

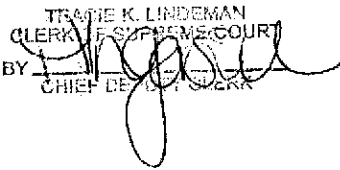
IN THE SUPREME COURT OF THE STATE OF NEVADA

IN THE MATTER OF THE
GUARDIANSHIP OF THE PERSON
AND ESTATE OF ADEN HAILU, AN
ADULT.

No. 68531

FILED

NOV 16 2015

TRACIE K. LINDEMAN
CLERK OF SUPREME COURT
BY 
CHIEF DEPUTY CLERK

FANUEL GEBREYES,
Appellant,
vs.
PRIME HEALTHCARE SERVICES,
LLC, D/B/A ST. MARY'S REGIONAL
MEDICAL CENTER,
Respondent.

Appeal from a district court order denying a petition for temporary restraining order and permanent injunction. Second Judicial District Court, Family Court Division, Washoe County; Frances Doherty, Judge.

Reversed and remanded.

O'Mara Law Firm, P.C., and David C. O'Mara, Reno,
for Appellant.

Snell & Wilmer, L.L.P., and William E. Peterson and Janine C. Prupas,
Reno,
for Respondent.

BEFORE THE COURT EN BANC.

OPINION

By the Court, PICKERING, J.:

“For legal and medical purposes, a person is dead if the person has sustained an irreversible cessation of . . . [a]ll functions of the person’s

entire brain, including his or her brain stem.” NRS 451.007(1). The determination of death “must be made in accordance with accepted medical standards.” NRS 451.007(2). Here, we are asked to decide whether the American Association of Neurology guidelines are considered “accepted medical standards” that satisfy the definition of brain death in NRS 451.007. We conclude that the district court failed to properly consider whether the American Association of Neurology guidelines adequately measure all functions of the entire brain, including the brain stem, under NRS 451.007 and are considered accepted medical standards by states that have adopted the Uniform Determination of Death Act. Accordingly, we reverse the district court’s order denying a petition for temporary restraining order and remand.

FACTS

Medical history

On April 1, 2015, 20-year-old university student Aden Hailu went to St. Mary’s Regional Medical Center (St. Mary’s) after experiencing abdominal pain. Medical staff could not determine the cause of her pain and decided to perform an exploratory laparotomy and remove her appendix.¹ During the laparotomy, Hailu’s blood pressure was low and she suffered “severe, catastrophic anoxic, or lack of brain oxygen damage,” and she never woke up. After her surgery, Hailu was transferred to the St. Mary’s Intensive Care Unit (ICU), under the care of Dr. Anthony

¹An exploratory laparotomy is a surgery in which “[t]he surgeon makes a cut into the abdomen and examines the abdominal organs.” See *Abdominal Exploration*, Nat’l Inst. of Health: U.S. Nat’l Library of Med., <https://www.nlm.nih.gov/medlineplus/ency/article/002928.htm> (last updated Nov. 13, 2015).

Floreani. Within the first two weeks of April, three different electroencephalogram (EEG) tests were conducted,² all of which showed brain functioning.

On April 13, 2015, Dr. Aaron Heide, the Director of Neurology and Stroke at St. Mary's, first examined Hailu. Dr. Heide concluded that Hailu was not brain dead at that time but was "rapidly declining." To make that determination, Dr. Heide conducted an examination of Hailu's neurological functions; her left eye was minimally responsive, she was chewing on the ventilator tube, and she moved her arms with stimulation. The next day, April 14, 2015, Hailu did not exhibit these same indicia of neurological functioning.

On May 28, 2015, St. Mary's performed an apnea test,³ which involved taking Hailu off ventilation support for ten minutes to see if she

²An EEG test

detects abnormalities in the brain waves or electrical activity of the brain. During the procedure, electrodes consisting of small metal discs with thin wires are pasted on the scalp. The electrodes detect tiny electrical charges that result from the activity of the brain cells. The charges are amplified and appear as a graph on a computer screen or as a recording that may be printed out on paper.

