

Primary California Legal Authorities on Accommodating Objections to the Determination of Death by Neurological Criteria

Thaddeus Mason Pope, JD, PhD

January 2015

1. California Uniform Determination of Death Act, CAL. HEALTH & SAFETY CODE § 1254.4 (1982).
2. CAL. HEALTH & SAFETY CODE §§ 7180-81 (2008) (aka A.B. 2565).
3. California Department of Health, Letter to General Acute Care Hospitals, *Hospital Brain Death Policy* (Jan. 20, 2009).
4. *Dority v. Superior Court*, 145 Cal. App. 3d 273 (1983).
5. Cal. A.B. 3311 (1986) (Katz).
6. Thaddeus Mason Pope, *Legal Briefing: Brain Death and Total Brain Failure*, 25(3) JOURNAL OF CLINICAL ETHICS 245-257 (2014).

CALIFORNIA HEALTH & SAFETY CODE § 7180

- (a) An 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. A determination of death must be made in accordance with accepted medical standards.
- (b) This article shall be applied and construed to effectuate its general purpose to make uniform the law with respect to the subject of this article among states enacting it.
- (c) This article may be cited as the Uniform Determination of Death Act.

Added by Stats.1982, c. 810, p. 3098, § 2 (emphasis added)

CALIFORNIA HEALTH & SAFETY CODE § 7181

When an individual is pronounced dead by determining that the individual has sustained an irreversible cessation of all functions of the entire brain, including the brain stem, there shall be **independent confirmation** by another physician.

Added by Stats.1982, c. 810, p. 3098, § 2 (emphasis added)

CALIFORNIA HEALTH & SAFETY CODE § 1254.4

- (a) A general acute care hospital **shall adopt a policy** for providing family or next of kin with a reasonably brief period of accommodation, as described in subdivision (b), from the time that a patient is declared dead by reason of irreversible cessation of all functions of the entire brain, including the brain stem, in accordance with Section 7180, through discontinuation of cardiopulmonary support for the patient. During this reasonably brief period of accommodation, a hospital is required to continue **only previously ordered cardiopulmonary support**. No other medical intervention is required.
- (b) For purposes of this section, a "**reasonably brief period**" means an amount of time afforded to gather family or next of kin at the patient's bedside.
- (c) (1) A hospital subject to this section shall provide the patient's legally recognized health care decisionmaker, if any, or the patient's family or next of kin, if available, with a **written statement of the policy** described in subdivision (a), **upon request**, but no later than shortly after the treating physician has determined that the potential for brain death is imminent.

(2) If the patient's legally recognized health care decisionmaker, family, or next of kin voices any **special religious or cultural practices and concerns** of the **patient or the patient's family** surrounding the issue of death by reason of irreversible cessation of all functions of the entire brain of the patient, the hospital shall make **reasonable efforts to accommodate** those religious and cultural practices and concerns.
- (d) For purposes of this section, in determining **what is reasonable**, a hospital shall consider the **needs of other patients** and prospective patients in urgent need of care.
- (e) There shall be no private right of action to sue pursuant to this section.

Enacted Sept. 27, 2008, Ch. 465 (emphasis added)

History: A.B. 2565 (Eng)



MARK B HORTON, MD, MSPH
Director

State of California—Health and Human Services Agency
California Department of Public Health



ARNOLD SCHWARZENEGGER
Governor

January 20, 2009

AFL 08-37

TO: General Acute Care Hospitals (GACH)

SUBJECT: Hospital Brain Death Policy

AUTHORITY: Assembly Bill (AB) 2565 (Eng, Chapter 465, Statutes of 2008)

This letter is being sent to notify you of new legislation established by Assembly Bill 2565. The following information represents the mandates set forth by this chaptered legislation, as it affects hospitals and a new required policy.

Effective January 1, 2009, Health and Safety Code (HSC) Section 1254.4 requires all GACHs to develop and adopt a policy for providing a patient's family or next of kin with a reasonably brief period of accommodation, as described in HSC 1254.4(b), from the time that a patient is declared brain dead by reason of irreversible cessation of all functions of the entire brain, including the brain stem (in accordance with HSC § 7180), through discontinuation of cardiopulmonary support for the patient. During this reasonably brief period of accommodation, a hospital is required to continue only previously ordered cardiopulmonary support. No other medical intervention is required.

HSC § 1254.4(b) describes a "reasonably brief period" as an amount of time afforded to gather family or next of kin at the patient's bedside.

HSC § 1254.4(c)(1) requires a hospital to provide the patient's legally recognized health care decisionmaker, if any, or the patient's family or next of kin, if available, a written statement of the policy, upon request, but no later than shortly after the treatment physician has determined that the potential for brain death is imminent.

In addition, HSC § 1254.4(c)(2) requires that if the patient's legally recognized health care decisionmaker, family, or next of kin voices any special religious or cultural practices and concerns of the patient or the patient's family surrounding the issue of death by reason of irreversible cessation of all functions of the entire brain of the patient, the hospital shall make reasonable efforts to accommodate those religious and cultural practices and concerns.

AFL 08-37
Page 2
January 20, 2009

HSC § 1254.4(d) affirms that in determining what is reasonable, a hospital shall consider the needs of other patients and prospective patients in need of urgent care.

In closing, HSC § 1254.4(e) states that there shall be no private right of action to sue pursuant to this section.

If you have any questions, please contact your local District Office.

Sincerely,

Original Signed by Kathleen Billingsley, R.N.

Kathleen Billingsley, R.N.
Deputy Director
Center for Health Care Quality

Court of Appeal, Fourth District, Division 2, California.

William DeWayne DORITY, et al., Petitioners,

v.

The SUPERIOR COURT OF SAN BERNARDINO COUNTY, Respondent;

Dennis KOTTMIER, et al., Real Parties in Interest.

Kristopher DeWayne DORITY, etc., Petitioner,

v.

The SUPERIOR COURT OF SAN BERNARDINO COUNTY, Respondent;

William ZIPRICK, Real Party in Interest.

Civ. 29662, Civ. 29664.

July 21, 1983.

Hearing Denied Oct. 27, 1983.

Parents and counsel for minor child petitioned for a writ of prohibition against removal of a life-support device from child. The Court of Appeal, Rickles, J., held that the evidence was sufficient to sustain the finding that brain death had occurred in the child. Writs denied.

**288 *274 Murray & Ames and S. Donald Ames, San Bernardino, for petitioner William DeWayne Dority.

Timothy L. Guhin, San Bernardino, for petitioner Kristopher DeWayne Dority.

No appearance for Pamela Lois Munn Dority.

Lawson & Hartnell and Bryan C. Hartnell, Redlands, for real party in interest William Ziprick.

Alan K. Marks, County Counsel, and Richard Wm. Strong, Deputy County Counsel, San Bernardino, for real party in interest, Fred Thies, Director, Dept. of Public Social Services, County of San Bernardino.

No appearance for real party in interest Dennis Kottmier.

Bioethics Committee of the Los Angeles County Bar Association, Irene L. Silverman, Chairperson, Richard Stanley Scott, Jay N. **289 Hartz, and William J. Winslade, Los Angeles, as amici curiae on behalf of real parties in interest.

*275 RICKLES, Associate Justice.

In this tragic case we are called upon to decide the propriety of judicial intervention regarding the termination of life support devices sustaining the bodily functions of a brain-dead minor.

Our courts are called upon to determine the rights and fate of persons in many situations and this may be one area in which we ought not to be involved. We are mindful of the moral and religious implications inherently arising when the right to continued life is at issue. Considering the difficulty of anticipating the factual circumstances under which a decision to remove life-support devices may be made, to say courts lack the authority to make such a determination may also be unwise.

FACTS

On November 16 a 19-day-old infant was admitted to the emergency room of a local hospital and later transferred to Loma Linda University Medical Center. The infant's parents brought him in after they noticed an odd twitching activity of the left arm which the doctors interpreted as a seizure disorder. The attending physicians performed a variety of tests, the results of which showed increased intracranial pressure. The prescribed treatment called for decreasing the amount of carbon dioxide in the blood which is done by increasing respirations. Because the infant was already having irregular and shallow respirations, the doctors placed him on a respirator, i.e., the life-support device.

The baby's condition deteriorated significantly. At week's end he failed to respond to any stimulation. The doctors ordered electroencephalograms and a cerebral blood flow to determine the viability of the brain. These tests, performed on or about November 22 and then about one month later, showed electrocerebral silence, which means little, if any, electrical activity in the brain. The doctors concluded the infant, having shown no signs of purposeful spontaneous activity or spontaneous respirations, was brain dead.^{FN1}

^{FN1}. The Loma Linda hospital defines brain death as total and irreversible cessation of brain function, although there is no written policy as to how to make that diagnosis.

As a result of this diagnosis the doctor recommended removing the life-support device. The baby's heart was expected to stop within 10 minutes after removal. This hospital's policy in similar circumstances has been to defer to the parent's wishes concerning the removal of life-support devices in light of the emotional implications of such a decision. One doctor testified *276 the hospital has kept several children on these devices for prolonged periods of time "until the parents were emotionally able to realize what the medical opinion was and what its final impact was."

The doctors anticipated the bodily functions could be maintained only for a few weeks. However, the baby's heart continued to pump and the lower court was petitioned to appoint a guardian (see [Prob.Code, § 2100](#) et seq.) in order to secure consent of a responsible person to terminate the life-support device. The hearing was held on January 17 and 21. The court ordered both parents present. The court was informed the parents had been fully advised of their child's condition. After first consulting with counsel, the parents spoke privately and thereafter chose to withhold consent to the withdrawal of the life-support device.^{FN2}


^{FN2}. On November 23, both parents were arrested and charged with felony child neglect or child abuse. The parents remained in custody and were held to answer to these charges.

The trial court appointed the Director of the Department of Public Social Services as temporary guardian of the person of the minor child. After hearing unrefuted medical testimony concluding the infant was brain dead, the court directed "the Temporary Guardian give the appropriate consent to the health care provider to withdraw the life support system presently used to maintain the vitality of the minor child."

The parents and counsel for the minor child petitioned this court for a writ of prohibition against removing the life-support device.

**290 Before this court could act on these petitions, the infant's bodily functions ceased and the life-support device was removed.

MOOTNESS

 [1] In light of the important questions raised by this case, this court has the discretion to render an opinion where the issues are of continuing public interest and are likely to recur in other cases. ([Daly v. Superior Court \(1977\) 19 Cal.3d 132, 141, 137 Cal.Rptr. 14, 560 P.2d 1193](#); [United Farm Workers of America v. Superior Court \(1975\) 14 Cal.3d 902, 906-907, 122 Cal.Rptr. 877, 537 P.2d 1237.](#)) The novel medical, legal and ethical issues presented in this case are no doubt capable of repetition and therefore should not be ignored by relying on the mootness doctrine. This requires us to set forth a framework in which both the medical and legal professions can deal with similar situations.

*277 THE MERITS

Recent medical and technological advancements and procedures have enabled physicians to prolong biological functions even after the brain ceases to function. The immediate question arises as to whether and under what circumstances these procedures ought to be employed or continued. Many times prolonging this biological existence with life-support devices only prolongs suffering, adding economical and emotional burden to all concerned. Conversely, a decision to withdraw these devices which would eventually result in the cessation of all bodily functions even though no life is left may cause equal emotional trauma.

