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Toward A Legally And Medically Acceptable Definition of Death

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Abstract

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KEYWORDS: death, legally, acceptable

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Death may be defined as the absence of life.¹ However, this type of circular definition is only as concrete as the corollary term itself. The tragedy faced by the Quinlan family in 1976² focused the attention of the entire country on the need for a realistic definition of death within which both the medical and legal professions could operate.³ Legislatures and the judiciary have attempted to establish a framework within which both professions can function effectively without infringing on the rights of the dead or dying patient.⁴

Advances in medical technology have necessitated a change in perspective of the concept of death. The purpose of this paper is to examine this shift and to enumerate the ways in which the legislatures and the courts have attempted to define death. Finally, the paper will distinguish between the person who meets the definitional standard of death and the person whom the medical and legal professions will allow to die.⁵

Traditionally, death has been viewed as an event in time,⁶ the occurrence of which triggers such legal issues as inheritance, property rights, and liability under insurance contracts.⁷ Until recently, the de-

^{1.} Victor, Brain Death: An Overview, 27 Med. Trial Tech. Q. 37, 38 (1980).

^{2.} In re Quinlan, 137 N.J. Super. 227, 348 A.2d 801 (Ch. Div. 1975), rev'd, 70 N.J. 10, 355 A.2d 647 (1976), cert. denied sub nom. Garger v. New Jersey, 429 U.S. 922 (1976).

^{3.} Victor, supra note 1, at 38.

^{4.} Collester, Death, Dying and the Law: A Prosecutorial View of the Quinlan Case, 30 Rutgers L. Rev. 304 (1977). Dawben, Prometheus Revisited: Popular Myths, Medical Realities and Legislative Actions Concerning Death, 5 J. Health Pol., Pol'y & L. 250 (1980). Comment, North Carolina's Natural Death Act: Confronting Death With Dignity, 14 Wake Forest L. Rev. 771 (1978).

^{5.} Capron & Kass, A Statutory Definition of the Standards for Determining Human Death: An Appraisal and a Proposal, 121 U. Penn. L. Rev. 87 (1972).

^{6.} See Hoffman & Van Cura, Death - Five Brain Criteria, 1978 Med. Trial Tech. Q. 377, 378 (1978).

^{7.} In re Bowman, 94 Wash. 2d 407, 617 P.2d 731, 734 (1980) (en banc). Ufford,

termination of the time of death has been relatively straight forward both medically and legally.8 "When the heart stopped beating and the lungs stopped breathing, the individual was dead according to physicians and according to the law."9

When the question did arise as to the viability of an individual, courts made the determination based on the then universally accepted criteria of heartbeat and respiration.¹⁰ These criteria were not statutory, but had developed as part of the common law, with many courts quoting directly from *Black's Law Dictionary*.¹¹

"With the recent advancement of medical science, the traditional common law 'heart and lung' definition is no longer adequate." Modern equipment, such as respirators and dialysis machines, and surgical procedures, such as organ transplants, can now prolong the life of a patient who at an earlier period would have died. The situation created by the inadequacy of the traditional definition can be best illustrated by reference to the issues raised in relation to heart transplants. A donor's cardiac function can be maintained mechanically for an indefinite period of time. If the physician removes the heart from the donor while it is still beating, albeit mechanically, the physician may be liable for homicide. However, if the donor's heart is not maintained mechanically and the heart stops beating, the physician would be absolved of any liability but the operation would be useless. 16

The advent of life-sustaining support mechanisms has shifted our perspective in relation to the concept of death. Death can no longer be viewed by the legal profession as a single event in time, but must be

Brain Death/Termination of Heroic Efforts to Save Life - Who Decides?, 19 WASHBURN L.J. 225 (1980).

