

Criminal Act or Palliative Care? Prosecutions Involving the Care of the Dying

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Two significant, apparently unrelated, trends have emerged in American society and medicine. First, American medicine is reexamining its approach to dying. The Institute of Medicine,¹ the American Medical Association,² and private funding organizations³ have recognized that too many dying people suffer from pain and other distress that clinicians can prevent or relieve. Second, this past decade has marked a sharp increase in the number of physicians prosecuted for criminal negligence based on arguably negligent patient care.⁴ The case often cited as a watershed is *People v. Einaugler*, which involved a New York nursing home patient whose physician was convicted in 1993 of two criminal misdemeanors after he ordered an elderly dialysis patient to be tube fed through a peritoneal dialysis catheter.⁵

How is the growing awareness of dying patients' pain and the increasing willingness of prosecutors to charge physicians with crimes connected? Pain at the end of life is frequently treated with narcotics, prescription drugs that are closely regulated by state and federal law. That complex web of laws—and a growing fear of legal sanctions—has deterred physicians from prescribing controlled substances.⁶ As those legal sanctions move from disciplinary actions to criminal charges, physicians' fears may expand.

In this article, I discuss and analyze what actions have put physicians or nurses at risk for criminal investigation or prosecution in connection with their care of dying patients, particularly their management of pain. I do not survey all criminal actions against physicians and nurses. Some physicians have been investigated, prosecuted, and convicted for providing gross or culpable departures from the ordinary standard of care.⁷ For example, a California phy-

sician was convicted of involuntary manslaughter when he wrote illegal prescriptions for controlled substances and his patient used the opiates to commit suicide.⁸ Rather, I focus on pain management for dying patients and so limit discussion to the criminal investigations and actions brought against physicians for care, particularly pain control, at the end of life.

Background cases: Is too much morphine murder?

In 1982, *Commonwealth v. Capute*, a highly publicized murder trial in Fall River, Massachusetts, raised the question of whether a caregiver's use of opioids could betray an intent to kill.⁹ After five weeks of testimony, Anne Capute was acquitted of both a murder charge and a second charge, illegally dispensing morphine. In 1990, the county attorney and the medical examiner in Hennepin County, Minnesota, accused five physicians of committing homicide in two separate cases. Both cases involved terminally ill patients who received large doses of morphine before they died.¹⁰ The county attorney chose not to carry the cases forward to a grand jury and, instead, he issued guidelines for treating end-of-life pain. Although the county attorney determined that the deaths were homicides, he believed that he had little chance of conviction because the elements of the crime could not be proved beyond a reasonable doubt.¹¹

Physicians may prescribe large doses of morphine because dying patients do suffer excruciating pain. Patients' distress is magnified because they not only face physical pain, but they also remain anxious that physicians will allow needless discomfort to pervade the dying process.¹² Myriad testimonials illustrate this dilemma.¹³ Beyond anecdotes, data suggest that despite the existence of effective pain control, such fears are justified. Patients in the SUP-

PORT study suffered considerably: the families of half of the patients who died reported that the patients experienced moderate or severe pain during most of their final three days of life.¹⁴

Several factors contribute to physicians' failure to use high dose opioids to manage the pain of dying patients. Survey data suggest that some physicians and nurses lack the knowledge and skill to use pain medications effectively.¹⁵ The same data also indicate that physicians and nurses fear criminal prosecutions resulting from the administration of large amounts of morphine at the end of a patient's life.¹⁶ This fear may extend to health care professionals who specialize in palliative care. Dr. Timothy Keay, a palliative care expert at the University of Maryland, described his approach to morphine use by noting, "I want to practice good medicine. But it has to be squeaky clean, or you can wind up in big trouble."¹⁷ Media attention to physicians' fears may fuel professional anxiety as well. For example, NBC's *Today Show* reported that the U.S. Supreme Court's decisions in *Washington v. Glucksberg*¹⁸ and *Vacco v. Quill*¹⁹ "could make murder charges against doctors more common."²⁰ These cases did not involve criminal actions, and nothing in the Supreme Court's holding, that there is no general constitutional right to physician-assisted suicide (PAS),²¹ suggests that states will prosecute more physicians. However, physicians are correct in noting that they, as a profession, have become more vulnerable to criminal actions. Even though criminal prosecutions of physicians are still rare, they have become more common in the United States within the past ten years, and the prosecutions involving the use of morphine or other analgesics or sedatives to treat severe pain must be considered in light of this trend toward criminal prosecutions for lapses in clinical judgment.²²

Although data are scarce, anecdotal evidence indicates that criminal prosecutions for pain medications given to dying patients frighten doctors, nurses, and hospital administrators. Reports in Massachusetts and Minnesota following *Capute* and the Hennepin County cases suggest that health care professionals hesitated to provide appropriate doses of morphine for dying patients. *Minnesota Medicine* quoted the family of a seventy-five-year-old cancer patient who had died in pain.²³ "The nurses and the physician said, 'There are these morphine cases out there,'" reported one family member. "One [nurse] even said, 'You know they can send people to jail for this.'"²⁴ Eight years ago when the Minnesota cases were investigated, lawyers and ethicists assured physicians that "Nobody has gone to jail for administering too much morphine to a dying patient."²⁵ That statement no longer holds true. In 1997, a Kansas jury found Dr. L. Stan Naramore guilty of attempted first-degree murder after he gave injections of fentanyl and Versed to a seventy-eight-year-old woman who was dying of cancer.²⁶ Naramore was also convicted of second-degree murder in

connection with his decision to withdraw respiratory support from an eighty-one-year-old diabetic male patient who had suffered a stroke.²⁷ Sentenced to concurrent terms of five to twenty years, he served thirty months in jail before being paroled.²⁸ In February 1998, his appeal was argued and submitted to the Kansas Court of Appeals. In July 1998, that court summarily reversed the convictions.²⁹

Research methodology

In 1990, the legal landscape pertaining to end-of-life care shifted. At the end of 1989, the Supreme Court implicitly held, in *Cruzan v. Director, Missouri Department of Health*, that a patient has a liberty interest in refusing unwanted medical care, including life-sustaining therapy like nutrition and hydration.³⁰ This decision became the cornerstone of a trend that began with a California appellate court decision, in *Barber v. Superior Court*. In this case, the California Court of Appeals held that a physician charged with murder and conspiracy to commit murder had not committed an unlawful act when, with permission from the patient's family, he removed hydration and nutrition tubes from a comatose patient.³¹ A physician, the court found, has "no duty to continue treatment, once it has proved to be ineffective."³² Because it was unclear whether withholding or withdrawing care was a criminal act prior to 1990 in states other than California, cases from the period before the Supreme Court's *Cruzan* opinion could muddy the analysis and provide little useful contemporary information.³³ Therefore, the search for cases here focused on instances of alleged criminal activity after 1990, after the Supreme Court had decided *Cruzan*.

For this article, searches of national data bases within the LEXIS-NEXIS system were conducted to identify physicians who had allegedly given a patient a lethal dose of medication and were under criminal suspicion. Cases that were not discussed through public media (including print journalism, radio, or television reporting), criminal indictment proceedings, or a trial might not have been included. Civil cases, which include malpractice suits, are not part of this analysis. Neither are homicide cases that concerned physicians but did not involve patient care.³⁴ The data base searches focused on reports of medical professionals who were associated with alleged homicides in relation to dying patients by using keywords to identify those issues.³⁵ Numerous telephone interviews with prosecutors, defense lawyers, state medical board staff members, reporters, and others with knowledge of alleged crimes were also conducted to obtain detailed information about individual cases and to discern local and national trends. Although unreported cases of physicians allegedly ending a dying patient's life with pain medications might not be included here, it is likely that every case since 1990 that resulted in indictment or prosecution is.³⁶

Killers and pain-killers: a primer on homicide and opioids

Physicians, like all citizens, must abide by the social norms of behavior that criminal laws reinforce. A crime usually contains two basic elements.³⁷ First, there must be a criminal act.³⁸ Second, with the exception of manslaughter statutes, most criminal laws covering unlawful deaths require the act to be intentional.³⁹ Malice, whether express or implied, is always necessary to convict a person of any degree of murder.⁴⁰ Crimes like rape, fraud and abuse, or suicide assistance, whether or not the alleged perpetrator is a physician, have one common element: they involve intentional criminal acts. A physician's use of opioids to treat a patient's pain, on the other hand, need not, and usually is not, an intentional criminal act. Prosecutors must find evidence of a physician's intent to kill or a reckless disregard for a patient's well-being.

Homicide and criminal codes

The cases considered here cover investigations for a number of alleged crimes. Because crime is an area of law traditionally left to the states, each state has its own penal code and may define homicidal crimes slightly differently.⁴¹ Some states choose to divide murder into degrees. For example, in California, first-degree murder is generally a willful, deliberate, and premeditated killing, while second-degree murder covers "all other kinds of murder."⁴² New York divides homicides into five categories: criminally negligent homicide; first- and second-degree manslaughter; and first- and second-degree murder.⁴³ The American Law Institute has created a model on which state legislatures can pattern their codes, and its general definitions are useful background here.⁴⁴ According to the *Model Penal Code*, murder occurs when a homicide is committed purposely, knowingly, or recklessly "under circumstances manifesting extreme indifference to the value of human life."⁴⁵ In all states and in the *Model Penal Code*, criminal attempts, like attempted murder, are also crimes.⁴⁶ Gross physician negligence, which does not require intentional and expressly or implicitly malicious killings, could result in a charge of involuntary manslaughter in a state that uses that derivation of the crime. California defines involuntary manslaughter, in part, as "the commission of a lawful act which might produce death, in an unlawful manner, or without due caution and circumspection."⁴⁷ "Aggravated, culpable [and] gross negligence" are necessary for an involuntary manslaughter conviction.⁴⁸ Finally, physician negligence could also result in a criminal charge of reckless endangerment.⁴⁹ Although jurisdictions may differ in the details, all states criminalize homicidal behavior and, depending on a prosecutor's decision and the facts of the case, a physician may be criminally liable for any act that grossly deviates from the standard of care and results in a patient's death.

Medication for the palliation of pain

Dying patients receive several types of drugs for palliative care, a category of care that refers to the management of patients with active, progressive, far-advanced disease that cannot be cured.⁵⁰ Palliative care aims to control pain and other symptoms and to achieve the best quality of life for patients and their families.⁵¹ Almost all of the patients in the cases analyzed here would be eligible for palliative care. It is not surprising, however, that many of them did not receive adequate palliation because the quality of end-of-life care in America remains low.⁵² For example, numerous studies have mapped the prevalence of pain for dying patients, particularly those with advanced cancer.⁵³

The major group of drugs used in cancer pain management are opioid analgesics. *Opioid* is a general term that describes naturally occurring and semisynthetic drugs derived from the juice of the opium poppy (like morphine and fentanyl) and completely synthetic drugs (like methadone) that produce their effects by binding to opioid receptors.⁵⁴ Respiratory depression is the most serious adverse effect of strong opioids. The morphine-like agonists act on brainstem respiratory centers to produce, as a function of dose, increasing respiratory depression to the point of apnea.⁵⁵ Significant respiratory depression rarely occurs in a patient whose opioid dose has been gradually adjusted against pain.⁵⁶ However, tolerance to opioids is relative and almost never complete. Even a cancer patient who has developed tolerance to high doses of strong opioids can have the drug tolerance overcome with doses that are significantly greater than the patient's current opioid blood level. For example, in a five-year study of physicians in the Netherlands, where euthanasia and assisted suicide are practiced with increasing openness, 84 percent of all respondents reported that they had administered opioids in such doses that they may have shortened a patient's life.⁵⁷ Many of the cancer patients could tolerate opioids because they were taking opioids for pain management.⁵⁸

Benzodiazepines are sometimes used as adjuvant medication for some malignant pain.⁵⁹ They are also the primary pharmacologic treatment for anxiety during the dying process.⁶⁰ In general, benzodiazepines act as depressants of the central nervous system (CNS), producing all levels of CNS depression, from mild sedation to hypnosis to coma.⁶¹ Opioids, when combined with benzodiazepines, act to cause more severe respiratory depression and a simultaneous drop in blood pressure.⁶² Some of the cases analyzed here involve acute administrations of Versed or Valium (benzodiazepines) with fentanyl or morphine (opioids).

Several of the cases involved potassium chloride, a drug that is regularly used in an intravenous drip to treat potassium deficiencies that often result from treatment for common diseases like heart failure and high blood pressure.⁶³ Potassium chloride can be fatal because, in excessively high blood levels, it can stop the heart.⁶⁴ Blood levels become

dangerously high either when too much potassium chloride is given or a correct amount is given too quickly. The drug is used in some states for lethal injections⁶⁵ and has also been used by Dr. Jack Kevorkian in his suicide machines.⁶⁶ In 1987, the *Journal of the American Medical Association* published a brief report of a “proud and private man” with circulatory insufficiency, small vessel disease in both legs.⁶⁷ The patient declined amputation and dialysis and then asked his physician to “shoot [potassium] right into my vein.”⁶⁸ He argued, “What’s the difference?” Without dialysis, “the potassium in my blood will build up and then my heart will stop.”⁶⁹ The potassium injection would be “similar to what will happen by itself, but ... it will save me the agony of waiting and pain.”⁷⁰

Cases from 1990 to present: Criminal acts or end-of-life care?

Discussion of criminal cases should begin with the observation that physicians and nurses who provide good palliative care to patients have little to fear from the criminal law. This research shows no systematic efforts by any state or local government to target health care providers or dying patients for routine investigation or review. Treatment of terminal pain is never investigated unless someone knowledgeable about the treatment informs either a hospital supervisor, an ethics committee, or a local prosecutor.⁷¹ State boards in all of the criminal cases studied here reacted to the investigations of hospitals or local prosecutors; none of them initiated any of these actions. In other words, these cases represent intercollegial discord and miscommunication or disagreements between providers and families, rather than suspicious or overzealous prosecutors. Furthermore, the number of cases identified is small and probably underestimates the actual number of times physicians have used lethal doses for the primary purpose of ending a patient’s life.⁷² For example, a recent national survey of physicians likely to care for dying patients reported that 4.7 percent of respondents said they had administered at least one lethal injection.⁷³ Another survey of 355 oncologists found thirty-eight cases where physicians had injected a patient with a lethal dose of a drug or had written an order to that effect.⁷⁴ It is therefore possible, and perhaps likely, that many more health care providers use controlled substances to hasten death than are ever investigated or prosecuted.