[Health and Safety Code section 7180](#), subdivision (a), provides: “An 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. A determination of death must be made in accordance with accepted medical standards.” Faced with this definition and the advanced medical technology, we must deal with the procedural problems resulting when bodily functions are maintained after brain death. In California the right to make that decision, i.e., to withdraw life-support devices, has been established by the Legislature. [Health and Safety Code section 7185](#) et seq., the Natural Death Act, acknowledges in adults the fundamental right to control decisions relating to the rendering of their own medical care. More specifically, section 7186 “recognize[s] the right of an adult person to make a written directive instructing his physician to withhold or withdraw life-sustaining procedures in the event of a terminal condition.”

Other jurisdictions acknowledge the right to withdraw life-support devices under the constitutional right of privacy in the penumbra of specific guarantees of the Bill of Rights. (See [Matter of Quinlan \(1976\) 70 N.J. 10, 355 A.2d 647](#); [Superintendent of Belchertown v. Saikewicz \(1977\) 373 Mass. 728, 370 N.E.2d 417](#); [Severns v. Wilmington Medical Center, Inc. \(1980 Del.Supr.\) 421 A.2d 1334.](#)) In *Saikewicz* the court stated “[t]he constitutional right to privacy . . . is an expression of the sanctity of individual free choice and self-determination as fundamental constituents of life. The value of life as so perceived is lessened not by a decision to refuse treatment, but by the failure to allow a competent human being the right of choice.” ([370 N.E.2d at 426.](#))

These cases then take one step further by allowing a guardian of a comatose patient *who has not been declared brain dead* to vicariously assert the patient's constitutional right to


refuse medical treatment, i.e., to withdraw*278 life-support devices. There is a distinction, however, between these cases and the case at issue-the declaration of brain death. In *Quinlan* and *Severns* the patients were in a comatose, non-cognitive state, being maintained on life-support systems. In *Saikewicz* the ward was severely mentally retarded and unable to understand or consent to painful chemotherapy treatment which might prolong his life but would not necessarily cure his disease. In each case the court allowed the guardian to refuse treatment, including the removal of life-support devices, for these individuals who were not brain dead. These cases, **291 although dealing with patients who were not yet brain dead, nevertheless can provide some guidance in this case. If removal of life-support devices can be proper as to persons who are still in some sense alive, then *a fortiori* appropriate procedures may be devised for removal of such devices from persons who are brain dead.

In the case before us, we have a petition to appoint a guardian after the doctors have made their brain death determination.^{FN3} A portion of the hearing was devoted to medical testimony which resulted in the court's declaring the infant brain dead. We find no authority mandating that a court must make a determination brain death has occurred. [Section 7180](#) requires only that the determination be made in accordance with accepted medical standards. As a safety valve, [Health and Safety Code section 7181](#) calls for independent confirmation of brain death by a second physician. This is, and should be, a medical problem and we find it completely unnecessary to require a judicial "rubber stamp" on this medical determination. This does not mean parents or guardians are foreclosed from seeking another medical opinion. In this case, both the treating and consulting physicians agreed brain death had occurred. No medical evidence was introduced to prove otherwise. The medical profession need not go into court every time it declares brain death where the diagnostic test results are irrefutable.


^{FN3}. We suggest where child abuse results in severe injuries, quick and decisive action is necessary. This may include removal of the child from parental control and decisions involving the further medical care of the child, including the removal of life-support systems. [Welfare and Institutions Code section 300](#) et seq. would seem to provide a more appropriate vehicle for expeditiously resolving these problems.


Next the trial court granted the petition to appoint a guardian under [Probate Code section 2100](#) et seq. Section 2250 provides that a temporary guardian may be appointed for good cause or other showing.


The state has a substantial interest in protecting and providing for the child's care when the parents represent a potential threat to the child's well-being or where the parents for some reason become unavailable. Investigations revealed the parents in this case may have been responsible for the child's injuries. The parents had been held to answer on charges of child *279 neglect and child abuse. Parents, by their own action, can become legally unavailable and unable to provide the proper care for their child.

 [2] If the parents in this case had injured the minor child less severely, a guardianship appointment would have been appropriate. It would be anomalous to hold that a guardianship is proper when the parents hurt the child to some extent, but not when they injure the child so badly it is or may be brain dead. Such conduct should be greater, not less, reason to appoint a guardian. There was plenty of evidence here to support a judicial

determination the parents' conduct was detrimental to the welfare of the child. Where important decisions remain to be made about the child, and where the parents have demonstrated an inability to act in the best interest of the child, it is proper to appoint a guardian to make the necessary decisions.

[3]  Once the guardian is appointed in a case where a child is or may be brain dead, what power does the guardian have? Subject to the court's control, a temporary guardian has the same authority as a parent having legal custody of the child. The initial decision the substitute parent must make when faced with a medical diagnosis of brain death is whether there is any reason or basis to contest the diagnosis. Investigation by the guardian may reveal objective symptoms inconsistent with brain death, or a second medical opinion may cast doubt on the diagnosis, requiring the court to determine if brain death has occurred. The unique case at bench provides another occasion where court intervention is necessary. Here, the guardian was faced with a **292 sharp conflict between the unavailable parents, the attorney appointed to represent the minor's interests, and the health care providers as to whether brain death had occurred. Common sense would indicate the guardian was in need of guidance. In order to appropriately advise the guardian, the trial court can properly hear the testimony and decide whether the determination of brain death was in accord with accepted medical standards. Here the court so found. Its finding was supported by substantial evidence.

[4]  It appears that once brain death has been determined, by medical diagnosis under [Health and Safety Code section 7180](#) or by judicial determination, no criminal or civil liability will result from disconnecting the life-support devices (see [People v. Mitchell \(1982\) 132 Cal.App.3d 389, 183 Cal.Rptr. 166](#)). This does not mean the hospital or the doctors are given the green light to disconnect a life-support device from a brain-dead individual without consultation with the parent or guardian. Parents do not lose all control once their child is determined brain dead. We recognize the parent should have and is accorded the right to be fully informed of the child's condition and the right to participate in a decision of removing the life-support devices. This participation should pave the way and permit discontinuation of artificial means of life support in circumstances where even *280 those most morally and emotionally committed to the preservation of life will not be offended. Whether we tie this right of consultation to an inherent parental right, the Constitution, logic, or decency, the treating hospital and physicians should allow the parents to participate in this decision.

[5]  No judicial action is necessary where the health care provider and the party having standing to represent the person allegedly declared to be brain dead are in accord brain death has occurred. The jurisdiction of the court can be invoked upon a sufficient showing that it is reasonably probable that a mistake has been made in the diagnosis of brain death or where the diagnosis was not made in accord with accepted medical standards. We are in accord with the Loma Linda University Medical Center policy of deferring to parental wishes until the initial shock of the diagnosis dissipates; and would encourage other health care providers to adopt a similar policy. In the case at bar the parents became unavailable by their actions, requiring the court to appoint a temporary guardian. The guardian, faced with a diagnosis of brain death,

correctly sought guidance from the court. The court, after hearing the medical evidence and taking into consideration the rights of all the parties involved, found Kristopher DeWayne Dority was dead in accordance with the California statutes and ordered withdrawal of the life-support device. The court's order was proper and appropriate.^{FN4} [FN4](#). The court is aware of a recent Attorney General opinion ([65 Ops.Cal.Atty.Gen. 417 \(July 2, 1982\)](#) CV 81-508) reaching a different resolution than that reached today. We have examined the opinion and are not persuaded by its logic.

Accordingly, the writs are denied.

MORRIS, P.J., and KAUFMAN, J., concur.

Hearing denied; MOSK and BROUSSARD, JJ., dissenting.

AMENDED IN ASSEMBLY APRIL 10, 1986

CALIFORNIA LEGISLATURE—1985-86 REGULAR SESSION

ASSEMBLY BILL

No. 3311

Introduced by Assembly Member ~~Hill~~ Katz

February 18, 1986

An act to amend Section ~~14132~~ of the Welfare and Institutions Code, relating to Medi-Cal. An act to amend Section 7180 of the Health and Safety Code, relating to The Uniform Determination of Death Act.

LEGISLATIVE COUNSEL'S DIGEST

AB 3311, as amended, ~~Hill~~ Katz. ~~Medi-Cal covered benefits~~
The Uniform Determination of Death Act.

(1) *Existing law, known as the Uniform Determination of Death Act, provides that an individual who has sustained either an irreversible cessation of circulatory and respiratory function or an irreversible cessation of all functions of the entire brain, including the brain stem, is dead.*

This bill would provide an exception to this definition of death by providing that an individual, as specified, is not dead if the determination of death would violate the religious or moral beliefs or convictions of the individual. This bill would provide that an individual, as specified, who is a minor or incompetent whose religious or moral beliefs or convictions are not known, is not dead if the determination of death would violate the religious or moral beliefs or convictions of the parent or guardian of the individual. This bill would also require persons, authorized to determine that an individual is dead, to use reasonable means to determine whether a finding of death would violate the religious or moral beliefs or convictions of the individual or of the parent or guardian of the individual, as specified. To the extent that this requirement would apply to local public health facilities, it

would impose a state-mandated local program.

(2) The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement, including the creation of a State Mandates Claims Fund to pay the costs of mandates which do not exceed \$500,000 statewide and other procedures for claims whose statewide costs exceed \$500,000.

This bill would provide that reimbursement for costs mandated by the bill shall be made pursuant to those statutory procedures and, if the statewide cost does not exceed \$500,000, shall be payable from the State Mandates Claims Fund.

Existing law provides for the Medi/Cal program pursuant to which public assistance recipients and other low/income persons are eligible for health care benefits, including the purchase of prescribed drugs which are subject to the Medi/Cal Drug Formulary and utilization controls.

This bill would revise that Medi/Cal covered benefit to include, instead, pharmaceutical services and prescribed drugs, subject to the Medi/Cal Drug Formulary and utilization controls.

Vote: majority. Appropriation: no. Fiscal committee: yes. State-mandated local program: ~~no~~ yes.

The people of the State of California do enact as follows:

- 1 ~~SECTION 1.~~ Section ~~14132~~ of the Welfare and
 2 SECTION 1. Section 7180 of the Health and Safety
 3 Code is amended to read:
 4 7180. (a) ~~An~~ Except as provided in subdivision (b),
 5 an individual who has sustained either (1) irreversible
 6 cessation of circulatory and respiratory functions, or (2)
 7 irreversible cessation of all functions of the entire brain,
 8 including the brain stem, is dead. A determination of
 9 death must be made in accordance with accepted
 10 medical standards.
 11 (b) An individual whose heartbeat and respiration are
 12 maintained by mechanical means is not dead if a
 13 determination of death would violate the religious or

1 moral beliefs or convictions of the individual, as
2 previously announced by the individual or as attested to
3 by a family member or next friend. If the individual, as
4 described above, is a minor or an incompetent person
5 whose religious or moral beliefs or convictions are not
6 known, the individual is not dead if this determination
7 would violate the religious or moral beliefs or convictions
8 of the parent or guardian of the individual. Any person,
9 who is authorized to determine that an individual is dead,
10 shall use reasonable means to determine, from the family
11 or next friend of the individual, whether a finding of
12 death would violate the religious or moral beliefs or
13 convictions of the individual and, in the case of a minor
14 or incompetent person whose religious or moral beliefs or
15 convictions are unknown, whether a finding of death
16 would violate the religious or moral beliefs or convictions
17 of the parent or guardian of the individual. For the
18 purposes of this section "next friend" means any person
19 whose contact with an individual enables him or her to
20 be familiar with the religious or moral beliefs or
21 convictions of the individual and who may be asked to
22 present an affidavit stating the facts and circumstances
23 upon which this claim of friendship is based.