- 8. Victor, supra note 1, at 39.
- 9. 94 Wash. 2d at __, 617 P.2d at 734.
- 10. Victor, supra note 1, at 50.
- 11. BLACK'S LAW DICTIONARY 488 (4th ed. 1951) defines death as "the cessation of life; the ceasing to exist; defined by physicians as total stoppage of the circulation of the blood, and a cessation of the animal and vital functions consequent thereon, such as respiration, pulsation, etc." *But see*, BLACK'S LAW DICTIONARY 360 (5th ed. 1979) which references Brain Death at 170.
 - 12. 94 Wash. 2d at __, 617 P.2d at 734.
 - 13. Hoffman & Van Cura, supra note 6, at 377.
 - 14. Id. at 381.
 - 15. Ufford, supra note 7, at 227.

seen in the same light as in the medical community, as a "continuing process of gradual change." Recognizing the distinction between the clinical death of the person as an individual and biological death of cells and tissues which may continue to deteriorate over a period of time, medical science has tried to determine the point at which the "process of death becomes irreversible." Since the cessation of either the cardiac or the respiratory system is now frequently a treatable condition, the use of either one as the criteria to determine when the process of death has become irreversible will just as frequently be inconclusive. In those cases in which the 'heart-lung' criteria are inapplicable, the medical profession replaces them with brain death criteria. "Brain death is used to describe a state where there is irreversible destruction to the entire brain despite the continuance of cardiac activity." 20

Although technical medical distinctions are beyond the scope of this paper, it is necessary to have an elementary understanding of the organization of the nervous system.²¹ Functionally speaking, the nervous system may be divided into three levels: (1) the spinal cord level, (2) the lower brain level (including the brain stem), and (3) the higher brain or cortical level. The lower brain level is the pathway between the spinal cord and the cortex.²² It is the reflex center of the brain and controls the cardiac, vasomotor and respiratory functions.²³ The lower brain level is considered the subconscious control area, the destruction of which causes the loss of vital body functions resulting inevitably in death.²⁴ The higher brain or cortical level is a vast storage area. The human cortex contains the qualities which are unique to mankind and which make the human being a cognitive, sapient individual.²⁶ If all or

^{16.} Id. at 230.

^{17.} Victor, supra note 1, at 39.

^{18.} Ufford, supra note 7, at 230.

^{19.} Victor, supra note 1, at 39.

^{20.} Id. at 45. Florida has recently enacted a brain death statute. See FLA. STAT. § 382.085 (Supp. 1980).

^{21.} Hoffman & Van Cura, supra note 6, 385-86.

^{22.} Id.

^{23.} Id.

^{24.} Victor, supra note 1, at 48.

^{25.} Ufford, supra note 7, at 228.

a significant portion of the cortex is destroyed, a vegetative state will result in which the reflex center of the lower brain maintains vital body functions but all cognitive function is lost.²⁶

In 1968 the Ad Hoc Committee of the Harvard Medical School pointed out the need for the recognition of brain death as a standard.²⁷ Although the six criteria that this committee established for irreversible coma²⁸ "have been found to be inadequate in practice and have been superceded by various other. . . criteria,"²⁹ they were relied on in the *Quinlan* case³⁰ and continue to be cited in the most recent cases.³¹ No single criteria is determinative and multiple, realistic parameters can be developed to establish the absence of cortical and brain stem activity,³² since both functions must be absent for a diagnosis of brain death.

Several states, including Florida in 1980, have adopted statutory definitions of brain death³³ which eliminate uncertainty and avoid ret-

