1997

Presumed Consent to Organ Donation: A Reevaluation

Maxwell J. Mehlman

Follow this and additional works at: https://scholarlycommons.law.case.edu/faculty_publications

Part of the Health Law and Policy Commons

Repository Citation
https://scholarlycommons.law.case.edu/faculty_publications/542

This Article is brought to you for free and open access by Scholarly Commons. It has been accepted for inclusion in Faculty Publications by an authorized administrator of Scholarly Commons.
AS THE DEMAND for transplant organs continues to exceed the supply,\textsuperscript{1} various methods are being considered for increasing the availability of organs from cadaveric donors. One alternative is "presumed consent." Currently in the United States,\textsuperscript{2} a person is presumed to be unwilling to donate his or her organs at death unless the person, or the family, gives permission. In other words, ours is a system of "presumed nonconsent." Under presumed consent, on the other hand, the decedent would be presumed to be willing to have his or her organs harvested upon death unless he or she, or the family, actively objected.

This paper examines the presumed consent approach from a practical, legal and ethical perspective. It concludes that presumed consent for harvesting cadaveric organs \textsuperscript{3} may be a viable policy alternative, but that research in a number of specific areas is needed before the policy can be endorsed.

\begin{itemize}
\item[1.] Approximately 100,000 people are on waiting lists for organ or tissue transplantation. Rivers, Buse, Bivins and Horst, \textit{Organ and Tissue Procurement in the Acute Care Setting: Principles and Practice-Part 1}, 19 \textsc{Annals of Emergency Med.} 78, 79 (1990) [hereinafter "Rivers"]. There were 9,123 kidney transplants in 1988, but 13,000 patients are still waiting for kidney transplants. \textit{Id.} The National Heart Transplant Study found that 14,000 to 15,000 patients need a heart transplant but only 1,647 patients received transplants in 1988. \textit{Id.} at 78-79.
\item[2.] For information on other countries, see infra notes 55-67, 72-73, 86-88 and accompanying text.
\item[3.] This paper does not address the question of how to increase the supply of transplant organs from living donors.
\end{itemize}
I. HISTORICAL BACKGROUND

Although the first cadaveric kidney was transplanted in 1936, significant concern with assuring an adequate supply of transplant organs only began to be expressed following the marked success of renal transplantation in the late 1960's and 1970's. Initially, the United States relied on a purely voluntary approach to organ donation. The law provided that in general an individual, or his family, could consent to the removal of organs following the individual's death, but that harvesting organs without this permission could subject the persons removing the organs to civil and criminal penalties. Apart from this basic rule, however, the legal principles governing consent to donation, which were established by state courts and legislatures, varied from state to state. The result was a confusing patchwork. Moreover, in many cases there were no clear answers to such important questions as what should happen if the family disagreed with the wishes of the decedent.

To remedy these problems, the National Conference of Commissioners on Uniform Law began to draft model state legislation in 1965, and in 1968, approved the Uniform Anatomical Gift Act. By 1972, the UAGA had been adopted throughout the United States. The UAGA was more than an effort to clarify state law on organ donation and to create a uniform set of rules, however; it was also an attempt to promote organ donation by simplifying the pro-

---

4. The first cadaveric kidney transplant was performed in the Soviet Union in 1936 and a great deal of experimentation was done in the United States during the 1940's and 1950's. Hamilton, Kidney Transplantation: A History, in KIDNEY TRANSPLANTATION: PRINCIPLES AND PRACTICE 5-8 (P. Morris ed. 2d. ed. 1984).

5. Tissue typing and the use of cyclosporine have contributed to the improved success rates. See id. at 8-11. At the end of the 1980's, one year graft survival rates were 75-85 percent and patient one-year survival rates were greater than 95 percent. Suranyi and Hall, Current Status of Renal Transplantation, 152 W. J. MED. 687 (1990).


8. 8a U.L.A. 16 (1983) [hereinafter “UAGA(1968)”].

9. See Uniform Anatomical Gift Act, 8a U.L.A. 22-23 (Supp. 1991) [hereinafter “UAGA(1987)”]. The UAGA was amended in 1987 in various respects. Id. at 2. A number of states have adopted the amendments in whole or in part. See Note, “She’s Got Bette Davis’s Eyes”: Assessing the Nonconsensual Removal of Cadaver Organs under the Takings and Due Process Clauses, 90 COLUM. L. REV. 528, 532 (1990) [hereinafter “Columbia Note”].
cess of consent, especially by the decedent. For example, the UAGA recognized donor cards as a method by which a person could give legally valid consent to donate organs upon death. Passage of the UAGA, in short, signified that the nation would no longer rely on purely voluntary behavior. Instead, the law would be changed to facilitate donation. This approach was known as “encouraged voluntarism.”

