The Determination of Death

The New York State Task Force on Life and the Law

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Staff

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Summary of Conclusions

Governor Cuomo, in his Executive Order creating the Task Force on Life and the Law, asked the Task Force to study and make recommendations regarding the ethical, legal and medical issues related to the determination of death. The Task Force's recommendations and the reasons for those recommendations are set forth in this Report. The recommendations are summarized below.

1. Both the traditional standard of cessation of heart and lung activity and the standard of total and irreversible cessation of brain function, including brain stem function, should be recognized as the legal standards for determining death in the State of New York.
2. In light of the 1984 Court of Appeals decision in *People v. Eulo,* legislation to adopt the brain death standard is unnecessary in New York. The Department of Health should, however, issue a regulation which ensures that the brain death standard is uniformly adopted and applied in hospitals throughout the State.
3. The official time of death for a patient who is declared dead under the brain death standard should be the time when the tests or observation period confirm that the patient's brain has totally and irreversibly ceased to function.
4. Hospitals should develop procedures for notifying family members or other individuals legally responsible for and involved with a patient who has sustained brain death before removing the patient from the respirator.
5. Although no formal legal exception to the brain death standard should be created, hospitals should make an effort to accommodate religious or moral objections to the standard expressed by patients or by family members on a patient's behalf.

One member of the Task Force, Rabbi J. David Bleich, does not join in the Task Force's recommendations. Rabbi Bleich's recommendation are set forth in the second section of this Report.

Introduction

Developments in medical technology have greatly expanded our ability to save and prolong life. At the same time, they have confronted us with new and agonizing decisions. These decisions challenge us to re-examine our fundamental values and assumptions at both the levels of individual choice and public policy.

One of the basic issues that medical science has forced us to reconsider is the determination of death. Simply stated, what should the standard be for determining that death has occurred?

The notion of "defining death" actually embodies three different questions:

(1) What is so essential to human life that when it is lost the individual is considered dead?

(2) When should a person legally be considered dead, or, stated differently, what physiological standards should be used by the medical profession to determine that an individual has died?

(3) What tests and procedures are used to determine that the physiological standards have been met?[1]

(4)

The first question, which involves a broad philosophical or theological understanding of death, is more closely related to a "definition" of death. In contrast, the second question, while also related to broader concerns, focuses upon the legal standard for determining that death has occurred.

Rather than propose a "definition" of death, this Report responds to the second question and recommends a standard for the determination of death. The Report also briefly addresses the third, more clinical issue, the procedures used to determine that the standard has been met.

The Traditional Criteria—Cessation of Circulation and Respiration

From the advent of reliable methods of measuring heartbeat and respiration in the late nineteenth century to the late 1960s, the question of defining death was uncontroversial. In fact, the straightforward description of death in *Black's Law Dictionary* was consistent with medical and scientific knowledge as well as the theological and moral beliefs of a pluralistic American society. That description embodied the traditional notion of cessation of circulation and respiration as the basis for a determination that death had occurred.[2] The cessation of other organ systems, such as the brain, liver or kidneys, was significant as an indicator of death only to the extent that it caused heart and lung activity to cease.

In the late 1960s, the development of new resuscitative techniques and the ability to maintain circulatory and respiratory activity by use of an artificial respirator after the brain had totally and irreversibly ceased to function challenged the traditional standards by which death was determined. Previously, once the heart ceased beating, all vital organs also ceased to function as blood carrying oxygen and nutrients to the vital organs stopped flowing. Conversely, when total loss of brain function had occurred, including the loss of brain stem activity which regulates the biological or "bodily integration" functions, such as circulation and respiration, respiration could not be sustained and circulation would quickly cease. The artificial respirator, however, demonstrated that a mechanical substitute for the brain's regulating function could sustain the traditional indicia of life, circulation and respiration, for at least a short period of time.[3]

The development of technology to permit the transplantation of vital organs further intensified the debate about the determination of death. The suitability of some organs for transplantation, including the liver and heart, quickly declines when the donor's respiration and circulation cease. Thus, individuals who are brain dead1 and whose breathing and heartbeat are maintained by an artificial respirator are frequently the best, if not the only, source of certain organs for transplantation.

1The term "brain death" refers to the irreversible cessation of the functioning of the entire brain including the brain stem. Commentators have noted that "brain death" can be interpreted two ways: the cessation of brain function or the determination of death of an individual as indicated by cessation of brain function. Under the first interpretation, brain death is a diagnosis of bodily function but does not necessarily indicate that the individual is dead. As used throughout this Report, "brain death" relates to the second interpretation; it is a legal standard for the determination of death, not solely a diagnosis.

The absence of a settled and uniform standard for determining death created anguishing uncertainty. For physicians, the dilemma was acute: at what point did the patient cease to be an individual in need of medical care and become a corpse? The uncertainty was equally difficult for the patient's family and friends as the line between caring for the living and loss of a loved one was blurred. Finally, for society as a whole, the questions raised about the uses and limitations of newly developed medical achievements were also compelling; was society's expensive and advanced technology being used to sustain the living or, in an unprecedented fashion, to treat the dead?

Development of a Consensus — The Brain Death Standard

In 1968, new criteria for determining death began to emerge. In that year, a committee at the Harvard Medical School issued a landmark report which proposed irreversible loss of brain function as an independent standard to determine that death had occurred.[4] The report described the brain-based criteria for a determination of death: unreceptivity and unresponsivity, total lack of reflexes, and lack of spontaneous movement or breathing.

Since 1968, the brain death standard has been widely accepted among the medical and legal communities as a basis for determining that death has occurred.[5] Acceptance of the standard has rested, in part, on medical information concerning two related issues: (i) medical certainty, based on clinical experience, that loss of whole brain function is irreversible; and (ii) the reliability of clinical tests to diagnose brain death.[6]

In 1980, the National Conference of Commissioners on Uniform State Laws adopted the Uniform Determination of Death Act which incorporates the brain death standard as well as the traditional circulatory and respiratory standards. In its report, *Defining Death*, published one year later, the President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research urged each state to adopt the Uniform Determination of Death Act.[7]

Today thirty-nine states and the District of Columbia have laws which adopt cessation of brain function as a standard for determining death.[8] In six other states, the brain death standard has been established by judicial decision.[9] Some states have embraced brain death as the sole standard while others have added brain death as an alternative to the traditional standard of cessation of respiratory and circulatory activity.

The Determination of Death in New York

In New York, it is not the Legislature but the courts which have addressed the determination of death. The New York Court of Appeals first enunciated a legal definition of death in 1872 in its opinion in *Evans v. People.*[10] As stated by the Court, "Death is the opposite of life, it is the termination of life."[11]

No such simple formulation was possible when the Court of Appeals next addressed the legal standard for the determination of death in its 1984 decision in *People v. Eulo.*[12] In that case, two defendants convicted of manslaughter argued on appeal that the victims had not been killed by the defendants, but by removal of the victims' organs for transplantation.

In its *Eulo* opinion, the Court noted that the victims had suffered total cessation of brain function prior to removal of their organs and expressly held that brain death satisfied the legal definition of death in New York. As stated by the Court,

> We hold that a recognition of brain-based criteria for determining death is not unfaithful to prior judicial definitions of "death", as presumptively adopted in the many statutes using that term. Close examination of the common-law conception of death and the traditional criteria used to determine when death has occurred leads inexorably to this conclusion.[13]

The Task Force Position

The Brain ln Death Standard

The Task Force believes that both the traditional standard of cessation of heart and lung activity and the standard of total and irreversible cessation of brain function should be recognized as the legal definition of death in New York State. This position establishes that death has occurred when either the brain death standard or the circulatory and respiratory standard is satisfied. Reliance on these two standards to determine death is sound public policy for the State and conforms to existing legal and medical standards.

Adoption of the brain death standard serves a number of important goals. First, it establishes a uniform determination and pronouncement of death. This uniformity is of great importance for legal and medical purposes. Second, it makes the determination of death in this State consistent with the determination in the majority of other states in the nation. Third, it eliminates confusion for the decedent's family and marks the end of what would otherwise be a painful and ultimately futile waiting period before the pronouncement of death. Fourth, once the brain death standard is consistently adopted and applied, medical resources will no longer be diverted for those who are not considered living by widely accepted medical and societal standards. Finally, adoption of the brain death standard increases the availability of scarce organs for donation by making it clear that persons who are brain dead are potential organ donors.

With respect to this last reason, the increased availability of much needed organs, the Task Force wishes to make it clear that, while such a result is a benefit of recognizing a determination of death based upon cessation of brain function, it is not a justification.[11] The legal definition of death must not be manipulated to facilitate organ donation or to achieve any other purpose unrelated to the determination of when each patient's life has ceased.[15]

The Task Force believes that the basis for promulgating the brain death standard in New York is the near unanimous support among the medical, legal and religious communities in the State. This consensus is critical since death has great significance as a medical, legal, theological and moral concept.

Recognizing the theological and moral dimensions of death, the Task Force believes that efforts should be made to accommodate the deeply held religious or moral beliefs of persons who object to the determination of death based on cessation of brain function. The Task Force's recommendations concerning this question are set forth

more fully in the Section entitled "The Paths Not Taken."

Two other issues related to the brain death determination must also be addressed: the procedure for informing family members2 of the deceased that death as determined by cessation of brain function has occurred and practices regarding the official time of death in cases of brain death.