- 26. Victor, supra note 1, at 48.
- 27. Hoffman & Van Cura, supra note 6, at 382.
- 28. Report of the Ad Hoc Committee of the Harvard Medical School To Examine the Definition of Death, A Definition of Irreversible Coma, 205 J. A.M.A. 337 (1968) lists the necessary criteria as:
 - (1) Unreceptivity and unresponsivity to externally applied stimuli;
 - (2) No movement of breathing;
 - (3) No reflexes:
 - (4) A flat electroencephalogram;
 - (5) Repetition of tests in 25 hours; and
- (6) No evidence of hypothermia or central nervous system depressants. *Id.* at 338-40.
- 29. Hoffman & Van Cura, *supra* note 6, at 392-93 states that flat EEG is not determinative and has been replaced by angiography. Victor, *supra* note 1, at 46 states that spinal cord reflexes may be present even when the patient is brain dead.
 - 30. 70 N.J. at _, 355 A.2d 652, 656.
 - 31. See note 73 infra.
 - 32. Victor, supra note 1, at 48.
- 33. 1979 ALA. ACTS 165; ALASKA STAT. § 09.65.120 (Supp. 1979); ARK. STAT. ANN. § 82-537 (1977); CAL. HEALTH & SAFETY CODE § 7180 (Deering 1975); CONN. PUBLIC ACT 79-556; FLA. STAT. § 382.085 (Supp. 1980); GA. CODE § 88-1715.1 (1975); HAWAII REV. STAT. § 327C-1 (Supp. 1980); IDAHO CODE § 54-1819 (1979); ILL. ANN. STAT. ch. 3, § 552 (Smith-Hurd Supp. 1975); IOWA CODE § 702.8 (West 1979); KAN. STAT. ANN. § 77-202 (Supp. 1974); LA. CIV. CODE ANN. art. 9-111 (West Supp. 1979); MD. ANN. CODE art. 43, § 54F (1980); MICH. COMP. LAWS § 333.1021 (1980); MONT. REV. CODES ANN. § 50-22-101 (1979); NEV. REV. STATS. §

rospective determination of the rights and duties of the parties involved.³⁴ These advantages outweigh the fear that the statutes would be poorly drafted or biased in favor of transplantation.³⁵

Kansas was the first state to pass a brain death statute in 1974.³⁶ It recognizes the absence of cardiac-respiratory functions and, alternatively, the absence of spontaneous brain function as the standards for determining death. Whether either of the statutory standards has been met, is "based on the ordinary standards of medical practice." Both the alternative standards and the lack of specific medical criteria were

451.007 (1979); N.M. STAT. ANN. § 12-2-4 (Supp. 1973); N.C. GEN. STAT. § 90-322 (Cum. Supp. 1979); OKLA. STAT. tit. 63 § 1-301 (1976); OR. REV. STAT. § 146.087 (1977); TENN. CODE ANN. 53-459 (1977); TEX. REV. CIV. STAT. ANN. § 4447 (Vernon Supp. 1980); VA. CODE § 54-325.7; W. VA. CODE § 16-19-1 (Supp. 1980); Wyo. STAT. § 35-19-101 (Supp. 1980); Hereinafter, Statutes.

- 34. Ufford, supra note 7, at 234-35.
- 35. Id. at 231.
- 36. KAN. STAT. ANN. § 77-202 (1977), which provides:

A person will be considered medically and legally dead if, in the opinion of the physician, based on ordinary standards of medical practice, there is the absence of spontaneous respiratory and cardiac function and because of the disease or condition which caused, directly or indirectly, these functions to cease, or because of the passage of time since these functions ceased, attempts at resuscitation are considered hopeless; and, in the event, death will have occurred at the time these functions ceased; or

A person will be considered medically and legally dead if, in the opinion of a physician, based on ordinary standards of medical practice, there is the absence of spontaneous brain function; and if based on ordinary standards of medical practice, during reasonable attempts to either maintain or restore spontaneous circulatory or respiratory function in the absence of aforesaid brain function it appears that further attempts at resuscitation or supportive maintenance will not succeed, death will have occurred at the time when these conditions first coincide. Death is to be pronounced before artificial means of supporting respiratory and circulatory function are terminated and before any vital organ is removed for purpose of transplantation.

These alternative definitions of death are to be utilized for all purposes in this state, including trials of civil and criminal cases, any laws to the contrary notwithstanding.

The 1979 revision changed the last sentence in the second paragraph to read: "Death is to be pronounced before any vital organ is removed for purposes of transplantation." *Id.* (Supp. 1980).

37. Id.

approved by the Kansas Supreme Court in State v. Shaffer³⁸ which held that the Kansas brain death statute was constitutional.

