk setting, and you have uterine atony, that is the time to regroup, and you need the anesthesiologist at the bedside in the operating room." *See id.*; Tr. 785. The United States disagrees, highlighting Dr. Samuels' testimony that Dr. Shaffer did not need to demand the presence of the anesthesia attending because CRNA Kammann

was a credentialed anesthesia provider who was presumably competent and qualified to monitor Julia's vital signs and administer uterotonics, such as Pitocin and/or Hemabate. DPFFCL at 21 (citing Tr. 1587–88).

In considering Dr. Hameed and Dr. Samuels' competing testimony, the Court finds that Midland has not shown by a preponderance that Dr. Shaffer failed to use reasonable skill that a physician would ordinarily use by not paging Dr. Osunero when Julia's uterine atony was diagnosed. *See Vargas*, 430 F. Supp. 3d at 510. Although Dr. Hameed testified that an anesthesiologist was required to be present because the uterine atony could lead to transfusions and obstetric hemorrhage, *see* Tr. 786, Dr. Hameed failed to cite to any literature supporting that proposition, nor did Dr. Hameed explain what skills the anesthesiologist could perform that a CRNA could not. Dr. Hameed further admitted that she had no familiarity with Mount Sinai's anesthesia procedures. Tr. 812–14. As Dr. Samuels credibly testified, Dr. Shaffer did not need to demand the presence of the anesthesia attending because CRNA Kammann was a credentialed anesthesia provider who was presumably competent and qualified to monitor Julia's vital signs and administer uterotonics. Tr. 1587–88.

Dr. Samuels' testimony was consistent with other evidence in the record. For instance, Dr. Samuels' testimony was consistent with that of Dr. John Vasquez (Dr. Vasquez), the former chair of Mount Sinai's anesthesiology department. Dr. Vasquez explained that, per Mount Sinai's Policy and Procedural Manual, there was no service that an anesthesiologist could perform that a CRNA could not, including the

administering of general anesthesia. Tr. 1291–31, 1299–1300. Dr. Vasquez further testified that administering medication for obstetrical emergencies, such as uterine atony, was within the scope of practice for a CRNA at Mount Sinai. Tr. 1300. Dr. Samuels' testimony was likewise buttressed by that of CRNA Lori Anderson, an expert nurse anesthetist, who stated that a nurse anesthetist is qualified and capable of administering medication for uterine atony without the attending anesthesiologist. Tr. 1465–66. CRNA Anderson elucidated that she has administered anesthesia during hundreds of C-sections, and has treated uterine atony many times as the only anesthesia provider in the operating room. Tr. 1450–54, 1466–67.

To be clear, CRNA Anderson and Dr. Vazquez are anesthesia providers, so they likely lack the qualifications under Rule 702 to testify to the standard of care applicable to Dr. Shaffer. *See supra* Section II.c, Note 5. The Court therefore does not credit their testimony as establishing the standard of care applicable to an obstetrician during an emergency C-section procedure. Rather, in considering the competing testimony of the experts who are qualified to opine on the standard of care applicable to Dr. Shaffer, Dr. Hameed and Dr. Samuels, the Court finds that Dr. Samuels' testimony is more persuasive because his testimony is consistent with both Mount Sinai's anesthesia policies and the general capabilities of a CRNA. Dr. Hameed's opinion, by contrast, is inconsistent with that context and appears to be supported only by hindsight. As a result, the Court finds that Midland has failed to show that it is more likely than not true that the standard of care required Dr. Shaffer

to page Dr. Osunero after Julia's baby was delivered and Drs. Shaffer and Sood diagnosed Julia with uterine atony.

iii. Interdisciplinary Communication and Knowledge of Vital Signs

Midland argues that the standard of care required interdisciplinary communication and for Dr. Shaffer to have actual knowledge of Julia's vital signs. PPFFCL at 30, 33. The former is, as a general matter, undisputed; Drs. Shaffer, Hameed, and Samuels agree that interdisciplinary communication is required under the standard of care with a multidisciplinary team like the surgical team for Julia's emergency C-section procedure. Tr. 223–24, 1137, 1616.