Notifying the Patient's Family

Unlike persons who die and whose respiratory and cardiac activity have ceased, patients who are brain dead and maintained on a respirator retain some of the indicia ordinarily associated with life: bodily warmth, a moving chest and normal skin color. The pronouncement of death for such a patient and removal of the patient from the respirator without informing family or friends actively involved with the patient may cause confusion, suspicion and, perhaps, unnecessary grief.

Accordingly, the Task Force recommends that hospitals3 develop procedures requiring health care professionals to notify family members or other individuals legally responsible for and involved with the patient before removing the patient from the respirator. Family members should be fully informed about the patient's condition and should have an opportunity to ask questions. Since the procedure to test for brain death is ordinarily a two-step process, an initial test and a subsequent confirmatory test, the best time to notify the family would be following the first test. Family members would then understand why the tests are being conducted and would have a brief time period to adjust to the fact that the patient may soon be declared dead and the respirator may be turned off.

The hospital procedures should set forth both the obligation to notify family members and the limits of that obligation. For example, health care professionals should be obligated to make "good faith" and "reasonable" efforts to reach family members before removing the patient from the respirator.

2Use of the term "family members" is not meant to preclude consultation with other individuals who may be legally responsible for or personally involved with the patient where that is appropriate.

3The term "hospital" is used broadly throughout this Report to include those nursing homes that have the capability to provide artificial respiration. It does not however include hospices since hospices do not provide artificial maintenance of cardiopulmonary functions.

Time of Death

For patients diagnosed as dead on the basis of the brain death standard, as with other patients, a time of death must be specified on the death certificate. For brain dead patients whose respiration is artificially maintained, the selection of any particular moment is somewhat arbitrary; completion of the tests or the end of the observation period does not ordinarily coincide with the moment that the brain actually ceases to function. Nonetheless, recording practices should be uniform throughout the State.

The Task Force believes that the time when the irreversible cessation of total brain function is confirmed is the soundest alternative for the pronouncement of death. The Task Force therefore suggests that the official time of death for a patient who is declared dead under the brain death standard should be the time when the tests or observation period confirm that the patient's brain has totally and irreversibly ceased to function rather than any prior moment when, although medically diagnosed, brain death has not yet been confirmed in accordance with acceptable medical standards.

Proposed Action

The Task Force recommends that the New York State Department of Health promulgate a regulation which establishes that an individual is dead when the individual has suffered either (i) irreversible cessation of respiratory and circulatory functions or (ii) irreversible cessation of all functions of the entire brain, including the brain stem. The language of the regulation proposed by the Task Force is set forth as Appendix A to this Report.

The proposed regulation also specifies that the determination of death must be made in accordance with accepted medical standards and that the time of death will be the time when the determination of death has been completed. The Task Force has concluded, however, that the medical tests and procedures to determine brain death should not be specified in the regulation. Since clinical tests and procedures to determine death in accordance with brain-related criteria are constantly being refined by research and advances in medical science, they should remain flexible.

Hospitals and physicians will, however, need guidance in diagnosing that brain death has occurred. The Task Force believes that an advisory memorandum issued by the Department of Health is the appropriate vehicle to provide this guidance. The memorandum should set forth the current clinical tests and procedures to determine brain death, and should also advise hospitals of the importance of communicating with family members prior to turning off the respirator.

The Task Force recommends that the Department of Health, in preparing the memorandum, should rely on guidelines developed by the Medical Consultants to the President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research.[16] Those guidelines, developed in 1981, still reflect the most current research in the field. They also provide sufficient guidance while permitting discretion in reaching medical judgments in individual Crises. A copy of those guidelines is included as Appendix B of this Report.

The Paths Not Taken

Before arriving at the recommendations set forth in this Report, the Task Force considered other standards for the determination of death and other measures to effectuate the brain death standard. The alternatives considered and the reasons for rejecting them are set forth below.

Different Standards for the Determination of Death

The Higher Brain Standard

A patient who is brain dead has lost all capacities regulated by the brain, including the ability to regulate biological or "vegetative" functions and consciousness. The regulating function of the brain is controlled by the brain stem and cerebellum while the capacities associated with consciousness—memory, thought and feeling—are governed primarily by the cerebrum or "higher" brain. Patients who are brain dead have lost both higher brain and brain stem function. They cannot breathe spontaneously, lack all response to light, pain, sound and other stimuli, and have no reflexes. In contrast, patients who, like Karen Ann Quinlan, are in a persistent vegetative state have lost cerebral or higher brain capacity but retain brain stem function.[17] These patients can maintain their own biological functions such as heartbeat and breathing without mechanical support. Such patients, however, will never regain consciousness. Their capacity for social interaction, feeling or thought is therefore irrevocably lost.

Some philosophers and theologians have suggested that it is this capacity for "personhood" or "social interaction" which defines human existence.[18] According to this view, biological functioning, absent the qualities of identity and personality which separate human from animal life, is not a sufficient indication of life. Individuals who share this view advocate what has come to be known as a "higher brain" standard for determining death. They urge that patients who suffer irreversible loss of consciousness or cerebral activity should be considered dead.

The Task Force rejects this higher brain formulation of death. First, it is not supported by a consensus among the medical and lay community and would therefore constitute a radical departure from existing law and practice without the social and moral foundations for doing so. Second, and equally important, any standard for determining death which focuses on terms such as "personhood" or "capacity for social interaction" raises troubling questions about evaluating the quality of life as part of the determination of death. The implication of such an approach for patients suffering from degrees of loss of consciousness or social capacity, e.g., the severely retarded, is unacceptable.

Therefore, while the Task Force recognizes that questions concerning the termination of treatment for patients who are dying or suffering from a permanent loss of consciousness must be addressed, they should not be foreclosed in the formulation of a standard for determining death. Instead, the Task Force will address those questions in the context of future reports and recommendations concerning the right of patients, or surrogates acting on behalf of patients, to terminate treatment.

Differing Legal Standards

The Task Force has also considered a proposal to establish a different legal definition of death for those persons who express, or whose families express on their behalf, a religious or moral objection to the determination of death based on the irreversible and total loss of brain function. Under this proposal, persons in the same medical condition, e.g., brain dead and on a respirator, would be declared dead at different times depending on their religious or moral beliefs.

The Task Force believes that the State has a strong interest in a uniform determination of death. While the State's laws make many exceptions to administrative practices, including practices related to public health, to accommodate religious beliefs,[19] what is involved in the determination of death is not merely a practice but the most fundamental human status—a determination of whether the person, is alive or dead for all legal purposes. This determination has a wide range of legal consequences—the person is either subject to all the benefits and burdens of the law or the person is considered dead and a very different set of legal mechanisms regarding the dead is triggered, e.g., obligations with respect to the body of the decedent and the creation, valuation and distribution of an estate. The Task Force believes that the State's interest in uniformity with respect to so basic a determination is too great to permit variation dependent upon individual beliefs.

Furthermore, creation of an exception in regulations or legislation would, in practice, make the operation of a uniform determination unworkable. Religious or moral objections to the brain death standard may range on a spectrum from objections by persons who accept only the traditional heart and lung criteria to objections by persons who believe in the higher brain standard and embrace consciousness as the touchstone of human existence. Once exceptions are recognized anywhere along this spectrum of belief, the ability of health care providers to rely on any single standard in pronouncing death will be eroded.

A decision about legal status, however, does not necessarily resolve the question of whether persons who object to the brain death standard on religious or moral grounds should continue to receive artificial respiration. Since the outset of the debate about brain death, advocates of the brain death standard have acknowledged that the medical and religious or moral foundations of the standard were inextricably linked.[20] A 1977 article supporting the brain death standard stated this connection succinctly: "The principal reason for deciding that a person is dead should be based on a fundamental understanding of the nature of man."[21]

Whether phrased in religious terms as the departure of the soul from the body, or in secular terms as the loss of that which is essential to human existence, it is clear that the concept of death cannot and should not be stripped of its spiritual or moral dimensions. It is for this reason that the existence of a consensus supporting the brain death standard, however broadly based, fails to resolve the very difficult question of what should be done in those cases where imposition of the brain death standard would violate a person's strongly held religious or moral beliefs about the meaning of death.

This question is particularly troubling in a state like New York with its rich tradition of pluralism and its long-standing commitment to accommodate that pluralism in many spheres of public and private life. Moreover, there are religious communities in New York, including some members of the Orthodox Jewish faith, who believe that death can be determined solely by the total cessation of cardiac and respiratory activity, regardless of whether such activity is spontaneous or artificially maintained. In accordance with this belief, a person who has suffered brain death and whose breathing is artificially maintained by a respirator is considered alive until other bodily organs cease to function and the flow of blood throughout the body stops.

As set forth above, the Task Force has rejected the creation of a statutory or regulatory right to continued treatment since legislating such a right is likely to undermine the very great benefits to society of establishing a uniform determination of death. Nonetheless, the Task Force believes that, where feasible, an effort should be made to respect the deeply held religious or moral beliefs of persons who object to the brain death standard for determining death.

The Task Force recommends that hospitals develop procedures to respond to moral and religious objections to the brain death standard expressed by patients prior to the loss of decision making capacity or by family members on a patient's behalf.* The development of procedures to accommodate objections to the brain death standard obviously would be most important at hospitals which regularly serve those religious communities which profess the objection. At such

hospitals, procedures could best be devised through a process of consultation with representatives of the concerned religious groups. In this way, an accommodation could be achieved which is responsive to both the needs of each hospital as an institution and the religious beliefs of the community it serves.