Capron & Kass³⁹ have criticized the Kansas statute for going beyond a simple definition of death⁴⁰ and establishing the "misconception that there are two separate phenomena of death."41 Their statutory proposal.42 which has been adopted by eight states, would "provide two standards gauged by different functions, for measuring different manifestations of the same phenomenon."48 The "irreversible cessation of spontaneous brain functions" standard would be applicable only when "artificial means of support preclude" the use of the "irreversible cessation of spontaneous respiratory and circulatory functions" standard.44 "Irreversible cessation of spontaneous brain functions" is intended to include both cortical and brain stem activity. A patient who has no cortical activity but retains some brain stem activity would be excluded from the statutory standard.45 "The condition of 'neo-cortical death' may well be a proper justification for interrupting all forms of treatment and allowing those patients to die, but this moral and legal problem cannot and should not be settled by 'defining' these people as 'dead.' "46

Montana and Tennessee⁴⁷ adopted the model statute approved by

^{38.} State v. Shaffer, 223 Kan. 244, 574 P.2d 205 (1977).

^{39.} Alexander Morgan Capron is an Assistant Professor of Law at the University of Pennsylvania. Leon R. Kass is the Executive Secretary on the Committee on Life Sciences and Social Policy, National Research Council - National Academy of Sciences. Capron & Kass, *supra* note 5, at 87.

^{40.} Id. at 110, 115, 117.

^{41.} Id. at 109.

^{42.} *Id.* at 111 provides:

A person will be considered dead if in the announced opinion of a physician, based on ordinary standards of medical practice, he has experienced an irreversible cessation of spontaneous respiratory and circulatory functions. In the event that artificial means of support preclude a determination that these functions have ceased, a person will be considered dead if in the announced opinion of a physician, he has experienced an irreversible cessation of spontaneous brain functions. Death will have occurred at the time when the relevant functions ceased.

^{43.} Id. at 112.

^{44.} Id. at 111.

^{45.} Id. at 115.

^{46.} Id.

^{47.} MONT. REV. CODES ANN. § 50-22-101 (1981): "Definition of death. A

the American Bar Association in 1975.⁴⁸ This model does away with the cardiac-respiratory standard entirely and relies solely on the "irreversible cessation of *total* brain functions."⁴⁹ Nevada adopted the Uniform Brain Death Act.⁵⁰ The language of this model has the advantage of specifically excluding any brain stem function from the scope of the statute. Along with the American Bar Association model, the Uniform Brain Death Act excludes the cardiac-respiratory standard. The language is no longer part of the statute and has been relegated to the commissioners' comments which state that "the act does not preclude a determination of death under other legal or medical criteria, including the additional criteria of cessation of respiration and circulation."⁵¹

Several states, which have not adopted a statutory definition of brain death, have adopted the brain death standard judicially. The Massachusetts Supreme Court⁵² approved a jury instruction in a murder trial which stated that

as a matter of law, the occurrence of a brain death, if you find it, satisfies the essential element of the crime of murder requiring proof beyond a reasonable doubt of the death of the victim. Brain death occurs when, in the opinion of a licensed physician, based on ordinary and accepted standards of medical practice, there has been a total and irreversible ces-

human body with irreversible cessation of total brain function, as determined according to usual and customary standards of medical practice, is dead for all legal purposes."

TENN. CODE ANN. § 53-459 (1980): "Death defined. — For all legal purposes, a human body, with irreversible cessation of total brain function, according to the usual and customary standards of medical practice, shall be considered dead." See statutes cited in note 33 supra.

- 48. "For all legal purposes, a human body with irreversible cessation of total brain functions, according to the usual and customary standards of medical practice, shall be considered dead." House of Delegates Redefines Death, Urges Redefinition of Rape, and Undoes the Houston Amendment, 61 A.B.A. J. 464 (1975).
 - 49. Id. (emphasis added).
- 50. Nev. Rev. Stat. § 451.007 (1980). Uniform Brain Death Act, 12 U.L.A. 15 (Supp. 1981): § 1. (Brain Death)

For legal and medical purposes, an individual who has sustained irreversible cessation of all functioning of the brain stem, is dead. A determination under this section must be made in accordance with reasonable medical standards."

