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RECENT CASE

THE ACCEPTANCE OF BRAIN DEATH AS A LEGAL DEFINITION OF DEATH IN ILLINOIS: *IN RE HAYMER*

Prior to the development of modern medical technology, it was well settled that death occurred when respiration and circulation ceased.¹ Without artificial life support systems, the brain died within a few minutes of the cessation of breathing and circulation.² Accordingly, such a determination of death was sufficiently accurate.³ Since the late 1960's, however, organ transplantation,⁴ cardiopulmonary resuscitation,⁵ and mechanical respiratory maintenance⁶ have become commonplace. As a consequence of these medical developments, the definition of death as cessation of respiration and cir-

1. The fourth edition of Black's Law Dictionary contains the most frequently cited definition of death: "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 488 (4th ed. 1968). Eleven years later, the fifth edition made reference to brain death as an alternative definition of death: "The cessation of life; permanent cessations of all vital functions and signs. Numerous states have enacted statutory definitions of death which include brain-related criteria." BLACK'S LAW DICTIONARY 360 (5th ed. 1979); see also *Estate of Schmidt*, 261 Cal. App. 2d 262, 273, 67 Cal. Rptr. 847, 854 (1968) (for purposes of the decision, death was defined as total stoppage of the circulation of the blood and cessation of vital functions, as defined in the third edition of Black's Law Dictionary); *Gray v. Sawyer*, 247 S.W.2d 496, 497 (Ky. Ct. App. 1952) (a body is not dead so long as there is a heartbeat). See generally Comment, *Medical and Legal Views of Death: Confrontation and Reconciliation*, 19 ST. LOUIS U.L.J. 172 (1974) (cessation of respiration and circulation were unimpeachable indicators of death prior to technological and scientific developments) [hereinafter cited as Comment, *Medical and Legal Views*].

2. Hirsh, *Brain Death*, 21 MED. TRIAL TECH. Q. 377, 378 (1975). Respiratory failure and circulatory impairment result in anoxia of the brain. Unless resuscitative measures are instituted immediately, total and irreversible cessation of brain function occurs. *Id.*

3. *Id.*

4. On December 4, 1967, Dr. Christiaan Barnard transplanted the heart of one man into the body of another who was dying of advanced cardiac disease. Note, *The Time of Death—A Legal, Ethical, and Medical Dilemma*, 18 CATH. LAW. 243, 243 (1972) [hereinafter cited as Note, *The Time of Death*]. When the heart and lungs are stopped so that a defective heart can be replaced by a healthy one, the recipient is placed on a cardiopulmonary bypass machine which provides the necessary circulation and oxygenation. See Comment, *Medical and Legal Views*, *supra* note 1, at 172 (strides in medical science, such as the heart-lung machine, increase the uncertainty in the determination of death).

5. At Johns Hopkins Hospital in 1960, Dr. Kouwenhoven and his associates devised a procedure to restore and sustain the circulation. The procedure, known as cardiopulmonary resuscitation, involves rhythmic compression of the lower sternum to compress the heart and mouth-to-mouth ventilation to supply oxygen. L. MELTZER, R. PINNEO & J. KITCHELL, *INTENSIVE CORONARY CARE* 30 (4th ed. 1983).

6. A respirator is a machine for prolonged artificial respiration. *TABER'S CYCLOPEDIA*

cultation has become increasingly difficult to apply.⁷ Technological developments can now restore life as defined by the traditional criteria even when there has been massive brain damage that precludes any possibility of a person returning to consciousness.⁸

The difficulty these technological developments have created in diagnosing death, combined with medical advancements in the study of brain activity, has prompted the medical community to develop an alternative definition of death—brain death.⁹ Unfortunately, the legal community has lagged behind the medical community in the acceptance of brain death as a determinant of death. Thus, a person void of any cerebral function may be considered medically dead, but legally alive.¹⁰

Recently, in an effort to resolve this definitional dilemma, the Illinois Appellate Court for the First District accepted brain death as a legal definition of death in *In re Haymer*.¹¹ Although this decision is binding precedent only within the First District, it nonetheless will be highly persuasive in other Illinois courts.¹² The following discussion will examine the present state of the law regarding brain death in other jurisdictions in an effort to determine the future implications of *Haymer*. This discussion will focus on the debate over whether the legislature or the judiciary is the preferable forum for action on this issue. Close analysis of the concept of brain death indicates that although the *Haymer* decision was appropriate, legislative action should be taken by the General Assembly to make brain death a legal definition of death state-wide.

BACKGROUND

Medical

A thorough analysis of the *Haymer* decision and the subject of brain death must begin with an understanding of the basic physiology of the brain and

MEDICAL DICTIONARY 1241 (14th ed. 1981); see Comment, *Medical and Legal Views*, *supra* note 1, at 172 (mechanical respirators have given physicians the power to maintain a patient's breathing artificially and thereby preserve one of the previously cardinal signs of life).

7. The ability of an organ recipient to continue living after his heart has been removed and replaced by another has greatly undermined the status of the beating heart as the primary sign that a person is alive. Capron & Kass, *A Statutory Definition of the Standards for Determining Human Death: An Appraisal and a Proposal*, 121 U. PA. L. REV. 87, 89 (1972).

8. *A Definition of Irreversible Coma: Report of the Ad Hoc Committee of the Harvard Medical School to Examine the Definition of Brain Death*, 205 J. A.M.A. 337, 339 (1968) [hereinafter cited as *A Definition of Irreversible Coma*].

9. *Id.* at 337. A brain that no longer functions and has no possibility of ever functioning again is, for all practical purposes, dead. The characteristics of a permanently nonfunctioning brain include (1) unreceptivity and unresponsivity; (2) no movement or breathing; (3) no reflexes; and (4) a flat electroencephalogram. These characteristics are commonly referred to as the Harvard criteria for brain death. *Id.* at 337-38. For a more detailed description of the criteria, see *infra* note 81.

10. Jacobson, Anderson & Spiegel, *Towards a Statutory Definition of Death in Illinois*, 14 J. MAR. L. REV. 701, 701 (1981).

11. 115 Ill. App. 3d 349, 450 N.E.2d 940 (1st Dist. 1983).

12. There are very few cases nationwide that seek to define death. *Haymer* is a case of

the process of dying. The brain is divided into several sections. The cerebral cortex is the site of the highest centers of the brain, those having to do with intelligence, perceptions, memory, cognition and consciousness.¹³ The cerebellum is the next section of the brain which is of significance, and its primary function lies in control of body equilibrium.¹⁴ The brain stem is the lowest portion of the brain and it controls the vital functions such as respiration, heart rate, and blood pressure, as well as other biological functions.¹⁵

Dying, long thought to be a single event,¹⁶ is now understood to be a continuous process with an orderly progression from clinical death, to brain death, to biological death, to cellular death.¹⁷ The initial stage of clinical death occurs when respiration and circulation cease. When circulation ceases, the brain is deprived of oxygen and anoxia occurs. At this point brain death is inevitable and follows within minutes unless resuscitative procedures are instituted immediately.¹⁸

The brain also dies in an orderly progression. First the cerebral cortex ceases to function, followed by the cerebellum, and finally the brain stem or vital centers. When all parts of the brain are dead, biological death, or permanent extinction of bodily life, occurs.¹⁹ It is at this point that cellular death begins.²⁰ Because cellular death is the last step in the process, organs

first impression in Illinois. Consequently, any future case within the state that requires a legal determination of death will look to the *Haymer* decision as persuasive authority.