Quite apart from the question of a statutorily-created exception to the brain death standard, the Task Force has considered and takes no position with respect to the separate issue of whether persons who object to the brain death standard on religious or moral grounds have a constitutional right under the Free Exercise Clause to continued treatment. In adopting the brain death standard in its *Eulo* decision, the Court of Appeals did not reach the question of whether the standard, constitutional on its face, would be unconstitutional as applied to individuals with religious or moral objections to the standard. The question is one of first impression in this State, and, indeed, in the country.

The Task Force must, of course, ensure that its recommendations comply with State and Federal constitutional requirements. The regulation proposed by the Task Force concerning the standards for the determination of death is clearly constitutional. While the regulation incorporates the brain death standard, it neither precludes nor requires continued treatment for patients who object to the standard on religious or moral grounds.

Legislation on Brain Death

By recognizing that a person is legally dead when brain death has occurred, the Court of Appeals, in its 1984 *Eulo* decision, made legislation to establish the brain death standard unnecessary in New York.[22] For this reason, the Task Force considered and rejected the development of proposed legislation to adopt the brain death standard. Nonetheless, it appeared that further guidance was needed to assist hospitals in implementing the *Eulo* decision.[23]

'The Task Force uses the term "moral objection" in a limited sense to indicate a conflict of values and principles regarding the standard for determining death. A moral objection to the brain death standard is therefore based upon an objection to the conceptual definition of death and can be distinguished from rejection of the brain death standard based solely upon psychological denial that death has occurred.

The Task Force believes that the regulation and memorandum it proposes will provide that guidance. The Commissioner of Health has a broad mandate to regulate and oversee the operation of hospitals in the State.[24] The regulation fulfills that mandate with respect to the brain death issue by ensuring that the brain death standard is uniformly applied by hospitals throughout the State. Equally important, the regulation and memorandum proposed by the Task Force clarify some of the issues related to brain death which were not resolved by the Court in the *Eulo* decision: the clinical tests and procedures for determining brain death and the official time of death.

Adoption of the brain death standard by regulation will also protect health care providers from liability for terminating treatment in cases when death is pronounced based on brain-related criteria. It is axiomatic that when death is determined according to legally established standards there can be no liability for withdrawing treatment, unless a constitutional claim is asserted and upheld.[25] In fact, proper medical practice would require the termination of treatment upon the determination of death, except in those cases when a religious or moral objection to the brain death standard has been made, or unless consent to organ donation has been obtained and artificial respiration is continued to facilitate the donation.

Conclusion

Many aspects of our legal and medical systems depend on an ability to determine whether an individual is alive or dead. The Task Force is hopeful that its Report and the regulation it proposes will provide the clarity needed on this fundamental issue.

The Task Force recognizes that its recommendations do not resolve all the issues related to the standard for determining death. They do not, for instance, instruct hospitals about how to respond to conscientious objections to the brain death standard, except to encourage respect and, whenever possible, an effort to accommodate those patients and their families.

Public policy regarding the determination of death must command broad moral and social acceptance and conform with sound medical practice. The Task Force believes that the regulation proposed in this Report satisfies these criteria and meets society's need for a uniform and clear standard for determining that death has occurred.

Footnotes

1. These questions first emerged in the debate about the determination of death in the 1970s. See, Alexander Capron and Leon Kass, "A Statutory Definition of the Standards for Determining Human Death: An Appraisal and a Proposal," 121 *U Fa. L. Rev.* 87, 102-104 (1972); Robert Veatch, 'The Definition of Death: Ethical, Philosophical and Policy Confusion," 315 *Ann. N.Y. Acad, of Sciences,* 307, 308 (1978).

2. The definition stated: "Death is the cessation of life; the ceasing to exist; defined by physicians as a total stoppage of the circulation of the blood and a cessation of the animal and vital functions consequent thereon, such as respiration, pulsation, etc." *Black's Law Dictionary,* (4th ed.) West Publishing Co., Minn. (1968), p 488. For the current definition, see *Black's Law Dictionary,* (5th ed.) West Publishing Co., Minn. (1979), p. 170, which includes a reference to the brain death standard.

3. In most cases, artificial respiration can only sustain the heartbeat and respiration of a patient who is brain dead for approximately 2-10 days. See Julius Korein, "Brain Death," in J. Cottrell and H. Turndorf (eds.) *Anesthesia and Neurosurgery,* C.V. Mosby and Co., St. Louis (1980), pp. 282-284.

4. Ad Hoc Committee of the Harvard Medical School to Examine the Definition of Brain Death, "A Definition of Irreversible Coma," 205 *J.A.M.A.* 337 (1968).

5. To date, the following organizations, among others, have endorsed the brain death standard: The American Medical Association, The American Bar Association, The American Academy of Neurology, The American Elec- troencephalographic Society and The New York Academy of Medicine.

6. See, "Refinements in Criteria for the Determination of Death: An Appraisal," A Report by the Task Force on Death and Dying of the Institute of Society, Ethics and the Life Sciences, 221 *J.A.M.A.* 48-50 (1972); "Guidelines for the Determination of Death," Report of the Medical Consultants on the Diagnosis of Death to the President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research, 246 *J.A.M.A.* 2184-2186 (1981).

7. As the President's Commission For the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research concluded: "Knowledgeable physicians agree that, when used in appropriate combinations, available procedures for diagnosing death by brain criteria are at least as accurate as the customary cardiopulmonary tests." President's Commission For the Study of Medicine and Biomedical and Behavioral Research, *Defining Death,* U.S. Gov't. Printing Office, Wash., D.C. (1981) [herein after President's Commission, *Defining Death],* p. 29.

8. Alabama, ALA. CODE § 22-31-1 (1984); Alaska, ALASKA STAT. § 09.65.120 (1983); Arkansas, ARK. STAT. ANN. § 82-537 (Supp. 1985); California, CAL. HEALTH & SAFETY CODE § 7180 (Supp 1986); Colorado, COLO. REV. STAT. § 12-36-136 (Supp. 1984); Connecticut, CONN. GEN. STAT. § 19a-504a (1985); Delaware, DEL. CODE ANN. tit. 24, § 1760 (Supp. 1986); District of Columbia, D.C. CODE § 6-2401 (Supp 1985); Florida, FLA. STAT. ANN. § 382.085 (Supp 1986); Georgia, GA. CODE ANN. § 31-10-16 (1985); Hawaii, HAWAII REV. STAT. § 327C-1 (Supp 1984); Idaho, IDA. CODE § 54-1819 (Supp 1985); Indiana, IND. Code § 1-1-4-3 (Supp 1986); Illinois, ILL. ANN. STAT. ch.110 V4, para. 302 (1978); Iowa, !A. CODE ANN. § 702.8 (1979); Kansas, KAN. STAT. ANN. § 77-205 (1984); Kentucky, KY. REV. STAT. § 446.400 (Supp. 1986); Louisiana, LA. REV. STAT. ANN. § 9:111 (Supp 1986); Maine, 22 ME. REV. STAT. ANN. § 2811 (Supp 1985); Maryland, MD. CODE ANN., HEALTH-GENERAL § 5-202 (Supp. 1985); Michigan, MICH. COMP. LAWS ANN. § 333.1021 (1980); Mississippi, MISS. CODE ANN. §41-36-3 (1981) ; Missouri, VERNON'S ANN. MO. STAT. §194.005 (1983); Montana, MONT. CODE ANN. § 50-22-101 (1983); Nevada, NEV. REV. STAT. § 451.007 (1986); New Mexico, N.M. STAT. ANN. § 12-2-4 (1978); North Carolina, N.C. GEN. STAT. §90-323 (1985); Ohio, OHIO REV. CODE ANN. § 2108.30 (Supp 1985); Oklahoma, OKLA. STAT. ANN. tit.63, § 1-301(g) (1984); Oregon, OR. REV. STAT. §146.001 (1985); Pennsylvania, 35 P.S. § 10201 (Supp. 1985); Rhode Island, R.I. GEN. LAWS § 23- 4-16 (1985); South Carolina, SC. CODE ANN. § 44-43-450 (1985); Tennessee, TENN. CODE ANN. § 68-3-501 (1983); Texas, TEX. REV. CIV. STAT. ANN. art. 4447t (Supp 1986); Vermont, VT. STAT. ANN. tit. 18, § 5218 (Supp. 1985); Virginia, VA. CODE § 54.325.7 (1982) ; West Virginia, W. VA. CODE § 16-10-2 (1985); Wisconsin, W1S. STAT. ANN. § 146.71 (Supp. 1985); Wyoming, WYO. STAT. § 35-19- 101 (Supp 1985).

9. Arizona, *State v. Fierro,* 124 Ariz. 182, 603 P.2d 74 (1979); Massachus- setts, *Commonwealth a Goldston,* 373 Mass. 249, 366 N.E.2d 744 (1977), *cert, denied* 434 U.S. 1039 (1978); Nebraska, *State v. Meints,* 212 Neb. 410, 322 N.W.2d 809 (1982); New Jersey, *State v. Watson,* 191 N.J. Super. 464,467 A.2d 590 (App Div. 1983) *certif denied* 95 N.J. 230, 470 A.2d 443 (1983); New York, *People v. Eulo,* 63 N.Y.2d 341, 482 N.Y.S.2d 436, 472 N.E.2d 286 (1984); Washington, *In re Bowman,* 94 Wash.2d 407, 617 P.2d 731 (1980).

10. 49 N.Y. 86 (1872).

11. *Id.* at 90.