Overview

Tables 1, 2, and 3 show the results of searches of national data bases of print and broadcast journalism and of legal data bases of court opinions. Table 1 shows the reports of physicians who have been criminally investigated but not indicted or formally prosecuted. Since 1990, at least thirteen physicians have been criminally investigated but not

formally indicted or prosecuted. Table 2 lists the cases of physicians who have been formally charged or indicted for homicide. Three have been tried for murder in connection with their treatment of dying patients and two more have been charged with or indicted for murder. Table 3 shows the experience of nurses with the criminal justice system. Two nurses have been criminally investigated and two more have been indicted. One of the nurses indicted, Orville Lynn Majors, still awaits trial.

Most of these cases involve a single health care provider. The Hennepin County cases involved five physicians; the New Haven case involved two physicians (the attending surgeon and a resident), and the Volusia County hospice case involved an undisclosed number of physicians and hospice workers. This Florida hospice case is the only criminal investigation that examined the activities of health care team members of different disciplines. These cases represent a total of at least twenty-three investigations of professional caregivers, eight indictments, four murder trials, and two physician convictions. One set of convictions (for attempted first-degree murder and second-degree murder) was reversed on appeal.⁷⁵

The seven indictments in the last eight years represent a substantial increase in criminal prosecutions of end-of-life care. In the fifty-five preceding years, from 1935 to 1990, ten physicians were charged with killing terminally ill patients.⁷⁶ Those ten charges resulted in seven trials leading to one guilty plea, one conviction, three acquittals, and three dismissals. None of the physicians involved in those cases served jail time, and one is notable as a case of withdrawal of support at the request of the patient. Such withdrawal of treatment is no longer considered a criminal action.⁷⁷

Where were providers prosecuted?

Indiana is the only state where more than one health care professional has been indicted. Dr. Marilyn Dargis was indicted by a Michigan City grand jury in 1992 for reckless homicide following her alleged inappropriate use of morphine and suffocation of a patient.⁷⁸ Dargis injected a sixty-six-year-old man who had suffered a heart attack with morphine following an attempt to resuscitate him.⁷⁹ Though the patient was believed to be dead, two nurses told the Indiana Medical Licensing Board that they noticed him breathing again.⁸⁰ At that point, they saw Dargis inject the man with morphine in order to stop his breathing.⁸¹ Dargis entered a plea agreement to perform community service in return for a suspension of the charges against her.⁸² The case of Majors concerns a licensed practice nurse who allegedly used potassium chloride to kill at least four, and perhaps more, patients in an intensive care unit (ICU) in rural Indiana.⁸³ Majors was indicted, arrested, and pleaded not guilty to murder charges in December 1997,⁸⁴ and he continues to await trial.

Five unidentified physicians St. Paul/Minneapolis, Minnesota	120 mg dose of morphine given in 45 minutes to 65-year-old woman with terminal lung failure while withdrawing ventilator. ¹	Medical examiner ruled death a homicide. No prosecution. Instead, prosecutor's office issued guidelines on proper uses of morphine and effective dosing. ²
Five unidentified physicians St. Paul/Minneapolis, Minnesota	395 mg dose of morphine and 40 mg dose of midazolam given in 5 hours to 29-year-old man with an immune system deficiency related to a bone marrow transplant while withdrawing ventilator. ³	Medical examiner ruled death a homicide, calling it a "simple act of active euthanasia." ⁴ No prosecution. Instead, prosecutor's office issued guidelines on proper uses of morphine and effective dosing. ⁵
Frederick Curren, M.D. Psychiatrist Pembroke, Massachusetts	Unidentified drugs prescribed by psychiatrist for his 42-year-old disabled, depressed wife to commit suicide. ⁶	County investigated illegal prescribing and psychiatrist's role in patient's death. ⁷
Charles Kivowitz, M.D. Medicine ⁸ Beverly Hills, California	Unknown amounts of morphine and Demerol given to terminally ill woman, heiress to significant tobacco fortune. ⁹	Prosecutor concluded investigation, finding "no credible evidence" of murder ¹⁰ although Kivowitz stated that he "increased the morphine [level] so that she would not linger [and not] suffer." ¹¹
Unidentified physician Anesthesiologist San Francisco, California	Bolus of potassium chloride given to 9-year-old girl from whom life support was withdrawn. ¹²	Coroner investigated, but the body was not exhumed. No referral to grand jury. ¹³
James Gallant, M.D. Medicine ¹⁴ Corvallis, Oregon	Allegedly supplied 100 mg dose of succinylcholine to 78-year-old woman diagnosed with subarachnoid hemorrhage after she was taken off a respirator. ¹⁵	No criminal charges were laid, ¹⁶ but defendant's license was suspended for two months. ¹⁷
Viswa Nathan, M.D. Cardiothoracic surgeon New Haven, Connecticut	Ordered medical resident to turn the intravenous valve "wide open" to deliver morphine dose seventeen times greater than previous dose, then ordered potassium chloride injection. ¹⁸ Patient was terminally ill following an attempt to repair a damaged thoracic aorta, and he died "within one minute of the injections." ¹⁹	Chief state medical examiner ruled the death a homicide, but the state attorney did not prosecute, noting that the killing lacked criminal intent. The hospital revoked staff membership and privileges, calling the death a "mercy killing." Privileges returned and the hospital pressured Connecticut Medical Examining Board to reinstate the surgeon's license. ²⁰
Stephen Sudderth, M.D. Medical resident New Haven, Connecticut	Followed the orders of Dr. Viswa Nathan, above. ²¹	State health officials denied the resident the ability to practice by refusing to grant him a residency permit, ²² and the Department of Health Services revoked his license to practice. ²³ No criminal prosecution due to lack of criminal intent.
Unidentified physician Resident Providence, Rhode Island	Potential morphine overdose of 60-year-old man who suffered complications after his esophagus was surgically removed. ²⁴	No additional reports of case; however, earlier reporting noted the reluctance of the U.S. Attorney's office to discuss the case. ²⁵
John Coe, M.D. Redding, California	Assisted patient with acquired immune deficiency syndrome with suicide by prescribing an overdose of morphine. ²⁶	Coroner ruled the death a homicide. Prosecutor did not bring charges because the jury would be unlikely to convict, because Coe was "moved by compassion." ²⁷ The California Board of Medicine closed its investigation, citing a lack of evidence showing that Coe violated the medical practice act. ²⁸
Unidentified physicians and hospice workers Volusia County, Florida	Medical examiner alleges that cancer patients received lethal doses of liquid morphine. ²⁹	Investigation concluded that medical examiners misunderstood the use of morphine for pain control. ³⁰ Medical examiner was suspended and later resigned. ³¹

Table 1. Criminal Investigations of Physicians According to Press Reports, 1990 to Present.

Sources

1. See D.M. Gianelli, "Patient Deaths Spur Guidelines on Pain Drugs," *American Medical News*, May 4, 1990, available in 1990 WL 3259650.

2. See "Doctors Reportedly Won't Be Prosecuted in Mercy Killings," *United Press International*, Mar. 28, 1990.
3. See *id.*
4. See Letters, "Active Euthanasia," *Star-Tribune* [Minneapolis], May 17, 1990, at 18A.
5. See "Doctors Reportedly Won't Be Prosecuted," *supra* note 2.
6. See M. Devine, "Suicide Brings Group Together; Members Say Curren's Death Preventable," *Patriot Ledger*, Aug. 27, 1996, at 9C.
7. See *id.*
8. See Combined Press Reports, "DA: Duke's Butler Didn't Do It," *Newsday*, July 26, 1996, at A26.
9. See Associated Press, "Inquiry Exonerates 2 in Death of Heiress," *New York Times*, July 26, 1996, at B2.
10. See *id.*
11. See P. Lieberman, "Inquiry Rejects Claim Doris Duke Was Murdered," *Los Angeles Times*, July 25, 1996, at B1.
12. See E. Epstein, "Girl's Doctor at UCSF Won't Be Charged: He Allegedly Gave Dying 9-year-old a Lethal Injection," *San Francisco Chronicle*, May 25, 1995, at A16.
13. See *id.*
14. See "Doctors Fear Man May Be Suffering from Rare Brain Disease," *United Press International*, Aug. 22, 1990.
15. See "Board: Doc Killed Patient Against Will," *Bulletin*, July 21, 1996, at A1; and "Doctor Investigated for Euthanasia," *States New Briefs*, Aug. 2, 1996.
16. See Staff and Wire Reports, "Across the USA: News From Every State (Oregon)," *USA Today*, Dec. 11, 1997, at 12A.
17. See Staff and Wire Reports, "Across the USA: News From Every State (Oregon)," *USA Today*, Aug. 7, 1997, at 7A.
18. See "Medical Records Reveal Apparent Mercy Killing," *United Press International*, Jan. 21, 1990.
19. See "State Denies Doctor Residency Permit in Mercy Killing," *United Press International*, Jan. 9, 1990.
20. See F. Spencer-Molloy, "State Disciplinary Action Viewed as Often Lenient," *Hartford Courant*, May 24, 1992, at A4.
21. See "State Denies Doctor Residency," *supra* note 19.
22. See *id.*
23. See "Hospital Expels Mercy-Killing Doctor," *United Press International*, Feb. 23, 1990.
24. See E. Kreiger, "Death at VA Prompts Federal Probe; A Comatose Patient May Have Been Given a Lethal Dose of Morphine by a Doctor in Training," *Providence Journal-Bulletin*, Mar. 30, 1997, at 1B.
25. See *id.*
26. See Associated Press, "No Trial in Aided Suicide," *New York Times*, May 23, 1994, at A13.
27. See *id.*
28. See Bee News Services, "State Ends Probe of Doctor," *Sacramento Bee*, Nov. 19, 1994, at B3.
29. See A.C. Rippel, "Investigation Begins in Two Hospice Deaths," *Orlando Sentinel Tribune*, May 31, 1998, at B1.
30. See A.C. Rippel, "Examiner Spurs 'Fake Hysteria,' Expert Says," *Orlando Sentinel Tribune*, Aug. 29, 1998, at D1.
31. "County Begins Process of Hiring New Examiner," *Orlando Sentinel Tribune*, Nov. 6, 1998, at D3.

Marilyn Dargis, M.D. Emergency Medicine Physician LaPorte County, Indiana	Injected 66-year-old man in emergency department following heart attack with unknown amount of morphine, then obstructed his endotracheal tube with gauze. ¹	Indicted by grand jury. ² Plea bargain resulted in community service. ³ Defendant banned by state board of medicine from seeing patients or prescribing medications.
Eva Carrizales, M.D. Neonatologist Riverdale, Georgia	Accused of smothering premature 39-day-old neonate suffering from kidney failure ⁴ and lung disease ⁵ by applying pressure to carotid artery.	Murder trial resulted in 7-5 (acquit) hung jury ⁶ after which the district attorney dismissed charges. ⁷ The Georgia Composite Board of State Medical Examiners decided not to impose sanctions. ⁸
Ernesto Pinzon-Reyes, M.D. Nephrologist Sebring, Florida	Morphine, Valium, and bolus of potassium chloride given to 70-year-old man, terminally ill with cancer of the lung, ⁹ liver, and spine. ¹⁰	First-degree murder trial resulted in acquittal. ¹¹ State medical board suspended ¹² then, with a 7-6 vote, reinstated ¹³ nephrologist's medical license.
L. Stan Naramore, O.D. Family Practitioner St. Francis, Kansas	Withdrew oxygen without reversing neuromuscular block from 81-year-old man in emergency room following presumed stroke. ¹⁴	Jury convicted physician of second-degree murder. Conviction was overturned by Kansas Court of Appeals. ¹⁵
L. Stan Naramore, O.D. Family Practitioner St. Francis, Kansas	Fentanyl and Versed (midazolam) given to 78-year-old woman with metastatic cancer. ¹⁶	Jury in trial as above convicted physician of attempted first-degree murder. Conviction overturned by Kansas Court of Appeals. ¹⁷
C. Douglas Wood, M.D. Surgeon Broken Arrow, Oklahoma	20 mL of potassium chloride given in 30 seconds to 86-year-old man with tuberculosis, emphysema, congestive heart failure, and septic stomach ulcer who was hospi-	Trial for first-degree murder in federal district court. Jury convicted surgeon of lesser offense (involuntary manslaughter). Wood is in house detention with unsecured

	talized for surgical repair of ulcer. ¹⁸ Surgeon argued potassium chloride was used to restart the patient's ailing heart. ¹⁹	bond pending sentencing hearing. ²⁰ Original October 1998 sentencing date postponed. ²¹
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Table 2. Criminal Trials of Physicians, 1990 to Present.

Sources

1. See "Doctor Indicted in Hospital Death," *Chicago Tribune*, Apr. 11, 1991, at 3.
2. See *id.*
3. See Telephone Interview with Cynthia Hedge, LaPorte County Prosecuting Attorney (May 1, 1998).
4. See R. Ellis, "Murder Charge Against Carrizales Dropped; Clayton County Says It Won't Retry Doctor," *Atlanta Journal & Constitution*, Apr. 14, 1995, at 1A.
5. See T. Watson, "Ga. Murder Trial Has Ethics Subtext," *USA Today*, Oct. 24, 1994, at 10A.
6. See A. Cowles and B. Montgomery, "Doctor Absolved, Hospital Gets Mistrial in Brain Damage Case," *Atlanta Journal & Constitution*, Apr. 16, 1997, at 5C.
7. See "Law and Order: Fulton County Doctor Not Liable in Death of Infant," *Atlanta Journal & Constitution*, Nov. 9, 1996, at 7D.
8. See R. Ellis, "No Sanctions Against Physician Tried in Death of Newborn," *Atlanta Journal & Constitution*, Feb. 8, 1996, at 1C.
9. See P. Lima, "Doctor Wins Back License," *Tampa Tribune*, Dec. 7, 1997, at 1.
10. See "Doctor Charged with Murdering Cancer Patient," *New York Times*, Dec. 5, 1996, at B16.
11. See Lima, *supra* note 9.
12. See Tribune Staff Report, "Doctor Loses Bid to Regain License," *Tampa Tribune*, July 30, 1997, at 4.
13. See "Board Allows Doctor Acquitted of Murder to Practice Again," *New York Times Abstracts*, Dec. 7, 1997, at B6.
14. See *State v. Naramore*, 965 P2d. 211, 215 (Kan. Ct. App. 1998).
15. See *id.* at 212, 224.
16. See *id.* at 215.
17. See *id.* at 212, 224.
18. See A. Thornton, "Judge Frees Surgeon to Await Sentencing," *Daily Oklahoman*, May 20, 1998, at 1.
19. See C.T. Jones and A. Thornton, "Dose Not Lethal, Doctor Testifies," *Daily Oklahoman*, May 8, 1998, at 1.
20. See R. Espinosa, "Doctor to Appeal Manslaughter Case," *Tulsa World*, July 16, 1998.
21. See Personal Communication from Guy Fortney, J.D., Attorney to C. Douglas Woods, to Julie Cantor, Research Assistant to Ann Alpers (Nov. 18, 1998) (on file with author).