13. See A. GUYTON, TEXTBOOK OF MEDICAL PHYSIOLOGY 564, 687, 690-94 (6th ed. 1981).

14. *Id.* at 662-65.

15. *Id.* at 516, 563, 701-02.

16. See, e.g., *Thomas v. Anderson*, 96 Cal. App. 2d 371, 376, 215 P.2d 478, 482 (1950) (court used this concept to assist in defining death). See generally Morison, *Death: Process or Event?*, in ETHICAL ISSUES IN DEATH AND DYING 57 (R. Weir ed. 1977) (traditional view of death as clearly defined event that puts an end to life is deeply imbedded in literature, art, and law).

17. Hirsh, *supra* note 2, at 378.

18. *Id.*; see also LAW REFORM COMMISSION OF CANADA, CRITERIA FOR THE DETERMINATION OF DEATH 13 (1979) [hereinafter cited as CRITERIA FOR THE DETERMINATION OF DEATH]. Loss of blood circulation to the brain results in loss of consciousness within ten seconds. Resuscitation within four minutes will prevent any critical brain damage to the patient. Necrosis of the cerebral cortex occurs within eight to ten minutes. The damage within this period of time is such that it may be impossible for the patient ever to regain consciousness, with resulting loss of all manifestations of personality. Within 15 to 18 minutes, the brain stem begins to die. Such destruction results in loss of vital functions such as circulation and respiration unless supportive measures are undertaken.

Often the distinction between brain death and irreversible coma is confused. Brain death refers to the total destruction of the brain including all brain stem activity. See *An Appraisal of the Criteria of Cerebral Death*, 237 J. A.M.A. 982 (1977). Irreversible coma, however, is a persistent vegetative state in which a person loses all cortical functions but retains lower brain functions. Thus, the person will never regain consciousness, but the entire brain is not destroyed. The person is still very much alive. See also *In re Quinlan*, 70 N.J. 10, 26, 355 A.2d 647, 654 (1976) (Karen Ann Quinlan is an example of a person in a persistent vegetative state).

19. Hirsh, *supra* note 2, at 379.

20. *Id.*

such as the heart and kidneys can be transplanted after biological death has occurred.²¹

Legal

Brain Death

Prior to the Illinois appellate court's recognition in *Haymer*, brain death had been accepted as a legal definition in at least thirty-five other states.²² Twenty-nine states had done so through legislative action²³ and six through judicial decision.²⁴ The legal acceptance of brain death is relatively re-

21. See, e.g., CRITERIA FOR THE DETERMINATION OF DEATH, *supra* note 18, at 13. The length of time before cellular death begins varies from organ to organ. Heart tissue can survive anoxia for one hour to 90 minutes, kidneys can survive for two and a half hours, lungs for 30 to 60 minutes, and liver for 15 to 30 minutes.

22. 115 Ill. App. 3d at 352, 450 N.E.2d at 943. The *Haymer* court stated that at least 34 states had legally recognized brain death. That number, however, was actually 35, but the *Haymer* court inadvertently excluded the state of Washington, which judicially recognized brain death in *In re Welfare of Bowman*, 94 Wash. 2d 407, 617 P.2d 731 (1980). For a list of the states that have recognized brain death, see *infra* notes 23-24.

23. See ALA. CODE § 22-31-1 (Supp. 1982); ALASKA STAT. § 09.65.120 (Supp. 1982); ARK. STAT. ANN. § 82-537 (Supp. 1983); CAL. HEALTH & SAFETY CODE § 1780 (West Supp. 1983); COLO. REV. STAT. § 12-36-136 (Supp. 1982); FLA. STAT. ANN. § 382.085 (West Supp. 1983); GA. CODE ANN. § 88-1716 (Supp. 1982); HAWAII REV. STAT. § 327C-1 (Supp. 1982); IDAHO CODE § 54-1819 (Supp. 1983); IOWA CODE ANN. § 702.8 (West 1979); KAN. STAT. ANN. § 77-202 (Supp. 1982); LA. REV. STAT. ANN. § 9:111 (West Supp. 1983); MD. HEALTH GEN. CODE ANN. § 5-203 (1982); MICH. COMP. LAWS ANN. § 333.1021 (West 1980); MISS. CODE ANN. § 41-36-3 (1981); MONT. CODE ANN. § 50-22-101 (1983); NEV. REV. STAT. § 451.007 (1981); N.M. STAT. ANN. § 12-2-4 (1978); N.C. GEN. STAT. § 90-323 (1981); OHIO REV. CODE ANN. § 2108.30 (Page 1983); OKLA. STAT. ANN. tit. 63, § 1-301 (West 1981); OR. REV. STAT. § 146.001 (1981); TENN. CODE ANN. § 53-459 (1980); TEX. REV. CIV. STAT. ANN. art. 4447t (Vernon Supp. 1982); VT. STAT. ANN. tit. 18, § 5218 (Supp. 1983); VA. CODE § 54-325.7 (1982); W. VA. CODE § 16-10-2 (Supp. 1983); WIS. STAT. ANN. § 146.71 (West Supp. 1983); WYO. STAT. § 35-19-101 (Supp. 1983).

The statutory definitions of death attempt to retain the traditional standards of absence of respiration and circulation for diagnosing death, while also adding the standard of brain death. Horan, *Definition of Death: An Emerging Consensus*, 16 TRIAL 22, 23 (1980). The various statutes fall into three categories. A. MORACZEWSKI & J. SHOWALTER, DETERMINATION OF DEATH 24 (1982); cf. Horan, *supra*, at 23 (occasionally the statutes are divided into four categories, with the first of the three categories subdivided into two different categories). The first category of statutes provides for alternative definitions of death, one based upon the traditional concept of death as cessation of respiration and circulation, and the other based upon the modern concept of brain death. Under this type of statute, death legally occurs if either definition is met. The second category of statutes provides for determination of death based upon brain function only if artificial means of life support prevent determination of death by traditional means. The third category defines death based upon brain function, but does so without mention of the traditional criteria for the determination of death. Although there is no provision made for determination of death based upon the traditional criteria of cessation of respiration and circulation, such a provision is implied. It was not intended that the traditional means of death should be superceded by the statute. Horan, *supra*, at 23-24.