24 ~~(b)~~

25 (c) ~~This~~ Subject to the provisions of subdivision (b),
26 this article shall be applied and construed to effectuate its
27 general purpose to make uniform the law with respect to
28 the subject of this article among states enacting it.

29 ~~(e)~~

30 (d) This article may be cited as the Uniform
31 Determination of Death Act.

32 *SEC. 2. Reimbursement to local agencies and school*
33 *districts for costs mandated by the state pursuant to this*
34 *act shall be made pursuant to Part 7 (commencing with*
35 *Section 17500) of Division 4 of Title 2 of the Government*
36 *Code and, if the statewide cost of the claim for*
37 *reimbursement does not exceed five hundred thousand*
38 *dollars (\$500,000), shall be made from the State Mandates*
39 *Claims Fund.*

1
2
3
4
5
6
7

All matter omitted in this version of the bill appears in the bill as introduced in the Assembly, February 18, 1986 (J.R. 11).

O

AMENDED IN ASSEMBLY JUNE 2, 1986
AMENDED IN ASSEMBLY APRIL 10, 1986

CALIFORNIA LEGISLATURE—1985-86 REGULAR SESSION

ASSEMBLY BILL

No. 3311

Introduced by Assembly Member Katz

February 18, 1986

An act to amend Section 7180 of the Health and Safety Code, relating to The Uniform Determination of Death Act.

LEGISLATIVE COUNSEL'S DIGEST

AB 3311, as amended, Katz. The Uniform Determination of Death Act.

(1) Existing law, known as the Uniform Determination of Death Act, provides that an individual who has sustained either an irreversible cessation of circulatory and respiratory function or an irreversible cessation of all functions of the entire brain, including the brain stem, is dead.

This bill would provide an exception to this definition of death by providing that an individual, as specified, is not dead if the determination of death would violate the religious or moral beliefs or convictions of the individual. This bill would provide that an individual, as specified, who is a minor or incompetent whose religious or moral beliefs or convictions are not known, is not dead if the determination of death would violate the religious or moral beliefs or convictions of the parent or guardian of the individual. This bill would also require persons, authorized to determine that an individual is dead, to *use make a reasonable means attempt* to determine *from a family member of the individual, as defined*, whether a finding of death would violate the religious or moral beliefs or convictions of the individual or of the parent or guardian of the individual, as specified. To the extent that this

requirement would apply to local public health facilities, it would impose a state-mandated local program.

(2) The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement, including the creation of a State Mandates Claims Fund to pay the costs of mandates which do not exceed \$500,000 statewide and other procedures for claims whose statewide costs exceed \$500,000.

This bill would provide that reimbursement for costs mandated by the bill shall be made pursuant to those statutory procedures and, if the statewide cost does not exceed \$500,000, shall be payable from the State Mandates Claims Fund.

Vote: majority. Appropriation: no. Fiscal committee: yes. State-mandated local program: yes.

The people of the State of California do enact as follows:

1 SECTION 1. Section 7180 of the Health and Safety
2 Code is amended to read:

3 7180. (a) Except as provided in subdivision (b), an
4 individual who has sustained either (1) irreversible
5 cessation of circulatory and respiratory functions, or (2)
6 irreversible cessation of all functions of the entire brain,
7 including the brain stem, is dead. A determination of
8 death must be made in accordance with accepted
9 medical standards.

10 (b) An individual whose heartbeat and respiration are
11 maintained by mechanical means is not dead if a
12 determination of death would violate the religious or
13 moral beliefs or convictions of the individual, as
14 previously announced by the individual or as attested to
15 by a family member ~~or next friend~~. If the individual, as
16 described above, is a minor or an incompetent person
17 whose religious or moral beliefs or convictions are not
18 known, the individual is not dead if this determination
19 would violate the religious or moral beliefs or convictions
20 of the parent or guardian of the individual. Any person,
21 who is authorized to determine that an individual is dead,

1 shall ~~use reasonable means~~ *make a reasonable attempt* to
2 determine, from the family ~~or next friend~~ *member* of the
3 individual, whether a finding of death would violate the
4 religious or moral beliefs or convictions of the individual
5 and, in the case of a minor or incompetent person whose
6 religious or moral beliefs or convictions are unknown,
7 whether a finding of death would violate the religious or
8 moral beliefs or convictions of the parent or guardian of
9 the individual. For the purposes of this section "~~next~~
10 ~~friend~~" "*family member*" means any person whose
11 ~~contact with an individual enables him or her to be~~
12 ~~familiar with the religious or moral beliefs or convictions~~
13 ~~of the individual and who may be asked to present an~~
14 ~~affidavit stating the facts and circumstances upon which~~
15 ~~this claim of friendship is based.~~ *related to the individual*
16 *as set forth in subdivisions (a) to (d), inclusive, of Section*
17 *7151.5 or a guardian or conservator of the individual or*
18 *other person legally responsible for making medical*
19 *decisions for the individual.*

20 (c) Subject to the provisions of subdivision (b), this
21 article shall be applied and construed to effectuate its
22 general purpose to make uniform the law with respect to
23 the subject of this article among states enacting it.

24 (d) This article may be cited as the Uniform
25 Determination of Death Act.

26 SEC. 2. Reimbursement to local agencies and school
27 districts for costs mandated by the state pursuant to this
28 act shall be made pursuant to Part 7 (commencing with
29 Section 17500) of Division 4 of Title 2 of the Government
30 Code and, if the statewide cost of the claim for
31 reimbursement does not exceed five hundred thousand
32 dollars (\$500,000), shall be made from the State Mandates
33 Claims Fund.

Thaddeus Mason Pope, "Legal Briefing: Brain Death and Total Brain Failure," *The Journal of Clinical Ethics* 25, no. 3 (Fall 2014): 245-57.

Law

Legal Briefing: Brain Death and Total Brain Failure

Thaddeus Mason Pope

ABSTRACT

This issue's "Legal Briefing" column covers recent legal developments involving total brain failure. Death determined by neurological criteria (DDNC) or "brain death" has been legally established for decades in the United States. But recent conflicts between families and hospitals have created some uncertainty. Clinicians are increasingly unsure about the scope of their legal and ethical treatment duties when families object to the withdrawal of physiological support after DDNC. This issue of *JCE* includes a thorough analysis of one institution's ethics consults illustrating this uncertainty.¹ This experience is not unique. Hospitals across the country are seeing more DDNC disputes. Because of the similarity to medical futility disputes, some court cases on this topic were reviewed in a prior "Legal Briefing" column.² But a more systematic review is now warranted. I categorize recent legal developments into the following nine categories:

1. History of Determining Death by Neurological Criteria
2. Legal Status of Determining Death by Neurological Criteria
3. Legal Duties to Accommodate Family Objections
4. Protocols for Determining Death by Neurological Criteria
5. Court Cases Seeking Physiological Support after DDNC

6. Court Cases Seeking Damages for Intentionally Premature DDNC
7. Court Cases Seeking Damages for Negligently Premature DDNC
8. Court Cases Seeking Damages for Emotional Distress
9. Pregnancy Limitations on DDNC

1. HISTORY OF DETERMINING DEATH BY NEUROLOGICAL CRITERIA

For centuries, death was determined in one way: by the irreversible cessation of all circulatory and respiratory functions, as determined in accordance with currently accepted medical standards. But, in the 1960s, both with the introduction of life-sustaining technology like mechanical ventilation and with the expansion of organ transplantation, this traditional definition was increasingly seen as inadequate.³

Death determined by neurological criteria was first described in 1959.⁴ By 1968, there was a medical consensus that a certain type of severe brain injury could be pronounced as death.⁵ This diagnosis is now described as "total brain failure."⁶ During the 1970s in the United States, several states acted to turn this medical consensus into a legally recognized standard.⁷ But those states failed to formulate the

Thaddeus Mason Pope, JD, PhD, is Director of the Health Law Institute at Hamline University School of Law in St. Paul, Minnesota, tpope01@hamline.edu.

©2014 by *The Journal of Clinical Ethics*. All rights reserved.

legal standard in a consistent manner. There were material differences from state to state. In response, in 1981, the President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research proposed a model statute.⁸

The President's Commission's model statute proposed determining death by the application of either of two alternative standards: (1) "irreversible cessation of circulatory and respiratory function" or (2) "irreversible cessation of all functions of the entire brain, including the brain stem." The latter standard is also known as the determination of death by neurological criteria (DDNC). The satisfaction of *either* standard is sufficient to determine death. So, if cessation of all brain function is confirmed, then the patient may be declared dead, despite ongoing cardiopulmonary functions that are maintained by artificial ventilation or pharmacological support.

The President's Commission's model statute was endorsed by the National Conference of Commissioners on Uniform States Laws.⁹ The NCCUSL published it as the Uniform Determination of Death Act (UDDA),¹⁰ and 36 states, the District of Columbia, and the U.S. Virgin Islands have adopted it.¹¹ The remaining states have adopted substantially similar standards either through legislation or through court decision.¹² But, as discussed below in sections 3 and 4, material differences remain. Notably, there was a brief push in the late 1980s to expand DDNC to require cessation of only higher brain functions. This would have meant that individuals with persistent vegetative state or anencephaly would be legally dead. These efforts were unsuccessful.¹³

2. LEGAL STATUS OF DETERMINING DEATH BY NEUROLOGICAL CRITERIA

DDNC has been legally established as death in all U.S. jurisdictions and in most other developed countries.¹⁴ It is supported by a "durable worldwide consensus."¹⁵ But, despite its widespread adoption, DDNC is hardly without controversy and criticism. It has been described as "at once well settled and persistently unresolved."¹⁶

The most articulate and prolific critic of DDNC is Alan Shewmon.¹⁷ He persuasively demonstrates that the bodies of individuals determined dead by neurological criteria still do many of the things done by living organisms. They can maintain "integrated functions" for months or even years.¹⁸ For example, these "brain dead" bodies can still heal wounds, fight infections, and mount a stress response to surgical incisions. As discussed in more detail below in section 9, they can even gestate a fetus. In short, the

array of functions in "brain dead" patients is similar to that of ventilator dependent patients with high cervical quadriplegia. But since the latter are not dead, the conceptual foundation for DDNC seems less clear than necessary.

But while Shewmon's arguments have been acknowledged, they have not been deemed weighty enough to warrant changing the *status quo*. For example, a 1995 Institute of Medicine (IOM) conference recognized that despite certain theoretical and practical problems, DDNC was so successful and so well accepted that no public policy changes seemed desirable.¹⁹ Similarly, in 2008, the President's Council on Bioethics recognized concerns with and counterarguments to DDNC. Still, it recommended no changes. The President's Council concluded that DDNC remained "biologically and philosophically defensible."²⁰ Other commentators agree.²¹

Some scholars are even more critical than the IOM and the President's Council, arguing that DDNC is "seriously problematic" and that the legal definition of death does not correspond to a biological definition of death.²² But most of these commentators ultimately conclude that "current practices can be justified ethically and legally."²³ Despite some conceptual flaws, DDNC is "too ingrained to abandon."²⁴

Determining death, many assert, cannot be done by "discovering an objective, scientific fact." Rather, it must be done by "deciding through a social consensus."²⁵ That consensus has held strong.²⁶ "Despite the vigor and longevity of the arguments opposing" DDNC, the opponents have been unsuccessful in catalyzing a public movement sufficient to change medical practices or public laws.²⁷ On the other hand, given the public's apparent confusion about DDNC, it may be difficult to argue that legal stability demonstrates societal consensus.