Electroencephalogram (EEG), Johns Hopkins Med.: Health Library, http://www.hopkinsmedicine.org/healthlibrary/test_procedures/neurological/electroencephalogram_eeg_92,P07655/ (last visited Nov. 13, 2015).

³An apnea test "adds carbon dioxide to the patient's blood. A person with a functioning brain stem tries to breathe in response to the carbon dioxide. If the patient tries to breathe, you abort the test immediately and

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could breathe on her own; Hailu failed the apnea test, leading St. Mary's to conclude that "[t]his test result confirms Brain Death unequivocally." Based on Hailu's condition, Dr. Jeffrey Bacon wrote the following in his notes: "Awaiting administration and hospital lawyers for direction re care—withdrawal of Ventilator support indicated NOW in my opinion as brain death unequivocally confirmed." On June 2, 2015, St. Mary's notified Hailu's father and guardian,⁴ Fanuel Gebreyes, that it intended to discontinue Hailu's ventilator and other life support. Gebreyes opposed taking Hailu off life support and sought judicial relief.

Procedural history

June 18, 2015, hearing

Gebreyes filed an emergency motion for temporary restraining order to enjoin St. Mary's from removing Hailu from life-sustaining services. On June 18, 2015, the district court held a hearing on the matter. The parties stipulated that St. Mary's would continue life-sustaining services until July 2, 2015, at 5:00 p.m. to allow Gebreyes to have an independent neurologist examine Hailu. They further stipulated that if, after the independent examination, Gebreyes wished St. Mary's to continue life support, he would need to request it through guardianship court. However, "if on July 2, 2015, it is determined that Aden Hailu is legally and clinically deceased, the hospital shall proceed as they see fit."

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say the patient is not brain-dead." Leslie C. Griffin & Joan H. Krause, *Practicing Bioethics Law* 106 (2015) (internal quotation marks omitted).

⁴Hailu has two guardians: Fanuel Gebreyes and Metsihate Asfaw (Hailu's cousin). Asfaw was attending college in Russia and did not directly participate in this case.

Based on the stipulation, the district court dismissed the complaint for a temporary restraining order.

July 2, 2015, hearing

For reasons unknown, Gebreyes was unable to obtain the services of a neurologist before the stipulated July 2, 2015, deadline. Consequently, on July 1, 2015, Gebreyes filed an “Emergency Petition for Order Authorizing Medical Care, Restraining Order and Permanent Injunction.” In the petition, he alleged that the doctors at St. Mary’s had prematurely determined that Hailu had experienced brain death and sought to prevent the hospital from removing Hailu from the ventilator. St. Mary’s opposed the emergency petition on July 2, 2015, and the district court held a hearing that same day.

At the July 2, 2015, hearing, the district court heard from four witnesses. First, Gebreyes testified that he wanted Hailu to get a tracheostomy⁵ and feeding tube to prepare her for transport; he hoped to take her home or relocate her to Las Vegas, where he resides. When asked why he did not obtain the services of another doctor to perform the tracheostomy, he stated that it was something he thought St. Mary’s had to do because Hailu is at St. Mary’s. Second, Gebreyes obtained the services of Dr. Paul Byrne—a known opponent of brain-death declarations who is unlicensed in Nevada—to testify that Hailu is still alive. Dr. Byrne

⁵A tracheostomy “is an opening surgically created through the neck into the trachea (windpipe) to allow direct access to the breathing tube.” *What Is a Tracheostomy*, Johns Hopkins Med., <http://www.hopkinsmedicine.org/tracheostomy/about/what.html> (last visited Nov. 13, 2015).

complained that Hailu was never treated for thyroid problems and testified that this treatment will help her improve.