12. 63 N.Y.2d 341, 482 N.Y.S.2d 436, 472 N.E.2d 286. Two lower courts had previously addressed the question in separate decisions affirming the brain death standard. In *New York City Health and Hospitals Corporation v. Sulsona,* 81 Misc. 2d 1002, 367 N.Y.S.2d 686 (Sup. Ct., Bronx Co. 1975), a case determining the criteria for death of an organ donor, and again in *Petition of Jones,* 107 Misc. 2d 290, 43 3 N.Y.S.2d 984 (Sup. Ct., Onondaga Co. 1980), the lower courts in New York held that brain death, when diagnosed in accordance with accepted medical standards, met the legal standard for death in New York.

14. As stated by Paul Ramsey, "Any benefit that may accrue to

13. 63 N.Y2d at 355.
other patients in this age of organ transplantation must be a wholly independent byproduct of an updating of death that is already per se right and wise and a proper judgment to be made concerning the primary patient." *The Patient* As *Person,* Yale University Press, New Haven (1970), p. 105.

15. Moreover, the determination of death must be applied consistently regardless of whether organ donation will occur. A recent case illustrates the pain and confusion that is caused when the determination of death is linked to the issue of organ donation. In *Strachan v. J.F. Kennedy Memorial Hospital,* 507 A.2d 718 (N.J. Super. Ct., App. Div. 1986), physicians at a hospital informed a couple that their child was brain dead, and requested consent to organ donation. The parents refused consent to the donation and sought their child's body for burial. The hospital then asserted that it could not discontinue respiration without a court order.

16. President's Commission, *Defining Death,* pp. 159-166.

17. The condition of patients who are brain dead has often been confused with the condition of patients who, like Karen Ann Quinlan, are in a persistent vegetative state. Individuals suffering from persistent vegetative state still retain brain stem activity and spontaneous cardiopulmonary function, although they have lost higher brain or cerebral activity. In contrast, patients who are brain dead have a very different physiological condition in which all brain function, including the ability to regulate heartbeat and breathing, is irreversibly lost. For further discussion about persistent vegetative state and brain death, see F. Plum and D.E. Levy, "Outcome From Severe Neurological Illness: Should it Influence Medical Decisions?" 69 *Brain and Mind* 271 (1979); Ronald Cranford and Harmon Smith, "Some Critical Distinctions Between Brain Death and Persistent Vegetative State," 6 *Ethics in Sci. and Med.* 199, 201 (1979).

18. H. Tristram Engelhardt, Jr., "Defining Death: a Philosophy Problem for Medicine and Law;' 112 *Ann. Rev. Respiratory Dis. 587* (1975); Robert Veatch, "The Whole Brain Oriented Concept of Death: An Outmoded Philosophical Formulation," 3 *Journal of Thanatology* 13 (1975); Michael Greer and Daniel Wikler, "Brain Death and Personal Identity," 9 *Phil. & Pub. Affairs* 105 (1980); Bernard Gert, "Personal Identity and the Body;' *Dialogue* 458 (1971).

19. For example, N.Y. Public Health Law § 4210-c.l provides that, in the absence of a compelling public necessity, no dissection or autopsy of a deceased person can be performed if a surviving relative or friend of the deceased objects that the procedure is contrary to the religious belief of the decedent. Similarly, N.Y. Public Health Law § 4351.1, which requires that a request for consent to an anatomical gift be made upon the death of a patient, recognizes an exception to that requirement where there is reason to believe that the patient would have objected to the donation for religious reasons.

20. As stated by Julius Korein, "Fundamental to our thesis is the concept that death of a human being is the irreversible loss of those functions that we consider the essence of an individual." Julius Korein, Preface, 305 *Annals N.Y. Acad, of Sciences* (1978). Alexander Capron and Leon Kass observed that, "the formulation of a concept of death is neither simply a technical matter nor one susceptible of empirical verification. The idea of death is at least partly a philosophical question, related to such ideas as 'organism,' 'human,' and 'living.'" "A Statutory Definition of the Standards for Determining Human Death: An Appraisal and Proposal," 121 *U. Pa. L. Rev.* at 94.

21. Frank Veith, Jack Fein, Moses Tendler, Robert Veatch, Marc Kleiman, George Kalkines, "Brain Death and Organ Transplantation," 238 *J.A.M.A.* 1744 (1977).

22. Prior to the E*ulo* decision, legislation to establish brain death as part of the legal standard of death in New York had been introduced in the New York Legislature many times. The legislation was first introduced in 1974. A. 11669, 197 Sess. (1974).

23. See *Matter of Perricone*, N.Y.L.J., Apr. 2, 1985, p. 13, col. 3 (Sup. Ct., Nassau Co. Jan. 31, 1985). In *Perricone,* a Long Island hospital refused a family's request to discontinue artificial respiration of a man who had been declared brain dead. The hospital contended that a court order was needed to protect it from civil and criminal liability, despite the Court of Appeal's decision in *Eulo.* The State Supreme Court held that no court order was necessary to discontinue life support systems because *Eulo* had clearly established brain death as the legal standard for death in New York.

24. N.Y. Public Health Law § 2803.

25. See n. 23, supra. As discussed on page 13, supra, if an objection is made to the withdrawal of treatment on religious or moral grounds, a claim under the First Amendment may be asserted. Neither a regulation nor a statute establishing the brain death standard can vitiate that constitutionally-based claim. Nonetheless, the possibility of such First Amendment claims does not diminish the protection from liability offered by the *Eulo* decision and the proposed regulation in the vast majority of cases where no such objection is made. Nor does the possibility of such claims raise the spectre of endless litigation. The question of whether the First Amendment requires continued treatment if a person expresses a moral or religious objection to the brain death standard will be settled as a matter of law in one case and will not require further litigation.

Appendix A

Proposed Regulation

§ 1. Determination of Death.

(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.

(b) A determination of death must be made in accordance with accepted medical standards.

(c) Death shall be deemed to have occurred as of the time of the completion of the determination of death.

Appendix B

Report of the Medical Consultants on the Diagnosis of Death to the President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research

The Criteria for Determination of Death

An individual presenting the findings in either section A [cardiopulmonary] or section B [neurologic] is dead. In either section, a diagnosis of death requires that both cessation of functions, as set forth in subsection 1, and irreversibility, as set forth in subsection 2, be demonstrated.

A. AN INDIVIDUAL WITH IRREVERSIBLE CESSATION OF CIRCULATORY AND RESPIRATORY FUNCTIONS IS DEAD.

1. CESSATION IS RECOGNIZED BY AN APPROPRIATE CLINICAL EXAMINATION.

Clinical examination will disclose at least the absence of responsiveness, heartbeat, and respiratory effort. Medical circumstances may require the use of confirmatory tests, such as an ECG.

2. IRREVERSIBILITY IS RECOGNIZED BY PERSISTENT CESSATION OF FUNCTIONS DURING AN APPROPRIATE PERIOD OF OBSERVATION AND/OR TRIAL OF THERAPY.

In clinical situations where death is expected, where the course has been gradual, and where irregular agonal respiration or heartbeat finally ceases, the period of observation following the cessation may be only the few minutes required to complete the examination. Similarly, if resuscitation is not undertaken and ventricular fibrillation and standstill develop in a monitored patient, the required period of observation thereafter may be as short as a few minutes. When a possible death is unobserved, unexpected, or sudden, the

examination may need to be more detailed and repeated over a longer period, while appropriate resuscitative effort is maintained as a test of cardiovascular responsiveness. Diagnosis in individuals who are first observed with rigor mortis or putrefaction may require only the observation period necessary to establish that fact.

B. AN INDIVIDUAL WITH IRREVERSIBLE CESSATION OF ALL FUNCTIONS OF THE ENTIRE BRAIN, INCLUDING THE BRAINSTEM, IS DEAD.

The "functions of the entire brain" that are relevant to the diagnosis are those that are clinically ascertainable. Where indicated, the clinical diagnosis is subject to confirmation by laboratory tests as described below. Consultation with a physician experienced in this diagnosis is advisable.

1. CESSATION IS RECOGNIZED WHEN EVALUATION DISCLOSES FINDINGS OF a AND b:

a. CEREBRAL FUNCTIONS ARE ABSENT, AND...

There must be deep coma, that is, cerebral unreceptivity and unresponsivity. Medical circumstances may require the use of confirmatory studies such EEG or blood flow study.

b. BRAINSTEM FUNCTIONS ARE ABSENT.

Reliable testing of brainstem reflexes requires a perceptive and experienced physician using adequate stimuli. Pupillary light, corneal, oculocephalic, oculovestibular, oropharyngeal, and respiratory [apnea] reflexes should be tested. When these reflexes cannot be adequately assessed, confirmatory tests are recommended.

Adequate testing for apnea is very important. An accepted method is ventilation with pure oxygen or oxygen and carbon dioxide mixture for ten minutes before withdrawal of the ventilator, followed by passive flow of oxygen. (This procedure allows P&CO^2 to rise without hazardous hypoxia.) Hypercarbia adequately stimulates respiratory effort within thirty seconds when $PaCO^2$ is greater than 60 mmHg. A ten minute period of apnea is usually sufficient to attain this level of hypercarbia. Testing of arterial blood gases can be used to confirm this level. Spontaneous breathing efforts indicate that part of the brainstem is functioning.

Peripheral nervous system activity and spinal cord reflexes may persist after death. True decerebrate or decorticate posturing or seizures are inconsistent with the diagnosis of death.

2. IRREVERSIBILITY IS RECOGNIZED WHEN EVALUATION DISCLOSES FINDINGS OF a AND b AND c:

a. THE CAUSE OF COMA IS ESTABLISHED AND IS SUFFICIENT TO ACCOUNT FOR THE LOSS OF BRAIN FUNCTIONS, AND...