24. See *State v. Fierro*, 124 Ariz. 182, 603 P.2d 74 (1979) (victim was legally dead as a result of gunshot wound to head prior to removal of life support systems); *Swafford v. State*,

cent²⁵ and was initiated as a form of protection for transplant surgeons.²⁶ Surgeons feared the possibility of criminal or civil liability for removing organs from a body which, though medically dead, was maintained on artificial life support systems and therefore remained legally alive.²⁷

After tracing the evolution of case law on the subject of brain death, it immediately becomes apparent that there are few cases which attempt to define death.²⁸ The early case law centered on civil issues such as survivorship and inheritance.²⁹ The primary issue facing the courts in these early cases was a determination of which of two people had survived the other for purposes of inheritance. These cases were decided prior to the general acceptance of brain death by the medical profession. As a result, the courts declared that as a matter of law, death was to be defined as cessation of respiration and circulation.³⁰

In the late 1960's, case law was in a state of flux regarding the acceptance of the concept of brain death. During this period of time, decisions could be found which continued to adhere to the traditional definition of death.³¹

____ Ind. ____, 421 N.E.2d 596 (1981) (defendant guilty of murder when gunshot wound to head caused irreversible cessation of all brain activity); *Commonwealth v. Golston*, 373 Mass. 249, 366 N.E.2d 744 (1977) (defendant guilty of murder when he caused brain death by hitting victim over the head with a baseball bat, despite removal of life support systems from victim by physician), *cert. denied*, 434 U.S. 1039 (1978); *State v. Meints*, 212 Neb. 410, 322 N.W.2d 809 (1982) (defendant guilty of motor vehicle homicide when rear-end collision caused injury to brain stem from which victim would not recover); *New York City Health and Hosps. Corp. v. Sulsona*, 81 Misc. 2d 1002, 367 N.Y.S.2d 686 (N.Y. Sup. Ct. 1975) (for purposes of anatomical gifts under Public Health Law, death is to be defined in a way that is consistent with generally accepted medical standard of brain death); *In re Welfare of Bowman*, 94 Wash. 2d 407, 617 P.2d 731 (1980) (abused child declared legally dead when all brain function had ceased).

25. The initial legal acceptance of brain death occurred in 1970 when Kansas adopted the first statutory definition of death. See KAN. STAT. ANN. § 77-202 (Supp. 1982).

26. See, e.g., Taylor, *A Statutory Definition of Death in Kansas*, 215 J. A.M.A. 296, 296 (1971) (letter to the editor) (principal draftsman of the statute stated that the purpose of the statute was protection from liability). See generally Capron & Kass, *supra* note 7, at 88 (statutory definitions of death were prompted by members of medical profession who feared potential liability for transplants); Comment, *Liability and the Heart Transplant*, 6 Hous. L. Rev. 85, 97-104 (1968) (discrepancy between legal and medical definitions of death caused uncertainty as to the potential civil and criminal liability of transplant surgeons).

27. Jacobson, Anderson & Spiegel, *supra* note 10, at 701.

28. Friloux, *Death, When Does it Occur?*, in DEATH, DYING AND EUTHANASIA 27, 29 (D. Horan & D. Mall eds. 1977).

29. *Id.*

30. See, e.g., *Smith v. Smith*, 229 Ark. 579, 589, 317 S.W.2d 275, 281 (1958) (judicial notice taken that one breathing, but unconscious, is not dead); *Thomas v. Anderson*, 96 Cal. App. 2d 371, 376, 215 P.2d 478, 481 (1950) (applies Black's Law Dictionary definition of death as cessation of respiration and pulsation); *Gugel's Adm'r v. Orth's Ex'r*, 314 Ky. 591, 594, 236 S.W.2d 460, 462 (1950) (decapitated wife held to have survived her husband because spurts of blood continued to come from the body).

31. See, e.g., *Estate of Schmidt*, 261 Cal. App. 2d 262, 67 Cal. Rptr. 847 (1968). *Schmidt* was a case involving a determination of heirship under the Uniform Simultaneous Death Act. CAL. PROB. CODE § 296-296.8 (West 1981). At issue was whether a husband and wife had died simultaneously or whether one had predeceased the other. The petitioner had alleged that

There also were cases, however, which accepted the newly introduced concept of brain death.³² This inconsistency illustrates that both the medical and legal communities were still uncertain as to what constituted death.³³

When the concept of brain death gained virtually universal acceptance in the medical profession,³⁴ courts began to embrace brain death enthusiastically as a legal determination of death. Consistent judicial acceptance has occurred since the mid-1970's.³⁵ As a result of *Haymer*, Illinois now joins the majority of states by accepting this alternative definition for the legal determination of death.

Judicial v. Legislative Action in Changing the Common Law

Controversy frequently ensues over which governmental branch holds the authority to change the standing common law.³⁶ The general rule is that

the trial court erred in its use of the common law definition of death to determine the question of survivorship. Nevertheless, the trial court's conclusion that the husband had predeceased the wife (who had died of a head injury) by 10 to 15 minutes was affirmed by the appellate court. In affirming, the appellate court quoted the trial court:

Medical opinion in this case varied as to when death occurred. In the opinion of the medical experts death might be the inability to resuscitate or an irreversible coma. However, for purposes of this decision, this court considers death as defined in Black's Dictionary, Third Edition: "as total stoppage of the circulation of the blood and cessation of the animal and vital functions of the body such as respiration and pulsation."

261 Cal. App. 2d at 273, 67 Cal. Rptr. at 854. The appellate court noted that although the petitioner's contention was interesting, the above definition of death was to be used by the California courts. *Id.*

32. See, e.g., *United Trust Co. v. Pyke*, 199 Kan. 1, 427 P.2d 67 (1967); *Tucker v. Lower*, No. 2831 (Richmond, Va. L. & Eq. Ct., May 23, 1972) (cited in *ETHICAL ISSUES IN DEATH AND DYING* 125 (R. Weir ed. 1977)). Brain death was readily accepted by the courts in *Pyke* and *Tucker*; cf. *Schmidt*, 261 Cal. App. 2d 262, 67 Cal. Rptr. 847 (1968). In *Pyke*, a husband fired five gun shots into the head of his wife and then turned the gun upon himself. Testimony showed that while the wife bled profusely, the husband showed no signs of bleeding at all. The court held that the wife had died before the husband, despite the circulating blood. 199 Kan. at 8, 427 P.2d at 73. This was based upon medical testimony that the severe brain damage to the wife had caused an irreversible cessation of all brain function. *Id.*

In *Tucker*, a patient who had suffered severe head injuries was removed from a mechanical respirator and pronounced dead. His heart was then removed by surgeons for use in an organ transplant. The patient's brother sued the surgeons, claiming that his brother was alive at the time the heart was removed. The judge instructed the jury that death could be determined by either traditional or brain criteria. The jury found for the surgeons. No. 2831 (Richmond, Va. L. & Eq. Ct., May 23, 1972). For discussion of *Tucker*, see *CRITERIA FOR THE DETERMINATION OF DEATH*, *supra* note 18, at 21.

33. See Friloux, *supra* note 28, at 33.

34. *Swafford v. State*, ____ Ind. ____, ____, 421 N.E.2d 596, 598 (1981).