The extent of communication required by Dr. Shaffer with respect to Julia's vital signs, however, as well as whether Dr. Shaffer should have taken additional steps to discover Julia's vital signs, is contested by the parties. Midland posits that the evidence shows that Dr. Shaffer should have "directly communicate[d] with anesthesia to ask for the numeric vital signs on his patient who continued to have atony, and who had been given multiple doses of uterotonics and was not responding," rather than ask broadly whether everything was okay. PPFFCL at 36. Midland similarly faults Dr. Shaffer for relying on CRNA Kammann's representation that everything was fine or okay without verifying Julia's vitals (*e.g.*, by looking at the monitors). *Id.* at 30, 33, 38. In addition, Midland asserts that Dr. Shaffer's failure to know Julia's vital signs violated the obstetric hemorrhage protocol existing at Mount Sinai. *Id.* at 33. The United States opposes Midland's position on the standard of care regarding Julia's vitals on several grounds, including: (1) the purported duty to ask

for specific vital signs; (2) the alleged violation of the obstetric hemorrhage protocol; and (3) the propriety of relying on CRNA Kammann's representation. DPFFCL at 23–29. Upon consideration of the evidence presented at trial, the Court finds that Midland failed to establish by a preponderance that the standard of care required such exacting communication and verification by Dr. Shaffer regarding Julia's vitals.

To begin, Midland did not prove that it was more than likely true that the standard of care required Dr. Shaffer to ask for specific vital signs instead of asking the anesthesia provider more broadly how Julia was doing. As Dr. Samuels credibly testified, Dr. Shaffer did not need to ask for specific vital sign numbers at any point, particularly given that Julia was not bleeding heavily and that CRNA Kammann did not raise any concerns, even when asked about Julia's condition. Tr. 1582–95, 1598. In addition, Dr. Samuels persuasively reasoned that a single number, given at any point in time, does not allow a physician to meaningfully assess the patient. Tr. 1633. Indeed, when Dr. Sood asked CRNA Kammann for Julia's blood pressure, CRNA Kammann provided a number that, while possibly accurate, left out the larger picture about Julia being on the brink of cardiac arrest. Joint Exh. 2 at 4; Tr. 408–09. Thus, it would be reasonable for Dr. Shaffer to ask the medical professional charged with actively monitoring the patient's vitals more generally how the patient was doing.

Midland insists that the standard of care required Dr. Shaffer to ask for Julia's vital signs before administering Hemabate specifically. PPFFCL at 34. In that vein, Dr. Hameed testified that the standard of care required Dr. Shaffer to know Julia's heartrate, blood pressure, and oxygenation "because the second line drugs — there

are three or four different ones, some of them have contraindications . . . so you want to choose the right one for the patient." Tr. 793–94. The Court finds Dr. Samuels' testimony on this point more persuasive and credits his testimony over that of Dr. Hameed. Dr. Samuels testified that the standard of care does not require an obstetric (OB) surgeon to ask for specific vital signs before administering Hemabate because Hemabate does not result in hypertension, hypotension, or a significant tachycardia. Tr. 1594–95. Dr. Samuels also explained that there are not any contraindications for Hemabate that could only be discovered by asking for specific vital signs. Tr. 1595. Thus, Midland did not prove that asking for specific vital signs while treating uterine atony is something an "ordinarily careful professional" would do. *Johnson v. Armstrong*, 2022 IL 127942, ¶ 52 (internal quotation marks and citations omitted).

In further support of its view of the standard of care, Midland points to Dr. Hameed's testimony on Mount Sinai's obstetric hemorrhage protocol. PPFFCL at 33. Dr. Hameed testified that the obstetric hemorrhage protocol at Mount Sinai was not followed because a full set of vital signs was never communicated between the vital team members—the obstetrician and the anesthesiologist. *Id.* (citing Tr. 790). Midland's obstetric hemorrhage protocol contention is unconvincing for at least two reasons. First, the protocol does not apply because Julia did not experience a hemorrhage. Tr. 834. Second, even if the protocol did apply to Julia's surgery, nothing in the protocol states that an OB surgeon must know "the full set of vital signs." Rather, the protocol states that "the primary nurse" should assess "and/or consider" vital signs. Pl. Exh. 4 at 2. Whereas the primary physician is tasked with directing

"operative . . . interventions." *Id.* That is exactly what Dr. Shaffer did here. Thus, Mount Sinai's obstetric hemorrhage policy does not establish a breach of the standard of care; the policy, if it applied at all, suggests that the primary nurse should perform and document the assessment of vitals, not the primary physician.