Sharon LaDuke, R.N. New York	Unspecified dose of fentanyl given to 76-year-old woman with end-stage lung disease and pneumonia. ¹	District attorney concluded that insufficient evidence of homicide existed; the skilled nursing facility fired LaDuke. Patient's family supported nurse and requested better pain management.
Unidentified nurse Texas	Bolus of potassium chloride injected into feeding tube of terminally ill 83-year-old man. ²	Charged with murder.
Orville Lynn Majors, L.P.N. Indiana	Bolus of potassium chloride given to at least six intensive care unit patients who were not terminally ill. ³	Indicted on six murder counts in December 1997. Seventh murder charge was filed on November 2, 1998. The trial is expected to begin in summer 1999. ⁴ Nursing license was revoked in 1995.
Richard Williams, R.N. Missouri	Forty-two patients in a Veteran's Administration hospital died unexpectedly under defendant's care. ⁵	Federal Bureau of Investigation is investigating. No charges have been filed as of December 1998.

Table 3. Criminal Investigations of Nurses According to Press Reports, 1990 to Present.

Sources

1. See *LaDuke v. Hepburn Medical Center*, 657 N.Y.S.2d 810 (N.Y. App. Div. 1997).
2. See Editorial, "Debating the Inevitable," *Austin American-Statesman*, Jan. 11, 1997, at A10.
3. See "Former Nurse Charged in Murder of Six Patients," *World News Tonight with Peter Jennings* (ABC News broadcast, Dec. 29, 1997).
4. See M. Ricketts, "Ex-Nurse Charged with 7th Slaying; Count Lodged on Deadline for Additional Filings in Case Alleging Lethal Injections of Hospital Patients," *Indianapolis Star*, Nov. 3, 1998, at B1.
5. See S. Donaldson and D. Sawyer, "Mystery on Ward 4 East," *ABC Primetime Live* (ABC News broadcast, Jan. 7, 1998).

Two cases in California were investigated but none of the health care workers in either was formally charged. The other cases arose in Massachusetts, New York, Georgia, Florida, Minnesota, Kansas, Texas, and Oregon. The most notable element of these cases is geography: they tend to be rural. With the exception of the Hennepin County and the San Francisco and Beverly Hills investigations, none of which proceeded to indictments or formal charges, all of the cases occurred in small towns or rural counties.⁸⁵ Many of the health care providers were outsiders—either newly arrived,⁸⁶ members of racial or ethnic minorities,⁸⁷ or living alternative lifestyles.⁸⁸ Given that criminal processes can reflect majoritarian power,⁸⁹ this last observation may reflect troubling patterns of prejudice or injustice.

Where did patients die? What was their relationship to the physicians?

All the cases involved deaths in hospitals, with the exception of the investigation of Sharon LaDuke and her actions at a skilled nursing facility in New York State. Only one of the physicians was related to or a friend of the patient (Dr. Frederick Curren of Massachusetts allegedly prescribed analgesics and sedatives for his ex-wife who used them to commit suicide.⁹⁰) This trend differs from the cases reported prior to 1990. Five of those ten doctors were prosecuted for deaths that occurred in the patient's homes.⁹¹ Three of those five physicians were related to the patients, and a fourth had been a long-time friend of his patient.⁹² The earlier cases may reflect the potential exposure of family members and close associates to criminal liability.

In the 1990s, criminal investigations of health care workers for treatment of patients at the end of life have involved professional relationships between physicians and patients. The patients in Tables 1 and 2 sought care because they were seriously ill. In the cases that proceeded to murder trials, the patients did not have ongoing relationships with the physicians, nor did they choose these doctors individually. For example, Dr. Naramore was the only active physician in the rural Kansas county where he practiced; and Dr. Ernesto Pinzon-Reyes, while on call over a weekend, was the attending physician when a patient of his colleague died.

None of the patients seen by the four physicians accused of murder or attempted murder requested suicide assistance. During the four murder trials, evidence was put forth that neither the families nor the physicians accepted euthanasia or PAS as appropriate, ethical treatments.⁹³ These cases differ from those involving Dr. Kevorkian because his patients have specifically sought him out for help in hastening death.⁹⁴ The fact that none of the cases reviewed here involves PAS or right-to-die issues also distinguishes them from most of the earlier criminal prosecutions involving care of the dying. Few of the pre-1990 cases

involved morphine, and none of the physicians in those cases argued that he/she used the various fatal agents to manage pain or provide palliative care.

How did prosecutors become involved?

All of the cases reported here involve an informant, someone who participated in caring for the patient or was knowledgeable about the patient's care and reported concerns about the way in which the patient died. Apparently, the criminal justice system plays a passive role in policing physician and nurse behavior. Even in the cases where potassium chloride was administered, the medical examiner, local prosecutor, and state medical board depended on informants to flag the cases. Routine institutional review processes failed to catch these cases. In one instance, the case of Dr. C. Douglas Wood, where the surgeon gave his patient a potassium chloride injection, Wood himself filed an incident report; however, nurses who witnessed the injection also served as informants.⁹⁵

The Majors case from Indiana demonstrates how informants play such key roles. In this case, the hospital administration launched a herculean effort to investigate Majors after nurses and family members reported their suspicions.⁹⁶ Before dismissing the nurse, Vermillion County Hospital conducted an exhaustive internal review that revealed that patients were almost forty-three times more likely to die when Majors was on duty.⁹⁷

Who were the informants?

As Table 4 indicates, nurses were the most frequent sources of information about potentially inappropriate terminal care. In the case of Naramore, the family raised the initial concerns. Physicians are conspicuously absent as informers. Research has not uncovered a single case either in the most recent wave of prosecutions or in the earlier cases where a physician provided information about another physician.

What kind of end-of-life care raises suspicions?

Several of the cases involve treatment flowing from the decision to withdraw ventilatory or other life-sustaining treatment from the patients. Two of these withdrawal cases occurred in emergency departments and so include a special kind of withdrawal: the decision to stop resuscitative efforts because they have not succeeded in restoring circulation or breathing or because they have failed to meet the patient's or family's goals of care.⁹⁸

These withdrawal cases are significant and raise particularly difficult issues regarding the role of physician intent in evaluating treatment at the end of life. Physicians who withdraw support, either at the patient's or family's

<i>Provider</i>	<i>Informant</i>
Unidentified physician (resident) Providence, Rhode Island	Hospital staff notified hospital director, who notified the Federal Bureau of Investigation. ¹
Five unidentified physicians St. Paul/Minneapolis, Minnesota	Unknown
Frederick Curren, M.D. Pembroke, Massachusetts	Unknown, although patient received assistance from Dr. Jack Kevorkian, which may have alerted authorities. ²
Charles Kivowitz, M.D. Beverly Hills, California	Bedside nurse, who was later sentenced to eight years in prison for stealing from her wealthy patients. ³
Unidentified physician San Francisco, California	Three nurses. ⁴
James Gallant, M.D. Corvallis, Oregon	Unknown. Reports indicate that the patient's family was supportive of Gallant's behavior. ⁵
Viswa Nathan, M.D. New Haven, Connecticut	Patient's wife, asserting that neither she nor her husband gave physicians permission to discontinue the use of a respirator, informed hospital administrators of foul play. State police were informed, and major investigation began. ⁶
Stephen Sudderth, M.D. New Haven, Connecticut	See findings in case of Dr. Viswa Nathan.
John Coe, M.D. Redding, California	Anonymous informant told county coroner that Coe provided patient's girlfriend with a morphine prescription. ⁷
Marilyn Dargis, M.D. LaPorte County, Indiana	Two nurses. ⁸
Eva Carrizales, M.D. Riverdale, Georgia	Nurses in the neonatal unit. ⁹
Ernesto Pinzon-Reyes, M.D. Sebring, Florida	Nurses. ¹⁰
L. Stan Naramore, O.D. St. Francis, Kansas	Nurse, nurse administrator, and family members. ¹¹
C. Douglas Wood, M.D. Broken Arrow, Oklahoma	Nurses. The surgeon also filed his own incident report and put potassium chloride on the death certificate. The Veteran's Administration hospital had been investigating since 1990, based on concerns about quality of care. ¹²

Table 4. Initiating the Investigation: Informants.

Sources

1. See E. Kreiger, "Death at VA Prompts Federal Probe; A Comatose Patient May Have Been Given a Lethal Dose of Morphine by a Doctor in Training," *Providence Journal-Bulletin*, Mar. 30, 1997, at 1B.
2. See M. Devine, "Suicide Brings Group Together; Members Say Curren's Death Preventable," *Patriot Ledger*, Aug. 27, 1996, at 9C.
3. See P. Lieberman, "Inquiry Rejects Claim Doris Duke Was Murdered," *Los Angeles Times*, July 25, 1996, at B1.
4. See E. Epstein, "Girl's Doctor at UCSF Won't Be Charged: He Allegedly Gave Dying 9-year-old a Lethal Injection," *San Francisco Chronicle*, May 25, 1995, at A16.
5. See "Doctor Investigated for Euthanasia," *States News Briefs*, Aug. 2, 1996.
6. See "Hospital Expels Mercy-Killing Doctor," *United Press International*, Feb. 23, 1990.
7. See Wire Reports, "Around the U.S.," *Dallas Morning News*, May 22, 1994, at A8.
8. See E.B. Schoch, "Doctor's Emergency Room Actions Debated; Licensing Panel Weighs Charges in Patient's Death," *Indianapolis Star*, Aug. 28, 1992, at B1.
9. See R. Ellis, "Revisiting Dr. Eva Carrizales; 'I Don't Have Any Hard Feelings'," *Atlanta Journal & Constitution*, May 3, 1996, at 2C.
10. See C.S. Palosky, "Ruling Harms Murder Case Against Pinzon," *Tampa Tribune*, June 17, 1997, at 1 (Metro).
11. See A. Bavley, "Now Paroled, Doctor Appeals Verdicts," *Kansas City Star*, Dec. 21, 1997, at A1.
12. See A. Thornton, "Doctors Tell of Surgeon's Medical Errors," *Daily Oklahoman*, Apr. 6, 1998, at 1.

request or on their own initiative but with consent or assent, foresee and may in some way intend the patient's death. Some physicians act not only to rid the patient of unwelcome technology, but also to help the patient end

his/her suffering by dying sooner.⁹⁹ The fact that the physicians, in some sense, intend the patient's earlier death has not created ethical or legal trouble so long as other conditions, such as informed consent, lack of benefit from the

treatment, or futility, are in place.¹⁰⁰ Physicians' intent raises difficult questions in the withdrawal cases, as discussed below, when the other conditions, including professionally competent methods of withdrawal, are not present.

Several of the cases involved potassium chloride. Dr. Wood, an Oklahoma surgeon, was convicted of involuntary manslaughter after he injected 20 mL of potassium chloride into a patient who was suffering from congestive heart failure. Wood argued that he used potassium chloride in an attempt to restart the patient's heart. In a separate incident, an unidentified nurse in Texas was charged with murder after he/she injected potassium chloride into the feeding tube of a terminally ill patient. In San Francisco, an unidentified physician was investigated after he/she gave a nine-year-old child in a pediatric ICU a bolus of potassium chloride. Dr. Pinzon-Reyes of Florida, was tried for first-degree murder because he injected potassium chloride into the intravenous port of a seventy-year-old man with metastatic lung cancer. The use of potassium chloride raises questions about the physicians' and nurses' purposes in administering the drug because it has no palliative function and does not treat pain.¹⁰¹

Criminal prosecutions arising from care of the dying and attempts to manage pain in the terminally ill fall into three broad categories: withdrawal of life-sustaining treatment and any accompanying use of pain medication; the administration of morphine or other analgesics and sedatives; and terminal care that includes the use of a potentially fatal agent, such as potassium chloride, insulin, or chloroform. Because these cases are few and quite bound to their facts, it is useful to look closely at the details. Examination of the facts is particularly important because these cases have as much to do with the personalities of the health care workers, the patients, and the communities as they do with the actual care given or withheld. For example, one of these murder trials involves withdrawal of support and another involves the administration of potassium chloride. However, the San Francisco case where a child received potassium chloride following withdrawal of support was never taken to a grand jury. Here follow significant examples of each of these three types of cases.

Criminal prosecutions and withdrawal of support

Withdrawal of support raises several issues that recur in the criminal cases. Most important among these is the doctrine of double effect and its role in assessing physician intent. Ethicists distinguish morally permissible care that results in death from inappropriate killing by applying the rule of double effect.¹⁰² The doctrine has always been controversial in moral philosophy,¹⁰³ in medical ethics,¹⁰⁴ and in criminal law.¹⁰⁵ It plays a critical role in evaluating the actions of physicians and nurses in treating patients at the end of life, both from the prosecutor's perspective and the

hospital's or institution's. Therefore, it is essential to understand the rule and its clinical and legal application to end-of-life decisions. The withdrawal cases present a unique lens through which to view intent because, in at least some cases, physicians and nurses have multiple motivations.

A significant number of the criminal cases involving end-of-life care reviewed in this research involve withdrawal of support. Notable among these is the case of Dr. Eva Carrizales, whose murder trial for withdrawing ventilatory support and then smothering a thirty-nine-day-old male neonate with multi-organ failure ended with a hung jury. The baby's parents also argued that they had not consented to withdrawal of treatment. The district attorney dismissed the charges after polling jurors and considering evidentiary difficulties. One nurse changed her pretrial testimony—that the physician had applied pressure to the baby's carotid artery to choke off the blood supply to his brain—and instead testified that her supervisor urged her to give evidence against the physician.¹⁰⁶

Withdrawal cases have also involved alleged excessive use of opioid analgesics or bolus administration of potassium chloride. For example, the LaDuke case involved a criminal investigation of a nurse for giving too much fentanyl¹⁰⁷ to a patient with advanced lung disease who was experiencing severe pain after her ventilatory support had been withdrawn. The Hennepin County cases also involved high doses of opioid analgesics combined with benzodiazepines, following the withdrawal of ventilatory support. The following case is a relatively straightforward instance of withdrawal of support because it involved neither pain medication nor potassium chloride and withdrawal was done with the consent of the patient's family.

The Naramore–Willt case

Dr. Naramore was an outsider in a small town. He moved to St. Francis, Kansas, a farming town of fewer than 1,500 in the northwest part of the state, in 1992.¹⁰⁸ St. Francis is the seat of Cheyenne County, which has a population of 3,200.¹⁰⁹ Naramore had a strained relationship with the community. The medical writer for the *Kansas City Star* noted that he "didn't quite follow the code of friendliness and modest behavior."¹¹⁰ He "played the ponies. Drank and smoked. Drove his flashy red Lincoln too fast."¹¹¹ Naramore was recruited by the Cheyenne County Hospital board of directors when St. Francis's long-time doctor retired and his predecessor resigned. The hospital guaranteed Naramore a monthly income of \$10,000.