Most difficulties with the determination of death on the basis of neurologic criteria have resulted from inadequate attention to this basis diagnostic prerequisite. In addition to a careful clinical examination and investigation of history, relevant knowledge of causation may be acquired by computed tomographic scan, measurement of core temperature, drug screening, EEG, angiography, or other procedures.

b. THE POSSIBILITY OF RECOVERY OF ANY BRAIN FUNCTIONS IS EXCLUDED, AND...

The most important reversible conditions are sedation, hypothermia, neuromuscular blockade, and shock. In the unusual circumstance where a sufficient cause cannot be established, irreversibility can be reliably inferred only after extensive evaluation for drug intoxication, extended observation, and other testing. A determination that blood flow to the brain is absent can be used to demonstrate a sufficient and irreversible condition.

c. THE CESSATION OF ALL BRAIN FUNCTIONS PERSISTS FOR AN APPROPRIATE PERIOD OF OBSERVATION AND/OR TRIAL OF THERAPY.

Even when coma is known to have started at an earlier time, the absence of all brain functions must be established by an experienced physician at the initiation of the observation period. The duration of observation periods is a matter of clinical judgment and some physicians recommend shorter or longer periods than those given here

Except for patients with drug intoxication, hypothermia, young age or shock, medical centers with substantial experience in diagnosing death neurologically report no cases of brain functions returning following a six hour cessation, documented by clinical examination and confirmatory EEG. In the absence of confirmatory tests, a period of observation of at least twelve hours is recommended when an irreversible condition is well-established. For anoxic brain damage where the extent of damage is more difficult to ascertain, observation for twenty-four hours is generally desirable. In anoxic injury,

the observation period may be reduced if a test shows cessation of cerebral blood flow or if an EEG shows electrocerebral silence in an adult patient without drug intoxication, hypothermia, or shock.

Confirmation of clinical findings by EEG is desirable when objective documentation is needed to substantiate the clinical findings. Electrocerebral silence verifies irreversible loss of cortical functions, except in patients with drug intoxication or hypothermia. (Important technical details are provided in: American Electroencephalographic Society, Guidelines in EEG 1980, Section 4: "Minimum Technical Standards for EEG Recording in Suspected Cerebral Death." pp. 19-24, Atlanta 1980.) When joined with the clinical findings of absent brainstem functions, electrocerebral silence confirms the diagnosis.

Complete cessation of circulation to the normothermic adult brain for more than ten minutes is incompatible with survival of brain tissue. Documentation of this circulatory failure is therefore evidence of death of the entire brain. Four-vessel intracranial angiography is definitive for diagnosing cessation of circulation to the entire brain (both cerebrum and posterior fossa) but entails substantial practical difficulties and risks. Tests are available that assess circulation only in the cerebral hemispheres, namely radioisotope bolus cerebral angiography and gamma camera imaging with radioisotope cerebral angiography. Without complicating conditions, absent cerebral blood flow as measured by these tests, in conjunction with the clinical determination of cessation of all brain functions for at least six hours, is diagnostic of death.

Complicating Conditions

A. Drug and Metabolic Intoxication

Drug intoxication is the most serious problem in the determination of death, especially when multiple drugs are used. Cessation of brain functions caused by the sedative and anesthetic drugs, such as barbiturates, benzodiazepines, meprobamate, methaqualone, and trichloroethylene, may be completely reversible even though they produce clinical cessation of brain functions and electrocerebral silence. In cases where there is any likelihood of sedative presence, toxicology screening for all likely drugs is required. If exogenous intoxication is found, death may not be declared until the intoxicant is metabolized or intracranial circulation is tested and found to have ceased.

Total paralysis may cause unresponsiveness, areflexia, and apnea that closely simulates death. Exposure to drugs such as neuromuscular blocking agents or aminoglycoside antibiotics, and diseases like myasthenia gravis are usually apparent by careful review of the history. Prolonged paralysis after use of succinylcholine chloride and

related drugs requires evaluation for pseudo-cholinesterase deficiency. If there is any question, low-dose atropine stimulation, electromyogram, peripheral nerve stimulation, EEG, tests of intracranial circulation, or extended observation, as indicated, will make the diagnosis clear.

In drug-induced coma, EEG activity may return or persist while the patient remains unresponsive, and therefore the EEG may be an important evaluation along with extended observation. If the EEG shows electrocerebral silence, short latency auditory or somatosensory evoked potentials may be used to test brainstem functions, since these potentials are unlikely to be affected by drugs.

Some severe illnesses (e.g., hepatic encephalopathy, hyperosmolar coma, and preterminal uremia) can cause deep coma. Before irreversible cessation of brain functions can be determined, metabolic abnormalities should be considered and, if possible, corrected. Confirmatory tests of circulation or EEG may be necessary.

B. Hypothermia

Criteria for reliable recognition of death are not available in the presence of hypothermia (below 32.2°C core temperature.) The variables of cerebral circulation in hypothermic patients are not sufficiently well studied to know whether tests of absent or diminished circulation are confirmatory. Hypothermia can mimic brain death by ordinary clinical criteria and can protect against neurologic damage due to hypoxia. Further complications arise since hypothermia also usually precedes and follows death. If these complicating factors make it unclear whether an individual is alive, the only available measure to resolve the issue is to restore normothermia. Hypothermia is not a common cause of difficulty in the determination of death.

C. Children

The brains of infants and young children have increased resistance to damage and may recover substantial functions after exhibiting unresponsiveness on neurological examination for longer periods than do adults. Physicians should be particularly cautious in applying neurologic criteria to determine death in children younger than five years.

D. Shock

Physicians should also be particularly cautious in applying neurologic criteria to determine death in patients in shock because the reduction in cerebral circulation can render clinical examination and laboratory tests unreliable.

Minority Report

Time of Death Legislation Rabbi J. David Bleich

Developments in medical science and technology have greatly expanded our ability to treat illness and disease. The resultant cures and elimination of pain are certainly a boon to mankind. However, the same knowledge and technology have also yielded the means of prolonging life even in situations in which the patient's condition cannot be ameliorated and in which a cure is far beyond the scope of the human intellect. These advances in medical science have forced society to reformulate and re-examine age old questions:

Is every life worth preserving?
Should an autonomous individual have the right to demand the termination of his life for certain specified reasons, for arty reason, or even for no reason?

Since it is only assiduous application of human intelligence which has made possible survival of the human organism beyond the point of perceived meaningfulness, does man have the moral right to withhold application of the technological fruit of the human intellect when such application yields pain rather than pleasure and anguish rather than happiness?

Even more perplexing is the situation in which withdrawal of life-support systems would make it possible to harvest organs for purposes of transplantation and thereby preserve the life of another human being who faces imminent death. Is it proper to foreshorten the life of one human being, even passively, in order to save the life of another?

With the possible exception of abortion, the establishment of criteria for defining the time of death and the question of withholding treatment from terminally ill patients are the two most widely debated issues in bioethics today. Yet it is a fundamental misperception to regard these as two issues rather than as dual aspects of a single issue.

The Task of Defining Death

The ongoing debate concerning adoption of so called "brain death" criteria involves absolutely no controversy with regard to either factual or ontological matters. Definitions, by their very nature, are tautologies. The common law definition of death as the "total stoppage of the circulation of the blood, and a cessation of the animal and vital functions consequent thereupon, such as respiration, pulsation, etc." does little more than provide verbal shorthand for statements affirming or negating the presence of those phenomena. The term "death" does not denote a state or a phenomenon semantically distinguished from the criteria employed in its definition. The term itself is descriptive rather than prescriptive and hence its use is entirely a matter of convention.

There is nothing mysterious or mystical about the use of most words in human discourse. Nor, with regard to most words, is there anything arcane about the parameters of usage—and hence the definition—of any given term. The common law definition of death is nothing more than the adoption for legal purposes of the term as it was, and continues to be, used in common parlance. To be sure, that definition is a tautology, as is every definition. But words are assigned certain meanings because they are needed as a form of verbal shorthand for the communication of concepts. The term "death," particularly as predicated of human beings, was made synonymous, not with decomposition of the body, the onset of putrefaction, or with rigor mortis, but with the cessation of respiration and cardiac function precisely because it is at that stage that the human organism is beyond medical treatment. As such, it is no more than an empirical statement devoid of any value judgment. Moralists of bygone ages were perfectly capable of debating the issues of euthanasia, both active and passive, despite this definition—or better, because of the definition. It is precisely because death is defined in terms of criteria which reflect the empirical impossibility of continued medical treatment that there is room for debate concerning withholding of treatment (passive euthanasia) or overt "negative treatment" (active euthanasia) at a stage prior to death when treatment, both positive and negative, is yet efficacious.

From time immemorial death has been equated with cessation of cardiac and respiratory activity. That is certainly the connotation of the word "death" in common parlance. There is nothing mystical or occult in the association of these phenomena with the term "death." As has already been noted, quite apart from the metaphysical and theological ramifications of this definition, "death" is the term employed for the physiological state in which any further attempt to provide medical or physical assistance of any kind is an exercise in futility. Futility in this

context is to be understood in its literal sense,
i. e., as being of no effect whatsoever, as distinct from being of effect, albeit in a "meaningless" or undesired form. Since resurrection of the dead is beyond the ken of human science, there is nothing one can do for a cadaver insofar as physical well-being is concerned. Prior to cessation of the heartbeat and respiration, provision of nutrients, liquids and medications can affect the course of the patient's illness; even if they yield no improvement they may succeed in preserving the status quo. Subsequent to irreversible cessation of cardiac and respiratory activity there is nothing known to medical science that can make the slightest difference to the biological functions of the patient.'