Midland also failed to show by a preponderance of the evidence that an ordinarily careful obstetrician would not rely on a CRNA's representation that a patient was fine or okay. In fact, the evidence at trial showed that it was the role of the CRNA to monitor and communicate concerns about a patient's vitals, and that a surgeon would be poorly suited to monitor (or even verify) a patient's vitals. As Dr. Hameed conceded, CRNA Kammann's "fundamental function" was to monitor and communicate any concerns about Julia's vital signs. Tr. 816–17. On the other side of the surgical drape, Dr. Shaffer was busy performing an emergency abdominal surgery and could not see the anesthesia monitor. Tr. 1240–42.

The Court finds that Dr. Shaffer was not required to, and in fact could not, verify that CRNA Kammann was monitoring vital signs while competently performing surgery at the same time. Tr. 1563. Dr. Shaffer needed to focus on Julia's abdomen and internal organs to make sure that neither Julia nor her baby were injured. Tr. 1563–64, 1569–71. Dr. Samuels discussed each of the steps required to perform a C-section in detail. Tr. 1574–80. The Court credits Dr. Samuels' testimony that it is physically impossible for an OB surgeon to monitor vital signs at the head of the table while focusing on and performing abdominal surgery. Tr. 1564, 1577. Dr. Shaffer and Dr. Sood also testified credibly, and in detail, about the fact that they

cannot perform surgery and monitor vital signs simultaneously. Tr. 391, 403 (Dr. Sood) ("[I]t is like driving a car . . . you have to focus on the surgery, and surgical field . . . we don't even sometimes look at the scrub tech, just ask for the instruments and they are handed over to us in our hands."); Tr. 1193–94, 1245–46 (Dr. Shaffer) ("Our focus is always looking in that pelvis every second . . . Dr. Sood has a knife in her hand . . . I have to make sure my fingers are not in the way, and we sort of anticipate everybody's movement . . . [M]y eyes never leave the field. Her eyes better not leave the field. Because we are focusing on what we are doing and it is all hands on deck.").

The weight of the evidence supports the conclusion that an OB surgeon is in fact expected to rely on an anesthesia provider to accurately and competently monitor a patient's vital signs. Dr. Shaffer credibly and clearly explained: "[W]e trust the various members of our team. So, if anesthesia is going to tell me that everything is okay, I am going to trust that they are being clear with their information and they are being correct." Tr. 1264–65. Dr. Sood, likewise, affirmed: "I have to . . . believe, yes. I have no reason not to believe that she would not [sic] look at the vitals, or at the monitor . . . We believed that the patient is stable." Tr. 406–07.

Dr. Hameed's testimony, on the other hand, was inconsistent and not credible on the concept of "reliance." Dr. Hameed testified that she believed, to a reasonable degree of medical certainty, that CRNA Kammann would have provided accurate vital signs numbers had they been requested. Tr. 841. Dr. Hameed, however, offered no basis for this assumption. In fact, there is no reasonable basis to conclude that CRNA Kammann would have provided specific vital sign numbers if asked.