Yet, the fact remains: there has been almost zero legislative or judicial action in the U.S. to eliminate or to change DDNC. Despite ongoing academic debate, the law concerning DDNC has remained relatively stable for decades. The main recent legal issues, as discussed in the following sections, have concerned the duty to accommodate family objections and the manner of conducting DDNC.

3. LEGAL DUTIES TO ACCOMMODATE FAMILY OBJECTIONS

Once a patient is determined dead, physiological support is typically discontinued. Once death is determined, there is no longer a duty to treat. This is well established both in appellate caselaw²⁸ and

in medical practice.²⁹ Once dead, the patient is no longer a patient.³⁰ The hospital is no longer in a treatment relationship with a patient. It is instead the custodian of a dead body.³¹ Moreover, to continue “treatment” could constitute mistreatment of the newly dead.³² In short, DDNC is a “hard clinical endpoint” where technological interventions reach the limits of required or accepted medical practice.³³

There are three situations in which hospitals continue physiological support after DDNC. First, if a patient is an organ donor, support is continued until donation. Second, as discussed below in section 8, if a patient is pregnant, support may be continued until delivery. Third, organ-sustaining measures may be continued to accommodate family.

Many facilities *voluntarily* offer a short-term accommodation as a compassionate measure to help the family cope with the patient's death.³⁴ But in three states the duty to accommodate is *mandated* by law.³⁵ Statutes in New Jersey, New York, and California explicitly and specifically require hospitals to “accommodate” families after a patient is declared dead by neurological criteria. New Jersey's accommodation mandate is the broadest. New York and California have less expansive requirements.

New Jersey

In 1991, New Jersey enacted the New Jersey Declaration of Death Act.³⁶ As in every other U.S. state, this statute provides that an individual who has “sustained irreversible cessation of all functions of the entire brain, including the brain stem, shall be declared dead.”³⁷ But in contrast to every other state, the statute includes a categorical exception.³⁸ When triggered, this exception amounts to an indefinite duty to accommodate a religious objection to DDNC.

Specifically, the New Jersey Declaration of Death Act provides that the death of an individual shall *not* be declared on the basis of neurological criteria “when the licensed physician authorized to declare death has reason to believe, on the basis of information in the individual's available medical records, or information provided by a member of the individual's family or any other person knowledgeable about the individual's personal religious beliefs that such a declaration would violate the personal religious beliefs of the individual.”³⁹

While the statute does not define what qualifies as a legitimate religious belief, statutory interpretation would likely be guided by extensive federal constitutional analysis of what qualifies as a legitimate religious belief. The threshold under the First Amendment is low.⁴⁰ Consequently, it seems that

upon the assertion of any plausible religious claim, death shall be declared “solely upon the basis of cardiorespiratory criteria.”

In short, if a patient has religious objections to DDNC and the objections are made known to clinicians, then the patient is not legally dead until complete irreversible cessation of the patient's circulatory and respiratory functions.⁴¹ If the family does not consent to stop ventilator support, then under New Jersey law a patient may not be legally dead for a significant period of time after determination of total brain failure. In other words, the New Jersey statute grants objecting individuals an “exemption” from the generally accepted standards for determining death. From healthcare providers, the New Jersey statute requires an “indefinite accommodation.”⁴²

New York

New York judicially recognized total brain failure as death in 1984.⁴³ In 1986, the New York State Task Force on Life and the Law (the Task Force) recommended that the New York State Department of Health (NYDOH) recognize this standard.⁴⁴ And in 1987, the NYDOH adopted the Task Force's recommendation in administrative regulations.⁴⁵ But the NYDOH did more than formally recognize DDNC. It also required hospitals to accommodate religious or moral objections to DDNC.

In 2011, the NYDOH clarified its regulation. Specifically, the NYDOH confirmed that the New York accommodation requirement is not a categorical exception like the New Jersey accommodation requirement. Instead, New York hospitals must merely “establish written procedures for the reasonable accommodation of the individual's religious or moral objections to use of the brain death standard” when such an objection has been expressed by the patient or surrogate.⁴⁶

In contrast to New Jersey, the NYDOH accommodation requirement extends not only to religious but also to moral objections. On the other hand, since New Jersey does not define what qualifies as a valid “religious” objection, it might also include “moral” objections, that is, non-theistic beliefs that are sincerely held. This interpretation is implied by the broad definition of “religion” under Title VII of the U.S. Civil Rights Act of 1964.⁴⁷

Yet, while the range of recognized objections may be broader in New York than in New Jersey, the duty of accommodation is less demanding. The NYDOH leaves hospitals substantial discretion in designing their accommodation policies. Under the regulation, policies “may” include specific accom-

modations, such as “the continuation of artificial respiration under certain circumstances, as well as guidance on limits to the duration of the accommodation.” One major New York hospital provides up to 72 hours.⁴⁸ Policies “may” also provide guidance on “the use of other resources, such as clergy members, ethics committees, palliative care clinicians, bereavement counselors, and conflict mediators to address objections or concerns.”

Two New York courts have construed the NYDOH accommodation regulation. One case concerned a newborn.⁴⁹ The other case concerned a five-month-old baby.⁵⁰ In each case the court ruled that the hospital complied with the regulation. But in each case the court also restrained the hospital from discontinuing physiological support for seven days to give the family time to find another care facility.

California

California recognized DDNC when it adopted the Uniform Determination of Death Act in 1982.⁵¹ But in 2009, a new California statute expanded the obligations of hospitals with respect to patients declared dead on the basis of neurological criteria.⁵² California does not carve out a categorical exception like New Jersey. But, in two respects, the California duty of accommodation is broader and more expansive.

First, both New Jersey and New York require accommodation of only religious or moral objections. Indeed, the NYDOH specifically addresses objections to the DDNC based either upon psychological denial that death has occurred or upon an alleged inadequacy of the brain death determination. The NYDOH confirms that since such objections are not based upon the individual’s moral or religious beliefs, reasonable accommodation is not required in such circumstances.⁵³

In contrast, California requires not only accommodation of moral or religious objections but also accommodation of *all types* of objections. The California statute requires that general acute care hospitals adopt a policy for providing family with a “reasonably brief period of accommodation” after a patient is declared dead by reason of irreversible cessation of all functions of the entire brain. This accommodation is required even when the family’s objections are not religious or moral.

But while broad in the types of objections covered (for example, religious, moral, psychological), the California duty of accommodation is limited in several material respects. First, during this “reasonably brief period of accommodation,” a hospital is required to continue only previously ordered cardiopulmonary support; no other medical interven-

tion is required. Second, “brief period” is narrowly defined as only “an amount of time afforded to gather family or next of kin at the patient’s bedside.”⁵⁴ In other words, the California duty of accommodation is finite, requiring maintenance of only one type of physiological support and only for one specific and objectively attainable purpose. This usually entails an accommodation of under 24 hours in duration.⁵⁵ At least two hospitals permit accommodations of up to 36 hours.⁵⁶

The second respect in which the California duty of accommodation is broader (at least than that in New York) concerns religious objections. If the patient’s legally recognized healthcare decision maker, family, or next of kin voices any special religious or cultural practices and concerns of the patient or the patient’s family surrounding DDNC, the hospital must make “reasonable efforts to accommodate those religious and cultural practices and concerns.”

This duty of religious/cultural accommodation is broader than California’s general duty of accommodation.⁵⁷ It is broader than the NYDOH duty of moral or religious accommodation, but it is unclear exactly how much is required. The only guidance in the statute reads, “in determining what is reasonable, a hospital shall consider the needs of other patients and prospective patients in urgent need of care.”⁵⁸ So, accommodation would not be required if the ICU were full. In contrast to futility disputes and cases of conscience-based objection, the California DDNC accommodation statute contains no explicit requirement to attempt a transfer.⁵⁹ But because such transfers are sometimes made, attempting a transfer may be considered a required “reasonable” effort.⁶⁰

4. PROTOCOLS FOR DETERMINING DEATH BY NEUROLOGICAL CRITERIA

Death by neurological criteria is legally defined in all 50 states as cessation of “all functions of the entire brain, including the brain stem.” In terms of how exactly this cessation is measured, most states, following the UDDA, defer to “accepted medical standards,” “ordinary standards,” or “usual and customary standards.” The NCCUSL notes that the UDDA does not specify an exact means of diagnosis, because “to do so would guarantee its obsolescence as technology advances.”⁶¹ The UDDA’s “flexible precision” leaves the medical profession to establish clinical criteria and specific tests.⁶²

Unfortunately, the medical profession has not established those criteria and tests in a uniform and consistent manner. A 2008 study that included 41

of the top hospitals in the U.S. found widespread and worrisome variability in how clinicians and hospitals were determining who met DDNC criteria.⁶³ In response, in 2010, the American Academy of Neurology (AAN) issued guidelines on the determination of brain death. The goal of the AAN guidelines was to remove some of the guesswork and the variability among doctors in their procedures and protocols for DDNC.⁶⁴ But DDNC policies and practices remain “remarkably heterogeneous.”⁶⁵ Consequently, some have called for adoption of a national standard.⁶⁶

Much of the variability in DDNC protocols is the result of medical practice patterns and customs. But some is the result of inconsistent *legal* requirements. Some states specify the very protocols and methods of DDNC. And, unfortunately, the state laws differ in several respects, including: (1) the number of physicians required for DDNC, (2) the qualifications of these physicians, (3) the types of tests required, and (4) the procedures for administering these tests.⁶⁷

For example, New York and Texas permit DDNC to be performed by a single physician.⁶⁸ New York does not even require the single physician to be a neurologist or to consult with a neurologist. New Jersey also requires only a single physician,⁶⁹ but requires a specialist when a patient is less than 12 months old.⁷⁰ In contrast, two physicians are required in Alabama, California, Florida, Iowa, and Kentucky.⁷¹ In Florida, for example: “One physician shall be the treating physician, and the other physician shall be a board-eligible or board-certified neurologist, neurosurgeon, internist, pediatrician, surgeon, or anesthesiologist.”⁷²

Until this year, Virginia also required two physicians. Virginia required DDNC both to be “determined” by one physician and to be “attested” (affirmed as true) by a second physician. A March 2014 amendment eliminated the requirement for the second physician.⁷³ But, in contrast to New York, Virginia still requires the diagnosing physician to be a “specialist in the field of neurology, neurosurgery, electroencephalography, or critical care medicine.”⁷⁴

Like Virginia, New Jersey has been trying to eliminate or simplify its detailed diagnostic requirements. The 1991 New Jersey Declaration of Death Act required the New Jersey Department of Health and the New Jersey Board of Medical Examiners (NJBME) to adopt regulations setting forth “(1) requirements, by specialty or expertise, for physicians authorized to declare death upon the basis of neurological criteria; and (2) currently accepted medical standards, including criteria, tests and proce-

dures, to govern declarations of death upon the basis of neurological criteria.”⁷⁵

NJBME first promulgated these regulations in 1992.⁷⁶ As required by the 1991 statute, the regulations specify detailed diagnostic requirements and clinical protocols for DDNC.⁷⁷ NJBME has amended the regulations several times in the past 20 years.⁷⁸ But since the process for amending regulations is time-consuming, regulations still become outdated and inconsistent with clinical neurological practice standards (as articulated by AAN, for example).⁷⁹

In response, New Jersey enacted legislation in 2014 that prohibits the New Jersey Department of Health and NJBME from requiring the use of “any specific test or procedure” in the declaration of death upon the basis of neurological criteria.⁸⁰ Instead, this statute, more flexibly, requires that DDNC be “in accordance with currently accepted medical standards that are based upon nationally recognized sources of practice guidelines, including, but not limited to, those adopted by the American Academy of Neurology.”