35. See *supra* note 24 and *infra* text accompanying note 56. Colorado also judicially accepted brain death. See *Lovato v. District Court*, 198 Colo. 419, 601 P.2d 1072 (1979). This judicial decision was followed by a statutory definition of death. See *COLO. REV. STAT. § 12-36-136* (Supp. 1982).

36. The common law of Illinois is not static. It has established itself in the history of the law because of its flexibility in its recognition of and adaption to changing times and mores. See, e.g., *Ney v. Yellow Cab Co.*, 2 Ill. 2d 74, 81, 117 N.E.2d 74, 79 (1954) (common law

the common law is to remain in effect until expressly revoked by statute.³⁷ There are some situations, however, in which the common law is inadequate in light of current circumstances. In such situations, the inaction of both the legislature and the judiciary results in a virtual standstill in the law.³⁸ The Illinois Supreme Court has attempted to resolve such standstills by dictating that the legislature and the courts should cooperate and assist each other in examining and changing the common law to conform with the ever-changing demands of the community.³⁹ When a state of mutual inaction exists, and a case comes before the court in which a gap in the common law must be bridged, it is the imperative duty of the judiciary to act to prevent a manifest injustice to the public.⁴⁰

THE HAYMER DECISION

Facts and Procedural History

On October 28, 1982, Loyola University Medical Center, owner and operator of Foster G. McGaw Hospital, sought a declaratory judgment that its seven-month-old patient, Alex B. Haymer, was dead.⁴¹ The hospital sought permission to remove the child from a mechanical ventilation system.⁴² The parents, however, as well as the child's guardian ad litem, opposed the removal of the life support systems.⁴³ Uncontradicted expert medical testimony by a pediatric neurosurgeon indicated that according to the usual and customary standards of medical practice, Alex B. Haymer had suffered total and irreversible brain death on October 23, 1982.⁴⁴

An order was issued to Foster G. McGaw Hospital to discontinue the

rule requiring foreseeability of injury was changed by court's holding that any violation of the Uniform Traffic Act is negligence per se because the increase in population and number of cars necessitated such a change); *Amann v. Faigy*, 415 Ill. 422, 434, 114 N.E.2d 412, 418 (1953) (common law rule disallowing tort recovery by unborn children changed to allow recovery because the rule was deemed antiquated). As adopted by our legislature, the common law is a system of elementary rules and general judicial declarations that should expand simultaneously with the process of society. *Ney v. Yellow Cab Co.*, 2 Ill. 2d 74, 81, 117 N.E.2d 74, 79 (1954); *Amann v. Faigy*, 415 Ill. 422, 434, 114 N.E.2d 412, 418 (1953).

37. ILL. REV. STAT. ch. 1, § 801 (West Supp. 1983). "The common law of England, so far as the same is applicable and of a general nature, and all statutes or acts of the British Parliament . . . shall be the rule of decision, and shall be considered as of full force until repealed by legislative authority." *Id.*

38. *Alvis v. Ribar*, 85 Ill. 2d 1, 23, 421 N.E.2d 886, 896 (1981) (comparative negligence adopted judicially).

39. *Id.*

40. *Id.*

41. 115 Ill. App. 3d at 350, 450 N.E.2d at 942.

42. *Id.*

43. *Id.*

44. *Id.* at 356, 450 N.E.2d at 946. Dr. Timothy B. Scarff testified that the child exhibited lack of responsiveness, including brain stem reflexes, lack of pupillary or other eye movements, lack of spontaneous eye movements, lack of spontaneous respiration, lack of brain activity evidenced by a flat electroencephalogram, and a negative isotope blood flow. All of the above tests indicate irreversible brain death.

mechanical ventilation system.⁴⁵ The trial court stayed the effect of its order for seven days to provide for appellate review before the mechanical ventilation system was removed.⁴⁶ Because the circumstances surrounding the brain injury of Alex B. Haymer were suspicious,⁴⁷ the state of Illinois was allowed to intervene on the grounds that it had an interest in any death caused by criminal action in the state. The state objected to the stay because after brain death has occurred and artificial maintenance on a respirator continues, tissue deterioration occurs "which may render it impossible to determine the cause of death."⁴⁸ The appellate court nevertheless stayed the effect of the trial court's order and set oral arguments for December 6, 1982.⁴⁹ Meanwhile, on November 28, 1982, Alex B. Haymer's heart stopped beating and the mechanical ventilation system was removed.⁵⁰

The Court's Holding and Rationale

Despite the fact that Alex B. Haymer's heart stopped functioning, thereby satisfying the traditional legal definition of death, the appellate court reviewed the case and affirmed the lower court's decision that the child was legally dead on October 23, 1982, the date on which his brain ceased to function.⁵¹ The court held that "a person is legally dead if he or she has sustained either (1) irreversible cessation of total brain function, according to usual and customary standards of medical practice, or (2) irreversible cessation of circulatory and respiratory functions, according to usual and customary standards of medical practice."⁵²

In laying the foundation for its acceptance of brain death, the *Haymer* court initially looked to the technological advancements that frequently make the traditional definition of death meaningless.⁵³ The court emphasized that in light of these technological advancements, the traditional definition of death could no longer be accepted as accurate.⁵⁴ The court then looked to the present state of the law regarding brain death and noted that the strong majority of states now legally recognize brain death.⁵⁵ The *Haymer* court emphasized that no court to which the issue has been presented has ever rejected brain death as a legal definition of death.⁵⁶

45. *Id.* at 350, 450 N.E.2d at 942.

46. *Id.*

47. *Id.*

48. *Id.* (quoting Affidavit of Cook County Medical Examiner).

49. *Id.*

50. *Id.*

51. *Id.*

52. *Id.* at 355, 450 N.E.2d at 945.

53. *Id.* at 350, 450 N.E.2d at 942. The court specifically mentioned cardiopulmonary bypass machines, heart transplants, artificial hearts, and mechanical respirators.

54. *Id.* at 351, 450 N.E.2d at 942. The court quoted a neurosurgeon as saying that "the time honored criteria of stoppage of the heartbeat and circulation are indicative of death only when they persist long enough for the brain to die." *Id.*

55. *Id.* at 352, 450 N.E.2d at 943.