Confusingly, Dr. Hameed, apparently, would rely on CRNA Kammann to provide her with accurate information, but faults Dr. Shaffer for relying on CRNA Kammann to do the same. According to Dr. Hameed, Dr. Shaffer breached the standard of care by believing CRNA Kammann when she (Kammann) told him that "everything is okay." Tr. 800. Dr. Hameed did not attempt to explain why she can properly assume that CRNA Kammann would competently do her job when Dr. Shaffer, apparently, cannot make that same assumption. As Dr. Hameed eventually conceded, it was entirely reasonable for Dr. Shaffer to assume that his nurse was looking at the anesthesia monitor and giving him accurate vital signs information because that was the job that she was certified to perform and that she had been performing for years. Tr. 841–42. For all of these reasons, Dr. Shaffer did not breach the standard of care by relying on CRNA Kammann.

iv. Situational Awareness and Comprehensive Evaluation

Midland's expert, Dr. Hameed, testified that the standard of care required Dr. Shaffer to have situational awareness and to perform a comprehensive evaluation of Julia. Tr. 787–88, 790. In more precise terms, Dr. Hameed testified that Dr. Shaffer lacked situational awareness as a result of the lack of communication in the team, and that, due to Julia's continued atony in conjunction with a lack of bleeding and the extensive use of uterotonics, Dr. Shaffer breached the standard of care by not undertaking a comprehensive evaluation of Julia. Tr. 789, 790. Hand in hand with her opinions regarding the need for situational awareness and a comprehensive

evaluation, was her testimony suggesting that Dr. Shaffer should have diagnosed lack of perfusion as the cause of Julia's atony. Tr. 853–54.

Both Dr. Samuels and Dr. Hameed agreed, in general terms at least, that situational awareness was required for Julia's emergency procedure. Tr. 755, 1631. But in terms of the need for Dr. Shaffer to diagnose the cause of Julia's uterine atony, Dr. Samuels did not "exactly" agree that Dr. Shaffer had to diagnose the cause of uterine atony or understand the lack of bleeding in order to properly treat Julia. Dr. Samuels testified: "[W]hen you talk about perfusion and ventilation, that is from an anesthesiology standpoint, and something that he doesn't do every day. So, I think he needs to be part of the team looking into it, but it is not his – it is really more an anesthesia responsibility." Tr. 1636.

Even if the standard of care required Dr. Shaffer to undertake a comprehensive evaluation of Julia and to diagnose Julia's lack of perfusion, the standard of care did not require Dr. Shaffer to distrust the anesthesia provider's communications while considering a differential diagnosis, as explained above. The evidence at trial showed that Dr. Shaffer conducted a differential diagnosis when treating Julia's uterine atony and that he considered lack of perfusion as a cause of her uterine atony. Tr. 1263. Dr. Shaffer credibly testified that, because he was thinking about perfusion, he asked CRNA Kammann "if everything was okay up there, and her response was, yes, and so that sort of ruled out perfusion as an issue, once I was informed that everything was fine." Tr. 1263. Furthermore, Dr. Sood also asked CRNA Kammann about Julia's blood pressure, and was given a normal number and was told that the

patient was "fine." This further ruled out the possibility of a perfusion issue. Tr. 1201–02, 1268.

Thus, the evidence shows that Dr. Shaffer did not fail to assess his patient or fail to consider the cause of Julia's uterine atony. Rather, he conducted a reasonable investigation and was given, tragically, false information by CRNA Kammann, the only provider with ready access to Julia's vital signs. Dr. Shaffer cannot be expected to have identified a perfusion problem once CRNA Kammann told the surgical team — twice and wrongly — that their patient's vital signs were fine. Indeed, Dr. Hameed agreed that a normal blood pressure and stable vital signs would indicate that perfusion was not the cause of uterine atony. Tr. 828–29, 831. For all of these reasons, Midland did not meet its burden of proving that Dr. Shaffer breached the standard of care with respect to situational awareness, comprehensively evaluating Julia, or for the failure to diagnose lack of perfusion as the cause of Julia's atony.

v. The ACOG Bulletin and California Toolkit

To support her various standard of care opinions, Dr. Hameed relied on the American College of Obstetrics and Gynecology (ACOG) bulletin and California toolkit, neither of which establishes a standard of care for this case. Dr. Hameed conceded that the ACOG bulletin on postpartum hemorrhage did not include information related to the specific situation in this case: uterine atony without significant bleeding. Tr. 826–27. And even if the bulletin did discuss the specific situation in this case, Dr. Hameed also conceded that it does not state that an OB surgeon must ask for heartrate, blood pressure, or oxygen saturation. Tr. 821–23,