Naramore's guaranteed income, urbane attitude, and penchant for expensive electronics drew attention. He and his family were the object of town gossip. Stories circulated that he was an alcoholic and a drug addict. Even though many of the physician assistants with whom he worked admired his skill,¹¹² prominent citizens resented

Naramore's sharp criticism of St. Francis's politics. For example, Naramore wrote a blistering letter to the chairwoman of the St. Francis Chamber of Commerce castigating community members for their management of the hospital.¹¹³ He publicly criticized the town council's plan to create a network of federally funded clinics.

Naramore had a busy practice. Among his patients was Chris Willt, an eighty-one-year-old man with severe diabetes, high blood pressure, and kidney and liver disease. In August 1992, Willt was brought to the emergency department with a possible diagnosis of cerebral vascular accident or stroke. Willt had to be restrained in the emergency department. He was then given a shot of Norcuron, a paralytic agent used to assist in intubating individuals, and intubated. Because St. Francis Hospital did not have a ventilator, medical technicians had to attach a bag to Willt's breathing tube and squeeze it manually to provide oxygen. Naramore and the hospital staff manually ventilated Willt, shocked his heart, and gave him intravenous fluids for over three hours.¹¹⁴

At some point during Willt's time in the emergency department, his brother, Rudy Willt, was summoned. Naramore told Rudy that his brother had suffered a severe stroke and that further treatment might be futile. He added his opinion that Willt was likely to be a "vegetable." Dale White, a nurse who was also the hospital administrator, was working in the emergency department. Naramore told White that he thought Willt was brain dead. White told Naramore that it would be permissible to stop life support if a second physician agreed with the diagnosis of brain death.¹¹⁵ Rudy spoke with his niece and with the Lutheran minister. He concluded that Chris would not want to live in a vegetative state or be artificially maintained.¹¹⁶

Meanwhile, White noticed that Willt was moving his arms and legs. Naramore attributed these movements to seizure activity. White suctioned Willt's mouth to remove saliva and Willt gagged. Naramore believed the gagging could affect Willt's ability to receive oxygen through the breathing tube so he administered a second shot of Norcuron.¹¹⁷ White believed the gagging showed that Willt could not be brain dead.¹¹⁸ Ernest Cram, St. Francis's long-time physician and county coroner, was called in to confirm that Willt was brain dead. Cram did a brief exam. He noted that the pupil of Willt's eye was fixed,¹¹⁹ and found no pulse in the carotid arteries of Willt's neck. Cram declared Willt dead and Naramore stopped resuscitation.

When resuscitation stopped, White informed Cram that Willt had been given the neuromuscular blocking agent, Norcuron. White described himself as "stunned" that Naramore withdrew ventilation while Willt was still under a neuromuscular block. He added, "I think there's a difference in trying to ease discomfort and in taking away the ability to breathe and then stopping the breathing."¹²⁰ He initiated a review of Naramore's care of Willt and of an-

other patient, Ruth Leach. That review led to the hospital's reporting both incidents to the Kansas State Board of Healing Arts. In September 1992, the hospital took away Naramore's staff privileges. In October 1992, the Kansas Bureau of Investigation began looking into the Naramore cases. In October 1993, he was hired by North Big Horn Hospital in Lovell, Wyoming, but the hospital terminated his contract because of patients' complaints.¹²¹ In July 1994, Naramore was arrested in Lovell, and charged with second-degree murder of Willt. He was also charged with attempted first-degree murder of Leach, a case I discuss.

Naramore's bond was set at \$500,000. He spent the eighteen months from arrest to trial in jail because he could not post bail. At trial, the prosecution argued "[T]he evidence ... show[ed] that [Naramore] killed [Chris Willt]" by administering a paralyzing drug and then cutting off his oxygen supply.¹²² Naramore argued that he could not have killed Willt, who was dead already. Some testimony suggested that Willt was not, in fact, brain dead and that Naramore and Cram had used the term *brain death* loosely to mean permanently unconscious rather than to meet the Harvard Brain Death criteria or the Uniform Declaration of Death Act criteria.¹²³ The jury was not instructed (nor were such instructions requested) on appropriate resuscitation attempts.¹²⁴ After a two-and-one-half week trial, Naramore was convicted of the second-degree murder.

This case is primarily a withdrawal of life support case. Willt was resuscitated and bagged for approximately three hours, during which time Naramore failed to see improvement in his condition. He recommended that life-sustaining treatment (the use of intubation and a bag to provide oxygen) be withdrawn. With the consent of Willt's brother, support was withdrawn; however, the withdrawal was handled inappropriately. Standard protocols for withdrawal of ventilation or other life support include stopping neuromuscular blocking agents, such as the Norcuron given to Willt before extubation.¹²⁵

The doctrine of double effect

The foundation for the right of patients and their families to refuse life-sustaining treatment rests on early actions against physicians for withdrawing care.¹²⁶ Perhaps the best-known case involved the death of Clarence Herbert.¹²⁷ Herbert had a coronary arrest in the recovery room following routine surgery, was resuscitated and placed on a ventilator, but suffered injury to his brain. After three days in the ICU, physicians estimated that he would not regain consciousness and Herbert's family asked that ventilatory support be withdrawn. Herbert was extubated but continued to breathe and showed minimal brain activity. Two days later, at the family's request, physicians ordered removal of nutrition and hydration and the patient died.¹²⁸ A nurse who disagreed with the decision to withdraw support alerted

the district attorney, and the surgeon and internist were charged. The California Court of Appeals, in a decision widely followed in other jurisdictions, dismissed the criminal information because failure to continue unwanted or nonbeneficial treatment is not unlawful failure to perform a legal duty, even when the physicians know that the patient will die as a result.¹²⁹

Many medical ethicists cite the rule of double effect to explain why a clinician is permitted to administer high doses of opioids to relieve a terminally ill patient's severe pain, even in amounts that would cause a patient to die sooner than otherwise.¹³⁰ The more severe and intractable a patient's pain, the greater the justification for risking premature death. Thus, the amount of opioids that are given and the rapidity with which the dose is increased must be proportional to a patient's pain and suffering. Despite the rule of double effect, some physicians and nurses have been reluctant to use sufficient doses of opioid pain-relievers, even when dying patients are suffering. This reluctance stems from ethical and legal fears about hastening death¹³¹ and from moral or psychological rejection of the alleged difference between intent to cause death and foreseen possibility of causing death.¹³² Caregivers' rejection of differences between actions intended to hasten death, as opposed to actions foreseen to do so, draws support from research that shows clinicians act from multiple motives in providing end-of-life care. Research on the use of sedatives and analgesics in ICUs has shown that hastening death is a motivation, albeit not the most important one, for some physicians and nurses.¹³³

The criminal law has incorporated the doctrine of double effect primarily in the context of decisions to withdraw or withhold life-sustaining treatment, as described in *Barber*.¹³⁴ The law permits, and sometimes requires, clinicians to forgo treatment at the request of a competent patient. The Supreme Court in *Quill* recently accepted the rule of double effect in the context of intensive palliative care related to a refusal of life-sustaining treatment. The Court noted that "Just as a State may prohibit assisting suicide while permitting patients to refuse unwanted life-saving treatment, it may permit palliative care related to that refusal which may have the foreseen but unintended 'double effect' of hastening the patient's death."¹³⁵ Physicians who apply the legal iteration of double effect, that the primary intent of the physician is implementing the wishes of the patient, to pain management at the end of life, use informed consent.

Informed consent complicates the analysis of potentially criminal acts, however. First, its relevance, strictly speaking, is unclear because patients or families cannot consent to killing. Nonetheless, consent clearly matters to prosecutors who know juries will not convict when a physician's actions reflect a patient's wishes. Second, the informed consent process with patients or families can

sometimes begin the miscommunication that leads to criminal investigations. Patient requests to discontinue treatment or to receive pain medication can alarm a health care worker who rejects hastened death as an appropriate outcome.¹³⁶ Finally, the anguished setting of a patient dying in pain can foster misunderstanding. Physicians who fear the legal ramifications of treatment that can hasten death, use informed consent to shield themselves from liability. Such a defensive posture can confuse and alienate families.¹³⁷

The final role of double effect is its potential impact on prosecutors, grand juries, and petit juries.¹³⁸ The doctrine in the context of palliative care emphasizes the caregiver's desire to relieve pain and soothe the dying patient. Although the law does not distinguish between a killing with a benevolent motive, like euthanasia, and any other intentional killing,¹³⁹ the public may view a compassionate health care worker with sympathy.¹⁴⁰ The pattern of the criminal cases analyzed here suggests that prosecutors and juries are influenced by a physician's motive despite the criminal law's focus on purpose or intent. For example, the physician who treated Doris Duke admitted that he gave her enough morphine to hasten death. He was quoted as explaining, "I increased the morphine so that she would not linger, that she would not suffer, and ultimately that she would die perhaps shortly or sooner than she would have otherwise died from her medical conditions, which I judged [to be] within a 48-hour period [given the] terminal nature [of her conditions]."¹⁴¹ Despite his admission, prosecutors decided there was no credible evidence of murder. In the case of Dr. John Coe, a California physician who assisted a patient with acquired immune deficiency syndrome to commit suicide by prescribing an overdose of morphine, the prosecutor refused to bring charges because Coe was "motivated by compassion."¹⁴² The California prosecutor's concerns echoed those of the Hennepin County prosecutor four years earlier, that a jury would be extremely unlikely to convict a physician whose stated motive was to ease suffering. These cases support earlier indications about the difficulty in successfully prosecuting physicians who appear to be acting compassionately. In the early 1980s, before the law on withdrawal of treatment was settled, a prosecutor opined that, even in a case of active euthanasia, "the likelihood is that a successful conviction will not be obtained" when the physician is motivated by mercy.¹⁴³

Why the Kansas jury considered Naramore's decision to withdraw support as evidence that he intended to cause Willt's unlawful death is unclear. Evidentiary difficulties with Naramore's intent contributed to the reversal of the conviction, as discussed below. However, the fact that Naramore's conviction was reversed does not negate the importance of his conviction. Few physicians would be willing to undergo criminal prosecution and incarceration on the likelihood of reversal on appeal. Naramore's actions did not show direct evidence of criminal intent. A reasonable

case could have been made that both a loose definition of brain death and the use of a neuromuscular block during extubation were within at least minority practice among physicians. Indeed, five medical experts testified at the trial that Naramore's actions in stopping resuscitation were medically appropriate.¹⁴⁴ Willt's prognosis was grim, even if he did not meet the technical definition of brain death, and his family agreed that he would not have wanted intensive interventions to prolong biologic existence. The Naramore case shows a potential flaw in the principle of double effect, at least where one jury was concerned. When the physician knows that the patient will be dead immediately after treatment is withdrawn, it can be hard to assume that he intended anything other than to secure death.

Criminal prosecutions and high doses of opioid analgesics

Prosecutions for homicide based on medical treatment measure the conduct of physicians, unlike other potential criminal defendants, against the professional standard of care to assess whether their actions depart severely enough from accepted practice to violate the criminal law. Physicians must make egregious mistakes before they will be held criminally responsible. For example, various courts have noted the necessity of acts that are "wanton," "reckless," "irresponsible and totally inappropriate," or are a "gross deviation from the standard of conduct a reasonable person would observe."¹⁴⁵ However, the use of opioid analgesics to treat severe pain demonstrates that this protection may fail because the standard of practice both varies considerably from community to community and is frequently well below what experts agree is necessary to relieve terminal pain. At its best, the standard of care may offer scant protection; at its worst, it may perpetuate undertreatment. The following case illustrates a criminal prosecution and conviction resulting from the use of high doses of opioid analgesics to treat terminally ill cancer patients.

The Naramore–Leach case

Dr. Naramore also cared for Ruth Leach, a seventy-eight-year-old woman with advanced metastatic breast cancer who was from a prominent St. Francis family. Leach was admitted to St. Francis Hospital in May 1992. Her breast cancer had metastasized to her bones, lungs, and brain. On August 2, 1992, her son and daughter-in-law, who had been frequent visitors, noticed that she had dramatically deteriorated.¹⁴⁶ She was suffering severe pain. The nurse, Carolyn Bizer, called Naramore. He came to the hospital and agreed to prescribe more pain medication for Leach. He advised her son, Jim Leach, that higher doses of pain medication could suppress respiration. Naramore and Jim and Cindy Leach returned to the patient's bedside. Naramore gave

Leach 4 mg of Versed and 100 µg of fentanyl.¹⁴⁷ According to Bizer's notes, Leach's respiration immediately slowed and grew irregular; her eyes rolled to the back of her head.¹⁴⁸ Jim Leach became upset and asked if his mother was going to die. Naramore said yes, but told the family that the effects of fentanyl could be reversed using Narcan. Bizer testified that she thought this was unusual because Narcan, in her experience, is not given unless there has been an overdose. Naramore began to set up an intravenous line to continue supplying Leach with pain medication. Jim instructed Naramore, "Don't give her any more. I would rather my mother lay there and suffer for 10 more days than for you to do anything to speed it up." Naramore answered, "It just gets terrible from here on out. The next few days for her are just going to be absolutely awful."¹⁴⁹ Naramore asked Leach if he would hold him responsible if his mother's condition worsened. Leach said he would. Naramore removed Leach's intravenous line and left the hospital.

Jim Leach testified that Naramore was trying to set a trap for the family to see if it would allow him to kill his mother. He described Naramore's conversation with the family as an invitation to a mercy killing.¹⁵⁰ Leach reported his suspicions to Dale White, the hospital administrator. Bizer also gave White the syringes that Naramore had used that night. Leach transferred his mother to Goodland Hospital the next morning. She died there three days later.¹⁵¹ After Leach died, her son complained to the county prosecutor about Naramore, and the prosecutor informed the state attorney general's office.

Naramore was tried for attempted first-degree murder of Leach in the same trial in which he was convicted of the second-degree murder of Willt. The prosecution argued that Naramore intended to kill Leach because "it was not the good Lord who made the decision to put Ruth Leach on death's doorstep" but Naramore. Naramore countered that he intended only to treat Leach's pain. Naramore did not request and the jury did not receive instructions on the nature or practice of palliative care.¹⁵² He was convicted of attempted first-degree murder.