Third, Dr. Aaron Heide testified on behalf of St. Mary's. Dr. Heide applied the American Association of Neurology (AAN) guidelines to Hailu to determine if she was brain dead. He testified that the AAN guidelines are the accepted medical standard in Nevada. The AAN guidelines call for three determinations: (1) whether there is a coma and unresponsiveness; (2) whether there is brainstem activity (determined by conducting a clinical examination of reflexes, eyes, ears, etc.); and (3) whether the patient can breathe on her own (determined by conducting an apnea test). Although another doctor conducted the apnea test one month after Dr. Heide's last examination of Hailu, Dr. Heide believed that Hailu "had zero percent chance of any form of functional neurological outcome." Further, Dr. Heide also administered a Transcranial Doppler test, which is a test that measures blood flow to the brain.⁶ While there was still some blood flow to Hailu's brain, the lack of blood flow was consistent with brain death.

Last, Helen Lidholm, the CEO of St. Mary's, testified that the hospital is in favor of allowing Hailu to be transported to Las Vegas, where her father lives. Lidholm stated that St. Mary's "could make that

⁶A Transcranial Doppler test is a noninvasive ultrasound measure of "sound waves, inaudible to the human ear, [which] are transmitted through the tissues of the skull. These sound waves reflect off blood cells moving within the blood vessels, allowing the radiologist to calculate their speed. The sound waves are recorded and displayed on a computer screen." *Ultrasonography Test (Transcranial Doppler)*, Cleveland Clinic, <https://my.clevelandclinic.org/health/diagnostics/hic-abdominal-renal-ultrasound/hic-ultrasonography-test-transcranial-doppler> (last updated Jan. 20, 2012).

happen” as long as Gebreyes arranges the proper medical equipment and transportation for Hailu and ensures a transfer location that can care for her. St. Mary’s would allow the family to retain the services of any neurologist to come in and test Hailu as long as the physician is licensed in the State of Nevada; St. Mary’s also offered to pay for the physician’s examination fee. On cross-examination, Lidholm clarified that if the family has a licensed neurologist examine Hailu and determine that she is still alive, the physician can then order treatment for Hailu. Gebreyes said that he never received this offer before the hearing.

After Gebreyes said that he wanted to take advantage of the opportunity to bring in his own neurologist, the parties stipulated to extend the hearing until July 21, 2015, to give Gebreyes time to retain the services of a neurologist. The district court gave Gebreyes specific instructions on the care plan he must bring back to the court. First, the district court stated that Gebreyes needs a neurological expert because the matter involves “primarily neurological issues.” Second, the care plan must determine “whether or not that physician is going to treat the patient, prescribe the protocol for the patient that the guardian is hoping for, and works with the guardian to accommodate transfer.” Third, the plan must also include the method and manner of transportation, the new location, and the plan of care at the new location, along with the method of payment for such care. Finally, the care plan must be supported by medical evidence. Based on this stipulation, the district court continued the hearing to July 21, 2015.

July 21, 2015, hearing

On July 21, 2015, Gebreyes presented a plan to transport Hailu to Las Vegas based on the testimony of two physicians. First,

Gebreyes called Dr. Brian Callister to testify. Dr. Callister is not a neurologist, but specializes in internal medicine and hospitalist medicine. He examined Hailu the day of his testimony and reviewed her medical records. Based on his examination of Hailu and review of her records, Dr. Callister testified: "I believe that her status is quite grim. I think that her chance of survival, her chance of awakening from her current state is a long shot. However, I do not think that the chance is zero." Dr. Callister stated that all three EEG tests did show brainwaves, albeit abnormal and slow. In Dr. Callister's opinion, the EEG tests are "something that should give you just enough pause to say you can't say with certainty that her chances are zero." Although Dr. Callister admitted that under the AAN guidelines Hailu's condition looks irreversible, Dr. Callister pointed to other factors that demonstrate improvement is a possibility. As examples, Dr. Callister cites Hailu's young age, her health, her skin, her ability to make urine and pass bowel movements, and the fact that the general functioning of the rest of her body is good. He explained that typically, someone kept alive by a ventilator shows other signs of deterioration, such as organ failures or necrosis of the hands and feet, that Hailu does not exhibit.