5. COURT CASES SEEKING PHYSIOLOGICAL SUPPORT AFTER DDNC

As described in the last section, most legal developments concerning DDNC have been legislative and regulatory. But there has also been significant judicial activity. Court cases have taken five basic forms: (1) families seeking physiological support after DDNC, (2) families seeking damages for intentionally premature DDNC, (3) families seeking damages for negligently premature DDNC, (4) families seeking damages for emotional distress, and (5) pregnancy limitations on DDNC. Accommodation cases are discussed below. The other types of cases are discussed in the next four sections.

Families regularly bring lawsuits seeking injunctions mandating continued physiological support. In some cases, a family has religious objections.⁸¹ In other cases, a family just distrusts the diagnosis.⁸² Such distrust should come as no surprise. Significant confusion in how the media report on DDNC has damaged public confidence.⁸³ Moreover, genuine cases of DDNC misdiagnosis are regularly reported in the media.⁸⁴ Courts almost never grant permanent injunctions. They almost never rule that families have a legal right to such support.⁸⁵ Courts usually grant temporary restraining orders preserving the *status quo* until more evidence can be gathered and presented to adjudicate the claims. The two most recent cases, both involving children, are illustrative.

Jahi McMath—Oakland Children's Hospital, Oakland, California

Jahi McMath was a 13-year-old girl suffering from sleep apnea. On 9 December 2013, she was admitted to Oakland Children's Hospital (OCH) for a tonsillectomy and an adenoidectomy. But there were complications after surgery. McMath started bleeding from the tissues where her tonsils were. She soon lost her airway (the passage through which air reaches the lungs) and suffered anoxic brain injury.⁸⁶

On 12 December 2013, after examination by two OCH physicians (Robin Shanahan and Robert Heidersbach), McMath was declared dead. But her mother, Latasha Winkfield, did not accept the diagnosis. Death was a surprising result from procedures on a relatively healthy girl. And McMath still showed traditional signs of life such as warm skin, a pulse, and breathing. After providing the family eight days to absorb the shock of McMath's death, OCH notified the family of its intent to withdraw her ventilator. In response, the family secured the *pro bono* services of a local attorney who obtained a temporary restraining order (TRO) from the Alameda County Superior Court on 20 December 2013. The TRO mandated that the hospital maintain McMath on mechanical ventilation.⁸⁷ It did not require the hospital to provide other means of physiological support.

Initially, the dispute was primarily a factual one. The family disputed that McMath was really dead. While DDNC had already been confirmed by two OCH clinicians, the California statute, like many other state laws (see section 4 above) requires "independent confirmation by another physician."⁸⁸ The court interpreted the term "independent" to require confirmation by a physician unaffiliated with OCH. In accordance with the court's ruling, on 23 December 2013, Stanford School of Medicine child neurologist Paul Fisher examined McMath. The next day, the court conducted a hearing that included testimony both from Fisher and from one of the OCH physicians. Both confirmed the DDNC diagnosis. The court concluded that McMath was dead. It dissolved the TRO effective 30 December 2013.

But the family asserted other arguments under federal and constitutional law. They argued that the California brain death statute was pre-empted by both the Americans with Disabilities Act and the Rehabilitation Act.⁸⁹ (Under the Supremacy Clause in the U.S. Constitution, federal statutes are "the supreme Law of the Land" and state judges are "bound thereby" notwithstanding any contrary state laws.)⁹⁰ The family also argued that the California DDNC statute was unconstitutional under the First Amend-

ment as well as the right to privacy under the Fourth and Fourteenth Amendments. Neither the Alameda County Superior Court nor the U.S. District Court for the Northern District of California, where the family filed a parallel action, ruled on the merits of these claims. But the TRO was extended to 7 January 2014, to permit the family to appeal.

Unable to get the court to order OCH to continue physiological support, the family focused on transferring McMath. But they discovered that potential subacute transferee facilities required McMath to have a tracheostomy tube inserted prior to transfer and admission. OCH was unwilling to perform surgery on a dead body. And the court was unwilling to order it. Preliminary injunctions are designed only to preserve the *status quo*.

Ultimately, the hospital and family were able to reach an agreement without court adjudication of the pending state and federal lawsuits. On 5 January 2014, OCH released McMath's body to the Alameda County Coroner. The coroner, in turn, released the body to the family. With assistance from the Terri Schiavo Life and Hope Network, the family eventually transferred McMath's body to Saint Peter's Hospital in New Brunswick, New Jersey. As recently as August 2014, McMath's parents report that she responds to verbal commands.⁹¹ According to *Essence* magazine, the mother is seeking to have McMath's California death certificate revoked so she will qualify for medical benefits.⁹² Presumably, the family's religious objections to DDNC mean that McMath is not legally dead under New Jersey law.

Issac Lopez—Kosair Children's Hospital, Louisville, Kentucky

On June 29, 2014, two-month old Issac Lopez presented to the emergency department at Kosair Children's Hospital in Louisville. He had a skull fracture, rib fractures, respiratory failure, cardiac arrest, and blood and fluid pooling around his brain.⁹³ His father, Juan Alejandro Lopez Rosales, was arrested for child abuse after admitting he hit the baby's head on the bathtub. Lopez was admitted to the pediatric intensive care unit where attending physician Mark McDonald's initial exam revealed Lopez was clinically nonresponsive. The next day, 30 June 2014, McDonald diagnosed Lopez with total brain failure.

At the family's request, a second exam to confirm DDNC was deferred for 48 hours to allow extended family members to arrive at the hospital. On 2 July 2014, two repeat examinations conducted by McDonald and Karen Orman confirmed total brain failure. But the family did not accept the diagnosis. That night, Lopez's mother, Iveth Yaneth Garcia, ob-

tained a temporary restraining order. In light of pending criminal charges, the father suffered a material conflict of interest in making medical decisions for the baby, and his objection to stopping physiological support was colored by a desire to avoid homicide charges. The hospital then filed its own separate action asking the court to allow the removal of physiological support, since Lopez was dead.

On 5 July 2014, pediatric neurologist Karen Skjei confirmed total brain failure. And on 12 July 2014, the family's independent expert, pediatric neurologist Anna Ehret, also confirmed total brain failure. At this point, there was no longer a factual dispute that Lopez's condition met the criteria for DDNC.

Nevertheless, the mother and a court-appointed guardian argued that the hospital could not stop physiological support, because parents have a constitutional right to make medical decisions for their children. They contended that since the parents had not had those rights terminated, they possessed sole decision-making authority with respect to their baby's medical care. The court rejected these arguments. In its 22 July 2014 order the court held, "with death, no parental decision making survives (save decisions regarding burial)." Instead, it found that since the criteria for DDNC were met, Lopez was "legally dead."⁹⁴ Consequently, the hospital had "no legal obligation to artificially maintain respiration, circulation or to render any other medical intervention or treatment." A few hours later, the hospital stopped physiological support.⁹⁵

6. COURT CASES SEEKING DAMAGES FOR INTENTIONALLY PREMATURE DDNC

Court cases in which families seek continued physiological support are not the only type of lawsuit concerning DDNC that is of interest and relevance to clinical ethics. One alarming allegation is that clinicians intentionally and deliberately determine death by neurological criteria before those criteria are actually satisfied. The reader may recall the intense media coverage, in 2008, of a San Francisco surgeon criminally charged with hastening a patient's death in order to procure his organs. According to the *Los Angeles Times*, Hootan Roozrok was ultimately acquitted of dependent adult abuse. And a medical board complaint was withdrawn.⁹⁶ But similar cases continue to be brought.

Gregory Jacobs v. CORE—Eerie, Pennsylvania

In March 2007, high school student Gregory Jacobs sustained catastrophic head injuries on a school ski trip. In a federal lawsuit filed against the

hospital and the area organ procurement organization, Jacobs's parents alleged that they were asked to consent to organ donation even though death had not been determined and was not even imminent. They claim that had Jacobs been properly treated rather than "killed for his organs," he would have had a significant chance of recovery. The parents asserted claims for battery, fraudulent misrepresentation, negligent misrepresentation, and medical malpractice.⁹⁷ In late 2012, the parties settled these claims for more than \$1 million.⁹⁸

McMahon v. NY Organ Donor Network

In an even more alarming lawsuit filed in late 2012, Patrick McMahon, a former transplant coordinator for the New York Organ Donor Network (NYODN) alleges that NYODN pressured hospital staffers to declare patients brain dead so their body parts could be harvested. McMahon alleges that approximately one in five patients declared dead still showed brain activity.

Here is just one example cited in the complaint: In September 2011, a 19-year-old man injured in a car wreck was admitted to Nassau University Medical Center. He was still trying to breathe and showed signs of brain activity. But doctors declared him brain dead under pressure from donor-network officials, including the director, who allegedly said during a conference call: "This kid is dead, you got that?"

McMahon was fired for disclosing or threatening to disclose the violations. His lawsuit alleges NYODN illegally retaliated against him for being a whistleblower.⁹⁹ But it is still unclear whether his claims of illegal activity are valid and substantiated. His lawsuit has not concluded. Nor have any state or federal investigations been reported.

7. COURT CASES SEEKING DAMAGES FOR NEGLIGENTLY PREMATURE DDNC

While cases of intentionally and deliberately premature DDNC are the most alarming, also troubling are cases of negligently premature DDNC. Such errors feed into a public fear that has abated, but not disappeared, since the publication of Edgar Allan Poe's *The Premature Burial* in 1844.¹⁰⁰ In this short horror story, the narrator graphically describes his fear of being buried alive. The history of this most primal fear is rich and colorful. Contemporary cases show that at least some concern is warranted.

Saint Joseph's Hospital—Syracuse, New York

In 2009, clinicians at Syracuse's Saint Joseph's Hospital Health Center declared Colleen Burns dead

after a drug overdose. Despite several signs of responsiveness to stimuli, the hospital ignored that evidence and continued to prepare Burns for organ procurement. Just as surgery was to commence, Burns opened her eyes in the operating room. Surgery was canceled and Burns was released two weeks later.

In 2013, the New York Department of Health fined the hospital \$6,000 for improperly implementing DDNC protocols. The U.S. Centers for Medicare and Medicaid Services (CMS) also sanctioned the hospital for failing to undertake an “intensive and critical review of the event.”¹⁰¹

Arroyo v. Plosay—Los Angeles, California

On 26 July 2010, Maria de Jesus Arroyo was taken by ambulance to White Memorial Hospital, where she received treatment for cardiac arrest, acute myocardial infarction, and hypertension. Shortly after arrival, she was pronounced dead. But when workers for the mortuary later came to pick up the body, they found it lying face down in the hospital morgue. The decedent’s nose was broken and her face had suffered lacerations and contusions—injuries that had not been present when she arrived at the hospital or when the body was viewed by relatives after the declaration of death.