Until recent years there was no reason to disturb the definition of death. The usual course of a terminal illness was relatively swift. Certainly, instances of a patient suffering from a chronic illness which reduced him to a nonsentient state were extremely rare. Hence there existed no reason to tamper with the notion that nothing be done to foreshorten the life of a patient. Renunciation of euthanasia as an acceptable social policy led to the result that any act having a deleterious effect upon residual life forces was eschewed.

"Brain Death": A Value Judgment

So long as continued therapy is a medical impossibility, no ethical issue arises with regard to either commanding or proscribing its utilization. When life cannot be sustained, no debate arises with regard to a moral mandate to preserve life under circumstances in which, arguably, the quality of that life is of questionable value. It is therefore readily understandable that such debates have arisen only in the wake of the vast strides in medical knowledge and technology which have occurred over the past two decades or so. In particular, the development of new resuscitative techniques and the ability to maintain respiratory activity by artificial means even after the cessation of brain function have made these issues matters of topical importance. Medical science has developed the capacity to sustain life for some time subsequent to cessation of neurological function but lacks the ability to restore the patient to any semblance of health

'To the extent that during the early and mid-19th century there were challenges to pronouncing a patient dead on the basis of these criteria, those challenges were based upon the unreliability of then available methods of measuring heartbeat and respiration and the concern that further medical ministration might *not* be futile in the sense indicated.

or consciousness, or even to prevent the continued downward progression which inevitably results in the death of the patient within a relatively short period of time.

The advances which have occurred in medical science are pragmatic rather than theoretical. They provide the means for accurate and precise determination of levels of physiological function, the basis for confidence in diagnosing and predicting the course of illness, as well as the technological ability to sustain life, but they do not provide new insights into the meaning of life and death. Nor do they offer novel means of delineating the boundary between life and death. Application of newly-developed techniques certainly enables the physician to describe with confidence the physiological state of his patient and to anticipate the prognosis with a high degree of accuracy. There is indeed a clear and convincing association between manifestation of certain neurological criteria and impending cessation of cardiac activity. That is not to say that neurological criteria are themselves the indicators of death; it is merely to state that those criteria constitute the harbinger of death. This was candidly acknowledged by the chairman of the Harvard Ad Hoc Committee in his statement that the Harvard criteria do not constitute a definition of death but rather a definition of irreversible coma.

The utilization of neurological criteria in determining that a patient is in a state of irreversible coma is a medical judgment and, as stated earlier, is not at all the subject of serious controversy on the part of those who reject the concept of brain death. A physician, in his professional capacity, diagnoses an illness, states a prognosis and advises a therapy when therapy is available. The physician is also available to implement and supervise the therapy. But the decision with regard to whether or not to act upon the information supplied by the physician is not a medical decision. It is the decision of an autonomous moral agent; hence the need for informed consent before permitting a physician to act upon his expert professional judgment. A physician may advise that a limb has been fractured, that it may be set and use of the limb may thereby be restored, while failure to set the bone will result in loss of use of the limb and even in the possible need for amputation at some future time. The physician will also offer information with regard to the need for anesthesia, the length of the anticipated hospital stay and the costs involved. The physician has no further medical advice to give. The patient must then weigh the risks of general anesthesia, the impact of temporary confinement in a hospital upon his personal life and business affairs, as well as the economic and emotional costs to himself. The patient's decision involves a value judgment, a balancing of the value of the restoration of function in a limb versus other values.

In the example given, the patient's probable decision is not difficult to predict. Given the system of values prevalent in our society the patient's decision is virtually predetermined, but that is not to say that no decision is required. In other cases the situation is not so clear-cut. The physician diagnoses lung cancer and predicts that if the condition is left untreated death will occur within six to twelve months. He offers a treatment protocol that includes invasive surgery, radiation and chemotherapy and, on the basis of statistical evidence, declares that the five-year survival rate is between 10 and 15 percent. Again, the patient, not the doctor, must determine whether the value of possible enhanced longevity warrants the burden imposed by the inconvenience, pain and cost of treatment.

A determination by the physician of the existence of a state of irreversible coma constitutes a description of the nature of the patient's physiological state coupled with a prediction of irreversibility. A determination that life can continue to be supported under such circumstances by means of life-support systems is also a medical determination. But the decision to continue or to withdraw life-support systems is not at all a medical decision; it is a value judgment.

Withholding of Treatment: The Moral Debate

Our society is presently engaged in an ongoing debate concerning quality of life issues. Many would argue that not only is the continued maintenance of a patient in a state of irreversible coma morally meaningless, but that preservation of a patient in a chronic vegetative state is also devoid of value. Others would raise the quality of life threshold in asserting that a life is endowed with human value only when accompanied by the capacity for entering into meaningful relationships or social interaction. The spectrum of human sentience is infinitely divisible and an argument can be made, and has been made, for drawing the line at virtually any point on the continuum. Indeed, many who decline to include patients in a chronic vegetative state among the class of persons from whom treatment should be withheld do so solely because of their fear that society may rapidly fall down the slippery slope leading to the relegation of all mentally incompetent individuals to a similar status.

Those value judgments have a direct impact upon very specific questions concerning a person's right, or the right of society, to withhold treatment. Possible answers to such questions are virtually infinite in number. One may posit personal autonomy as an absolute value and accord every member of society the right to terminate his or her life at will. Logically, adoption of such a position would entail that society grant immunity from penal sanctions and social censure to those

who aid and abet suicide. At the other extreme of the spectrum of possible policy decisions, one might adopt the view that all lives must be preserved under all circumstances. Or one can attempt carefully to balance the two values one against the other, viz., society's interest in the preservation of life on one hand and the precise circumstances and situations in which the first must be given preference over the second and those in which the second is to prevail against the first. Alternatively, one may espouse the principle that when the quality of life falls below a certain threshold level society no longer has an interest in the preservation of that life. These are precisely the issues involved in formulation of social policy— whether by legislative action or judicial decree—with regard to matters such as the utilization of a living will, implementation of a durable power of attorney, decision-making by surrogates, implementation of guidelines governing cardiopulmonary resuscitation and establishment of criteria for the withholding of treatment.

The argument in favor of withholding treatment from the irreversibly comatose patient can be formulated in one of two ways. It may be asserted that such life is entirely devoid of value and has no moral significance. There are some who would clearly espouse such a position. Those who do so bear the burden of formulating in a clear and precise manner the necessary attributes of humanhood which are correlative with human life endowed with value and moral significance. There is surely no reason for accepting neurological dysfunction as the sole point of demarcation serving to distinguish between life which is morally significant and life which is devoid of value. It is no accident that many of those who adopt the radical "no value" approach are quite willing to accept other quality of life tests and to adopt the position that absent a certain quality threshold, preservation of life is not a value and generates no imperative. They then differ among themselves only with regard to the nature or threshold of the quality of life which is to constitute the dividing line.

The argument in support of withholding treatment from an irreversibly comatose patient may also be formulated in an entirely different manner. It is not necessary to deny the moral value of human life even in a moribund and non-sentient state in order to advocate, in a morally cogent manner, a policy of non-treatment. Arguably, such a policy might be justified on the grounds that it is designed to further other values which, at least under the given circumstances, are more compelling.

A moral system, by virtue of its very nature, must posit a set of values. Yet no moral system can demand that its adherents promote each and every value in every conceivable situation. Truth-telling is a value. But surely, all ethicists would agree that not only is telling a lie in order to conceal the location of a dangerous weapon from a madman not a

violation of any moral code, it is morally mandated. Every moral maxim must be understood as qualified by a *ceteris paribus* clause. The posited value is clearly a moral *desideratum* and in a utopian universe would always be achievable. But in the real world moral values are frequently in conflict with one another in the sense that not all moral values can possibly be pursued or achieved simultaneously. Insofar as the example of the madman and the dangerous weapon is concerned, both truth-telling and preservation of life are values which ought to be promoted. But it is impossible to have one's moral cake and to eat it also. Truth-telling in that situation will result in loss of human life. Preservation of life will entail a lie.

What does a moral agent do when two values come into conflict with one another? Every system of ethics must either establish a hierarchical ranking of the values it posits or must formulate canons for decision-making which enable a moral agent to adjudicate between competing values. When the conflict is between truth-telling and preservation of life the dilemma is readily resolvable. Assuredly, in a system of weighted values, a white lie pales in significance when measured against the value of human life.

In other situations the resolution of conflicting claims that arise from competing values is far less obvious. The Declaration of Independence speaks of men as endowed by their Creator with certain "unalienable rights," a phrase which is synonymous with what philosophers speak of as principles of natural law. The underlying notion is that every individual is created by God and endowed by Him with certain prerogatives which are inalienable in nature. Those rights, in the eyes of our founding fathers, include, "life, liberty and the pursuit of happiness." In the philosophy of John Locke this notion was phrased a bit differently. Locke spoke of life, liberty and enjoyment of property. To the American mind, the concept of happiness is apparently reducible, at least in part, to enjoyment of property. The "unalienable rights" of which the Declaration of Independence speaks represent fundamental values.

Individuals are endowed with life and have a God-given right to have that life safeguarded and protected. Individuals are endowed with liberty, and no person ought to interfere with the personal autonomy of any other human being. Individuals are entitled to the pursuit of happiness and to the undisturbed enjoyment of their property.