- 51. *Id*.
- 52. Commonwealth v. Golston, 373 Mass. 249, 366 N.E.2d 744 (1977), cert. denied, 434 U.S. 1039 (1978).

sation of spontaneous brain functions and further attempts at resuscitation or continued supportive maintenance would not be successful in restoring such functions.⁵³

The murder victim demonstrated neither cortical nor brain stem activity and was pronounced dead in accordance with the Harvard criteria for brain death. His removal from the respirator which artificially maintained circulation and respiration was "in accordance with good medical practice." The court held that the trial judge had merely taken into account technical advances in medical science in forming his instruction.

In Lovato v. District Court,⁵⁸ the Supreme Court of Colorado stated that the prime issue before it was the "proper definition of death."⁵⁶ A young child-abuse victim "sustained cerebral death as evidenced by total lack of brain activity in both the cortex and the brain stem."⁵⁷ The district court ordered the child's guardians ad litem to authorize the child's physician to remove all extraordinary devices as the child was already dead. On appeal, the Colorado Supreme Court adopted the provisions of the Uniform Brain Death Act,⁵⁸ but did not preclude "continuing recognition of the standard of death as determined by traditional criteria of cessation of respiration and circulation."⁵⁹ The effect of the decision is to provide for "alternative determinations of death."⁶⁰

In In re Bowman, the Washington Supreme Court held that it is for the law to define the standard of death and for the medical profession to determine the applicable criteria for deciding when death is present.⁶¹ In this case, the child-abuse victim was pronounced brain dead and the hospital was enjoined from removing the artificial life support systems to give the child's guardian ad litem time to appeal the trial

^{53.} Id. at _, 366 N.E.2d at 747-48.

^{54.} Id. at _, 366 N.E.2d at 747.

^{55.} Lovato v. District Court, 601 P.2d 1072 (Colo. 1980) (en banc).

^{56.} Id. at 1075.

^{57.} Id. at 1074.

^{58.} Id. at 1081. See note 51.

^{59. 601} P.2d at 1081.

^{60.} Ashman, What's New in the Law, 66 A.B.A. J. 211, 212 (Feb. 1980).

^{61. 94} Wash. 2d at _, 617 P.2d at 732, 738.

court's adoption of the "irreversible loss of brain function standard."⁶² All of the victim's bodily functions had ceased before the Washington Supreme Court was able to hear the case. However, because of the importance of the question presented, the Court issued a decision in the technically moot case.⁶³

The Court was careful to distinguish brain death from a "persistent vegetative state." In order for brain death to occur there must be total cessation of both cortical and brain stem functions. The issue then becomes whether brain death is a recognized standard of death in the State of Washington. The issues involved are entirely different when there is some brain stem activity even in the total absence of cortical activity. This condition is known as vegetative coma and a person in this condition is not brain dead according to any accepted medical criteria. 66

The Washington Supreme Court decision is limited to the adoption of a brain death standard. That Court rejected the Uniform Brain Death Act adopted in Lovato v. District Court⁶⁷ because it failed to interrelate the traditional standards with the new brain functions standard.⁶⁸ Instead, the Washington Court adopted the provisions of the Uniform Determination of Death Act recommendation⁶⁹ which returns to the alternative standards of the Kansas Statute⁷⁰ and includes the clarification as to brain stem function found in the Uniform Brain Death Act.⁷¹

While the legislative or judicial adoption of definition of death which is predicated on a brain functions standard deals with some of the problems created by the recent advances in medical technology, it does not even address the issue of neo-cortical death which is raised by

^{62.} Id. at _, 617 P.2d at 734.

^{63.} Id.

^{64.} Id. at __, 617 P.2d at 735.

^{65.} Id. at _, 617 P.2d at 737.

^{66.} Id.

^{67. 601} P.2d 1072.

^{68.} Contra, id. at 1081 provides that the traditional criteria of respiration and circulation continue to be recognized.

^{69.} Wash. 2d at _,*617 P.2d at 735.

^{70.} See text of Kan. Stat. Ann., supra note 36.

^{71.} See text of Uniform Brain Death Act, supra note 50.