On 3 May 2012, the decedent’s husband, Guadalupe Arroyo, and the decedent’s eight children filed a lawsuit action against the hospital and treating physician, alleging that defendants prematurely declared the decedent dead. After this erroneous declaration, Arroyo was placed in a compartment in the hospital morgue while still alive. She inflicted disfiguring injuries to her face while trying to escape, and ultimately froze to death.¹⁰² While this is a case of erroneous determination of death on cardiopulmonary criteria, not erroneous DDNC, it is instructive. In 2014, the California Court of Appeal rejected the hospital’s procedural objections and permitted the lawsuit to proceed.

8. COURT CASES SEEKING DAMAGES FOR EMOTIONAL DISTRESS

In addition to court cases seeking continued physiological support and court cases seeking damages for premature DDNC, there are also court cases seeking emotional distress damages. In these cases, families allege that clinicians were insensitive or outrageous in how they treated or communicated with the family of the patient after DDNC.

In older cases, families have recovered emotional distress damages for inappropriate handling

of a dead body. For example, after the suicide of a 22-year-old man, a New Jersey hospital continued physiological support for three days after DDNC despite the parent’s objections. A jury awarded the parents \$140,000.¹⁰³

Morgan Westhoff—Oakland Children’s Hospital, Oakland, California

In January 2013, 21-month-old Morgan Westhoff died at Oakland Children’s Hospital after alleged malpractice in repairing a blood vessel birth defect. Westhoff’s parents did not dispute the brain death diagnosis or request continued physiological support. But after Westhoff’s death, the hospital allegedly engaged in outrageous conduct. First, it apparently lied about an autopsy, leaving the Westhoff family in “hours of cruel and unjust agony” as they waited with their baby’s body for the coroner to arrive. Second, the Westhoff family felt “betrayed, violated, and lost” when they later learned no autopsy was ever conducted. Third, the hospital pressured the family with “multiple aggressive requests” to donate the baby’s organs. Fourth, the hospital sent repeated fundraising solicitations and surveys. The Westhoff family sued for negligent infliction of emotional distress, intentional infliction of emotional distress, and fraudulent misrepresentation.¹⁰⁴

9. PREGNANCY LIMITATIONS ON DDNC

One striking example of the conceptual problems with DDNC, discussed in section 2 above, is that dead women can still gestate a fetus.¹⁰⁵ This is not just a theoretical possibility. The birth of such babies is periodically reported in the media.¹⁰⁶ These pregnancies are almost always continued with the consent of the family. An interesting legal question is whether a pregnancy may (or even must) be continued, even without family consent.

States take four different approaches to the effect of an advance directive if a patient is pregnant. Depending on the jurisdiction, a woman’s advance directive will have: (1) no effect; (2) no effect, if it is probable that the fetus will develop to live birth; (3) no effect, if the fetus is viable; or (4) no effect, unless rebutted by the patient’s instructions.

These limitations remain controversial and problematic for incapacitated pregnant patients. Indeed, lawsuits in Washington State and North Dakota have challenged similar statutes as unconstitutional in that they impose undue burdens on the right to terminate pregnancy, deprive women of liberty without due process, and discriminate on the basis of gender, in violation of the equal protection guaran-

tee. But those cases were brought by healthy, non-pregnant women. They were not “ripe” for adjudication, because there was not yet a live case or controversy. The claims depended upon contingent facts and future events that might not occur. So, the courts would not rule on them.¹⁰⁷ The basic rationale of the ripeness doctrine is to prevent courts from entangling themselves in abstract disagreements and to protect parties from judicial interference until the effects of the law are felt in a concrete way.¹⁰⁸

In short, the status of these statutory limitations on the rights of incapacitated (but living) pregnant women to refuse life-sustaining treatment (through an advance directive or surrogate) remains ethically and constitutionally uncertain. But what is more certain is that these limitations should have no effect once a pregnant patient is dead.¹⁰⁹ This was confirmed in a high-profile case earlier this year.

Muñoz v. John Peter Smith Hospital—Fort Worth, Texas

On 26 November 2013, 33-year-old Marlise Muñoz apparently suffered a fatal pulmonary embolism.¹¹⁰ She was found by her husband, Erick Muñoz, unconscious on their kitchen floor. She had lain there, not breathing, for some minutes. She was taken to nearby John Peter Smith Hospital, where doctors put her on ICU technologies, including a ventilator, and restored a heartbeat. But doctors soon determined that she was dead.¹¹¹

Her husband asked physicians to stop physiological support, but hospital staff refused. At the time, Muñoz was 14 weeks pregnant. The hospital’s position was that it has no choice but to maintain her body artificially. Texas law, hospital officials said, does not permit removing ICU technologies from a woman who is pregnant. Indeed, the Texas Advance Directives Act provides that “a person may not withdraw or withhold life-sustaining treatment under this subchapter from a pregnant patient.”¹¹²

But the Texas law, like similar laws in other states, is almost always applied when the woman is incapacitated and terminally or irreversibly ill. It does not apply to a pregnant patient who has died. The Texas Advance Directives Act defines “life-sustaining treatment” as that which “sustains the life of a patient and without which the patient will die.”¹¹³ Because Muñoz had died, neither cardiopulmonary nor any other form of support was or could be “life sustaining.” In short, the law requires only that a living pregnant woman be kept alive.¹¹⁴

Erick Muñoz filed a lawsuit charging the hospital with “cruel and obscene mutilation of a deceased body.” The court held that the Texas Advance Di-

rectives Act did not apply to Muñoz because she was dead.¹¹⁵ Two days later (exactly two months after Muñoz’s hospital admission), the hospital followed the court’s order and stopped physiological support.¹¹⁶

CONCLUSION

For decades, DDNC has been widely accepted. But it has never been universally supported. Recently, the near consensus position has been increasingly subjected to persuasive criticisms and serious concerns.¹¹⁷ Longstanding disagreements over DDNC’s validity have been reignited. Controversies over DDNC have “taken on new life in medical, ethical, and public debate.”¹¹⁸

Notwithstanding this academic and public debate, the law concerning DDNC remains settled. Moreover, the legal status of DDNC is itself unlikely to be displaced. But as conflicts, disputes, and uncertainty continue to grow, other legal changes may be coming. These include: (1) a national standard for measuring DDNC; (2) more accommodation requirements like those in California, New Jersey, and New York; (3) explicit safe harbor legal immunity for stopping physiological support after DDNC; and (4) special dispute resolution mechanisms to resolve DDNC disputes faster than the month-long judicial processes in the McMath and Lopez cases.

NOTES

1. A. Flamm, M.L. Smith, and P.A. Mayer, “Family Members’ Requests to Extend Physiologic Support after Declaration of Brain Death: A Case Series Analysis and Proposed Guidelines for Clinical Management,” in this issue of *JCE*.

2. T.M. Pope, “Legal Briefing: Medically Futile and Non-Beneficial Treatment,” *The Journal of Clinical Ethics* 22, no. 3 (2011): 277-96; T.M. Pope, “Legal Briefing: Organ Donation and Allocation,” *The Journal of Clinical Ethics* 21, no. 3 (2011): 243-63.

3. President’s Council on Bioethics, *Controversies in the Determination of Death*, 2008, <https://bioethicsarchive.georgetown.edu/pcbe/reports/death/Controversies%20in%20the%20Determination%20of%20Death%20for%20the%20Web%20%282%29.pdf>, accessed 26 August 2014; *In re Bowman*, 617 P.2d 731 (Wash. 1980).

4. P. Mollaret and M. Goulon, “The Depassed Coma,” *Review Neurology* 101 (1959): 3-15.

5. Ad Hoc Committee of the Harvard Medical School to Examine the Definition of Brain Death, “A Definition of Irreversible Coma,” *Journal of the American Medical Association* 205, no. 6 (1968): 337-40. For more on the Harvard Committee, see G. Belkin, *Death Before Dying: History, Medicine, and Brain Death* (New York: Oxford University Press, 2014).

6. President's Council, see note 3 above, pp. 12, 17-20.
7. E.g. Kan. Ch. 248 (1970), codified at Kan. Stat. Ann. § 77-202.
8. President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research, *Defining Death: Medical, Legal, and Ethical Issues in the Determination of Death*, 1981, <http://kie.georgetown.edu/nrcbl/documents/pcemr/definingdeath.pdf>, accessed 26 August 2014.
9. Earlier, in 1978, the NCCUSL had created the Uniform Brain Death Act. But since the statute did not address the status of traditional cardiopulmonary criteria, states found it confusing.
10. 12 U.L.A. 589 (1980).
11. The NCCUSL lists the following states as adopters of the UDDA: Alabama, Alaska, Arkansas, California, Colorado, Delaware, District of Columbia, Georgia, Idaho, Indiana, Kansas, Maine, Maryland, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, U.S. Virgin Islands, Utah, Vermont, West Virginia, Wisconsin, and Wyoming, <http://www.uniformlaws.org/LegislativeFactSheet.aspx?title=Determination%20of%20Death%20Act>, accessed 25 August 2014.
12. Outside the medical context there are other ways to determine death. For example, death can also be presumed, if the person has not been seen or heard from for seven years. *Donovan v. Major*, 97 N.E. 231 (Ill. 1911).
13. *In re T.A.C.P.*, 609 So. 2d 588 (1992); Fla. H.B. 1088 (1988); AMA Council on Ethical and Judicial Affairs, "The Use of Anencephalic Neonates as Organ Donors," *Journal of the American Medical Association* 273, no. 20 (1995): 1614-18.
14. J.L. Bernat, "The Whole-Brain Concept of Death Remains Optimum Public Policy," *Journal of Law, Medicine, and Ethics* 34, no. 1 (2006): 35-43; E.F.M. Wijdicks, "Brain Death Worldwide: Accepted Fact but No Global Consensus," *Neurology* 58, no. 1 (2002): 20-25; D. Gardiner et al., "International Perspective on the Diagnosis of Death," *British Journal of Anaesthesia* 108 Suppl. (2012): i14-28.
15. J.L. Bernat, "The Definition and Criterion of Death," *Handbook of Clinical Neurology* 118 (2013): 419-35. This consensus may not extend to East and Southeast Asia. Q. Yang and G. Miller, "East-West Differences in Perception of Brain Death," *Journal of Bioethical Inquiry*, published online 24 July 2014.
16. A.M. Capron, "Brain Death: Well Settled, Yet Still Unresolved," *New England Journal of Medicine* 344, no. 16 (2001): 1244-6.
17. D.A. Shewmon, "Constructing the Death Elephant: A Synthetic Paradigm Shift for the Definition, Criteria, and Tests for Death," *Journal of Medicine and Philosophy* 35, no. 3 (2010): 256-98; D.A. Shewmon, "Brain Death: Can It Be Resuscitated?" *Hastings Center Report* 39, no. 2 (2009): 18-24; D.A. Shewmon, "The Brain and Somatic Integration: Insights into the Standard Biological Rationale for Equating Brain Death with Death," *Journal of Medicine and Philosophy* 26, no. 5 (2001): 457-78; D.A. Shewmon, "Chronic Brain Death: Metaanalysis and Conceptual Consequences," *Neurology* 51, no. 6 (1998): 1538-45; D.A. Shewmon, "'Brain stem' death, 'brain death' and death: a critical re-evaluation of the purported equivalence," *Issues in Law & Medicine* 14, no. 2 (Fall 1998): 125-45.
18. R.D. Truog and F.G. Miller, "Defining Death: The Importance of Scientific Candor and Transparency," *Intensive Care Medicine* 40, no. 6 (2014): 885-87.
19. See Bernat, note 14 above; S.J. Younger and R. Schapiro, ed., *The Definition of Death: Contemporary Controversies* (Baltimore: Johns Hopkins Press, 1999).
20. See President's Council, note 3 above, p. 89.
21. J.N. Kirkpatrick, K.D. Bensley, and A. Caplan, "Death Is Just Not What It Used to Be," *Cambridge Quarterly of Healthcare Ethics* 19, no. 1 (2010): 7-16.
22. R.D. Truog and F.G. Miller, "Changing the Conversation about Brain Death," *American Journal of Bioethics* 14, no. 8 (2014): 9-14; S.K. Shah, "Piercing the Veil: The Limits of Brain Death as a Legal Fiction," *Michigan Journal of Law Reform* (forthcoming, 2014).
23. S.K. Shah, R.D. Truog, and F.G. Miller, "Death and Legal Fictions," *Journal of Medical Ethics* 37, no. 12 (2011): 719-22.
24. R.D. Truog, "Brain Death: Too Flawed to Endure, Too Ingrained to Abandon," *Journal of Law, Medicine and Ethics* 35, no. 2 (2007): 273-81.
25. B.A. Rich, "Structuring Conversations on the Fact and Fiction of Brain Death," *American Journal of Bioethics* 14, no. 8 (2014): 31-33.
26. S.K. Shah, K. Kasper, and F.G. Miller, "A Narrative Review of the Empirical Evidence on Public Attitudes on Brain Death and Vital Organ Transplantation: The Need for Better Data to Inform Policy," *Journal of Medical Ethics* 25 Apr. 2014.
27. J.L. Bernat, "Whither Brain Death," *American Journal of Bioethics* 14, no. 8 (2014): 3-8.
28. *Gallups v. Cotter*, 534 So. 2d 585 (Ala. 1988); *Lovato v. District Court*, 601 P.2d 1072 (Colo. 1979); *In re Jones*, 433 N.Y.S.2d 984 (Sup. Ct. 1980); *Virk v. Detroit Receiving Hospital*, No. 18062 (Mich. App. 25 Oct. 1996); *In re Long Island Jewish Hospital*, 641 N.Y.S.2d 989 (N.Y. Sup. Ct. 1996); *Dority v. Superior Court*, 145 Cal. App. 3d 273 (Cal. App. 1983).
29. American Academy of Pediatrics, "Clinical Report: Guidelines for the Determination of Brain Death in Infants and Children: An Update of the 1987 Task Force Recommendations," *Pediatrics* 128, no. 3 (2011): e720-40 ("It should be made clear that once death has occurred, continuation of medical therapies . . . is no longer an option. . . ."); L. Snyder, "American College of Physicians Ethics Manual: Sixth Edition," *Archives of Internal Medicine* 156, no. 1 (2012): 73-104 ("After a patient has been declared dead by brain-dead criteria, medical support should ordinarily be discontinued."); N. Berlinger, B. Jennings, and S.M. Wolf, *The Hastings Center Guidelines for Decisions on Life-Sustaining Treatment and Care Near the End of Life* (New York: Hastings Center, 2013): 105-10.
30. *Douglas v. Janssen Funeral Homes*, No. 2KB-09-