Finally, Dr. Callister questioned the reliability of the AAN guidelines stating that the AAN guidelines will always yield results consistent with brain death for a patient with a nonfunctioning cortex, even if the mid or hind parts of the brain are still functioning. Nevertheless, on cross-examination, Dr. Callister conceded that under "a strict definition" of the AAN guidelines, Hailu "would meet their category [of brain death]." On redirect, Dr. Callister concluded that "there's enough variables and enough questions based on the condition of her physical

body, the EEG's and the fact that no further neurological testing has been done in several months, and the fact that no outside third party neurologist has looked at her that I would have pause."

Second, Gebreyes called Dr. Scott Manthei from St. Rose de Lima Hospital (St. Rose) in Las Vegas. Although Dr. Manthei had not reviewed Hailu's medical records, he testified that he was prepared to perform a tracheostomy on Hailu. However, St. Rose was not prepared to accept Hailu at the time because there were no available beds. Dr. Manthei did not plan on accepting Hailu into his care, except for the tracheostomy. Dr. Manthei testified that he could not perform the tracheostomy until St. Rose agreed to accept Hailu into the short-term ICU, and found a long-term care facility for Hailu after her stay at St. Rose.

Next, St. Mary's called Dr. Anthony Floreani to testify. Dr. Floreani took care of Hailu in the ICU since the night following her surgery. Dr. Floreani is a pulmonary doctor, not a neurologist. Dr. Floreani agreed with the conclusions of Dr. Heide that Hailu is brain dead. He rejected the notion that the EEGs contradict that finding by stating: "The prior EEG, the prior MRI really do not—are not considered primary determinants of brain death by the established consensus and evidence-based criteria." Dr. Floreani testified that the St. Mary's doctors did the tests "by the book exactly how you should do it."

Based on all of the evidence from the July 2 hearing and the July 21 hearing, the district court ruled in favor of St. Mary's. The district court stated that a restraining order should not be granted because the medical evidence from Dr. Heide and Dr. Floreani suggested that the AAN guidelines were followed, and thus, "medical standards were met, the

outcome and criteria were satisfied in terms of the statute, the [AAN] protocol was followed, the outcome of the various three step tests under the [AAN] protocol all direct certification of death, and I agree.” Despite ruling in St. Mary’s favor, the district court granted an injunction pending Gebreyes’s appeal to this court. The district court’s written order was filed on July 30, 2015. Gebreyes appealed on August 3, 2015, and this court issued a stay of the district court’s order and directed St. Mary’s not to terminate Hailu’s life-support systems pending resolution of the appeal. Expedited briefing and argument followed.

DISCUSSION

Although this court gives deference to the district court’s factual findings, this court reviews the district court’s conclusions of law, including statutory interpretation issues, de novo. *Torres v. Nev. Direct Ins. Co.*, 131 Nev., Adv. Op. 54, 353 P.3d 1202, 1206 (2015).

Brain death presents a mixed legal and medical question. Although “it is for [the] law to define the standard of death,” courts have deferred to the medical community to determine the applicable criteria for deciding whether brain death is present. *In re Welfare of Bowman*, 617 P.2d 731, 732 (Wash. 1980). However, the statutory requirements of Nevada’s Determination of Death Act that death be determined using “accepted medical standards” and that the Act be applied and construed in a manner “uniform among the states which enact it,” NRS 451.007, necessitates a legal analysis regarding what the accepted medical standards are across the country. Thus, a brief overview of the Uniform Determination of Death Act, its predecessor the Uniform Brain Death Act, and their adoption in Nevada will provide perspective to the parties’ arguments.

Uniform Determination of Death Act

The Uniform Law Commission first created a uniform act regarding brain death in 1978, entitled the Uniform Brain Death Act. *State v. Guess*, 715 A.2d 643, 649 (Conn. 1998). However, due to confusion regarding the criteria of the act, the Uniform Law Commission replaced the Uniform Brain Death Act with the Uniform Determination of Death Act of 1980 (UDDA). *See id.* The UDDA provided that “[a]n individual who has sustained either (1) irreversible cessation of circulatory and respiratory functions, or (2) irreversible cessation of all functions of the entire brain, including the brain stem, is dead.” UDDA § 1, 12A U.L.A. 781 (2008). The UDDA and similar brain death definitions have been uniformly accepted throughout the country. *See* Leslie C. Griffin & Joan H. Krause, *Practicing Bioethics Law* 106 (2015) (“Thus all fifty states define brain death as legal death even if the heart continues to beat.”); Eun-Kyoung Choi et al., *Brain Death Revisited: The Case for a National Standard*, 36 J.L. Med. & Ethics 824, 825 (2008) (stating that the UDDA “provides the national legal framework for defining death”).