56. *Id.* (quoting A. MORACZEWSKI & J. SHOWALTER, *supra* note 23, at 30). The *Haymer*

Alex B. Haymer's guardian ad litem had contended that if brain death were to be accepted as a legal definition of death, it should be done by the legislature and not the judiciary.⁵⁷ The *Haymer* court reasoned that based upon supreme court precedent,⁵⁸ that the judiciary has an affirmative duty to reform the law when appropriate legislation is nonexistent.⁵⁹ Given the need to have a medically accurate legal definition of death, and given the General Assembly's failure to adopt brain death as a legal definition, the court determined that it was "appropriate and proper" for the judiciary to bridge this gap in the common law.⁶⁰

Because the child's heart stopped functioning prior to appellate review, the case technically could have been declared moot.⁶¹ Invoking an excep-

court relied upon this proposition, but it does not appear to be entirely true. Brain death as a definition of death was discussed in *Estate of Schmidt*, 261 Cal. App. 2d 262, 273, 67 Cal. Rptr. 847, 854 (1968). See *supra* note 31 and accompanying text. The trial court, as a question of fact, decided that the correct criteria for the determination of death were cessation of respiration and circulation, not cessation of brain function. The appellate court held that the trial court's factual determination was not to be altered, absent any abuse of discretion. While it does appear that this is a case in which brain death was rejected, this oversight is not fatal to the *Haymer* court's reasoning. The California court's decision was handed down in April 1968—at least four months prior to the publication of the Harvard Report, the first widely publicized recognition of brain death by the medical community. See *supra* notes 8-9. The concept of brain death was still too radical and controversial for the *Schmidt* court to accept. Today, however, brain death is becoming the accepted norm.

57. Brief for Appellant at 6, *In re Haymer*, 115 Ill. App. 3d 349, 450 N.E.2d 940 (1983).

58. 115 Ill. App. 3d at 353, 450 N.E.2d at 944 (citing *Alvis v. Ribar*, 85 Ill. 2d 1, 421 N.E.2d 886 (1981)).

59. *Id.*

60. *Id.*

61. The general rule is that a question is moot when it presents or involves no actual controversy, interest, or right of the parties, or when the issues have ceased to exist. See, e.g., *People v. Redlich*, 402 Ill. 270, 278, 83 N.E.2d 736, 741 (1949) (contempt of court order not moot because defendant would be confined to jail until he complied with an order that no longer existed); *Berg v. City of Chicago*, 97 Ill. App. 2d 410, 420, 240 N.E.2d 344, 349 (1st Dist. 1968) (when suit for violation of traffic ordinance was dismissed, whatever controversy existed as to the validity of the ordinance was rendered moot). When an appellate court has notice of acts that show that only moot questions or mere abstract propositions are involved, or when substantial questions before the trial court no longer exist, it will dismiss the appeal. See, e.g., *People v. Redlich*, 402 Ill. at 279, 83 N.E.2d at 741 (appeal not dismissed because decision affected the disposition of a jail term defendant was serving); *Tuttle v. Gunderson*, 341 Ill. 36, 45, 173 N.E. 175, 178 (1930) (appeal against trustees dismissed because trust had already been distributed). Following these general rules, the *Haymer* case was technically moot because the central question of whether Alex B. Haymer was legally dead was resolved when his heart stopped functioning on November 28, 1982. According to the traditional common law definition of death, Alex B. Haymer was undeniably dead.

Illinois, however, recognizes exceptions to these general mootness rules. An appellate court is not required to dismiss a case even though the issue is technically moot if the issue is likely to recur and involves matters of public concern, particularly in a situation in which the standard time for disposition of the appeal would effectively deprive similarly situated plaintiffs of appellate review. See, e.g., *In re Estate of Brooks*, 32 Ill. 2d 361, 364, 205 N.E.2d 435, 437 (1965) (decision regarding the constitutionality of appointment of a conservator for purpose of administering blood to a ward was of sufficient public interest not to be dismissed

tion, however, the *Haymer* court classified the case as one capable of repetition yet evading judicial review.⁶² Thus, the *Haymer* court dismissed the allegations of mootness and went on to the merits of the case, adopting brain death as a legal definition of death in Illinois.

ANALYSIS AND CRITIQUE

The *Haymer* court concluded correctly that the common law definition of death⁶³ is no longer meaningful or accurate.⁶⁴ Modern technology allows medical personnel to intervene in the process of dying at various stages.⁶⁵ For example, as the *Haymer* decision explained, people in today's society continue to live after experiencing cardiac arrest.⁶⁶ Similarly, cardiopulmonary bypass machines permit a patient's heart to be stopped for several hours during cardiac surgery with full clinical recovery after resuscitation.⁶⁷ Despite medical intervention, however, in less successful situations deterioration occurs with a progression to the point of irreversible brain death. Even after this point is reached, cardiac pacemakers and artificial respiratory maintenance make it possible to maintain mechanically the vital functions ordinarily controlled by the brain stem. Consequently, the traditional criteria of death are rendered useless in determining when death occurs in these patients. New parameters are clearly needed to determine when death has occurred.

The status of modern technology as the underlying impetus for an alteration in the legal definition of death is well documented in case law. Since 1975, every case in which brain death has been judicially recognized has made specific reference to medical advancements as the causal factor.⁶⁸ Furthermore, each of these cases has involved a victim who was maintained on artificial life support systems.⁶⁹ The continual reappearance of life sup-

for mootness after the transfusion was given); *see also* *Roe v. Wade*, 410 U.S. 113, 125 (1973) (condition of pregnancy classified as capable of repetition, yet evading review). Based upon these recognized exceptions, the *Haymer* court correctly concluded that the case fell within the category of those cases which consistently tend to escape judicial review.

62. 115 Ill. App. 3d at 357, 450 N.E.2d at 946.

63. *See supra* note 1.

64. 115 Ill. App. 3d at 351, 450 N.E.2d at 942.

65. *See* CRITERIA FOR THE DETERMINATION OF DEATH, *supra* note 18, at 13.

66. 115 Ill. App. 3d at 351, 450 N.E.2d at 942.

67. *Id.*

68. *See* *State v. Fierro*, 124 Ariz. 182, 185, 603 P.2d 74, 77 (1979) (transplants as impetus); *Lovato v. District Court*, 198 Colo. 419, 425, 601 P.2d 1072, 1076 (1979) (resuscitative technology and transplants); *Swafford v. State*, ___ Ind. ___, ___, 421 N.E.2d 596, 598 (1981) (mechanical maintenance of heartbeat and respiration); *Commonwealth v. Golston*, 373 Mass. 249, 254, 366 N.E.2d 744, 749 (artificial life support), *cert. denied*, 434 U.S. 1039 (1978); *State v. Meints*, 212 Neb. 410, 415, 322 N.W.2d 809, 812 (1982) (artificial maintenance of bodily functions); *New York City Health and Hosps. Corp. v. Sulsona*, 81 Misc. 2d 1002, 1004, 367 N.Y.S.2d 686, 688 (N.Y. Sup. Ct. 1975) (transplants and mechanical means to support circulatory and respiratory functions); *In re Welfare of Bowman*, 94 Wash. 2d 407, 412, 617 P.2d 731, 736 (1980) (resuscitation after cardiac arrest).

69. For example, in *New York City Health and Hosps. Corp. v. Sulsona*, 81 Misc. 2d

port systems as the factor creating the controversy in these cases illustrates clearly that the use of such modern medical technology necessitates a legal determination of what constitutes death. Because these life support systems artificially control respiration and circulation, the only accurate indication of death in these situations is brain death. Thus, it is imperative that brain death be accepted as a legal definition of death.