Naramore served one year of his three-year sentence and was paroled in January 1997. His appeal of both convictions was argued before the Kansas Court of Appeals on February 3, 1998. On appeal, he contended that neither conviction was supported by sufficient evidence and that he was denied his right to a fair trial, particularly with regard to his change of venue motion, which was denied. At oral argument, the court expressed particular concern about the trial court's failure to consider an affidavit that suggested jurors reached guilty verdicts because they were afraid that, if acquitted, Naramore would sue the county for a large sum that could raise property taxes.¹⁵³ Both of Naramore's convictions were reversed on appeal. That reversal is discussed below.

The Naramore–Leach case illustrates an attempted first-

degree murder conviction for the use of opioid analgesics to manage terminal cancer pain. The prosecution argued, based on reports from the family and Bizer, that Naramore intended to kill Leach with fentanyl and Versed (midazolam). The Leach family's anger shows the powerful effects of miscommunication during the informed consent process. This case also demonstrates the difficulty in measuring opioid pain management against standard medical practice, because the range of appropriate doses for opioid analgesics is so broad and patient-dependent. Given the wide variation between standards of practice, the generally poor quality of pain management in the United States, and the broad range of acceptable doses, comparisons with the standard of care may offer scant protection.

Researchers have consistently noted the considerable variability in the practice of cancer pain management.¹⁵⁴ Variability should be even more pronounced for terminally ill patients with other diseases for which pain control is less understood. Part of the variation in practice comes from the absence of a set of consistent pain management practice principles and part comes from general undertreatment of pain.¹⁵⁵ This variability creates a dilemma for the criminal law, which measures these treatment cases against a professional standard of care.

Although the *New England Journal of Medicine* published clinical practice guidelines for the management of pain in cancer patients in 1994, cancer pain is still widely undertreated, and there are no such guidelines for pain suffered by other terminally ill patients. Furthermore, the wide range of potentially appropriate doses and the different periods of time over which doses are administered make it hard for professionals to assess dosage appropriateness. The clinical cancer guidelines state that "[t]here is no ceiling or maximal recommended dose for full opioid agonists: very large doses of morphine (e.g., several hundred milligrams every four hours) may be needed by some patients with severe pain."¹⁵⁶ Health care providers who practice together can disagree sharply over appropriate doses of opioids. For example, the nurse caring for Leach thought the dose Naramore administered was too high. A similar problem arose in the Pinzon-Reyes case (discussed below), in which a nurse refused to give the initial bolus of morphine because she thought it was too much. Yet neither of these doses (10 mg of morphine prescribed by Pinzon-Reyes or 100 µg of fentanyl from Naramore) is beyond the range of appropriate doses for terminal cancer patients whose pain has been treated with opioids for at least one year.¹⁵⁷ In fact, a leading palliative care textbook recommends that patients with severe pain that is not controlled should *begin* one of the opioid agonists at a dose equivalent to 10 to 20 mg of oral morphine.¹⁵⁸ In the Naramore trial, two experts testified that the doses given to Leach were excessive; two others testified that they were appropriate. One defense witness said that if a physician intended to kill a

patient, "you would use ten times those doses."¹⁵⁹ On the other hand, a state expert said that combining fentanyl with Versed was a clear overdose, done for the purpose of hastening Leach's death.¹⁶⁰

Comparison with the Hennepin County cases¹⁶¹ shows similar problems of analyzing doses. One patient received 120 mg of morphine in forty-five minutes and another was given 395 mg of morphine and 40 mg of midazolam in five hours.¹⁶² On the basis of these doses, the deaths of the two patients were ruled homicides. Even though these doses are large, it is difficult to evaluate them without other information about the patients' individual case histories of pain and of opioid use and tolerance. In jurisdictions where medical examiners consider liberal use of opioids to be the standard of care for dying patients, large doses of morphine or other opioid analgesics, by themselves, will not excite prosecutorial attention. However, as the Pinzon-Reyes, Naramore, and Hennepin County cases show, morphine doses ranging from 20 to 120 mg can raise suspicions.

Given the difficulty in establishing physician intent with regard to high doses of opioids, the view of the family is significant. Because experts disagreed about whether the analgesics given to Leach were inappropriate, the primary evidence relied on by the state during Naramore's trial and appeal was Jim Leach's testimony that Naramore meant to kill his mother. Leach's testimony shows the potential problems with informed consent to high doses of opioid analgesics. Opioid drugs are commonly used to treat a variety of symptoms in patients with advanced disease who are actively dying. Communication with the family and the exchange of information necessary to secure consent to various treatments, including palliative care, occur in the context of the distress and suffering experienced by the family as the patient approaches death.

Patients and families, as well as physicians and nurses, are confused about the role of opioid drugs in the care of dying patients. Most palliative care experts agree that informed consent has been overlooked in palliative care and that it is essential to good care of dying patients.¹⁶³ Open discussion among patients and families dispels concerns and fears about pain management as well as addresses more global concerns about distress and suffering. Such discussions can be complicated because they frequently occur when the goals of care for a patient change. Ambivalence about opioid use on the part of the family or the patient may reflect not only misunderstanding about these drugs but also denial about the closeness of death. A continued desire to prolong life inevitably will conflict with the needs of an actively dying patient, particularly the need to alleviate suffering.¹⁶⁴ Ambivalence about Leach's approaching death probably colored her son's reaction to the information Naramore provided about the effects of opioid drugs. Naramore also fueled the myth that pain control with opioids is a form of euthanasia. Respiratory depression should

not be a significant limiting factor in the management of patients with pain because, with repeated doses, patients develop tolerance to this effect. If physicians in the outpatient setting use escalating doses titrated to relieve a patient's symptoms, respiration should not become compromised.¹⁶⁵ In the inpatient setting, where the escalation can occur over several hours, as opposed to several weeks or months, the increases may be smaller; however, palliation of symptoms generally will be the primary goal of care despite some risk of respiratory depression.

Criminal cases involving potassium chloride

The Pinzon-Reyes case represents one of the most contentious types of end-of-life treatment: those involving the use of potassium chloride. The use of agents like potassium chloride (or neuromuscular blocks) as part of terminal care, either during the withholding or withdrawal phase, or as part of palliative care for an actively dying patient, has been considered inappropriate because these drugs have no inherent therapeutic benefit other than hastening death. Many ethicists argue that clear distinctions exist between sedatives and analgesics, on one hand, and potassium chloride and neuromuscular blockers, on the other. The first are given to manage pain and other symptoms at a patient's or family's request. The latter, because they provide neither pain nor symptomatic relief, are given only to cause death, whether or not a patient or family so desire. The Pinzon-Reyes case provides a lens through which to view the utility of this distinction for the criminal law.

The Pinzon-Reyes case

Dr. Pinzon-Reyes was born in Colombia and attended medical school in Puerto Rico. He moved to Sebring, Florida, a citrus town of 8,900 people, in 1996. He practiced there for only ten months before a grand jury indicted him for first-degree murder in connection with his care of a terminally ill cancer patient.

Pinzon-Reyes is a nephrologist in private practice who specializes in kidney disease. One weekend in October 1996, he covered his senior partner's patients at Highlands Regional Medical Center. One of those patients was Rosario Gurrieri, a seventy year old with metastatic lung cancer. Gurrieri was in severe pain. His attending physician estimated that he had only a few days left to live, and a social worker had arranged for him to be discharged to a hospice program that would provide support while he died at home. This plan was consistent with Gurrieri's wishes. He had executed a living will in which he rejected aggressive measures and stated his desire to receive pain medication, even if it would hasten death.¹⁶⁶ In the meantime, Gurrieri would spend the weekend at Highlands Regional where he could receive intense palliative care.

On October 5, Pinzon-Reyes prescribed a morphine patch. The next day, he set up a morphine pump to allow Gurrieri to give himself 2 mg doses of morphine every six minutes.¹⁶⁷ Gurrieri continued to experience significant pain, however. His wife and son, who were among the dozen family members and friends with him, were also concerned about his suffering. A nurse, Bethany Crane, testified that Gurrieri's son Paul told her he wanted someone to give his father a shot to put him to sleep.¹⁶⁸ Crane wondered whether this was a request for PAS or euthanasia. She called Pinzon-Reyes, who had left the hospital, and he prescribed a 10 mg dose of intravenous morphine. Another nurse, Carol Drew, refused to administer that dose, because she considered it too high. Pinzon-Reyes canceled the order and returned to the hospital.

Pinzon-Reyes then gave Gurrieri 20 mg of morphine, followed within one hour by six injections totaling 117 mg of morphine and 10 mg of Valium.¹⁶⁹ There was contradictory testimony as to whether Gurrieri was still conscious or suffering pain at this point. Gurrieri's widow said her husband fell unconscious after two injections, but that Pinzon-Reyes put his hand to the patient's chest and said that he still had "an active heart."¹⁷⁰ Pinzon-Reyes testified at an administrative law hearing that Gurrieri remained alert.¹⁷¹ Drew, who was also present, testified that Gurrieri's neck and chest veins pulsed visibly, even after he fell unconscious.¹⁷² Drew also testified that Pinzon-Reyes then injected 10 to 20 mEq of potassium chloride into Gurrieri's intravenous port. Pinzon-Reyes's notes in the patient's chart, however, say that he gave 30 mEq of the drug diluted in saline through an intravenous infusion. This slower delivery system would minimize the risk of stopping Gurrieri's heart. Testimony at trial indicated that Gurrieri continued breathing for at least fifteen minutes after the potassium chloride was administered. He died within the hour. His widow testified that the family was surprised that he died so fast. "I would say it would take a while for him to die, for God to take my husband," she said.¹⁷³

Drew noticed the misrepresentation in the notes and reported it to the nurse-administrator Ginger Carroll. Carroll interviewed Pinzon-Reyes. According to Carroll, Pinzon-Reyes stated that he had given Gurrieri potassium chloride to stop his heart because the family wanted to end the patient's life. Defense attorneys won a motion to suppress Carroll's statement because it grew out of the hospital's peer review process. Although Florida law protects quality assurance and peer review meetings from discovery in the civil context,¹⁷⁴ it was not clear whether such information was protected from criminal subpoenas.¹⁷⁵ The defense argued that the civil privilege should apply to serve the public good of encouraging peer review and that the legislature must have intended to protect confidentiality in mandating a peer review system. Pinzon-Reyes later told state investigators that he gave potassium chloride to slow

Gurrieri's heart rather than to stop it. Two oncologists, one of whom reviewed the case for state regulators and another who heads Florida's pain commission, concluded that the use of potassium chloride was unindicated and that its administration, particularly through an intravenous push, showed that its "intended effect" was "to hasten the death of" Gurrieri.¹⁷⁶ A grand jury indicted Pinzon-Reyes for "willful, premeditated and unjustified murder."¹⁷⁷

As the case proceeded to trial, Pinzon-Reyes's former patients and other residents of Sebring supported him.¹⁷⁸ In addition, former patients cited his "soothing manner," "attentive care," and willingness to spend time with his patients as reasons why they believed him to be wrongly accused.¹⁷⁹ Pinzon-Reyes originally retained Geoffrey Fieger, the Michigan attorney who represented Kevorkian, but quickly hired two local well respected lawyers. One of the attorneys, Jack Edmund, is a local legend.¹⁸⁰

During the one-month trial, Pinzon-Reyes's defense team succeeded in suppressing his statements to the Highlands Regional Medical Center's administrators about why he wrote false statements in Gurrieri's chart and why he administered potassium chloride. They introduced testimony from expert witnesses that the 137 mg of morphine given to Gurrieri was well within the standard of care for patients in intense terminal pain, although the jury received no special palliative care instructions. They also introduced expert testimony that the potassium chloride could not have caused Gurrieri's death because almost one hour elapsed between its administration and the patient's death. Had the dose been large enough to kill Gurrieri, experts testified, it would have done so quickly.¹⁸¹ Jurors who were interviewed after they acquitted the defendant said the time lapse between the administration of potassium chloride and the patient's death convinced them that Pinzon-Reyes did not cause Gurrieri's death. Pinzon-Reyes "was really trying to help his heart rate," said juror Robin Nichols.¹⁸²

Four months after the acquittal, an administrative law judge concluded that Pinzon-Reyes did not kill or intend to kill Gurrieri with drugs. Judge Robert Meale found him guilty of one violation: lying in the patient's chart to conceal his unorthodox use of potassium chloride.¹⁸³ On December 6, 1997, the Florida State Board of Medicine (FSBM), which had suspended Pinzon-Reyes's license in summary proceedings two weeks after Gurrieri's death, voted 7 to 6 to suspend Pinzon-Reyes for two years, with credit for time served and a stay for the remainder of the sentence.¹⁸⁴ He resumed seeing patients when FSBM's decision was officially filed.

Special problems with potassium chloride

Because potassium chloride has no palliative function, its use in dying patients can raise serious questions. However, of the eight potassium chloride cases found in my

research,¹⁸⁵ only one (Wood) has resulted in a criminal conviction. Potassium chloride cases raise three problems for prosecutors, all of which were present in the Pinzon-Reyes case. First, although there is no question that a bolus of potassium chloride can cause cardiac arrest and death, there are often causation issues because patients who receive potassium chloride are severely compromised and near death when the drug is injected. Second, the use of potassium chloride shows an intent to hasten death, but does not detract from a physician's possible motive of mercy. Third, the potassium chloride cases raise the issue of jury nullification because jurors themselves fear a painful and prolonged dying process.

Causation can be hard to establish in potassium chloride cases. Jurors polled after the Pinzon-Reyes acquittal thought that the forty-five-minute lapse in time between administration of potassium chloride and Gurrieri's death raised significant doubts about whether the drug had caused the death.¹⁸⁶ Such a time lapse can be misleading, however, because the physicians who administer potassium chloride is usually the physician who declares the patient dead. Even when death follows closely in time after the administration of potassium chloride, reasonable physicians can debate the "cause of death" for purposes of the death certificate. First, potassium chloride can be difficult to administer in a lethal dose. A fairly large dose, somewhere near 100 mEq, is required to be fatal, and that amount can be difficult to introduce into a patient's veins in a single bolus.¹⁸⁷ A physician may signal an intention to hasten death by administering potassium chloride, but if the dose is insufficient to stop the patient's heart, the prosecution may encounter causation problems.