In re Quinlan⁷² and its progeny.⁷³ In the view of Capron & Kass, the issues of brain death and when a person is pronounced dead should be clearly distinguished from the issues of neo-cortical death and when a person should be allowed to die.⁷⁴ Several states have passed Natural Death Acts which endorse the concept of the "living will" in order to deal with the problems associated with the withdrawal of artificial life-support systems.⁷⁵ These cumbersome statutes fail to distinguish between life-prolonging and life-saving procedures and deal only with the competent adult who could invoke his constitutional right of privacy to refuse treatment even without the statute.⁷⁶

The courts, while themselves denouncing the legislative failure in dealing with neo-cortical death, have attacked the issue head on and attempted to fill the legislative vacuum in this area.⁷⁷ The seminal case is *In re Quinlan*.⁷⁸ On the night of April 15, 1975, Karen Ann Quinlan ceased breathing for at least two fifteen minute periods⁷⁹ and suffered neo-cortical death. In other words, Karen Ann Quinlan was in a chronic vegetative state. While she showed no evidence of cortex function, she did show evidence of brain stem activity. Under the brain death criteria discussed previously, Karen Ann Quinlan was alive although she would never be restored to "cognitive or sapient life." The New Jersey Supreme Court allowed Ms. Quinlan's father to invoke Ms. Quinlan's right of privacy in a "substituted judgment." In accordance with the framework set out by the court for the exercise of that right, ⁸²

^{72. 70} N.J. 10, 355 A.2d 647.

^{73.} Severn v. Wilmington Medical Center, Inc., 421 A.2d 1334 (Del. 1980); Satz v. Perlmutter, 362 So. 2d 160 (Fla. 4th Dist. Ct. App. 1978), aff'd, 379 So. 2d 359 (Fla. 1980); Superintendent of Belchertown State School v. Saikewicz, 373 Mass. 728, 370 N.E.2d 417 (1977); In re Spring, _ Mass. _, 405 N.E.2d 115 (1980); Eicher v. Dillon, 73 A.D.2d 431, 426 N.Y.S.2d 517 (1980).

^{74.} Capron & Kass, supra note 5.

^{75.} See generally, Comment, supra note 4.

^{76.} See generally, Dawben, supra note 4.

^{77.} Contra, Ufford, supra note 7, who argues that the courts are the most appropriate place to deal with neo-cortical death.

^{78. 70} N.J. 10, 355 A.2d 647.

^{79.} Id. at _, 355 A.2d 653-54.

^{80.} Id. at _, 355 A.2d at 655.

^{81.} Id. at _, 355 A.2d at 664-66.

^{82.} Id. at __, 355 A.2d at 672.

Mr. Quinlan had all extraordinary, life-prolonging machinery (i.e., respirator) withdrawn from his daughter.88

Although the Quinlan court touched on many of the issues that would be more fully developed by the cases which followed.84 it mainly developed the right of privacy, the mechanism through which that right could be exercised, and a framework for the relief granted. The Ouinlan court relied on Justice Douglas' opinion in Griswold v. Connecticut which found the unwritten constitutional right of privacy to exist in the penumbra of specific guarantees of the Bill of Rights.85 The "emanations from those guarantees"86 give life and substance to a right which is broad enough to "encompass a woman's decision to terminate pregnancy under certain conditions"87 and, by analogy, "broad enough to encompass a patient's decision to decline medical treatment under certain circumstances."88 The invocation of the constitutional right to privacy triggers a balancing of the right of the individual against the interest of the state in preservation of the sanctity of human life. The state's interest "weakens and the individual's right to privacy grows as the degree of bodily invasion increases and the prognosis dims. Ultimately there comes a point at which the individual's rights overcome the Isltate interest."89 At that point the individual may exercise his constitutional right of privacy.

The Quinlan court then decided that the rights of a comatose individual could be exercised through the doctrine of "substituted judgment" under the court's equity power. 90 "The only practical way to prevent the destruction of the right is to permit the guardian and family . . . to render their best judgment, . . . as to whether she would exercise it in these circumstances."91

^{83.} Id. at _, 355 A.2d at 664-66.