Nevada’s Determination of Death Act

In 1979, Nevada adopted the Uniform Brain Death Act (UBDA). Hearing on S.B. 5 Before the Assembly Judiciary Comm., 60th Leg. (Nev., April 10, 1979). Under the UBDA, determinations of death had to be made, “in accordance with reasonable medical standards.” 1979 Nev. Stat., ch. 163, § 1, at 226. In 1985, Nevada amended NRS 451.007 and adopted the UDDA. 1985 Nev. Stat., ch. 62, § 1, at 130. Subsequent to that adoption, NRS 451.007, much like its predecessor the UBDA, provides two different methods for determining death: “For legal and medical purposes, a person is dead if the person has sustained *an*

irreversible cessation of: (a) Circulatory and respiratory functions; or (b) All functions of the person's entire brain, including his or her brain stem." NRS 451.007(1) (emphases added). In contrast to the UBDA, which only required determinations of death to be made according to reasonable medical standards, the UDDA required that determinations of death "must be made in accordance with accepted medical standards," and applied and construed in a manner "uniform among the states which enact it." NRS 451.007(2)-(3). In so doing, the UDDA sought to achieve greater uniformity in making such important and profound medical determinations.

The legislative history of NRS 451.007 makes clear that the legislative purpose was to ensure there was no functioning at all of the brain before determining death. When considering the adoption of the act, physicians and medical professionals testified in support of the bill. Hearing on S.B. 5 Before the Assembly Judiciary Comm., 60th Leg. (Nev., February 27, 1979). For example, Dr. Don Olson, a physician and professor at the Nevada Medical School, testified that physicians currently use the "Harvard" criteria to determine brain death. *Id.* After the first three steps of the Harvard criteria, physicians "additionally run EEGs (electroencephalograms) 24 hours apart, to see how the brain is functioning before they would pronounce the final decision of 'Brain Death.'" *Id.* During the second hearing regarding the adoption of the UBDA, one senator stated: "if there was a heartbeat and a *brainwave*, the life support system cannot be disconnected and to do so would be murder." Hearing on S.B. 5 Before the Assembly Judiciary Comm., 60th Leg. (Nev., April 10, 1979) (emphasis added). And, Frank Daykin of the Legislative Counsel Bureau testified that "this bill gave a standard for determining

brain death which is expressed in terms of *functioning* of the brain. . . . Once *all functioning* of the brain has ceased, medically the person is considered dead.” *Id.* (emphases added). Based on this testimony, the Committee approved the bill. *Id.*

Are the AAN guidelines considered “accepted medical standards,” which adequately measure all functions of a person’s entire brain, including the brain stem?

The district court focused exclusively on whether St. Mary’s physicians satisfied the AAN guidelines, without discussing whether the AAN guidelines satisfy NRS 451.007. Although St. Mary’s presented testimony that the AAN guidelines are the accepted medical standard in Nevada—albeit a simple “yes” to the question of whether the AAN guidelines are the accepted medical standard in Nevada—the district court and St. Mary’s failed to demonstrate that the AAN guidelines are considered “accepted medical standards” that are applied uniformly throughout states that have enacted the UDDA as sufficient to meet the UDDA definition of brain death. The district court did not reach this issue at all, while St. Mary’s has only cited one source to support its argument that the AAN guidelines are the nationally accepted medical standard.