Second, many terminally ill patients have severely compromised hearts and so are very near death when they receive potassium chloride. If the patients have recently been removed from ventilators and are thus breathing a lower percentage of oxygen, they may experience severe hypoxemia, which can also destroy the brain and heart. Their hearts will stop and so they may die more quickly, but they do not die differently than they would without potassium chloride. In other words, the cause of death will still be cardiopulmonary failure. Third, potassium chloride has therapeutic uses. It was given by Dr. Carrizales, the neonatologist who was tried for murder in a separate case in Georgia, to another neonate, resulting in a civil suit where causation again was a problem. In that case, Carrizales argued that she had been using potassium chloride for weeks to treat the infant's hypokalemia.¹⁸⁸

The potassium chloride cases also raise issues of intent or purpose. Physicians from FSBM who reviewed the Pinzon-Reyes case prior to prosecution decided that the use of potassium chloride evinced a deliberate intent to kill. The grand jurors who indicted Pinzon-Reyes said that because there was "no medical reason" for administering

potassium chloride, because potassium chloride is “used in some states to carry out the death penalty by lethal injection,” and because he had “falsified ... [the] medical chart ... to indicate that potassium chloride was administered through an intravenous infusion instead of directly into the intravenous port at the wrist,” there was probable cause to believe that he had committed “willful, premeditated, and unjustified murder.”¹⁸⁹

Although Pinzon-Reyes and Naramore faced serious charges, it is distinctly unusual to charge physicians for first-degree murder in connection with their treatment of terminally ill patients. In a case without premeditation that lacks extraordinary circumstances like a financial motive to kill, it is difficult to prove the requisite criminal intent. Most cases of potassium chloride administration arise when a physician acts quickly to end the grimacing, clutching, and labored breathing, which characterize the dying process.¹⁹⁰ Even given the fact that a physician’s purpose in giving potassium chloride is to hasten death, the motive may be to end suffering. Thus, although families and patients cannot consent to giving potassium chloride given the clarity of the criminal law, most prosecutors and medical examiners consider a family’s position because it reflects on a physician’s motive of compassion or mercy.

Finally, the clear distinction between therapeutic agents like analgesics and nonpalliative ones like potassium chloride may break down with regard to physician intent. Even though opioid analgesics and sedatives have therapeutic value, they are sometimes used with two purposes: to treat pain and to hasten death. For example, many patients in ICUs are given such high doses of sedatives and analgesics before extubation that they cannot live after their ventilators are removed. Several prominent physicians and ethicists have argued that the intent of physicians who use this practice differs little from active euthanasia.¹⁹¹ In the actual practice of caring for dying patients, the differences between palliative care and potassium chloride administration may blur.

The fact that a physician may be motivated by compassion explains the last phenomenon, jury nullification,¹⁹² in most of the criminal cases involving terminal care, and particularly those involving potassium chloride. These cases would include the Kevorkian cases, some of which involved potassium chloride. Despite his outspoken support for PAS, Kevorkian has never been convicted. As the Pinzon-Reyes case illustrates, juries are reluctant to convict compassionate physicians, even when they act outside the standard of care or deliberately hasten a patient’s death. Neither the Pinzon-Reyes nor the Naramore jury was instructed on jury nullification. However, a normative view of the jury’s function would favor jury nullification as a corrective device that allows the criminal law to adjust to conventional public morality absent an applicable legal defense.¹⁹³ Juries could also nullify prosecutions on charges like manslaughter, which do not require specific intent and so might apply to

medical mistakes like failure to reverse a neuromuscular block before extubation. Research using mock jurors in hypothetical euthanasia cases shows sizable nullifications (25.3 percent not guilty and only 35.9 percent convictions for first-degree murder).¹⁹⁴ A defense verdict will not repair the loss of income, reputation, and emotional strain of a criminal trial for a defendant, but a pattern of defense verdicts or jury nullifications may deter prosecutors from pursuing criminal cases against physicians.

The Naramore reversals and the requirement of direct evidence of intent to kill

In deciding Naramore’s appeals of the Willt and Leach convictions, the Kansas Court of Appeals took the extraordinary step of reversing the jury verdicts on the ground that no reasonable jury could have found beyond a reasonable doubt that Naramore had acted with homicidal intent.¹⁹⁵ The court noted that, although the cases were tried as conventional murder and attempted murder cases, the convictions raised important issues about the criminal liability of physicians for providing medical care to patients. There was no direct evidence that Naramore intended to kill either Leach or Willt. Instead, the state relied on circumstantial evidence: the drugs given to Leach and the withdrawal of life support from Willt. The court noted that there was “substantial competent medical opinion in support of the proposition that Dr. Naramore’s actions were not only noncriminal, but were [also] medically appropriate.”¹⁹⁶ The state argued that the jury had heard conflicting testimony about Naramore’s care of Leach and had believed the prosecution’s evidence that the care was so unreasonable that it evinced intent to kill. The court disagreed, concluding that the evidence supporting a reasonable explanation for Naramore’s treatment decisions was so “extremely strong”¹⁹⁷ that a reasonable jury could not reject it. The court held that, absent direct evidence of criminal intent, the prosecution could not prove beyond a reasonable doubt that a physician had specific intent to kill so long as some expert medical testimony supports the physician’s actions.¹⁹⁸ In other words, there can never be sufficient evidence to convict a physician based on the medical care provided when some competent medical testimony supports the actions and the state produces no direct evidence of criminal intent. As a practical matter, the Naramore decision, if it is not modified or limited by the Kansas Supreme Court, will make it almost impossible to obtain a criminal conviction based on care given to patients that is neither clearly reckless nor purposely homicidal.

Recommendations

Even though physicians rarely face criminal investigations or prosecutions, they do occasionally happen, and any crimi-

nal matter has the potential to deter physicians from using sufficient opioids to manage pain experienced by dying patients. Given the small number of cases, it seems unlikely that change in the criminal law will promote better care of dying patients. Therefore, these recommendations are practical suggestions for improved communication among health care providers and for institutional changes to improve pain management for the dying.

Keep accurate records

In several cases, nurses were troubled by requests that they enter false information in the patient's chart or by observations that the physician had written an inaccurate chart note. Prosecutors may also regard deliberate inaccuracies in the record as potential evidence of wrong-doing. High doses of morphine and other opioid analgesics or sedatives can be justified if they are titrated to the patient's symptoms. Accurate records of caregivers' assessments of pain, along with those of the patient and family, demonstrate the necessity of escalating doses and show that the purpose of the dose adjustments was to manage pain. If a patient receives an agent with no role in pain management, like a neuromuscular block or potassium chloride, that treatment should also be accurately reported in the chart. Physicians should not prescribe or administer drugs they are unwilling to record in the medical chart. Accurate records are also essential to advance another goal: improving institutional review and health care provider education in palliative care.

Hold team meetings

Decisions at the end of life can be painful for families and health care professionals. The course of terminal care will involve many individuals, including the patient, physicians, nurses, other members of the hospital staff, and the family. All these individuals should be informed that the goal of terminal care is to relieve pain and suffering through the dying process. The patient and family should understand that dying can take minutes, hours, or days. They should also be advised about the common symptoms like labored or rattled breathing that can accompany dying. The health care providers should agree on the paramount importance of patient comfort.

Institutional guidelines for pain management and for withdrawal of life support

Institutional guidelines that lay out a process for discontinuing intensive care, life-sustaining treatment, or other therapies that do not directly contribute to patient comfort (such as intravenous fluids, diagnostic procedures, and antibiotics) and that provide effective palliative care serve several useful functions. First, the process of writing and

adopting these guidelines educates health care providers about the ethical and legal status of palliative care and withdrawal of life-sustaining treatment. Neither of these practices should be confused with euthanasia or inappropriate killing. Second, guidelines can provide procedures for observing, evaluating, and documenting patients' distress and increasing pain medication when appropriate. Thus, guidelines may improve pain management for dying patients. Third, the presence of guidelines may prevent mistakes like failure to stop neuromuscular blocking agents or misjudgments like the administration of potassium chloride.

Informed consent to palliative care and withdrawal

In law, ethics, and practice, the provision of palliative care and the withdrawal of life-sustaining treatment are characterized as appropriate responses to the autonomous wish of a dying patient who has accepted comfort as the primary goal of therapy. Informed consent is essential to ensure that a patient has made an informed and voluntary choice. However, conversations with a patient or family should not be requests that the family indemnify physicians or accept responsibility for causing the patient's death. At the same time that physicians refrain from asking families to authorize the death of a loved one, it is important that professional caregivers continue to work with families to make joint decisions. Even when the medical team agrees that continued treatment will not contribute to a meaningful recovery, physicians should guard against making unilateral decisions. As these cases illustrate, it is crucial that the surrogate, family, and other appropriate parties remain aware of the medical team's recommendations and informed about the team's intent to withdraw or withhold care.

Proper jury instructions

Should a case proceed to a criminal trial, the jury should be instructed about a physician's obligation to provide palliative care, and, if appropriate, proper efforts to resuscitate a patient. Physicians have unique responsibilities to dying patients about which there is a growing medical, legal, and ethics literature.¹⁹⁹ However, certain legal and ethical agreements about care of the dying are not well understood by lay people.²⁰⁰ For example, the fact that it is permissible to administer high doses of opioids if necessary to treat severe pain even if the opioids may pose some risk of hastening death is well established in law and ethics, but may not be commonly appreciated by the general public. Potential treatments for dying patients will almost always carry risks, possibly fatal ones, as well as benefits. Weighing those risks and benefits will, of necessity, involve the exercise of professional judgment. Physicians defending themselves against charges that include the require-

ment of a specific intent to kill should request that the jury be instructed regarding physicians' responsibility to make professional judgments concerning their patients' care. These instructions should include the particular standard of care appropriate to the facts of the case. For example, palliative care, withdrawal of care, or standards for resuscitation would have been appropriate for the cases considered above.

Conclusion

For two disturbing reasons, the criminal cases discussed are tragic. First, they represent bad deaths for the patients and families involved. Second, they represent wrenching ordeals for the physicians and nurses who underwent investigation, and sometimes indictment, trial, and incarceration. Detailed examination of these cases illustrates that fear of criminal liability or investigation should not deter physicians or nurses from aggressively using opioid analgesics to manage terminal pain, provided that pain has been carefully assessed and treated and communication with families and involved professional caregivers is thorough. The cases also illustrate, however, that patients' fears about dying in pain or suffering from lack of institutional sensitivity to the quality of dying are justified. Major initiatives in medical and public education regarding pain control should include the lessons learned here, distinguishing fact from fiction in the ethics and law of pain relief.

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1. See Committee on Care at the End of Life, M.J. Field and C.K. Cassel, eds., *Approaching Death: Improving Care at the End of Life* (Washington, D.C.: National Academy Press, 1997): at 2.
2. See Editorial, "Caring about Care at the End of Life," *American Medical News*, May 12, 1997, at 17.
3. The Open Society Institute is currently funding research associated with its "Project on Death in America." See Open Society Institute, ed., *Project on Death in America: A Report of Activities, July 1994–December 1997* (New York: Open Society Institute, 1998): 1–84.
4. See P.R. Van Grunsven, "Criminal Prosecutions of Health Care Providers for Clinical Mistakes and Fatal Errors: Is 'Bad Medicine' A Crime?," *Journal of Health & Hospital Law*, 29 (1996): at 107.

5. See *People v. Einaugler*, 208 A.D.2d 946 (N.Y. App. Div. 1994). All subsequent appeals, including writs of habeas corpus, were denied. See *Einaugler v. Supreme Court of New York, mandamus denied*, 117 S. Ct. 1840 (1997), *Einaugler v. Supreme Court of the State of New York*, 109 F.3d 836 (2d. Cir. 1997), *aff'g Einaugler v. Supreme Court of the State of New York*, 918 F. Supp. 619 (E.D.N.Y. 1996). The plaintiff received at least two feedings before the mistake was noticed. Although a consulting nephrologist, who was concerned about the danger of peritonitis, recommended immediate hospitalization, Dr. Gerald Einaugler waited ten hours before transferring the patient. A jury found him guilty of reckless endangerment and willful neglect, and the court sentenced him to fifty-two weekends of incarceration. See 109 F.3d 836 (reviewing pertinent facts of the case).

6. See S.H. Johnson, "Disciplinary Actions and Pain Relief: Analysis of the Pain Relief Act," *Journal of Law, Medicine & Ethics*, 24 (1996): at 320 n.11.

7. See, for example, *Einaugler*, 208 A.D.2d 946 (physician convicted on two criminal misdemeanor counts for ordering that a nursing home patient on dialysis be fed through her dialysis catheter and then attempting to disguise mistake); *State v. Warden*, 813 P.2d 1146 (Utah 1991) (upholding conviction of negligent homicide in home delivery of baby because evidence supported a determination that the physician's care grossly deviated from the accepted standard of care); and C.T. Jones and A. Thornton, "Dose Not Lethal, Doctor Testifies," *Daily Oklahoman*, May 8, 1998, at 1 (reporting Dr. C. Douglas Wood's trial for first-degree murder where the government alleges that he gave an eighty-six-year-old patient an excess of potassium chloride, while the defense argues that the drug was given in an attempt to revive the patient's failing heart).

8. See *People v. Schade*, 30 Cal. App. 4th 1515 (Cal. Ct. App. 1994). In another California criminal case, prosecutors charged Dr. Wolfgang Schug with second-degree murder for his alleged mistakes in clinical judgment. The patient, an eleven-month-old boy, had suffered from persistent vomiting and diarrhea for several days and was severely dehydrated. Schug discharged the baby and told his parents to drive him to Santa Rosa Community Hospital, fifty-five miles away over winding roads. Ninety minutes later when the parents arrived in Santa Rosa, the boy had stopped breathing and could not be revived. In February 1998, Lake County Superior Court Judge Robert Crone dismissed the criminal case against Schug, ruling that there was insufficient evidence of criminal wrongdoing. See J. Stryker, "Medical Mistake or Criminal Conduct?," *California Healthline*, Mar. 2, 1998.

9. Morphine, an opioid generally used for moderate to severe pain, can be lethal in doses significantly above the patient's level of tolerance, because an overdose will typically lead to respiratory depression. See G. Hanks and N. Cherny, "Opioid Analgesic Therapy," in D. Doyle et al., eds., *Oxford Textbook of Palliative Medicine* (New York: Oxford University Press, 2nd ed., 1998): at 349.

10. See D.M. Gianelli, "Patient Deaths Spur Guidelines on Pain Drugs," *American Medical News*, May 4, 1990, available in 1990 WL 3259650.

11. See *id.*

12. See S.H. Wanzer et al., "The Physician's Responsibility Toward Hopelessly Ill Patients," *New Engl. J. Med.*, 320 (1989): 844–49; and T.E. Quill and R.V. Brody, "'You Promised Me I Wouldn't Die Like This!'," *Archives of Internal Medicine*, 155 (1995): 1250–54.

13. See, for example, L. Kowalczyk, "Wife's Painful Last Day Prompts Husband to Act; Brockton Hospital Responds with

Changes," *Patriot Ledger*, Oct. 16, 1997, at 1.

14. See SUPPORT Principal Investigators, "A Controlled Trial to Improve Care for Seriously Ill Hospitalized Patients: The Study to Understand Prognoses and Preferences for Outcomes and Risks of Treatments (SUPPORT)," *JAMA*, 274 (1995): 1591-98.