^{84.} E.g., a few of the issues not emphasized in this paper include standing, life-saving vs. life-prolonging treatment, the Catholic viewpoint, and cognitive vs. biological existence.

^{85. 70} N.J. at _, 355 A.2d at 663, citing Griswold v. Connecticut, 381 U.S. 479 (1965).

^{86. 381} U.S. at 484.

^{87. 70} N.J. at., 355 A.2d at 663 citing Roe v. Wade, 410 U.S. 113 (1973).

^{88.} Id. at _, 355 A.2d at 663.

^{89.} Id. at _, 355 A.2d at 664.

^{90.} Id. at _, 355 A.2d at 666.

^{91.} Id. at _, 355 A.2d at 664.

The framework developed by the court eliminated the need for judicial decision in this type of case when the family, guardian, attending physician and hospital "Ethics Committee" all agree that there is no "reasonable possibility" of the individual emerging from a comatose condition to a cognitive, sapient state.⁹² At that point the life-support systems may be withdrawn without any civil or criminal liability on the part of any of the participants.⁹³

The next two cases which helped to develop this area of the law, Superintendent of Belchertown v. Saikewicz⁹⁴ and Satz v. Perlmutter, ⁹⁵ do not deal with neo-cortical death but rather with the right of the guardian of a mentally retarded adult and the right of a competent, terminally ill adult to refuse life-prolonging treatment. Saikewicz held that the "substantive rights of the competent and the incompetent person are the same in regard to the right to decline potentially life-prolonging treatment" because of the value of human dignity. Saikewicz also adopted the mechanism of "substituted judgment" and went to great pains to make it clear that the primary test is a subjective one. ⁹⁸ "[T]he goal is to determine with as much accuracy as possible the wants and needs of the individual involved."

The primary importance of Saikewicz to the present discussion is that it sets out the state's interests¹⁰⁰ which are to be balanced against the individual's right of privacy, and it rejects what it views as the

^{92.} Id. at __, 355 A.2d at 671. "The evidence in this case convinces us that the focal point of decision should be the prognosis as to the reasonable possibility of return to cognitive and sapient life, as distinguished from the forced continuance of that biological vegetative existence to which Karen seems to be doomed." Id. at __, 355 A.2d at 669.

^{93.} Id. at _, 355 A.2d at 671.

^{94. 373} Mass. 728, 370 N.E.2d 417 (1977).

^{95. 362} So. 2d 160 (Fla. 4th Dist. Ct. App. 1978), aff'd, 379 So. 2d 359 (Fla. 1980).

^{96. 373} Mass. at __, 370 N.E.2d at 423 (except that the incompetent individual may require more procedural safeguards).

^{97.} Id. at _, 370 N.E.2d at 427.

^{98.} Id. at __, 370 N.E.2d at 430-31.

^{99.} Id.

^{100.} The four state interests identified in Saikewicz are: (1) the preservation of life; (2) the protection of third parties; (3) the prevention of suicide; and (4) the ethical integrity of the medical profession. Id. at _, 370 N.E.2d at 425.

Quinlan court's abdication of its responsibility to make the final decision in this type of case. Both of these points have been cited with approval in subsequent cases.¹⁰¹ The balancing, of course, is a factual determination.

As to the second point, the Saikewicz court took "a dim view of any attempt to shift the ultimate decision-making responsibility away from the duly established courts of proper jurisdiction to any committee, panel or group, ad hoc or permanent." Satz v. Perlmutter is significant in that it clearly draws the distinction, alluded to in the previous cases, between life-saving treatment and life-prolonging treatment. 103

In seeking to protect the rights of an individual who has suffered neo-cortical death, the court may derive its subject matter jurisdiction from a statute, under the state's parens patriae powers over an incompetent or under the more fundamental principle of equity jurisdiction.¹⁰⁴ Further, the court has the obligation to exercise that power, even in the absence of enabling legislation, when it is faced with a "vital problem involving private rights."¹⁰⁵

The relief sought may be based on the common law right of bodily determination or on the constitutional right to privacy. One Since "common-law rights can be abrogated by statute in the exercise of the [s]tate's police powers subject only to due process requirements, I it is more effective to grant the relief sought on the basis of a constitutional right which "cannot be so abrogated." The "state action" necessary to apply the right of privacy through the mechanism of the four-

^{101.} E.g., Perlmutter, 379 So. 2d 359; Eicher, 73 A.D.2d 431, 426 N.Y.S.2d 517 (1980).