St. Mary’s cites the New Jersey Law Revision Commission’s Report relating to the Declaration of Death Act. However, the report actually supports the opposite conclusion for which St. Mary’s argues. In the report, New Jersey decided *against* adopting the AAN guidelines, stating that the AAN guidelines “are not uniformly accepted in the national (or even international) medical community.” *See* N.J. Law Revision Comm’n, Final Report Relating to New Jersey Declaration of Death Act, at 14 (Jan. 18, 2013). Further, the report cited to multiple studies suggesting that “the AAN guidelines need more research” and

“there is still a great variety of practice in US hospitals” even though the AAN guidelines were published in 1995. *Id.* at 10. Despite recognizing the AAN as guidelines “upon which most hospitals and physicians rely,” the report concluded that the AAN guidelines were not so broadly adopted and utilized as to have become *the* accepted medical standard for determining brain death. *Id.* at 14. Based on the foregoing, and the record before us, we are not convinced that the AAN guidelines are considered the accepted medical standard that can be applied in a way to make Nevada’s Determination of Death Act uniform with states that have adopted it, as the UDDA requires. NRS 451.007(3) (recognizing that the purpose of adopting the UDDA in Nevada “is to make uniform among the states which enact it the law regarding the determination of death”).

Contrarily, extensive case law demonstrates that at the time states began to adopt the UDDA, the uniformly accepted medical standard that existed was the then so-called Harvard criteria.⁷ The Harvard

⁷See Hearing on S.B. 5 Before the Assembly Judiciary Comm., 60th Leg. (Nev., February 27, 1979) (discussing Harvard criteria); *see also United States v. Gomez*, 15 M.J. 954, 959 (A.C.M.R. 1983) (“The determination [of death] in either case must be made in accordance with accepted medical standards, such as the Harvard Brain Death tests.”); *Gallups v. Cotter*, 534 So. 2d 585, 586 n.1 (Ala. 1988) (“An increasing number of states have adopted this so-called ‘Harvard’ definition of brain death, either by statute or court decision.”); *State v. Fierro*, 603 P.2d 74, 77-78 (Ariz. 1979) (“We believe that while the common law definition of death is still sufficient to establish death, the test of the Harvard Medical School or the Commissioners on Uniform State Laws, if properly supported by expert medical testimony, is also a valid test for death in Arizona.”); *Lovato v. Dist. Court in & for Tenth Judicial Dist.*, 601 P.2d 1072, 1076 (Colo. 1979) (“These [Harvard] criteria constitute the basis of accepted medical standards for determination of brain death.”); *State v. Guess*, 715 A.3d 643, 648 (Conn. 1998); *Janus v. Tarasewicz*, 482 N.E.2d
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criteria require three steps, followed by a flat EEG as a confirmatory test: (1) unreceptivity and unresponsivity to painful stimuli; (2) no spontaneous movements or spontaneous respiration; and (3) no reflexes, as demonstrated by no ocular movement, no blinking, no swallowing, and fixed and dilated pupils. Ad Hoc Comm. of the Harvard Med. Sch., *A Definition of Irreversible Coma*, 205 JAMA 337, 337-38 (1968) [hereinafter Harvard Report]; see also *In re Welfare of Bowman*, 617 P.2d at 737. After the first three steps, the report recommends requiring flat EEGs, which serve as "great confirmatory value."⁸ Harvard Report, *supra*, at 338. "All

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418, 422 (Ill. App. Ct. 1985) (citing to the Harvard criteria as "widely accepted characteristics of brain death"); *Swafford v. State*, 421 N.E.2d 596, 599 (Ind. 1981); *Commonwealth v. Golston*, 366 N.E.2d 744, 747 (Mass. 1977) ("The Harvard Committee developed basic clinical criteria, which are generally accepted by the medical community."); *State v. Meints*, 322 N.W.2d 809, 815 (Neb. 1982); *People v. Eulo*, 472 N.E.2d 286, 298 n.15 (N.Y. 1984) ("This [Harvard] test has served as the foundation for currently applied tests for determining when the brain has ceased to function."); *State v. Clark*, 485 N.E.2d 810, 812 (Ohio Ct. App. 1984) (discussing expert witness testimony that "physicians in Ohio generally use the Harvard standards which require two flat EEG tests within a twenty-four-hour period"); *In re Welfare of Bowman*, 617 P.2d 731, 737 (Wash. 1980) ("In 1968, a Harvard Medical School committee developed criteria which now constitute the basis of accepted medical standards for the determination of brain death."); *Black's Law Dictionary* 170 (5th ed. 1979) (incorporating the Harvard criteria into the definition of brain death).