15. See M.Z. Solomon et al., "Decisions Near the End of Life: Professional Views on Life-Sustaining Treatment," *American Journal of Public Health*, 83 (1993): at 20 (data suggest inappropriate management of pain is due partly to ignorance about appropriate techniques for pain control).

16. See Quill and Brody, *supra* note 12, at 1251; and Solomon et al., *supra* note 15, at 20 (inadequate pain management "related to fear of providing a last, lethal dose").

17. S.G. Stolberg, "Cries of the Dying Awaken Doctors to a New Approach," *New York Times*, June 30, 1997, at A1.

18. *Washington v. Glucksberg*, 117 S. Ct. 2258 (1997).

19. *Vacco v. Quill*, 117 S. Ct. 2293 (1997).

20. K. Sanders, *NBC Today Show* (NBC News broadcast, June 27, 1997).

21. See *Glucksberg*, 117 S. Ct. 2258; and *Quill*, 117 S. Ct. 2293.

22. See Stryker, *supra* note 8.

23. See M.K. Feldman, "Pain Control in Dying Patients," *Minnesota Medicine*, 73 (1990): 19-24.

24. *Id.* at 19.

25. *Id.*

26. See A. Bavley, "Now Paroled, Doctor Appeals Verdicts: Murder, Attempted Murder Convictions Involved Two Patients in Northwest Kansas," *Kansas City Star*, Dec. 21, 1997, at A1.

27. See *id.*

28. See *State v. Naramore*, 965 P.2d 211 (Kan. Ct. App. 1998), *cert. denied*, No. 96-77069-AS (Kan. Sept. 29, 1998).

29. See *id.* (finding that the reasonable jury does not have the discretion to disregard substantial expert medical opinions that would exonerate the defendant).

30. See *Cruzan v. Director, Missouri Dep't of Health*, 497 U.S. 261 (1990).

31. See *Barber v. Superior Court*, 147 Cal. App. 3d 1006 (Cal. Ct. App. 1983).

32. *Id.* at 1017.

33. For consistency, pre-1990 cases that may fit the pattern of giving lethal doses of medications to dying patients were also excluded. See, for example, M. Digirolamo, "No Jail Term for Doctor in Mercy Killing," *United Press International*, Dec. 19, 1986 (reporting on a physician who pleaded guilty to manslaughter for giving his mother-in-law a lethal dose of undisclosed medications and was sentenced to two years of probation, 400 hours of community service, and fined \$10,000); and S. Friedman, "Matthew Chandler," *St. Louis*, Oct. 1988, at 27 (criminal and administrative investigations launched after nurse reported that a pediatric anesthesiologist injected an eleven-year-old boy dying of adult respiratory distress syndrome and muscular dystrophy with 20 mL of potassium chloride).

34. For example, Dr. Michael Swango was convicted in 1985 of poisoning five co-workers at Blessing Hospital in Quincy, Illinois. Several stories alleging that he is a prolific serial killer have appeared in the national media; however, his criminal activities are not part of patient care. Although some of his victims are alleged to have been patients, Swango has not faced criminal charges based on his provision of palliative care to dying patients. His convictions rested on the arsenic and other poisons that Swango mixed into food and drink. See J.B. Stewart, "Annals of Crime: Professional Courtesy," *New Yorker*, Nov. 24, 1997, at 90-105; and "Physician Serial Killer Mystery," *ABC Good Morning America* (ABC News broadcast, Nov. 17, 1997).

35. For example, one of dozens of searches explored the news data base from years prior to 1996 with keywords like: (physician or doctor or nurse or pharm!) and (homicide or murder or kill! or death) w/50 (drug! or morphine or potassium or opiate!). Focus searches were also used to narrow the results.

36. Indeed, the Kansas Court of Appeals recently wrote that its own "substantial research" had revealed no criminal convictions of physicians for attempted murder or murder without clear and direct evidence of criminal intent. See *Naramore*, 965 P.2d 212.

37. See generally J. Dressler, *Cases and Materials on Criminal Law* (St. Paul: West, 1994): at 81-99, 103-05 (discussing the actus reus and mens rea for a crime).

38. See *id.* at 81-99.

39. See, for example, Cal. Penal Code § 20 (West 1988) (emphasizing the "unity of act and intent" in the statutory definition of crime).

40. See, for example, Cal. Penal Code §§ 188-89 (West 1997) (defining murder as an expressly or implicitly intentional act).

41. Compare, for example, Cal. Penal Code § 187, with Ala. Code § 13A-6-2 (1997).

42. See, for example, Cal. Penal Code § 189, in Dressler, *supra* note 37, at 197.

43. See N.Y. Penal Law §§ 125.10, .15, .20, .25, .27 (Consol. 1998).

44. See Dressler, *supra* note 37, at 906 (reprinting the American Law Institute, *Model Penal Code*, Official Draft 1962) (hereinafter *Model Penal Code*).

45. *Model Penal Code* § 210.2.

46. See generally, Dressler, *supra* note 37, at 650-99.

47. Cal. Penal Code § 192 (West 1988).

48. See *People v. Protopappas*, 201 Cal. App. 3d 152, 166 (1988).

49. See, for example, N.Y. Penal Law § 120.20 (Consol. 1998); and *Einaugler*, 918 F. Supp. 619.

50. See Committee on Care at the End of Life, *supra* note 1, at 2.

51. See D. Doyle et al., eds., *Oxford Textbook of Palliative Medicine* (New York: Oxford University Press, 1998): at 3 (commenting on the definition adopted by the World Health Organization).

52. See Committee on Care at the End of Life, *supra* note 1, at 126-35 (noting evidence of quality problems, including overuse of care, underuse of care, poor technical performance, and poor interpersonal performance).

53. See *id.* at 128.

54. See *id.*

55. See Hanks and Cherny, *supra* note 9, at 349.

56. See *id.*

57. See P.J. vander Maas et al., "Euthanasia, Physician-Assisted Suicide, and Other Medical Practices Involving the End of Life in the Netherlands, 1990-1995," *New Engl. J. Med.*, 335 (1996): at 1702.

58. See *id.* at 1703 tbl. 3.

59. See R.K. Portenoy, "Adjuvant Analgesics in Pain Management," in Doyle et al., *supra* note 9, at 376-77.

60. See H. Brody et al., "Withdrawing Intensive Life-Sustaining Treatment: Recommendations for Compassionate Clinical Management," *New Engl. J. Med.*, 336 (1997): at 653.

61. See United States Pharmacopeial Convention, Inc., *Drug Information for the Health Care Professional* (Rockville: USPC Board of Trustees, 18th ed., 1998): at 529.

62. See Hanks and Cherny, *supra* note 9, at 347 (noting that the central nervous system "depressant actions of these drugs [opioids] can be expected to be at least additive with the seda-

tive and respiratory depressant effects of sedative-hypnotics such as alcohol and the benzodiazepines") (emphasis added).

63. See C.C. Tisher, "Structure and Function of the Kidneys," in J.C. Bennett and F. Plum, eds., *Cecil Textbook of Medicine* (Philadelphia: W.B. Saunders, 20th ed., 1996): at 539-40.

64. See G.G. Singer and B.M. Brenner, "Fluid and Electrolyte Disturbances," in A.S. Fauci et al., eds., *Harrison's Principles of Internal Medicine* (New York: McGraw-Hill, 14th ed., 1998): at 271-77 (discussing potassium chloride, hypokalemia, and hyperkalemia).

65. See Jones and Thornton, *supra* note 7 (reporting that "Oklahoma prison officials said ... they use a 50 cc injection [of potassium chloride] to ensure an efficient execution"). See also A. Lines, "150 Mile Drive to the Death House," *Mirror*, Feb. 2, 1998, at 18 (reporting on the execution of Karla Faye Tucker, explaining that "[s]odium thiopentone is used as an anaesthetic, pancuronium bromide to stop her breathing and potassium chloride to stop her heart. Prison spokesman David Nunnelee said it would take about 20 seconds for the lethal dose to kill Tucker.").

66. See G.J. Annas, "Killing Machines," *Hastings Center Report*, 21, no. 2 (1991): at 34.

67. See C.M. Kjellstrand, "The Impossible Choice," *JAMA*, 233 (1987): at 257.

68. *Id.*

69. *Id.*

70. *Id.*

71. See *infra* pp. 315-17.

72. See, for example, L.R. Slome et al., "Physician-Assisted Suicide and Patients with Human Immunodeficiency Virus Disease," *New Engl. J. Med.*, 417 (1997): at 336 (finding that 53 percent of 228 physicians surveyed who treat patients infected with the human immunodeficiency virus in the San Francisco Bay area have complied with requests for assistance to commit suicide).

73. See D.E. Meier et al., "A National Survey of Physician-Assisted Suicide and Euthanasia in the United States," *New Engl. J. Med.*, 338 (1998): at 1195, 1200; and D.A. Asch, "The Role of Critical Care Nurses in Euthanasia and Assisted Suicide," *New Engl. J. Med.*, 334 (1996): at 1374 (controversial questionnaire finding that 19 percent of critical care nurses have participated in euthanasia).

74. See E. Emanuel et al., "The Practice of Euthanasia and Physician-Assisted Suicide in the United States: Adherence to Proposed Safeguards and Effects on Physicians," *JAMA*, 280 (1998): at 507 (finding as above but noting that physicians' confusion about what behavior constitutes physician-assisted suicide may lead to overreporting of the practice by as much as 20 percent).

75. The remaining conviction, that of Dr. Wood for involuntary manslaughter, is not ready to be appealed. Wood has yet to be sentenced. Following a final disposition of his conviction by the federal district court, he will have ten days to file a notice of appeal. See Fed. R. App. P. 4(b).

76. See D. Humphry, *Lawful Exit* (Junction City: Norris Lane Press, 1993): at 157-61.

77. See *Cruzan*, 497 U.S. 261 (assuming competent patients have a right to refuse life-sustaining treatment). The original criminal case against the physicians was eventually dismissed. See also *Barber*, 147 Cal. App. 3d 1006 (dismissing criminal information against physicians who discontinued nutrition and hydration at request of patient and family).

78. See E.B. Schoch, "Doctor's Emergency Room Actions Debated; Licensing Panel Weighs Charges in Patient's Death," *Indianapolis Star*, Aug. 28, 1992, at B1.

79. See *id.*

80. See *id.*

81. See *id.*

82. See Telephone Interview with Cynthia Hedge, Prosecuting Attorney of La Porte County, Ind. (May 1, 1998).

83. See "'Angel of Death' Indictment," *ABC Good Morning America* (ABC News broadcast, Dec. 31, 1997).

84. See "Ex-Nurse Arrested in Deaths of 6 Patients," *San Francisco Chronicle*, Dec. 30, 1997, at A2.

85. For example, Michigan City, Indiana's population is 33,822 (Dargis); St. Francis, Kansas's population is 1,495 (Naramore); Sebring, Florida's population is 8,900 (Pinzon); and Riverdale, Georgia's population is 9,359 (Carrizales). See *U.S. Census Bureau: The Official Statistics* (visited Aug. 13, 1998) <<http://www.census.gov>>.

86. For example, Dr. Ernesto Pinzon-Reyes was indicted ten months after he moved to Florida from Puerto Rico. See *infra* p. 323.

87. Dr. Eva Carrizales, a neonatologist charged with murder, said that her sex and Hispanic race made her vulnerable. See R. Ellis, "Revisiting Dr. Eva Carrizales," *Atlanta Journal & Constitution*, May 3, 1996, at 2C (recalling that "that was a very important factor, being female and Hispanic. With the jury present you could just feel it.").

88. *Court TV* reported that Orville Lynn Majors is "openly bisexual in a conservative corner of a conservative state." J. Bonne, *Indiana v. Orville Lynn Majors: Probable Cause Affidavit* (visited Aug. 12, 1998) <<http://www.courttv.com/legaldocs/newsmakers/orville.html>>. Dr. L. Stan Naramore struck the conservative residents of Cheyenne County, Kansas, as a city person who drove a bright red car fast, drank alcohol, and gambled. See *infra* p. 318.

89. See P. Butler, "Racially Based Jury Nullification: Black Power in the Criminal Justice System," *Yale Law Journal*, 105 (1995): at 677.

90. See M. Devine, "Suicide Brings Groups Together; Members Say Curren's Death Preventable," *Patriot Ledger*, Aug. 27, 1996, at 9C.

91. See Humphry, *supra* note 76, at 157-61.

92. See *id.* at 157-59.

93. In the Naramore trial, prosecution witness Jim Leach explained that Naramore was trying to kill his mother. "It was the most terrifying experience you can imagine," he said, Naramore "was killing my mother right before my eyes." K. Miniclier, "Family Doctor a Murderer? Trial Could Spur National Debate Over Death and Dying," *Denver Post*, Jan. 21, 1996, at A1.

94. See C.L. Bjorck, "Physician-Assisted Suicide: Whose Life Is It, Anyway?," *SMU Law Review*, 47 (1994): at 379-82 (summarizing activities of Dr. Jack Kevorkian with details about seventeen individuals who received his help in committing suicide).

95. See Jones and Thornton, *supra* note 7.

96. See B. Stone, "A Deadly Kind of Care," *Newsweek*, Jan. 12, 1998, at 33.

97. See *id.*

98. See B. Lo, *Resolving Ethical Dilemmas* (Baltimore: Williams & Wilkins, 1995): at 73 (explaining that an intervention may be considered futile when it has been tried and failed in a patient or when it will not achieve the goals of care).

99. See T.E. Quill, "The Ambiguity of Clinical Intentions," *New Engl. J. Med.*, 329 (1992): at 1039-40.

100. See J.D. Arras, "Physician-Assisted Suicide: A Tragic View," *Journal of Contemporary Health Law & Policy*, 13 (1997): at 378.

101. See *supra* pp. 310-11. Because it has no palliative function, potassium chloride's place as part of care for the dying has

not undergone a change in legal status following the U.S. Supreme Court's decisions in *Cruzan*, *Glucksberg*, and *Quill*. See *supra* p. 309. Patients may refuse life-sustaining treatment and may consent to intense palliative care, but they may not consent to euthanasia.

102. See, for example, A.R. Jonsen and S. Toulmin, *The Abuse of Casuistry* (Berkeley: University of California Press, 1988): at 221-313 (describing the doctrine's origins and referring to Thomas Aquinas: a single act may have two effects, one of them intentional and the other going beyond intention. The moral quality of the act depends on the nature of the effect that was intended.).

103. See *id.* at 221-23.

104. See T.E. Quill et al., "The Rule of Double Effect: A Critique of Its Role in End-of-Life Decision Making," *New Engl. J. Med.*, 337 (1997): at 1768-71.