^{102. 373} Mass. at _, 370 N.E.2d at 434; however, In re Spring, _ Mass. _, 405 N.E.2d 115 (1980), limited this to cases which had been brought before a court of competent jurisdiction at the outset.

^{103. 362} So. 2d at 163.

^{104.} Eicher v. Dillon, 73 A.D.2d at __, 426 N.Y.S.2d at 534. The New York Supreme Court in *Eicher* issued a decision in a technically moot case in order to develop "the structural legal framework for reaching similar termination-of-treatment decisions." *Id.* at __, 426 N.Y.S.2d at 524.

^{105.} Id. at _, 426 N.Y.S.2d at 534.

^{106.} Id. at _, 426 N.Y.S.2d at 540.

^{107.} Id. at _, 426 N.Y.S.2d at 540-41.

^{108.} *Id.* at __, 426 N.Y.S.2d at 541.

teenth amendment can be found in the nexus between the relief sought and the state's interest in its homicide statutes, hospital regulations and parens patriae responsibility to protect incompetents.¹⁰⁹

To conclude that an individual has "a right to refuse medical treatment necessarily implies that there exists a corresponding capability to exercise that right." However, there are certain medical criteria necessary to activate the individual's right. "He must be terminally ill; he must be in a [chronic or irreversible] vegetative coma . . .; he must lack cognitive brain function; and the probability [that such] . . . cognitive function [will return] must be extremely remote." Unless these criteria are met, the state's interest in the preservation of human life will outweigh the individual's right to privacy.

The court in *Eicher v. Dillon*¹¹³ approved the mechanism of "substituted judgment" to determine the subjective desire of the comatose individual.¹¹⁴ It further approved the admission of previous specific statements of intent by the now comatose individual.¹¹⁵ Finally, the *Eicher* court combined the *Quinlan* procedure with the *Saikewicz* requirement that the neutral presence of the law make the final determination.¹¹⁶

The most recent case, Severns v. Wilmington Medical Center, Inc., 117 is the classic neo-cortical death case. Mrs. Severns had suffered extensive damage to her cortex but her brain stem continued to evidence activity. The Delaware Supreme Court technically followed the legal framework developed by the Eicher court and found that Mr. Severns was to be appointed guardian and after a proper evidentiary hearing, was entitled to such relief as the evidence warranted. 118

In conclusion, it is clear that the rapid advancement of medical

^{109.} Id. at _, 426 N.Y.S.2d at 540. See Jackson v. Metropolitan Edison Co., 419 U.S. 345, 351 (1974).

^{110.} Id. at _, 426 N.Y.S.2d at 544.

^{111.} Id. at _, 426 N.Y.S.2d at 545.

^{112.} Id.

^{113. 73} A.D.2d 431, 426 N.Y.S.2d 517 (1980).

^{114.} Id. at _, N.Y.S.2d at 547.

^{115.} Id.

^{116.} Id. at _, 426 N.Y.S.2d at 548-51.

^{117. 421} A.2d 1334 (Del. 1980).

^{118.} Id. at 1349-50.

technology has obfuscated the concept of death. Statutory definitions adopting the brain death standard are preferable to judicial adoption of the standard, especially when the statutes are flexible and recognize the need to allow for changing medical criteria. But these statutes are only a first step; it is necessary to deal with the individual who has suffered neo-cortical death but fails to meet the brain death standard. Although the courts are beginning to develop a realistic framework, within which both the legal and medical professions can operate with relative certainty, judicial determination of this issue is much too cumbersome. A comprehensive legislative package which could be adopted uniformly throughout the country, is a goal that will not be realized in the very near future. However, as technology advances, it will be incumbent on the legislature to act to protect the fundamental rights of the individual.

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