⁸The Harvard Report states the following regarding the use of the EEG tests: "The condition [of brain death] can be satisfactorily diagnosed by points 1, 2, and 3 to follow. The electroencephalogram (point 4) provides confirmatory data, and when available it should be utilized." Harvard Report, *supra*, at 337.

of the above tests shall be repeated at least 24 hours later with no change.” *Id.*

It appears from a layperson’s review of the Harvard criteria versus the AAN guidelines that the AAN guidelines incorporated many of the clinical tests used in the Harvard criteria.⁹ See Am. Acad. of Neurology, *Update: Determining Brain Death in Adults*, 74 *Neurology* 1911 (2010). However, the AAN guidelines do not require confirmatory/ancillary testing, such as EEGs. *Id.* Although the AAN guidelines state that ancillary testing should be ordered “only if clinical examination cannot be fully performed due to patient factors, or if apnea testing is inconclusive or aborted,” the AAN’s own study recognized that a decade after publication of the guidelines, 84 percent of brain death determinations still included EEG testing. See David M. Greer et al., Am. Ass’n of Neurology Enters., Inc., *Variability of Brain Death Determination Guidelines in Leading US Neurologic Institutions*, 70 *Neurology* 1, 4 Table 2 (2007).

While the Harvard criteria may not be the newest medical criteria involving brain death, we are not convinced with the record before us that the AAN guidelines have replaced the Harvard criteria as the accepted medical standard for states like Nevada that have enacted the UDDA.¹⁰ We recognize the Legislature’s broad definition of “accepted

⁹See also Choi et al., *supra*, at 827 (“In summary, although several guidelines have been suggested over time, there seems to be consensus on essential components necessary for determining brain death, and these essential components have not radically evolved since the Harvard criteria of the late 1960s.”).

¹⁰“No court has refused to accept the ‘Harvard criteria.’” James Peter Padraic Dirr, *The Bell Tolls for Thee: But When? Legal Acceptance of*
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medical standards” to promote “the development and application of more sophisticated diagnostic methods.” *People v. Eulo*, 472 N.Ed.2d 286, 296 n.29 (N.Y. 1984) (“Any attempt to establish a specific procedure might inhibit the development and application of more sophisticated diagnostic methods.”). Therefore, we hesitate to limit the criteria to determine brain death “to a fixed point in the past.” *State v. Guess*, 715 A.3d 643, 650 (Conn. 1998) (“We have searched unsuccessfully for evidence that the legislature intended to render immutable the criteria by which to determine death. In the absence of any such indication, we are loath to limit the criteria to a fixed point in the past.”).

Regrettably, however, the briefing and record before us do not answer two key questions. First, the briefing and testimony do not establish whether the AAN guidelines are considered accepted medical standards among states that have enacted the UDDA. Besides the single citation to the New Jersey Law Revision Commission Report, which as discussed above does not four-square support St. Mary’s position, St. Mary’s has failed to cite in its brief or during oral argument any medical or legal document that supports the AAN guidelines as accepted medical standards under the UDDA definition. Second, whatever their medical

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“Brain Death” as a Criteria for Death, 9 Am. J. Trial Advoc. 331, 340 (1985); see also Jerry Menikoff, *Importance of Being Dead: Non-Heart-Beating Organ Donation*, 18 Issues L. & Med. 3, 7 (2002) (“Thus, even today, if you look in almost any major textbook on internal medicine, emergency medicine, or physical diagnosis, you may perhaps find a complicated and detailed protocol that discusses how to declare someone dead using ‘brain death’ criteria; that protocol is likely to be based on the initial recommendations of the Harvard Committee”); see *supra* note 7.