173CI, 2010 WL 9069780 (Alaska Super. Ct. 19 Nov. 2010) (citing 4 cases).

31. R.D. Miller, *Problems in Health Care Law* (Sudbury, Mass.: Jones & Bartlett, 2006), 765-75.

32. See President's Council, note 3 above; J.A. Anderson, L.W. Vernaglia, and S.P. Morrigan, "Refusal of Brain Death Diagnosis: The Health Lawyer's Perspective," *JONAS Health Care Law, Ethics and Regulation* 9, no. 3 (2007): 90-2. Defendants are sometimes held civilly or criminally liable for abuse of a corpse. E.g. *Range v. Douglas*, No. 12-3857/4190/492 (6th Cir. 15 August 2014).

33. M.J. Clarke, M.S. Remtema, and K.M. Swetz, "Beyond Transplantation: Considering Brain Death as a Hard Clinical Endpoint," *American Journal of Bioethics* 14, no. 8 (2014): 43-5.

34. Flamm, Smith, and Mayer, see note 1 above. *Dority v. Superior Court of San Bernardino County*, 193 Cal. Rptr. 288, 289 (Cal. Ct. App. 1983) (describing hospital policy of keeping brain dead children on life support "until the parents were emotionally able to realize what the medical opinion was"); L.R. Frankel and C.J. Randle, Jr., "Complexities in the Management of a Brain-Dead Child," in *Ethical Dilemmas in Pediatrics: Cases and Commentaries*, ed. L.R. Frankel et al., (New York: Cambridge University Press, 2005), 135, 137 ("On rare occasions, life support will be continued for a few more hours, pending arrival of other family members."); M.J. Edens et al., "Neonatal Ethics: Development of a Consultative Group," *Pediatrics* 86, no. 6 (1990): 944-9 ("treatment is continued for a period of time to allow the parents to come to terms with the hopelessness of [the] . . . condition."); R. Gustaitis, "Right to Refuse Life-Sustaining Treatment," *Pediatrics* 81, no. 2 (1988): 317-21 ("children have not infrequently been kept alive on life-support equipment for the sake of others."). Some have persuasively argued for such accommodation. R.A. Burt, "The Medical Futility Debate: Patient Choice, Physician Obligation, and End-of-Life Care," *Journal of Palliative Medicine* 5, no. 2 (2004): 249-54.

35. Accommodation is also afforded by military policy. G. Zaroya, "Military Ruling Offers Closure for Families of Brain Dead Troops," *USA Today*, 23 March 2010.

36. P.W. Armstrong and R.S. Olick, "Innovative Legislative Initiatives: The New Jersey Declaration of Death Act and Advance Directives for Health Care Acts," *Seton Hall Legislative Journal* 16, no. 1 (1992): 177-97; R.S. Olick, "Brain Death, Religious Freedom, and Public Policy: New Jersey's Landmark Legislative Initiative," *Kennedy Institute of Ethics Journal* 1, no. 4 (1991): 275-88.

37. N.J. Rev. Stat. § 26:6A-3.

38. This is due in part because New Jersey has a large Jewish population. M.A. Grodin, "Religious Exemptions: Brain Death and Jewish Law," *Journal of Church and State* 36, no. 2 (1994): 357-72; R.S. Olick et al., "Accommodating Religious and Moral Objections to Neurological Death," *The Journal of Clinical Ethics* 20, no. 2 (Summer 2009): 183-91.

39. N.J. Rev. Stat. § 26:6A-5; N.J. Admin. Code § 13:35-6A.6.

40. *Employment Division v. Smith*, 494 U.S. 872, 887 (1990); *United States v. Meyers*, 906 F. Supp. 1494, 1499

(D. Wyo. 1995).

41. The concept of brain death has been accepted by nearly all major religions. E.F.M. Wijidicks, "Brain Death," *Handbook of Clinical Neurology* 118 (2013): 191-203.

42. Flamm, Smith, and Mayer, see note 1 above.

43. *People v. Eulo*, 63 N.Y.2d 341 (N.Y. Ct. App. 1984).

44. *The Determination of Death* (New York: New York State Department of Health and New York State Task Force on Life and the Law, 1986).

45. 10 N.Y.C.R.R. § 400.16 (1987).

46. New York State Department of Health and New York State Task Force on Life and the Law, Guidelines for Determining Brain Death, November 2011, http://www.health.ny.gov/professionals/hospital_administrator/letters/2011/brain_death_guidelines.pdf, accessed 26 August 2014.

47. 29 C.F.R. § 1605.1.

48. New York City Health and Hospital Corp., "Corporate Brain Death Policy," <http://thaddeuspope.com/braindeath.html>, accessed 26 August 2014.

49. *Alvarado v. New York City Health and Hospital Corporation*, 547 N.Y.S.2d 190 (N.Y. Sup. Ct. 1989).

50. *In re Long Island Jewish Medical Center*, 641 N.Y.S.2d 989 (N.Y. Sup. Ct. 1996).

51. Cal. Health & Safety Code §§ 7180-81.

52. Cal. Health & Safety Code § 1254.4(a).

53. Hospital staff should demonstrate sensitivity to these concerns and consider using similar resources to help family accept the determination and fact of death. Among other interventions, family presence during DDNC improves understanding without an adverse impact on psychological well-being. I. Tawil et al., "Family Presence During Brain Death Evaluation: A Randomized Controlled Trial," *Critical Care Medicine* 42, no. 4 (2014): 934-42.

54. Cal. Health & Safety Code § 1254.4(b).

55. Flamm, Smith, and Mayer, see note 1 above; New York City Health and Hospital Corp., see note 48 above.

56. Cedars Sinai Medical Center, <https://www.cedars-sinai.edu/Patients/Programs-and-Services/Healthcare-Ethics-/Documents/2565-FAQs-NEW-PDF-158326.pdf>, accessed 26 August 2014; *Winkfield v. Children's Hospital Oakland*, No. 4:13-CV-05993-SBA (N.D. Cal. 20 Dec. 2013) (Opposition to Proposed TRO and Injunctive Relief) (noting OCH considered two to three days a reasonable accommodation in DDNC cases in the past 10 years).

57. *Dix v. Superior Court*, 53 Cal.3d 442, 459 (1991) ("we avoid statutory constructions that render particular provisions superfluous or unnecessary.").

58. Cal. Health & Safety Code § 1254.4(d). In both the *McMath* and *Lopez* cases the hospitals argued that accommodating dead patients would impact the ability to serve other patients with a better prospect for benefit. Relatedly, justice arguments are increasingly common in the futility context. E.g. T.N. Huynh et al., "The Opportunity Cost of Futile Treatment in the ICU," *Critical Care Medicine* 42, no. 9 (2014): 1977-82.

59. Cal. Prob. Code §§ 4735 & 4740.

60. Flamm, Smith, and Mayer, see note 1 above. A facility-to-facility transfer was effected for *McMath*. Facility-to-home transfers were effected for brain dead chil-

dren Jesse Koochin and Theresa Hamilton. C.M. Collins and L. Thomson, "Jesse Loses His Battle with Brain Tumor," *Deseret Morning News*, 20 November 2004; "Brain Dead Girl Will Be Sent Home on Life Support," *New York Times*, 19 February 1994.

61. <http://www.uniformlaws.org/ActSummary.aspx?title=Determination%20of%20Death%20Act>, accessed 26 August 2014.

62. A.M. Capron, "Legal Issues in Pronouncing Death," *Bioethics*, 4th ed. (Mahwah, N.J. Paulist Press, 2014), 793-9.

63. D.M. Greer et al., "Variability of Brain Death Determination Guidelines in Leading U.S. Neurological Institutions," *Neurology* 70 (2008): 284-9. The same heterogeneity in DDNC protocols has also been measured in prior studies. D.J. Powner, M. Hernandez, and T.E. Rives, "Variability among Hospital Policies for Determining Brain Death in Adults," *Critical Care Medicine* 32 no. 6 (2004): 1284-8; E.F. Wijdicks, "Brain Death Worldwide: Accepted Fact But No Global Consensus in Diagnostic Criteria," *Neurology* 58, no. 2 (8 January 2002): 20-5; E.F. Wijdicks, "Determining Brain Death in Adults," *Neurology* 45, no. 5 (1995): 1003-11.