825–26. Instead, Dr. Hameed stated that this requirement is "implied" and pointed to a table stating that Methergine should be avoided if a patient is hypertensive and that Carboprost should be avoided if a patient has a fever and tachycardia. Tr. 821, 823–25; Pl. Exh. 3 at 4. But neither Methergine nor Carboprost were administered in this case; nor did Julia have a fever. Moreover, Dr. Hameed's strained interpretation of the ACOG bulletin is contradicted by her own testimony that an OB surgeon does not need to know specific vital signs before administering Pitocin. Tr. 793. If indeed the ACOG bulletin implies what Dr. Hameed says it does, then an OB surgeon would need to ask for heartrate, oxygen saturation, and blood pressure before administering Pitocin, which is listed on the table Dr. Hameed identified. But, as Dr. Hameed conceded, that is not the standard of care. Tr. 793, 835–36. For all of these reasons, the ACOG bulletin does not support Dr. Hameed's opinions in this case.

The California toolkit similarly does not support Dr. Hameed's opinions. Dr. Hameed conceded that the toolkit does not provide recommendations or set a standard of care for Julia's clinical scenario, namely an atonic uterus without excessive bleeding. Tr. 827. There is no evidence that the toolkit is used in Illinois, where Mount Sinai is located, or that it sets a national standard of care. Dr. Hameed simply testified that the toolkit is "free to download by anyone anywhere in the world." Tr. 746. That the toolkit is available, however, does not establish where or how it is used. Nor does the toolkit's availability on the subscription-based website called "UpToDate" establish a national standard of care, as Midland suggests. There

is no evidence that Dr. Shaffer or anyone else at Mount Sinai uses UpToDate, much less that this website establishes the standard of care.

During cross examination, Dr. Hameed conceded that the California toolkit does not state that an OB surgeon needs to ask for blood pressure, heartrate, oxygen saturation, or respiratory rate before treating uterine atony. Tr. 827.[7] Moreover, to the extent the toolkit suggests that any particular provider is responsible for assessing patient's vital signs, it assigns that responsibility to the "primary nurse or designee"—not the OB surgeon. Pl. Exh. 2 at 91–92.

vi. Failing to Supervise CRNA Kammann

In passing, Midland argues that Dr. Shaffer failed to supervise the personnel in Julia's operating room, and that that failure constituted a departure from the standard of care. PPFFCL at 112. The Court disagrees.

The evidence at trial was that Dr. Shaffer, as an obstetric surgeon, did not have a general duty to supervise CRNA Kammann, the anesthesia provider. Dr. Hameed's vague assertions that team members must "integrate their observations," "communicate," and "collaborate" could apply to virtually any situation, inside or outside the operating room. Tr. 762–63. They do not establish that there was a specific duty, in this case, for the obstetric surgeon to supervise anesthesia. On the other hand, Dr. Vazquez, Dr. Samuels, and CRNA Anderson testified clearly and credibly that an OB surgeon does not supervise the anesthesia provider, whether she is a CRNA or an anesthesiologist. Tr. 1467–69, 1302–04, 1562–64. As their testimony

[7]Dr. Hameed's testimony was that the California Tool Kit discussed "vital signs" more generally. Tr. 827.

makes clear, an obstetric surgeon does not have the training, experience, or ability to supervise anesthesia while performing surgery. Tr. 1467–69, 1562–64.

Midland points to CRNA Kammann's testimony that she had intended to administer a regional "spinal" anesthetic to Julia but that Dr. Shaffer had instructed CRNA Kammann to place Julia under general anesthesia. PPFFCL at 11. Midland's general anesthesia argument is a non-starter for two reasons. First, CRNA Kammann provided unreliable testimony at her depositions,[8] and her version of events is not credible. For instance, with respect to the intubation, CRNA Kammann testified that she saw the endotracheal tube go through Julia's trachea and that she saw waveforms indicating endtidal carbon dioxide on the anesthesia monitor. Tr. 1320. According to CRNA Kammann: "[t]he intubation was easy." Tr. 1317. This testimony was not credible because the anesthesia monitor did not record any end-tidal carbon dioxide for the duration of Julia's case. *See* Tr. 1364–65. CRNA Kammann also denied that the endotracheal tube had been placed in Julia's esophagus. Tr. 1321–22. CRNA Kammann's denial was not credible because the medical evidence, which was available to CRNA Kammann at the time of her deposition, conclusively establishes that Julia was intubated in her esophagus rather than the trachea. *See* Tr. 1363. Because CRNA Kammann's testimony was not credible, the Court does not find that Midland has proven by a preponderance that Dr. Shaffer instructed CRNA Kammann as to which type of anesthesia to administer.