The medical profession has long recognized the need for a new definition of death and, in 1968, established the first widely accepted set of criteria for the determination of brain death.⁷⁰ According to present standards, the general common law definition of death is no longer acceptable. As a case of first impression in Illinois, *Haymer* provided the judiciary with a prime opportunity for the very important resolution of the definitional dilemma regarding brain death in Illinois.

1002, 367 N.Y.S.2d 686 (N.Y. Sup. Ct. 1975), the controversy surrounded the removal of organs for transplant from a neurologically dead patient who was maintained on life support systems. Although the patient's family consented to removal of his kidneys for transplant purposes, the physicians involved feared liability for removing the organs from a patient who was not legally dead. *Id.* at 1005, 367 N.Y.S.2d at 689. To avoid liability for removing the kidneys prior to the cessation of respiration and circulation, the physicians sought a declaratory judgment on the meaning of death.

In a somewhat different fashion, the use of life support systems underlay the controversies in *State v. Fierro*, 124 Ariz. 182, 603 P.2d 74 (1979); *Swafford v. State*, ___ Ind. ___, 421 N.E.2d 596 (1981); *Commonwealth v. Golston*, 373 Mass. 249, 366 N.E.2d 744 (1977), *cert. denied*, 434 U.S. 1039 (1978); and *State v. Meints*, 212 Neb. 410, 322 N.W.2d 809 (1982). These were criminal homicide cases in which the convicted defendants unsuccessfully alleged that the removal of life support systems from neurologically dead victims, rather than the defendants' actions, was the proximate cause of the homicides. In both *Fierro* and *Swafford*, the defendants unsuccessfully appealed their convictions for shooting the victims in the head. Although life support systems sustained the victim's biological functions for a period of time, the victims were eventually pronounced neurologically dead and all life support systems were removed. *See Fierro*, 124 Ariz. at 184, 603 P.2d at 76; *Swafford*, ___ Ind. at ___, 421 N.E.2d at 597. In *Golston*, the victim was hit on the head with a baseball bat by the defendant. As in *Swafford* and *Fierro*, brain death resulted and mechanical life support systems were consequently removed. The defendant unsuccessfully claimed that a jury instruction on brain death was inappropriate. *See Golston*, 373 Mass. at 253, 366 N.E.2d at 748. In *Meints*, the defendant was convicted of motor vehicle homicide after the victim died of a fatal brain injury. The defendant argued that pulling the plug on the respirator was a superceding cause of death. The conviction was upheld. *See Meints*, 212 Neb. at 420-21, 322 N.W.2d at 814-15.

Consistent with the above cases, the use of life support systems created the controversy in the most recent of the brain death cases—*Lovato v. District Court*, 198 Colo. 419, 601 P.2d 1072 (1979), and *In re Welfare of Bowman*, 94 Wash. 2d 407, 617 P.2d 731 (1980). These cases bear a striking resemblance to *Haymer* in the respect that each of them sought to define death so that life support systems could be removed from a neurologically dead child. In both *Lovato* and *Bowman*, an abused child was declared neurologically dead. In *Lovato*, a court order was issued to permit the hospital to remove the life support systems. The mother of the child appealed the order unsuccessfully, claiming that the court had abused its discretion by legally recognizing brain death. In *Bowman*, the child's heart stopped prior to review of the trial court's determination that the child was legally dead. Nonetheless, the supreme court affirmed the decision.

70. *See A Definition of Irreversible Coma*, *supra* note 8, at 337; *see also supra* note 9 and *infra* note 81.

The *Haymer* court devoted a great deal of discussion to the issue of whether the judiciary can appropriately establish a legal definition of death or whether such judicial action is a usurpation of legislative power.⁷¹ Proponents of a statutory approach could argue that action by the judiciary would result in retrospective judicial lawmaking and would constitute an invasion of legislative territory.⁷² This judicial versus legislative debate has been addressed in several of the other brain death cases.⁷³ Accordingly, the *Haymer* court relied upon the reasoning of these decisions, specifically quoting from *Lovato*.⁷⁴ The *Haymer* court correctly concluded that the absence of legislative action in this matter does not preclude judicial action. The court followed the Illinois Supreme Court's dictate that the judiciary act when circumstances are presented that call for a change in the common law.⁷⁵ Such a change in the legal definition of death is necessary if the common law is to expand with the progress of society.

Furthermore, in many circumstances judicial action is proper because a judge has no way of knowing if legislative action will ever occur. If a court does act in a manner that the legislature finds inappropriate, the mistake can later be rectified by statute.⁷⁶ Because of the urgent need for a legal determination of death in *Haymer*, as well as the general need for revision of the definition of death in Illinois, the *Haymer* court clearly acted within its authority when accepting brain death as a legal definition of death.

In formulating its judicial definition of death, the *Haymer* court recognized and acknowledged the General Assembly's intent to adopt brain death as a legal definition of death in another context.⁷⁷ The court voluntarily took into consideration the Illinois General Assembly's intent, found in the Uniform Anatomical Gift Act,⁷⁸ which defines death as irreversible cessation of total brain function. Although the Act did not control the issues in *Haymer*, the court found it significant that the legislature's definition of death under the Act conformed with the "consensus of the medical community that brain death is the death of the person."⁷⁹ Legislative intent is usually considered by courts only when interpreting a specific statute.⁸⁰ Con-

71. 115 Ill. App. 2d at 353, 450 N.E.2d at 944.

72. See *infra* note 73; see also Comment, *Medical and Legal Views*, *supra* note 1, at 182.

73. See *Lovato v. District Court*, 198 Colo. 419, 425, 601 P.2d 1072, 1075 (1979) (defendant contended that the trial judge had changed the law and invaded the province of the legislature); *Swafford v. State*, ___ Ind. ___, ___, 421 N.E.2d 596, 600 (1981) (defendant claimed brain death definition was a legislative matter); *Commonwealth v. Golston*, 373 Mass. 249, 253, 366 N.E.2d 744, 748 (1977) (defendant claimed that ex post facto lawmaking had occurred), *cert. denied*, 434 U.S. 1039 (1978).

74. 115 Ill. App. 3d at 353, 450 N.E.2d 944 (quoting *Lovato v. District Court*, 198 Colo. 419, 428, 601 P.2d 1072, 1081 (1979)).

75. See *supra* notes 38-40 and accompanying text.

76. Capron & Kass, *supra* note 7, at 101.

77. 115 Ill. App. 3d at 354, 450 N.E.2d at 945.

78. ILL. REV. STAT. ch. 110½, § 302(b) (1981).

79. 115 Ill. App. 3d at 353, 450 N.E.2d at 945.

80. See *Lipsey v. Michael Reese Hosp.*, 46 Ill. 2d 32, 39, 262 N.E.2d 450, 454 (1970)

sideration of legislative intent, therefore, indicates a commendable effort on the part of the court to act harmoniously with the legislature and to avoid usurpation of legislative functions.