64. E.F. Wijdicks et al., "Evidence-Based Guideline Update: Determining Brain Death in Adults: Report of the Quality Standards Subcommittee of the American Academy of Neurology," *Neurology* 74, no. 23 (2010): 1911-8.

65. J.F. Bartscher and P.N. Varelas, "Determining Brain Death—No Room for Error," *Virtual Mentor* 12, no. 11 (2010): 879-4; R.B. Arbour, "Brain Death Assessments, Controversies, and Confounding Factors," *Critical Care Nursing* 33, no. 6 (2013): 27-46. Non-uniformity in DDNC is not unique to the U.S. G. Citerio et al., "Variability in Brain Death Determination in Europe: Looking for a Solution," *Neurocritical Care* 28 May (2014); S.D. Shemie et al., "International Guideline Development for the Determination of Death," *Intensive Care Medicine* 40, no. 6 (2014): 788-97.

66. E.K. Choi et al., "Brain Death Revisited: The Case for a National Standard," *Journal of Law, Medicine and Ethics* 36, no. 4 (2008): 824-36; K.M. Busl and D.M. Greer, "Pitfalls in the Diagnosis of Brain Death," *Neurocritical Care* 11, no. 2 (2009): 276-87; Bartscher and Varelas, see note 65, above.

67. Some states permit nonphysician clinicians to determine death in nonhospital settings. E.g. Alaska Stat. §§ 09.6.120, 18.08.089 & 08.68.395. A New Jersey bill proposed permitting an emergency medicine technician, paramedic, or investigator for a county medical examiner's office to make determination and pronouncement of death under certain circumstances. The death must have occurred at home or at the scene of a motor vehicle accident, homicide, fire, flood, or other natural or manmade disaster or emergency; the deceased must exhibit decapitation, decomposition, lividity (discoloration), an absence of electrical activity in the heart, or rigor mortis. N.J. A.B. 648 (2014) (Moriarty).

68. Tex. Health & Safety Code § 671.001(b).

69. New Jersey used to require two physicians, but eliminated that requirement in 2006. <http://www.njconsumeraffairs.gov/proposal/bmepro515.htm>, accessed 26 August 2014.

70. N.J. Admin. Code § 13:35-6A.3.

71. Ala. Code. § 22-21-1(b); Cal. Health & Safety Code § 7181; Fla. Stat. § 382.009; Iowa Code § 702.8; Ky. Stat. § 446.400.

72. Fla. Stat. § 382.009(2).

73. Va. H.B. 541 (2014) (O'Bannon), enacted as Va. Chapter 73, codified at Va. Code § 54.1-2972.

74. Va. Code § 54.1-2972(A)(2).

75. N.J. Rev. Stat. § 26:6A-4(b).

76. R.1992 d.309; 23 N.J.R. 3635(a) & 24 N.J.R. 2731(c) (effective 3 August 1992), codified at N.J. Admin. Code §§ 13:35-6A.1 to 13:35-6A.7.

77. N.J. Admin. Code § 3:35-6A.4(b).

78. R.2007 d.l20; 38 N.J.R. 2021(a), 39 N.J.R. 1751(a) (effective 7 May 2007).

79. New Jersey Law Review Commission, "Final Report Relating to New Jersey Declaration of Death Act" (18 January 2013).

80. N.J. A.B. 3586 (2012) (Conaway), enacted as N.J. Pub. L. 2013 Ch. 185, codified at N.J. Stat. § 26:6A-4. Similar legislation was introduced in the following session. N.J. S.B. 1167 (2014).

81. *In re Motl Brody*, No. 1:08-CV-01898 (HHK) (D.D.C. 2008).

82. C.M. Burkle, A.M. Schippen, and E.F. Wijdicks, "Brain Death and the Courts," *Neurology* 76, no.9 (2011): 837-41; *Cole v. University of Kansas Medical Center*, No. 06-CV-830 (Wyandotte County District Court, Kansas 2006); *Shively v. Wesley Medical Center*, No. 06-CV-640 (Sedgwick County District Court, Kansas 2006); J. Vincent, "Judge Grants Request for Restraining Order," [Martinsburg, W.V.] *Journal*, 1 Sept. 2009; A. Simmons, "Death Not Just a Family Matter," *Atlanta Journal Constitution* 14 Dec. 2007 (Georgia court ordered Emory Eastside Medical Center to continue physiological support for Donald Fennell); L.M. Collins and L. Thomson, "Jesse Loses His Battle with Brain Tumor," *Deseret Morning News*, 20 Nov. 2004 (Utah court ordered hospital to continue physiological support for Jesse Koochin).

83. A. Daoust and E. Racine, "Depictions of 'Brain Death' in the Media: Medical and Ethical Implications," *Journal of Medical Ethics* 40, no 4 (2014): 253-59; J.K. Kilcullen, "As Good as Dead and Is That Good Enough? Public Attitudes toward Brain Death," *Journal of Critical Care* 29, no. 5 (2014): 872-74.

84. S. Gupta, *Cheating Death: The Doctors and Medical Miracles that Are Saving Lives Against All Odds* (New York: Hackett, 2009); M. Memmott, "Two Weeks after Waking Up in Body Bag, Man Dies," *NPR News*, 14 March 2014; P. Hluchy, "When Brain Death Isn't Terminal," *Toronto Star*, 13 April 2008 (Zack Dunlap); S. Malin, "The Girl Who Wouldn't Die," *Daily Mail*, 17 October 2012 (Carina Melchior); "The Boy Who Came Back from the Dead," *Daily Mail*, 24 April 2012 (Stephen Thorpe).

85. T.M. Pope, "Involuntary Passive Euthanasia in U.S. Courts: Reassessing the Judicial Treatment of Medical Futility Cases," *Marquette Elder's Advisor* 9, no. 2 (2008): 229-68.

86. *Winkfield v. Childrens Hospital Oakland*, No. 4:13-CV-05993-SBA (N.D. Cal. 20 Dec. 2013) (Complaint); *McMath v. Superior Court*, No. A140590 (Cal. App. 30 Dec. 2013) (Petition for Writ of Mandate).
87. *Winkfield v. Children's Hospital Oakland*, No. RG13-707598 (Alameda County Sup. Ct., Cal. 20 Dec. 2013) (Grillo, J.).
88. Cal. Health & Safety Code §§ 7181-82.
89. *Winkfield v. Childrens Hospital Oakland*, No. 4:13-CV-05993-SBA (N.D. Cal. 20 Dec. 2013) (Complaint).
90. U.S. Constitution, Article Six, Clause 2.
91. K. Ioffe and D. DeBolt, "Jahi McMath Being Kept at New Jersey Hospital," *Mercury News* 19 June 2014; D. Civiletti, "Never, Ever, Give Up Hope," *RiverheadLocal.com* (Riverhead, N.Y.), 16 August 2014, accessed 28 August 2014.
92. J. Cobb, "Fighting for Jahi," *Essence*, July 2014, 80-3.
93. *In re Issac Lopez, a Minor*, No. 14-CI-354 (Jefferson Circuit Court, Kentucky 22 July 2014) (Order); C. Galofaro, "Brain Dead Baby Focus of Mother's Court Fight," *Courier Journal* (Louisville, Ky.), 18 July 2014.
94. Ky. Rev. Stat. 446.400(2).
95. C. Galofaro, "Brain-Dead Baby Taken off Life Support," *Courier Journal*, 23 July 2014.
96. S. Chawkins, "Transplant Surgeon Acquitted," *Los Angeles Times*, 19 December 2008; Greene & Associates, "California Medical Board Withdraws Complaint against Physician after Acquittal in Criminal Case," 5 June 2009.
97. *Jacobs v. CORE*, No. 1:09-CV-00048-SJM (W.D. Pa. 23 August 2012) (trial brief).
98. *Jacobs v. CORE*, No. 1:09-CV-00048-SJM (W.D. Pa. 6 Nov. 2012) (Petition to Obtain Approval of Settlement).
99. *McMahon v. New York Organ Donor Network*, No. 15666-2012, 2012 WL 4363966, (N.Y. County Supreme Court, NY 25 September 2012) (Complaint).
100. Edgar Allen Poe, *The Premature Burial*, 1850, <http://poestories.com/read/premature>, accessed 26 August 2014; J. Bondenson, *Buried Alive* (New York: Norton, 2002).
101. J. O'Brien and J.J. Moulder, "St. Joseph's 'Dead' Patient Awake as Doctors Prepared to Remove Organs," *Syracuse Post-Standard*, 9 July 2013.
102. *Arroyo v. Plosay*, No. B245659 (Cal. App. 2014); *Arroyo v. Plosay*, No BC484024 (Los Angeles Sup. Court, Calif. 3 May 2012) (Complaint).
103. *Strachan v. John F. Kennedy Memorial Hospital*, 538 A.2d 346 (N.J. 1988).
104. *Westhoff v. Children's Hospital and Research Center of Oakland*, No. RG14721095 (Alameda County Sup. Court, Calif. 11 Apr. 2014) (Complaint).
105. M. Esmaeilzadeh et al., "One Life Ends, Another Begins: Management of a Brain Dead Pregnant Mother: A Systematic Review," *BMC Medicine* 8 (2014): 74.
106. E.A. Epstein, "It's a Miracle," *Daily Mail*, 21 April 2012 (Christine Bolden); R. Willing and W. Koch, "Devas-tating Loss," *USA Today*, 13 September 2005 (Susan Torres); "Joy and Heartbreak," *Daily Mail*, 11 February 2014 (Robyn Benson).
107. D. Sperling, "Maternal Brain Death," *American Journal of Law and Medicine* 30, no. 4 (2004): 452-500; D. Sperling, *Management of Post Mortem Pregnancy* (London: Ashgate, 2006); *Dinino v. Washington*, 684 P.2d 1297 (Wash. 1984); *Gabrynowicz v. Heitkamp*, 904 F. Supp. 1061 (D.N.D. 1995); *University Health Services v. Piazza*, No. CV86-RCCV-464 (Richmond Cty., Ga. 4 August 1986).
108. *Abbott Labs. v. Gardner*, 387 U.S. 136 (1967); *Texas v. United States*, 523 U.S. 295 (1998).
109. For example, in a similar case in Houston, a Texas court ordered a hospital to continue treatment for a comatose Tammy Martin, who was then 15 weeks pregnant. The court reversed the order a few weeks later when Martin was declared dead. R. Nissimov, "Comatose Woman's Fetus Focus of Battle," *Houston Chronicle*, 28 July 1999.
110. *Munoz v. John Peter Smith Hospital*, No. 096-270080-14 (Tarrant County District Court, Tex. 14 Jan. 2014) (Plaintiff's Original Petition for Declaratory Judgment and Application for Unopposed Expedited Relief).
111. Tex. Health & Safety Code § 671.001(b).
112. Tex. Health & Safety Code § 166.049.
113. Tex. Health & Safety Code § 166.002(10).
114. A.L. Caplan and T.M. Pope, "Pregnant and Dead in Texas: A Bad Law, Badly Interpreted," *Los Angeles Times*, 16 January 2014; T.W. Mayo, "Brain Dead and Pregnant in Texas," *American Journal of Bioethics* 14, no. 8 (2014): 15-8.