However, in the real world, the value known as preservation of life frequently comes into conflict either with happiness or with its analogue, preservation of property. After all, society has access to only a finite amount of material resources, or so we are told. What happens

when preservation of life simply costs too much? Preservation of life may be deemed to cost too much in terms of the expenditure of resources and services in prolonging that life. Alternatively, preservation of life may cost too much in emotional coin because the patient is in pain, the family is in a state of anguish, or the physicians experience frustration because, their diligent ministrations notwithstanding, they are incapable of effecting a cure. What happens when a conflict arises between preservation of life and promotion of happiness? Happiness and elimination of pain are, after all, but two sides of the same coin. In the real world such values often come into conflict with one another.

Well-intentioned individuals may differ with regard to the proper resolution of such dilemmas. Different religious traditions have certainly presented diverse answers. A moral system which distinguishes between "ordinary means" versus "extraordinary means" or which sanctions the withholding of "heroic measures" has not rendered a decision that human life which requires heroic measures or extraordinary means for its preservation is of no moral value. Rather, it has recognized that certain factors render the mode of treatment heroic or extraordinary by virtue of the fact that these factors represent other values which must be compromised or sacrificed in order to preserve the life in question. The pain and suffering, or even the inconvenience involved, may be such a conflicting value. The sheer cost of treatment may constitute such a value. The emotional distress and suffering caused to others may be such a value. In each instance the sanction provided for withholding treatment involves a decision that preservation of life is indeed a value but is, in effect, only one value among many. Hence, under certain circumstances, preservation of life is rendered subservient to preservation of other values.

Time of Death Statutes

Time of death statutes are not lexicographical exercises. Any attempt to categorize them as merely legislative reflection of more precise language usage is an act of intellectual or moral dishonesty and possibly both. Neither is it correct to state that such statutes reflect advanced scientific knowledge and expertise. It must be reiterated that there is absolutely no medical, scientific or factual issue involved in the "time of death" controversy.

Adoption of neurological criteria of death for legal purposes generates a legal state in which a patient manifesting such criteria enjoys the rights, immunities and privileges, not of a human being, but of a corpse. It is a statement, not of ontological fact, but of how society wishes to treat a human being in that particular physiological state.

This is no more than the legislative embodiment of a value judgment. Essentially, it is a decision to withhold treatment from a person

manifesting a given clinical profile. It is not a judgment that further medical treatment will be of no avail. There is no requirement, legal or moral, that a physician must employ therapy which is entirely useless and represents nothing more than an exercise in futility. It is precisely because the patient is *not* beyond medical treatment that a determination not to employ treatment is advocated, i.e., it is precisely because bodily functions, including, but not limited to, cardiac activity and body metabolism can be preserved by continued medical treatment that a decision not to treat is advocated.

The term 'Time of Death Statute" is a misnomer. The only accurate term is "Withholding of Treatment Statute." The sole question worthy of debate is: Should continued medical treatment be provided for an irreversibly terminal patient who manifests clinical symptom x, y or z?

That question poses a moral issue, not a question of medical fact or judgment. The physician is uniquely qualified to diagnose illness, to describe the physical damage suffered by the patient, to make a judgment with regard to the probable prognosis and to assess available modes of therapy. But, subsequent to determination of those clinical matters, the decision to treat or not to treat is a value judgment, not a medical decision.

Adoption of a brain death statute is nothing other than a moral judgment to the effect that there is no human value which augurs in favor of the preservation of the life of an irreversibly comatose patient or that there are other values which must be accorded priority. That is a question with regard to which reasonable people may differ. It is certainly a question with regard to which religious traditions have differed.

The attempt to justify withholding of treatment under the guise of redefinition of terms is a thinly-veiled attempt to secure moral and emotional approbation for a policy which would otherwise be greeted with repugnance and even indignation. It is the deeply held conviction of many, and probably of the majority, that all human life is sacred and inviolate. Withholding of treatment has the effect of snuffing out human life. Any *ad hoc* decision to act in such a manner involves a great deal of soul-searching and frequently engenders feelings of guilt. On the other hand, no one advocates medical treatment or continuation of life-support systems for a corpse. Pronouncing a person dead has the emotional effect of removing any aura of further moral responsibility. Such a process is, however, intellectually

dishonest. In a less than fully informed world lexicographical slight of hand may affect popular perception, but it should not be permitted to affect the universe of moral discourse.

The Social Consensus

There is no gainsaying the fact that, as a society, we have reached a consensus that the life of an irreversibly comatose patient should not be preserved. Although deplored by some moralists and theologians, a consensus has been reached that a cogent distinction can be made between a patient in a state of irreversible coma and a patient in a chronic vegetative state. That societal consensus is reflected in legislative statutes, judicial opinions and in the report of this Task Force. But it must be emphasized that it is a consensus regarding a value, not a fact.

This determination is accompanied by a growing consensus that an autonomous patient ought to be able to refuse any and all treatment regardless of the quality of life which might be preserved and an emerging concomitant consensus that the patient's designee or surrogate ought to be able to make such decisions on his or her behalf. Yet the feeling is that no such decision need be made on a case by case basis by the "brain dead" patient or by his surrogate. Presumably, the feeling is that since the vast majority of members of our society are willing to accept brain death criteria as normative, no authorization or consent need be sought for withdrawing further treatment in such circumstances.

The Legal Remedy: Legislation Permitting Withdrawal of Treatment

The most candid and forthright method for acceptance and legitimization of such a standard would be in the form of legislation specifically permitting withdrawal of all treatment, including life-support mechanisms, from a patient in such a physiological state. Simple logic dictates that, pursuant to legislation of this nature, such withdrawal not be deemed a supervening event serving as a barrier to prosecution for homicide or manslaughter. Such a statute would serve as an unequivocal expression of the moral standards accepted by our society without any distortion of factual truth.

There are also strong public policy considerations auguring in favor of such a course of action. The purpose of modifying the heretofore accepted common law definition of death is twofold: 1) not to prolong inordinately the process of dying; and 2) to allow for harvesting of organs for transplant purposes. Those are the sole societal concerns which acceptance of neurological criteria of death is designed to meet. Those concerns can be met equally well by the simple expedient of a statute sanctioning "pulling the plug" when those criteria are manifest.

No new definition of death is required in order to achieve those ends.

On the other hand, redefinition of death in terms of neurological criteria renders the determination of the precise time of the occurrence of this newly defined concept of death extremely problematic. Determination of the moment at which death occurs is of legal significance with regard to a host of legal matters including, among others, legal capacity of the patient's spouse to remarry, establishment of chronological priority of death among multiple decedents for purposes of inheritance and, at times, for tax purposes. The precise time of manifestation of the common law criteria of death can, in the vast majority of cases, be determined with a high degree of precision. Cessation of cardiac and respiratory activity can usually be observed even by a layman. Brain death, by virtue of its very nature as reflected in the need for neurological evaluation and repetition of diagnostic tests after a set interval, cannot be determined other than in a hospital setting and even then cannot be ascertained until a significant period of time has elapsed after the determinant events have already occurred. The result of redefining death for legal purposes is to generate a situation inviting litigation concerning indeterminable factual matters. The problems are not dissimilar to those well known in the annals of law which arise from the death of several parties in a common disaster.

To cite a further and rather far-fetched consequence: society certainly does not want the spouse of a "brain dead" patient to enter into a new marital relationship while the patient is still connected to a respirator. Yet adoption of a neurological definition of death not only makes that a distinct possibility but enables the husband or wife of a comatose patient upon whom the appropriate neurological tests were not performed to remarry and, in defense to a bigamy prosecution, to plead that the first spouse was indeed already "brain dead" at the time of the remarriage but that the physician had simply failed to perform the neurological tests necessary to confirm that fact. That, of course, could neither be proven nor disproven—but since the burden of proof lies with the prosecutor the defense would presumably prevail.

Thus, redefinition of the concept of death for legal purposes is an overcorrection which brings in its wake results that are undesired and undesirable. Nevertheless, there appears to be much support for such an approach if for no other reason than that it is emotionally and psychologically simpler to think of the irreversibly comatose patient "as if' dead. And it appears to be much neater to treat the person "as if' he or she is dead for all purposes of law rather than

merely for some purposes. It is of course well known to all students of law, and indeed it is axiomatic, that the meaning of a word for purposes of law does not necessarily bear any relation to the dictionary definition of the word or to the meaning of that word in common parlance. A word or term, when defined in a statute, becomes a code phrase or a form of legal shorthand to be used as a substitute for the definition. Definition of death in terms of neurological criteria, unfaithful to ontological truth as it may be, does satisfy the need for legal shorthand as perceived in the eyes of some.

Protection of Religious and Civil Liberties

The simplest, most expedient and most honest method of resolving the problem is not by redefining death, but by enacting a statute providing for the withholding of life support mechanisms from irreversibly comatose patients without at all disturbing the classical definition of death. Less desirable, but not totally devoid of merit, is legislation embodying neurological criteria as the standard for pronouncing death. Any legislation dealing with this matter must perforce acknowledge that what, in truth, is involved is actually withdrawal of treatment and that, accordingly, there exists a moral right to demand continuance of treatment. And legislation in this area is a matter of absolute necessity precisely because of the need to affirm this right.