While the decision of the *Haymer* court to define death legally should be applauded, the definition does have some inherent weaknesses. In light of the various criteria that have been developed to diagnose brain death,⁸¹ it appears that the *Haymer* definition is somewhat vague and nonspecific.⁸²

(legislative intent regarding statute of limitations on malpractice actions considered); *Morgan v. Board of Educ., Trico Community Unit School Dist.*, 22 Ill. App. 3d 241, 246, 317 N.E.2d 393, 397 (1974) (legislature's intent in drafting statutory school code considered in interpretation of the code).

81. The following are examples of the various criteria for the determination of brain death:

(A) The Harvard Criteria:

- 1) *Unreceptivity and unresponsivity*. There is a total unawareness to externally applied stimuli. Even the most intensely painful stimuli evoke no vocal or other response.
- 2) *No movements or breathing*. Observation covering a period of at least one hour by physicians is adequate. After the patient is on a mechanical respirator, the total absence of spontaneous breathing may be established by turning off the respirator for three minutes and observing whether there is any effort on the part of the subject to breathe spontaneously.
- 3) *No reflexes*. Irreversible coma with abolition of central nervous system activity is evidenced in part by the absence of elicitable reflexes.
- 4) *Flat electroencephalogram*. At least ten full minutes of recording are desirable, but twice that would be better.

A Definition of Irreversible Coma, supra note 8, at 337-38. *Contra Diagnosis of Death in Comatose Patients Under Resuscitation Treatment: A Critical Review of the Harvard Report*, 2 AM. J.L. & MED. 1 (1976) (disputing the use of clinical criteria for the determination of death, advocating angiography instead) [hereinafter cited as *Diagnosis of Death*].

(B) American EEG Society Criteria:

- 1) No spontaneous respiration for a minimum of 60 minutes.
- 2) No reflex response. No change in heart rate on ocular or carotid sinus pressure.
- 3) EEG. Flat lines with no rhythms in any leads for at least 60 minutes of continuous recording. No EEG response to auditory or somatic stimuli or to electrical stimulation. Two longer periods of total flat recording some hours apart may be preferred by some.
- 4) Normal basic laboratory data including electrolyte pattern.
- 5) Share responsibility for pronouncement of death with other colleagues.

Hamlin, Life or Death by EEG, 190 J. A.M.A. 112, 114 (1964).

(C) BRAIN Criteria:

- 1) *Brain stem areflexia*. Absent corneal, pupillary, ciliospinal, oculocephalic, oculovestibular, tonic neck reflexes.
- 2) *Radionuclide angiography*. Documentation of the absence of cerebral circulation is mandated as a confirmatory test of brain death.
- 3) *Apnea*. Observation by a physician covering a period of at least one hour is adequate to satisfy the criteria of no spontaneous respiration.
- 4) *Isoelectric EEG*. There is good evidence that a technically adequate EEG that is isoelectric for 10 to 30 minutes signifies severe brain damage.
- 5) Negative results at 24 hour repeat of the above tests.

Hoffman & Van Cura, Death—The Five Brain Criteria, MED. TRIAL TECH. Q. 377, 395 (1978).

82. *Compare Swafford v. State*, ___ Ind. ___, ___, 421 N.E.2d 596, 602 (1981) (brain death defined as the irreversible cessation of total brain function as determined by accepted

The definition leaves the diagnosis of cessation of brain function up to the "usual and customary standards of medical practice."⁸³ There are no specific guidelines as to how to diagnose brain death, nor are there any specific details such as the number of physicians to be involved in the determination.

Although the *Haymer* court's determination of the legal definition of death was appropriate, it was not sufficient to solve all future questions regarding brain death. Rather, action by the legislature should be taken to fill in the gaps left open by the *Haymer* court's definition of brain death. The advantages and disadvantages of legislative solutions over judicial resolutions have long been the subject of debate. At the forefront of the debate is the argument that reliance upon the judiciary for promulgation of the legal definition of death does not actively involve the public in the decision-making process.⁸⁴ Death is a medical, legal, theological, and philosophical concept and, as such, any attempt to define it should include the input of the various disciplines.⁸⁵ Not only should the scientific and legal dimensions of death be considered; rather, those dimensions of death that make it such an emotional subject should be given equal consideration. Only at open and publicized legislative hearings can the testimony and discussion of theologians, lawyers, sociologists, physicians, philosophers, and representatives of other various viewpoints be considered before framing a legal definition of death.⁸⁶

Also of paramount importance is the fact that a judicial definition of death is limited to the specific jurisdiction and subject matter of the litigation. The *Haymer* decision, for example, has precedential value only in the First District⁸⁷ because it is an appellate court decision.⁸⁸ A legislative definition, on the other hand, would not be limited in either jurisdiction or scope.

The legislative approach, however, also has some drawbacks. Some commentators believe that a statutory definition of death would consist of overly rigid guidelines for the determination of brain death.⁸⁹ Consequently, a statute could be subject to quick obsolescence as future refinements and developments in medical technology occur. While this certainly is a consideration, none of the statutes thus far enacted has imposed the rigidity that many advocates of the judicial approach feared.⁹⁰ Moreover, medical technology in this area seems to have progressed as far as possible. Therefore, a statutory defini-

medical standards) with *State v. Fierro*, 124 Ariz. 182, 186, 603 P.2d 74, 77 (1979) (brain death defined as total cessation of brain function as determined by the Harvard Criteria).

83. 115 Ill. App. 3d at 355, 450 N.E.2d at 945.

84. See Capron & Kass, *supra* note 7, at 100.

85. *Id.*

86. *Id.*

87. See *supra* note 12 and accompanying text.

88. Similarly, the *Golston* decision is technically limited to the law of homicide by a specific notation of the court that it was not concerned with the countless other situations in which a definition of death might be needed. 373 Mass. 249, 255, 366 N.E.2d 744, 749 (1977), *cert. denied*, 434 U.S. 1039 (1978).

89. See Hirsh, *supra* note 2, at 386.

90. See Comment, *Medical and Legal Views*, *supra* note 1, at 187.

tion of death that incorporates medical criteria would not be obsolete in the foreseeable future.

On balance, it appears that legislative enactment of a statutory definition of death is the preferred alternative.⁹¹ A legislative definition would permit public participation in the decision-making process and contain the clarity and specificity necessary to dispel the fears of both the public and physicians. The need for preciseness, accuracy, flexibility, and public involvement would thus be met.⁹² Perhaps most importantly, a legislative definition would provide for a state-wide definition of death applicable to all circumstances.

Although the *Haymer* court did not specifically encourage such legislative action to be taken in Illinois, it did appear to recognize that such an option exists.⁹³ The *Haymer* decision provides Illinois with the much needed framework for a legal definition of death based upon brain death. The legislature, aided by the input of many disciplines, should now build upon that framework by establishing a comprehensive statutory definition of death.