[8]CRNA Kammann passed away prior to the start of trial, so her testimony was presented via deposition designation.

Even if Dr. Shaffer had stated general anesthesia should be used, CRNA Anderson and Dr. Samuels also testified credibly that that language is simply how surgeons communicate urgency, and it does not constitute supervision, direction, or control. Tr. 1469–71 (CRNA Anderson) ("That communication is just the typical communication between an anesthesia professional . . . and surgeon about what is needed for a case, and in this case, an urgent case."); Tr. 1564–68 (Dr. Samuels) ("It is just a decision that had to be made quickly, and you know, it is a pretty straightforward decision."). Thus, Dr. Shaffer did not have a general duty to supervise or control CRNA Kammann.

In sum, Midland failed to establish that it was more likely true than not that Dr. Shaffer breached the standard of care in this case. Dr. Hameed's testimony failed to establish the standard of care because her opinions did not set out what an ordinarily careful medical professional would do under these circumstances. Dr. Hameed's opinions were instead based on hindsight and on documents like the California Toolkit, a resource designed to improve the medical treatment of mothers. *See* Pl. Exh. 2 (California Toolkit titled "A California Toolkit to Transform Maternity Care"). In that way, Dr. Hameed's testimony was largely aspirational, in that she testified to how the treatment of a mother during an emergency C-section *should ideally be*, not how it is presently. *See Bergman v. Kelsey*, 873 N.E.2d 486, 504 (Ill. App. Ct. 2007) (cleaned up) ("In general, standards not in effect on the date of the medical treatment are inapplicable to establish a standard of care for that treatment."). *Cf. Lees v. Carthage Coll.*, 714 F.3d 516, 525 (7th Cir. 2013) (aspirational

practices are not dispositive as to negligence liability); *Owens v. Nat'l Collegiate Athletic Ass'n*, 2022 WL 2967479, at *5 (N.D. Ill. July 27, 2022) (Lee, J.) (voluntary standards do not establish standard of care). Given the tragic outcome of this case, her opinions are appealing, but they failed to establish "the knowledge, skill, and care ordinarily used by a reasonably careful doctor." Illinois Pattern Jury Instructions, Civil, No. 105.01. The Court's holding is additionally based on the testimony of Dr. Samuels, who credibly testified that an ordinarily careful professional in Dr. Shaffer's shoes would not have had to act as Dr. Hameed claimed. Because Midland bore the burden of proving each element of its medical malpractice case by a preponderance of the evidence, Midland's medical malpractice claim fails. Nevertheless, for the sake of completeness, the Court goes on to assess the proximate cause element.

d. Proximate Cause

Under Illinois law, "[p]roximate cause in a medical malpractice case must be established by expert testimony to a reasonable degree of medical certainty, and the causal connection must not be contingent, speculative, or merely possible." *Morisch v. United States*, 653 F.3d 522, 531 (7th Cir. 2011) (internal quotation marks omitted) (quoting *Johnson v. Loyola Univ. Med. Ctr.*, 893 N.E.2d 267, 272 (Ill. App. Ct. 2008)). A medical malpractice plaintiff must establish both "cause in fact and legal cause." *Bergman*, 873 N.E.2d at 500 (internal quotation marks and citation omitted). "'Cause in fact' is established where there is reasonable certainty that the injury would not have occurred 'but for' the defendant's conduct or where a defendant's conduct was a

'substantial factor' in bringing about the harm." *Steed v. Rezin Orthopedics & Sports Med.*, 182 N.E.3d 109, 120 (Ill. 2021) *reh'g denied* (Mar. 4, 2021), *as modified* (Mar. 22, 2021) (citation omitted). Legal cause, on the other hand, "presents a question of foreseeability," and is established "if an injury was foreseeable as the type of harm that a reasonable person would expect to see as a likely result of his or her conduct." *Bergman*, 873 N.E.2d at 500 (citation omitted).