105. See N.L. Cantor and G.C. Thomas III, "Pain Relief, Acceleration of Death, and Criminal Law," *Kennedy Institute of Ethics Journal*, 6 (1996): at 110.

106. See Ellis, *supra* note 87.

107. Fentanyl is a highly potent, semisynthetic morphine. It is approximately eighty times as potent as parenteral morphine in an acute pain patient who has not developed tolerance to opioids. It is useful for pain control before uncomfortable procedures and for management of cancer pain. See Hanks and Cherny, *supra* note 9, at 340.

108. See Bavley, *supra* note 26.

109. See *id.*

110. *Id.*

111. *Id.*

112. Patrick Delano, a physician assistant, said, "He was good at what he did. Things he did in the ER saved lives." See *id.*

113. The chairwoman who received this hyperbolic letter sat on the jury that convicted Naramore of second-degree murder and attempted first-degree murder.

114. See Brief for Appellant at 13, *State v. Naramore*, No. 96-77069-A (D. Cheyenne County, Jan. 1996) (No. 94-CR-8).

115. Kansas uses a typical brain death or cardiopulmonary death standard for determining death. See Kan. Stat. Ann. § 77-205 (1977) ("An individual who has sustained ... irreversible cessation of all functions of the entire brain, including the brain stem, is dead"). In Kansas, the determination of death is a medical diagnosis that must be made by a physician, but that physician need not have personally examined the patient. Brain death (irreversible cessation of entire brain function) is a more sophisticated diagnosis than, for example, obvious decapitation, and may require the physician making the diagnosis to base it on personally acquired knowledge. All determinations are governed by the appropriate medical standard. See Kan. Op. Att'y Gen. No. 90-81 (1990), available in 1990 Kan AG LEXIS 82.

116. See Brief for Appellant at 14, *Naramore*, No. 96-77069-A.

117. See Bavley, *supra* note 26.

118. See *Naramore*, 965 P.2d at 216.

119. Chris Willt had one glass eye, so an examination of it would provide no information about whether brain death caused the pupil to be fixed.

120. *Id.*

121. See Miniclier, *supra* note 93 (reporting a statement of the hospital's chief executive officer Kent Kellersburger: "[W]e had a great number of complaints from the community and dissatisfied patients. They just didn't like his personality and were refusing to see him.").

122. *Id.* (statement of Kansas Assistant Attorney General Jon Fleenor).

123. See "Report of the Ad Hoc Committee of the Harvard

Medical School to Examine the Definition of Brain Death," *JAMA*, 205 (1968): 337-40. See also A.M. Capron and L. Kass, "A Statutory Definition of the Standards for Determining Human Death: An Appraisal and a Proposal," *University of Pennsylvania Law Review*, XX (1972): at 87. Naramore's and Ernest Cram's decision that Willt was brain dead was somewhat irregular. Clinical tests for cessation of brain stem function include testing pupillary, corneal, oculovestibular, and oropharyngeal reflexes. In addition, physicians would carry out an apnea test to determine respiratory function. The Harvard criteria call for these tests to be repeated twenty-four hours later with no change. See A. Halevy and B. Brody, "Brain Death: Reconciling Definitions, Criteria, and Tests," *Annals of Internal Medicine*, 119 (1993): at 520; and C. Pallis, "ABC of Brain Stem Death," *British Medical Journal*, 285 (1982): at 1487.

124. See *Naramore*, 965 P.2d at 218.

125. See, for example, Brody et al., *supra* note 60, at 653 (arguing that neuromuscular blocking drugs should be discontinued not only because they have lost their therapeutic rationale of facilitating ventilation, but also because they prevent patients from showing discomfort and so thwart effective pain management).

126. See *Grace Plaza of Great Neck v. Elbaum*, 183 A.D.2d 10 (N.Y. App. Div. 1993); and *McConnell v. Beverly Enterprises-Connecticut*, 553 A.2d 596 (Conn. 1989).

127. See *Barber*, 147 Cal. App. 3d 1006.

128. See *id.* at 1011.

129. See *id.*

130. See Quill et al., *supra* note 104, at 1768.

131. See Solomon et al., *supra* note 15, at 14-23.

132. See Quill et al., *supra* note 104, at 1769.

133. See W.C. Wilson et al., "Ordering and Administration of Sedatives and Analgesics During the Withholding and Withdrawal of Life Support from Critically Ill Patients," *JAMA*, 267 (1992): at 949.

134. See *Barber*, 147 Cal. App. 3d 1006.

135. *Quill*, 117 S. Ct. 2293 n.11.

136. See *infra* p. 323, discussing the Pinzon-Reyes case, in which a nurse misinterpreted a request for pain medication as a request for euthanasia.

137. See *infra* pp. 321-22, discussing *Naramore*, in which the family interpreted the physician's warning about opioids suppressing respiration as an invitation to perform euthanasia.

138. The guidelines for prosecutors state:

(1) The prosecutor, based on a complete investigation and a thorough consideration of all pertinent data readily available to him, is satisfied that the evidence shows that the accused is guilty of the crime charged.

(2) There is a legally sufficient, admissible evidence of a *corpus delicti*.

(3) There is legally sufficient, admissible evidence of the accused's identity as the perpetrator of the crime charged.

(4) The prosecutor has considered the probability of conviction by an objective fact-finder hearing the admissible evidence.

G.A. Oakes, "A Prosecutor's View of Treatment Decisions," in A.E. Doudera and J.D. Peters, eds., *Legal and Ethical Aspects of Treating Critically and Terminally Ill Patients* (Ann Arbor: AUPHA Press, 1982): at 197.

139. See *North Carolina v. Forrest*, 362 S.E.2d 252 (N.C. 1987) (son who brought gun to hospital and shot terminally ill, pain-ridden father can be found guilty of first-degree murder).

140. See *id.* at 260 (Exum, C.J., dissenting) ("Almost all would agree that someone who kills because of a desire to end a loved one's physical suffering caused by an illness which is both ter-

minal and incurable should not be deemed in law as culpable and deserving of the same punishment as one who kills because of unmitigated spite, hatred, or ill will.”).

141. Table 1 (citing P. Lieberman, “Inquiry Rejects Claim Doris Duke Was Murdered,” *Los Angeles Times*, July 25, 1996, at B1).

142. See *id.* (quoting Associated Press, “No Trial in Aided Suicide,” *New York Times*, May 23, 1994, at A13).

143. See Oakes, *supra* note 138, at 199.

144. See *Naramore*, 965 P2d at 221.

145. *Id.* at 223 (citing *In the Matter of Spring*, 380 Mass. 629 (1980); *Commonwealth v. Edelin*, 371 Mass. 497 (1976); and *Com v. Youngkin*, 285 Pa. Super. 417 (1981)).

146. See Brief for Appellee at 3, *State v. Naramore*, No. 96-77069-A (D. Cheyenne County, Jan. 1996) (No. 94-CR-8).

147. See *id.*

148. See *id.* at 4. See also Bavley, *supra* note 26 (providing account of Naramore’s treatment of Ruth Leach and conversations with Jim and Cindy Leach drawn from trial testimony and interviews with witnesses).

149. Brief for Appellee at 4, *Naramore*, No. 96-77069-A; and Bavley, *supra* note 26.

150. See Bavley, *supra* note 26; Brief for Appellee at 3–5, *Naramore*, No. 96-77069-A.

151. See Miniclier, *supra* note 93, at A1.

152. See *Naramore*, 965 P2d at 218.

153. See J. Petterson, “Appeals Court Hears Doctor’s Murder Case,” *Kansas City Star*, Feb. 4, 1998, at C3.

154. See C.S. Cleeland et al., “Pain and Its Treatment in Outpatients with Metastatic Cancer,” *New Engl. J. Med.*, 330 (1994): 592–96.

155. See J.H. Von Roenn et al., “Physician Attitudes and Practice in Cancer Pain Management: A Survey from the Eastern Cooperative Oncology Group,” *Annals of Internal Medicine*, 119 (1993): at 125.

156. A. Jacox et al., “New Clinical Practice Guidelines for the Management of Pain in Patients with Cancer,” *New Engl. J. Med.*, 330 (1994): at 654.

157. See K.M. Foley and E. Arbit, “Management of Cancer Pain,” in V.T. DeVita et al., *Cancer: Principles & Practice of Oncology* (Philadelphia: Lippincott, 1989): 2064–87.

158. See Hanks and Cherny, *supra* note 9, at 346. There is a difference in relative analgesic potency when the route of administration (oral, rectal, parenteral, or epidural) is changed. For example, the usual practice when converting from oral to subcutaneous morphine is to divide the oral dose by two or three. See *id.* at 338. In a survey of patients with advanced cancer, more than half required two or more routes of administration prior to death. See *id.* at 343 (citing N. Coyle et al., “Character of Terminal Illness in the Advanced Cancer Patient: Pain and Other Symptoms During the Last Four Weeks of Life,” *Journal of Pain and Symptom Management*, 5 (1990): 83–89).

159. Brief for Appellant at 27, *Naramore*, No. 96-77069-A (statement of Larry Anderson, M.D., President, Kansas Medical Society).

160. See *Naramore*, 965 P2d at 219.

161. These cases are summarized in Table 1.

162. See Gianelli, *supra* note 10.

163. See T.E. Quill et al., “Palliative Options of Last Resort: A Comparison of Voluntarily Stopping Eating and Drinking, Terminal Sedation, Physician-Assisted Suicide, and Voluntary Active Euthanasia,” *JAMA*, 278 (1997): at 2103.

164. See K.M. Foley, “The Relationship of Pain and Suicide Management to Patient Requests for Physician-Assisted Suicide,” *Journal of Pain and Symptom Management*, 6 (1991): at 292.

165. See *id.* at 291–92.

166. See S. Landry, “Living Will Comes to Light in Trial,” *St. Petersburg Times*, June 25, 1997, at 5B.

167. See C.S. Palosky, “Doctor Suspended in Death of Patient,” *Tampa Tribune*, Oct. 24, 1996, at A1.

168. See C.S. Palosky, “Lawyers Seek to Block Testimony,” *Tampa Tribune*, June 14, 1997, at A1.

169. See C.S. Palosky, “Sebring Doctor’s Trial Starts Today,” *Tampa Tribune*, May 27, 1997, at A1.

170. See Palosky, *supra* note 168.

171. See C.S. Palosky, “Pinzon Defends Actions in Death,” *Tampa Tribune*, Sept. 10, 1997, § 1 (Metro).

172. See C.S. Palosky, “Potassium Injection Worried Nurse,” *Tampa Tribune*, June 13, 1997, § 7 (Metro).

173. *Id.*

174. See Fla. Stat. Ann. § 766.101 (West 1997).

175. The use of peer review, quality assurance, or administrative hearing materials differs from state to state. For example, in the LaDuke case in New York, records from the institution’s quality assurance committee, which are also privileged from civil discovery, were made available to the grand jury.

176. See Palosky, *supra* note 169 (citing statement of Dr. Howard R. Abel, an oncology expert and consultant to the Florida State Board of Medicine).

177. C.S. Palosky, “Doctor Charged in Patient’s Death,” *Tampa Tribune*, Nov. 22, 1996, at A1.

178. See C.S. Palosky, “Trial Evokes Torrent of Compassion,” *Tampa Tribune*, June 12, 1997, at A18 (reporting that Pinzon-Reyes’s supporters created Internet sites in both Spanish and English so that computer users worldwide could learn about his case. The Hispanic community, especially Colombian-American professionals, provided strong support for Pinzon-Reyes and raised significant amounts of money for him). In contrast, Naramore had almost no support from organized medicine or professional organizations or the community during his trial. Fellow osteopaths bought him a suit to wear at his trial; however, during the trial, Jerry Slaughter, executive director of the Kansas Medical Society in Topeka, which represents about 4,000 physicians, said he knew nothing about the details of the case.

179. See Palosky, *supra* note 169.

180. See B. Heery, “Legal Maverick,” *Tampa Tribune*, Nov. 1, 1997, § 1 (Polk County).

181. See S. Landry, “Florida Doctor Not Guilty in Death of Man with Cancer, Lung Disease,” *Rocky Mountain News*, June 28, 1997, at 56A.

182. See C.S. Palosky, “Pinzon Jurors Discuss Acquittal,” *Tampa Tribune*, June 29, 1997, § 1 (Metro).

183. See C.S. Palosky, “Ruling May Let Pinzon Practice Again,” *Tampa Tribune*, Oct. 22, 1997, at A1.

184. See P. Lima, “Doctor Wins Back License,” *Tampa Tribune*, Dec. 7, 1997, § 1 (Metro).

185. See *supra* p. 317, for cases in addition to Pinzon-Reyes.

186. See Palosky, *supra* note 183.

187. See Personal Communication with Martha L. Graber, M.D., Clinical Chief, Nephrology, Department of Medicine, University of California, San Francisco (Aug. 10, 1998).

188. See Ellis, *supra* note 87.

189. “Grand Jury Indictment,” *Tampa Tribune*, Nov. 22, 1996, at A10.

190. See Friedman, *supra* note 33, at 32 (noting that oxygen pumped through a ventilator was lowered and the patient was given morphine; potassium chloride was administered when the patient’s heart stopped beating but then started again and continued beating for fifty minutes).

191. See D. Orentlicher, “The Supreme Court and Physician-Assisted Suicide: Rejecting Assisted Suicide but Embracing Eu-

thanasia," *New Engl. J. Med.*, 337 (1997): at 1236. See also Quill et al., *supra* note 104, at 1769-70.

192. Jury nullification occurs when a jury disregards the evidence presented at trial and acquits an otherwise guilty defendant because it objects to the law that the defendant violated, or to the application of the law to that defendant. See generally, Butler, *supra* note 89, at 700-04.

193. See R.F. Schopp, "Verdicts of Conscience: Nullification and Necessity as Jury Responses to Crimes of Conscience," *Southern California Law Review*, 69 (1996): at 2049-65.

194. See N.J. Finkel et al., "Right to Die, Euthanasia, and Community Sentiment: Crossing the Public/Private Boundary,"

Law & Human Behavior, 17 (1993): at 495.

195. See *Naramore*, 965 P.2d at 223.

196. *Id.*

197. See *id.*

198. See *id.*

199. See *id.* (Brazil, C.J., dissenting).

200. See C. Scanlon, Letter, *New Engl. J. Med.*, 344 (1996): at 1401-02 (noting that even critical care nurses may confuse the distinctions between appropriate care that may cause death and inappropriate hastening of death). See also Emanuel et al., *supra* note 74, at 510 (noting physician confusion about what behavior constitutes assisted suicide).