In a pluralistic society, no segment of the populace should be permitted to impose its moral views upon another. Every person is entitled as a matter of right to determine the circumstances in which he does not wish to be treated; each person has an equal right to determine the circumstances in which he *does* wish to be treated. A woman's body, it is urged, is her own and no one can dictate to her whether to abort or not abort the fetus. The irreversibly comatose patient has the selfsame right of privacy with regard to his or her body and the prolongation of his or her life. As a society, we dare not create a system of law which would deny this right—and certainly we dare not compound that effrontery by disguising the mandatory imposition of a particular value judgment upon conscientious objectors under the color of a declaration of fact.

Certainly, public policy should recognize that different religious systems resolve moral dilemmas in different ways. It is established public policy in our country that diverse systems of religious values be recognized and accommodated. Indeed, such accommodation is constitutionally mandated save in the face of a compelling state interest. In manifold areas pertaining to employment, education and family law such accommodation is required by virtue of legislative fiat and/or judicial mandate. Diverse value systems are certainly entitled to the same recognition and accommodation in matters pertaining to

bioethical issues.

Recognition of the claims of diverse religious traditions is essentially a matter of civil liberty. For this reason it is certainly arguable that the state should not interfere with an individual's right to be treated as a living human organism even though he may be in a state of irreversible coma, and that the state should not force treatment upon such persons against their previously announced, or generally presumed, will. Nor is the state necessarily compelled to treat the termination of the life of an irreversibly comatose person whose life is sustained in accordance with his wishes as an act of homicide to be punished in the appropriate manner set forth in the Penal Code. The state need merely acknowledge that it respects and accommodates the religious and moral beliefs of all of its citizens and will not treat a person, or allow him to be treated, in a manner which is repugnant to him. Of course, one who interferes with the legally protected civil liberties of another is a lawbreaker. But society may well declare the appropriate punishment to be that which is prescribed for violation of civil liberties, rather than that provided for homicide. Thus, there is no anomaly between adoption of neurological criteria of death in a criminal code and incorporation of a so-called "religious exemption" provision in other areas of law.

First Amendment Issues

Quite apart from the basic principles of liberty and personal autonomy, the provisions of the Free Exercise Clause of the First Amendment should serve to guarantee that even when statutes provide that neurological criteria may be employed for purposes of pronouncing a patient dead or, more accurately, that neurological criteria may be employed for purposes of withholding further treatment, such criteria should not be utilized for the purpose of removing or denying life-support mechanisms in violation of a patient's religious or moral convictions.

To be sure, the First Amendment has long been understood as providing absolute immunity with regard to matters of religious belief but not as providing absolute license in matters of religious practice. As early as 1879, the Supreme Court ruled in *Reynold vs. United States* that a free exercise claim could not be asserted as a defense against prosecution for violation of statutes prohibiting the practice of bigamy. Yet not every state interest or concern can justify the placing of a burden or restriction upon the right to practice one's religion freely. Thus, in *Schneider vs. State,* the Supreme Court ruled that the state's interest in preventing the littering of public streets cannot justify a municipal ordinance which would effectively ban

dissemination of religious literature. More recently, in *Sherbert vs. Verner*, the Supreme Court ruled that the state must ordinarily grant exemption from provisions of law in order to permit the free exercise of religion. Once a claimant has shown that the challenged regulation imposes some significant burden upon the free exercise of his or her religion, it becomes incumbent upon the state to demonstrate that the regulation, or the denial of an exemption, is necessary in order to protect a compelling state interest. Such accommodations can be denied, the Court declared, only in the face of "some substantial threat to public health, safety, peace or order."

It is quite difficult to identify a state interest which is so compelling as to warrant application of neurological criteria of death in violation of a patient's free exercise rights. It must be remembered that the harvesting of organs even in order to save the life of others, laudable as that purpose may be, is not sanctioned by law other than upon the previously granted consent of the deceased or of the next of kin. Hence, the need to preserve the life of another person cannot constitute a compelling state interest under such circumstances since, in matters pertaining to organ transplants, that goal may readily be thwarted. It may also be contended that allowing a patient to occupy a bed in an intensive care unit (ICU) renders that bed unavailable for use by another patient for whom the availability of such a bed may literally be a matter of life or death. Assuredly, the state does have a compelling interest in preserving life and in restoring its citizens to good health. Yet, as applied to the matter under discussion, the argument is entirely specious. Nothing in current law or administrative regulations prevents hospitals or health care professionals from exercising their own judgment in deciding how to allocate scarce medical resources or in deciding which patient to treat when all patients cannot be treated. It is tragic that triage decisions must ever be made, yet emergency room personnel are not infrequently called upon to make such decisions and do so in accordance with their own best medical judgment. Similarly, patients may be removed from the ICU and placed elsewhere when other patients have a greater need for, or may derive greater benefit from, the ICU facility. It is not at all argued that a free exercise claim can be asserted when to do so would prevent the exercise of sound medical judgment and thereby rebound to the detriment of others.

Moreover, the law has long recognized that, even when a free exercise claim cannot be asserted in order to compel privileged treatment, there exists a "zone of permissible accommodation" within which the law may legitimately accommodate religious practices. Thus, a school may institute a program of released time in order to facilitate religious instruction; Sabbath observers may be exempted from restrictions against commercial activity on Sunday; conscientious objectors may be

exempted from military service, etc. In a pluralistic society, recognition and respect for the religious convictions and practices of others is a social value of the highest importance. It may cogently be argued that exemption from a requirement that death be pronounced on the basis of neurological criteria, when such determination would violate sincerely held religious convictions, is a constitutionally protected right. But, even if not constitutionally mandated, such religious convictions are no less deserving of accommodation than are matters of far less pressing concern.

In a pluralistic society, disparate value judgments with regard to newly-arising questions of moral concern are to be anticipated. Public policy must be formulated within broad parameters of social morality in order to allow for diversity within unity. The strength of American democracy lies in its system of law which reflects a keen sensitivity for the accommodation of diverse value systems in forging "one nation, under God, with liberty and justice for all."

Minority Report

Proposed Legislation

Alternative 1

STATE OF NEW YORK

An Act concerning the determination of death and supplementing

Title of the Revised Statutes

BE IT ENACTED by the Senate and General Assembly of the State of New York.

1. This act shall be known and may be cited as the "Uniform Determination of Death Act."

2. An individual who has sustained an irreversible cessation of circulatory and respiratory functions is dead for all purposes of law.

3. A person whose heartbeat and respiration are maintained on the basis of mechanical means and who has sustained an irreversible cessation of all functions of the brain, including the brain stem, may be treated as if dead, for purposes of termination or withholding medical treatment and for purposes of removal of organs when such removal is otherwise sanctioned by law; provided that no action shall be taken in reliance upon the provisions of this section if to do so would violate the sincerely held religious or moral beliefs or convictions of the individual, as earlier announced by the individual himself or as attested to by a family member or next friend, or in the case of a minor or incompetent person, if to do so would violate the sincerely held religious or moral beliefs or convictions of the person's parent or guardian. It shall be the duty of any person seeking to act in reliance upon the provisions of this section to use reasonable means to determine, from the individual's family member or next friend, that such action will not violate the individual's religious or moral beliefs or convictions or, in the case of a minor or incompetent person, that such action will not violate the moral beliefs or convictions of said parent or guardian.

For purposes of this Act, next friend shall mean any person who maintains such regular contact with such individual as to be familiar with his religious or moral beliefs or convictions and who may be asked to present an affidavit stating the facts and circumstances upon which the claim that he is such friend is based.

4. Withdrawal of life support mechanisms or removal of a bodily organ subsequent to irreversible cessation of all functions of the brain, including the brain stem, shall not be deemed a supervening cause serving to bar either criminal or civil proceedings in cases of homicide, manslaughter or wrongful death.

5. A determination of death or a determination to treat a person as if dead in accordance with the criteria herein announced shall be made in accordance with accepted medical standards.

6. This act shall take effect immediately.

Minority Report

Proposed Legislation
Alternative 2

STATE OF NEW YORK

An Act concerning the determination of death and supplementing

_____ -Title of the Revised Statutes

BE IT ENACTED by the Senate and General Assembly of the State of New York.

1. This act shall be known and may be cited as the "Uniform Determination of Death Act."

2. A person may be pronounced dead upon suffering irreversible cessation of all circulatory and respiratory functions; or, in the cases of a person whose heartbeat and respiration are maintained on the basis of mechanical means, upon a determination that the person has sustained an irreversible cessation of all functions of the brain, including the brain stem; provided that no action shall be taken in reliance upon the provisions of this section with regard to a person whose heartbeat and respiration are maintained on the basis of mechanical means if to do so would violate the sincerely held religious or moral beliefs or convictions of the individual, as earlier announced by the individual himself or as attested to by a family member or next friend, or in the case of a minor or incompetent person, if to do so would violate the sincerely held religious or moral beliefs or convictions of the person's parent or guardian. It shall be the duty of any person seeking to act in reliance upon the provisions of this section to use reasonable means to determine, from the individual's family member or next friend, that such action will not violate the individual's religious or moral beliefs or convictions or, in the case of a minor or incompetent person, that such action will not violate the moral beliefs or convictions of said parent or guardian.

For purposes of this Act, next friend shall mean any person who maintains such regular contact with such individual as to be familiar with his religious or moral beliefs or convictions and who may be asked to present an affidavit stating the facts and circumstances upon which the claim that he is such friend is based.

3. Withdrawal of life support mechanisms or removal of a bodily organ subsequent to irreversible cessation of all functions of the brain, including the brain stem, shall not be deemed a supervening cause serving to bar either criminal or civil proceedings in cases of homicide, manslaughter or wrongful death.

4. A determination of death on the basis of the criteria herein announced shall be made in accordance with accepted medical standards.

6. This act shall take effect immediately.