Midland's conclusions of law do not provide analysis on proximate cause, so the Court discerns Midland's position on proximate cause from its proposed findings of fact.[9] In Midland's proposed findings of fact regarding Dr. Hameed's testimony, Midland identifies the following purported deviations from the standard of care, which in Dr. Hameed's opinion, caused Julia's outcome:

- Dr. Shaffer's failure to page the attending anesthesiologist;
- Dr. Shaffer's reliance on CRNA Kammann's representation that Julia was "fine or okay";
- Dr. Shaffer's failure to ask for and/or verify Julia's specific vital signs; and
- Dr. Shaffer's failure to diagnose lack of perfusion as the cause of Julia's atony.

PPFFCL at 27–39. But even assuming these acts or omissions were breaches of the standard of care, Midland failed to prove that Julia's death was a type of injury which a reasonable person would see as a likely result of Dr. Shaffer's acts or omissions. *See Murillo v. United States*, 504 F. Supp. 3d 875, 890 (N.D. Ill. 2020) (citations omitted).

[9]Again, while this made the Court's task more cumbersome, it did not impact the outcome of the Court's holding.

Beginning with Dr. Shaffer's failure to page the attending anesthesiologist, the evidence at trial, as discussed above, showed that Mount Sinai's policy allowed for a CRNA to be the anesthesia provider for an emergency procedure. Tr. 389–90, 1244, 1294; Def. Exh. 19 at 16. The evidence further demonstrated that the on-call attending anesthesiologist, Dr. Osunero, should have already been paged by CRNA Kammann (per Mount Sinai's anesthesiology policy) by the time Dr. Shaffer began treating Julia's uterine atony. Def. Exh. 19. As a result, a reasonable person would not foresee that failing to page the attending anesthesiologist a second time and proceeding with the CRNA would cause Julia the types of injuries she suffered, including hypoxic ischemic cardiomyopathy during the operative procedure as a result of prolonged hypoxia (low oxygen). Julia's lack of oxygen resulted from CRNA Kammann's failure to properly intubate Julia, and because CRNAs are expected to intubate properly just like an attending anesthesiologist, Julia's oxygen-deficiency related injuries were not the reasonably foreseeable result of Dr. Shaffer not paging Dr. Osunero before treating Julia's uterine atony. The Court therefore finds that even if Dr. Shaffer's failure to page Dr. Osunero constituted a breach of the standard of care, it was not the legal cause of her injuries.

Julia's injuries were likewise not the reasonably foreseeable result of Dr. Shaffer's failure to ask for specific vital signs or for his reliance on CRNA Kammann's representation that Julia was "fine" or "okay." Nor were Julia's injuries the reasonably foreseeable result of Dr. Shaffer failing to independently verify Julia's vital signs. At trial, the evidence illustrated that Dr. Shaffer asked broadly about

Julia's well-being to CRNA Kammann, the medical professional responsible for monitoring Julia's vitals, while running a differential diagnosis, and CRNA Kammann responded that Julia was "fine" or "okay." Tr. 1201, 1264. It was not foreseeable that the anesthesia provider would lie about or misrepresent Julia's condition, which in turn, would prevent the doctors on the other side of the surgical drape from taking measures to save Julia's life. A reasonable person in Dr. Shaffer's shoes would have no reason to think that Julia had been mis-intubated, or that the medical professional responsible for monitoring and communicating Julia's vital signs would misapprehend and misrepresent Julia's condition.