IMPACT

The general definition of brain death adopted by the *Haymer* court has implications beyond pointing up the need for legislative action. Lack of criteria upon which to predicate the occurrence of brain death could foster uncertainty among the medical profession as to what constitutes an acceptable determination of brain death.⁹⁴ This, in turn, could result in inconsistency among physicians in diagnosing brain death.⁹⁵ It is foreseeable that one physician would consider a patient to be dead while another would consider a patient in a similar condition to be alive. This could conceivably result in disparate treatment of two identical patients with regard to issues such as deciding whether to terminate life support systems.

Notwithstanding the judicial nature of the definition, and therefore its inherent limitations, the *Haymer* court's recognition of brain death will have far-reaching implications in Illinois. Perhaps the greatest impact⁹⁶ will be

91. See Capron & Kass, *supra* note 7, at 101 (preferring legislative over judicial definition). But see Note, *The Time of Death*, *supra* note 4, at 256 (preferring judicial over legislative definition).

92. See Capron & Kass, *supra* note 7, at 101.

93. "We recognize the authority of, and indeed encourage, the General Assembly to pronounce statutorily the standards by which death is to be determined. . . ." 115 Ill. App. 3d at 353, 450 N.E.2d at 944 (quoting *Lovato v. District Court*, 198 Colo. 419, 428, 601 P.2d 1072, 1081 (1979)). The Colorado legislature did subsequently adopt a statutory definition of death. See *supra* note 35.

94. See Hirsh, *supra* note 2, at 386.

95. See Capron & Kass, *supra* note 7, at 97.

96. Perhaps were it not for Illinois' prior adoption of the Uniform Anatomical Gift Act, the largest effect of the *Haymer* decision would have been felt in the area of transplants. Because the Act already defines death, for the purpose of the statute, as irreversible cessation of total brain function, there has been no concern over liability for the removal of organs from neurologically dead patients.

felt by patients who are maintained on artificial life support systems and the families of those patients. Prior to the *Haymer* decision, physicians had no legal authority to declare a patient neurologically dead and discontinue life support systems. A physician's discretion was limited because the possibility of civil or criminal liability was a realistic fear.⁹⁷ Disregarding the purpose behind the physician's actions, the law could have equated "pulling the plug" with criminal homicide by a hired gunman;⁹⁸ both actions result in death, and in both situations the actor intends that death should follow. The *Haymer* decision, however, allows physicians to remove life support systems legally from those patients diagnosed as neurologically dead. The decision to remove such systems does not rest solely in the hands of the physicians, but it rests on society as well through its acceptance of brain death as a legal definition of death.⁹⁹ Although the societal input is not as great as it would be if a legislative definition were formulated, judicial promulgation of what constitutes death nonetheless takes the bulk of the decision making out of the physician's hands. The physician will be making the ultimate decision, however, that decision will be guided by a legal standard. The extent of the impact of *Haymer* upon artificially sustained patients is further illustrated by recognition that all of the modern brain death decisions have involved victims on mechanical life support systems.¹⁰⁰

Beyond easing the physician's fear of liability for removing life support systems, the impact of *Haymer* will be felt by the families of such patients and by the hospitals.¹⁰¹ The prolonged mental suffering and financial strain experienced by the family will be lessened by a timely determination of brain death and the resulting termination of artificial maintenance of a family member.¹⁰² Additionally, hospital beds will be freed and staff and resources made available to patients who are capable of recovering.¹⁰³

Another major area where the impact of the *Haymer* decision will be felt is in the area of criminal law. Declaring a patient neurologically dead prior to the occurrence of clinical death aids in the determination of criminal wrongdoing as well as the determination of the specific cause of an injury. Prior to *Haymer*, a legal pronouncement of death might take place minutes

97. See Fletcher, *Prolonging Life*, in *ETHICAL ISSUES IN DEATH AND DYING* 226 (R. Weir ed. 1977).

98. *Id.*

99. See Appel, *Ethical and Legal Questions Posed by Advances in Medicine*, 205 J. A.M.A. 513, 516 (1968).

100. See *supra* note 69 and accompanying text.

101. See *Diagnosis of Death*, *supra* note 81, at 4.

102. *Id.*

103. *Id.* The amount of time that a patient can be artificially maintained after brain death occurs varies. Reported cases illustrate a period of at least 43 to 74 days. These patients might have been sustained even longer, but court orders ended their ordeals by allowing life support systems to be terminated. See Paris & Cranford, *Brain Death, Prolife and Catholic Confusion*, *AMERICA* 345, 346, 349 (December 4, 1982).

or days after the occurrence of brain death. Brain tissue is extremely sensitive to post-mortem changes, and deterioration of the tissue prior to autopsy can mask the true cause of death.¹⁰⁴ Now that a timely legal pronouncement of death can be made, such difficulties can be avoided.

Lastly, *Haymer* will have an impact on the numerous legal issues that require a determination of the time and presence of death. Such issues include questions of inheritance,¹⁰⁵ liability under life insurance contracts,¹⁰⁶ and obligations incurred contractually by the deceased.¹⁰⁷ A precise determination of death is always useful, but frequently is indispensable in these situations.¹⁰⁸ Prior to *Haymer*, a person was not legally dead when neurologically dead; however, in the future, a legally acceptable determination of brain death may lead to a different disposition of personal and real property as well as insurance benefits. The *Haymer* designation of brain death as legal death thus serves to provide for a more accurate disposition of these legal matters.

CONCLUSION

The *Haymer* court's acceptance of brain death as a legal definition provides the legal community with a modern definition of death long recognized by the medical community. The development of surgical transplants, cardiopulmonary resuscitation, and artificial life support systems has rendered the traditional definition of death—cessation of respiration and circulation—meaningless in many situations. *Haymer* provided a prime opportunity for the appellate court to acknowledge this definitional dilemma and rectify the situation accordingly.

While the *Haymer* court appropriately fulfilled the need for a legal definition by recognizing brain death judicially, it is now imperative that the legislature act. Adoption of a death statute would clarify the concept of brain death and provide a consistent, state-wide definition. Therefore, it is suggested that the Illinois legislature enact a statutory definition of death.

Marilee Clausing

104. See Hirsh, *supra* note 2, at 390; Sweet, *Brain Death*, 299 NEW ENG. J. OF MED. 410 (1978). The vulnerability of central neural tissue is well known. Neurotransmitters such as norepinephrine, dopamine, and serotonin lose their *in vivo* characteristic chemical affinities so rapidly that they cannot be detected more than one hour after brain death occurs. Hirsh, *supra* note 2, at 390.

105. See CRITERIA FOR THE DETERMINATION OF DEATH, *supra* note 18, at 18.

106. *Id.*

107. *Id.*

108. *Id.* For example, consider a situation in which two people have willed in each other's favor and they both die in the same accident. It is essential to know who died first so that his property can be passed to the other and then distributed to the appropriate heirs. See *In re Estate of Rowley*, 257 Cal. App. 2d 324, 339, 65 Cal. Rptr. 139, 143 (1968) (jury decided that one spouse had survived the other by 1/500,000th of a second).