acceptance generally, the briefing and testimony do not establish whether the AAN guidelines adequately measure the extraordinarily broad standard laid out by NRS 451.007, which requires, before brain death can be declared under the UDDA, an “irreversible cessation” of “[a]ll functions of the person’s *entire* brain, including his or her brain stem.”¹¹ NRS 451.007(1) (emphases added). Though courts defer to the medical community to determine the applicable criteria to measure brain functioning, it is the duty of the law to establish the applicable standard that said criteria must meet. *In re Welfare of Bowman*, 617 P.2d 731, 732

¹¹The experts proffered by St. Mary’s did not discuss whether the AAN guidelines measure *all* functions of one’s *entire* brain, including the brain stem. Although the family’s expert, Dr. Brian Callister, suggested that the AAN guidelines do not adequately test for a cessation of all functions of the entire brain, but rather only test if there is a functioning cortex (excluding the mid or hind parts of the brain), the record is wholly undeveloped on this matter. A cursory review of medical research raises concerns about brain death testing comporting with NRS 451.007. See Choi et al., *supra*, at 826 (“[S]ome features of brain function remain intact after brain death (e.g., posterior pituitary secretion of anti-diuretic hormone and thermoregulation). This raises an inconsistency with the definition of brain death in the UDDA: ‘irreversible cessation of all functions of the entire brain, including the brain stem.’”); Seema K. Shah, *Piercing the Veil: The Limits of Brain Death as a Legal Fiction*, 48 U. Mich. J.L. Reform 301, 311-12 (2015) (“Many brain-dead patients still have at least one functioning part of the brain—the hypothalamus, which continues to secrete vasopressin through the posterior pituitary. . . . [M]any brain-dead patients do not lose all neurological function, as the UDDA and state laws explicitly require to determine brain death.”); D. Alan Shewmon, *Brain Death or Brain Dying?*, 27 J. Child Neurology 4, 5 (2012) (“It has long been recognized that in some cases of clinically diagnosed brain death, certain brain structures may not only be preserved but actually function, such as the hypothalamus (in cases without diabetes insipidus), relay nuclei mediating evoked potentials, and cerebral cortex mediating electroencephalographic activity.”).

(Wash. 1980). The record before us does not discuss whether the AAN guidelines require an irreversible cessation of all functions of a person's entire brain, including the brain stem, as NRS 451.007(1)(b) demands. Therefore, we are not convinced that St. Mary's properly determined death as required under NRS 451.007. Thus, we hold that the district court erred in denying Gebreyes's motion for a temporary restraining order.

CONCLUSION

We recognize the important implications this case has for physicians, hospitals, families, patients, and, most importantly, Aden Hailu and her family. This court does not attempt to replace its judgment for that of medical experts, nor does it attempt to set in stone certain medical criteria for determining brain death. Instead, as an important issue of first impression in Nevada and beyond, we decline to make that determination based on the undeveloped record before us. If St. Mary's continues to advocate for only being required to follow the AAN guidelines, expert testimony is necessary to demonstrate that those guidelines, if met, establish "an irreversible cessation of . . . [a]ll functions of the person's entire brain, including his or her brain stem"¹² and that this is the accepted view of the medical community. As the record does not establish these key points, we reverse the district court's order denying a temporary

¹²Although we decline to order specific testing, it gives us pause that St. Mary's conducted three EEG tests in April, all of which showed brain functioning, but has failed to conduct further EEG testing. Instead of conducting a fourth EEG test, for confirmatory value after determining brain death, St. Mary's contends that EEG testing is not necessary. In oral argument, when asked why St. Mary's conducted three EEG tests if it believed that EEG testing was not necessary, counsel stated: "I don't know."

restraining order and permanent injunction, extend the interim stay entered pending review by this court of the parties' expedited appeal, and remand for further proceedings consistent with this opinion.

Pickering, J.
Pickering

We concur:

Hardesty, C.J.
Hardesty

Parraguirre, J.
Parraguirre

Douglas, J.
Douglas

Cherry, J.
Cherry

Saitta, J.
Saitta

Gibbons, J.
Gibbons