The trial evidence illustrated how this strange and horrific turn of events was unique and not foreseeable. Even Dr. Hameed did not opine that Dr. Shaffer was required to anticipate or suspect that CRNA Kammann was providing negligent medical care. Furthermore, multiple witnesses, including Dr. Hameed, confirmed that they have never seen a situation remotely like this case. Specifically, Dr. Hameed testified that she has never encountered a situation where she received vital signs information from an anesthesia provider that she later learned was false. Tr. 843. Nor did Dr. Hameed testify as to any other comparable case from her extensive review of maternal mortality cases. Tr. 844. Dr. Samuels and Dr. Sood, likewise, testified that they have never participated in a case nor heard of a case where an anesthesia provider failed to recognize any alarming vital signs and wrongly reported that the patient was "fine" to the surgical team. Tr. 409, 1608–09. From the anesthesia perspective, CRNA Anderson testified that in her 25 years' experience she has never

heard of or consulted on a case involving the same magnitude of inaccuracies and failures. Tr. 1502–03. Dr. Rubin, for his part, testified: "I want to emphasize, again, just how abnormal these vital signs are . . . at even a basic or fundamental level, they should have been interpreted that something is very wrong in this patient, and she did not communicate that at all, rather said the patient was okay or doing fine throughout the procedure." Tr. 1375. CRNA Kammann's reckless and negligent conduct would not have been foreseeable to a reasonable person, any more than Drs. Shaffer and Sood could foresee it.

For the same reasons, Dr. Shaffer's failure to diagnose lack of perfusion was not the legal cause of Julia's outcome. That is, it is not reasonably foreseeable that failing to determine the cause of Julia's atony (due to the CRNA providing false information about Julia's condition) would result in a patient suffering from the type of injuries Julia suffered. Dr. Samuels credibly testified that Dr. Shaffer did not have to personally diagnose lack of perfusion in order to properly treat Julia. Tr. 1636. Dr. Samuels further testified that a diagnosis of life-threatening effects due to lack of perfusion to the uterus "is as rare as rare can be," which shows that Julia's injuries were not foreseeable under these circumstances. Tr. 1635. While treating Julia's atony, moreover, CRNA Kammann represented, twice, that Julia was doing "okay" or "fine." Tr. 339, 382, 1201, 1264. As a result, Dr. Shaffer ruled out perfusion as the cause of Julia's atony. Tr. 1201–02, 1265. It is not objectively predictable that Dr. Shaffer's mistaken ruling out of perfusion would lead to Julia's tragic injuries and death because a reasonable person would not see hypoxic ischemic cardiomyopathy

or a similar injury as a likely result of the failure to identify the cause of uterine atony, particularly where the person was told, not once, but twice that the patient was doing "fine" or "okay." So, Dr. Shaffer's failure to identify perfusion as the cause of Julia's atony was not a legal cause of Julia's injuries either.

All in all, CRNA Kammann's gross carelessness and probable deceit is intertwined with all of Julia's outcomes, and CRNA Kammann's conduct was not foreseeable. The Court accordingly finds that Midland failed to establish that Dr. Shaffer's acts or omissions, even if they departed from the standard of care, were the legal cause of Julia's outcome.[10]

e. Damages

Midland failed to prove each element of its medical malpractice case by a preponderance of the evidence. The Court consequently finds in favor of the United States and does not reach the issue of damages.

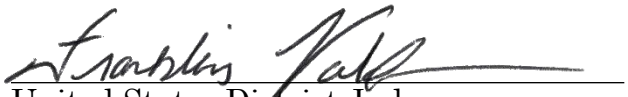
Conclusion

Although what happened to Julia Castellanos on November 16, 2015 at Mount Sinai Hospital is tragic, Midland failed to prove that the United States is liable for Julia's harrowing outcome. That is, Midland failed to prove by a preponderance of the evidence that Dr. Shaffer breached the standard of care and that Dr. Shaffer's acts or omissions proximately caused Julia's injuries and death. Consequently, the Court

[10]The Court does not address whether Dr. Shaffer's acts or omissions were the cause in fact of Julia's outcome because the Court has found that Midland failed to establish that Dr. Shaffer's acts or omissions were the legal cause of Julia's outcome. *See Bergman*, 873 N.E.2d at 500 (proximate cause requires plaintiff to prove cause in fact and legal cause).

enters judgment in favor of the United States.

Dated: September 30, 2022



United States District Judge
Franklin U. Valderrama