By the mid-1980’s, it had become clear that the policy of encouraged voluntarism embodied in the UAGA was not producing enough donors. Few persons signed donor cards. Even when potential donors with signed cards were identified, hospitals refused to harvest their organs without familial consent, and doctors were reluctant to approach families to ask for permission. The supply of cadaver organs remained limited at the same time that advances in transplant technique and immunosuppressive therapy improved the success rate of transplants, thereby increasing demand. The continued shortage of donor organs prompted the search for an alternative to the principles of encouraged voluntarism. One proposal was presumed consent. Under the name of “routine salvage,”

10. See, e.g., Columbia Note, supra note 9, at 535 (“the UAGA(1968) did not live up to its expectations for encouraging a sufficient supply of organs . . .”); Naylor, supra note 6, at 173 (“with the 1968 UAGA and the statutes modeled after it, legislators attempted to reduce the family’s role and use individual consent in order to procure more organs”).


13. A 1985 Gallup Poll found that 27 percent of those surveyed stated that they were very likely to donate their organs, but only 17 percent had signed donor cards. The GALLUP ORGANIZATION, INC., GALLUP SURVEY: THE U.S. PUBLIC’S ATTITUDES TOWARD ORGAN TRANSPLANTATION/ORGAN DONATION 19 (1985), cited in Naylor, supra note 6, at 174. Manninen and Evans reported that only 14 percent of respondents in a telephone survey of a national probability sample stated that they carried donor cards. Manninen and Evans, Public Attitudes and Behavior Regarding Organ Donation, 253 J. A.M.A. 3111, 3112 (1985).


15. The introduction of cyclosporine in 1983 was particularly significant. See U.S. DEPT. OF HEALTH AND HUMAN SERVICES, TASK FORCE ON ORGAN TRANSPLANTATION, REPORT TO THE SECRETARY AND THE CONGRESS ON IMMUNOSUPPRESSIVE THERAPIES 10 (1985).

Dukeminier and Sanders had advocated this approach back in 1968 when transplantation successes first began to stimulate interest in increasing the supply of donor organs. As envisioned by Dukeminier and Sanders, presumed consent would eliminate the need for donors to carry donor cards, and for physicians to intrude on the family's grief just when they had learned of the death of a loved one. In essence, the burden of taking action would shift from the surgeon wishing to remove the organs to the donor and his family. There would be no need for the doctor to obtain explicit consent to donation; instead, it would be up to the family, or to the decedent while still alive, to assert an objection. In the absence of an objection, the doctor would be entitled to assume that he had permission to retrieve any organs that were needed, and he could remove the organs without fear of legal liability.

Despite the possibility that its adoption would provide more organs for transplantation, the presumed consent idea did not receive wide endorsement. David Ogden, then President of the National Kidney Foundation, objected that it was "relatively coercive, compared to the more classical freedom of choice that characterizes our way of life." Others repeated Paul Ramsey's concern that presumed consent "would deprive individuals of the exercise of the virtue of generosity." The most telling objection, however, was that presumed consent was not acceptable to the public. A widely cited opinion poll, for example, reported that only 7 percent of the public supported the concept. Indeed, when a federal task force on organ transplantation rejected presumed consent in 1986, it gave lack of popular support as its only reason.

17. Dukeminier and Sanders, supra note 7.
18. Dukeminier and Sanders wrote:
   At present the surgeon is told: "You may not remove cadaver organs to save the life of a living person unless you have obtained consent from the deceased or his next of kin." He ought to be told: "You may remove cadaver organs to save the life of a living person unless the decedent notified you that he objected or the next of kin now objects."
   Id. at 418.
21. Manninen & Evans, supra note 13, at 3111.
   "Although there are recurring proposals to extend presumed consent from corneas to other tissues and vascularized organs, both consensus derived from experts in the field and public opinion polls show that there is little support for this mecha-
An additional factor may have been that the presumed consent concept was being confused with an entirely different approach, that of "required request." In 1983, Arthur Caplan had called for a shift from encouraged voluntarism to a system in which hospitals would be required by law to ask potential donors or their families if they had any objection to the removal of organs following death. Since people would be asked if they objected to donation rather than if they consented, Caplan felt that this amounted to creating a presumption in favor of removing organs. His proposal differed from Sanders' and Dukeminier's original presumed consent scheme in the key respect that, under Caplan's approach, organs could be harvested only if the donor or family expressly stated that they had no objection, while according to Sanders and Dukeminier, organs could be removed without any action by the donor or the family, so long as neither the donor nor the family had voiced an objection. Caplan's position thus in fact occupied a middle ground between encouraged voluntarism and presumed consent, as Matas and his colleagues pointed out in 1985. Nevertheless, Caplan termed his approach "presumed consent." Eventually, the distinction between asking donors and families if they consented to donation and asking them if they objected, which had formed the basis for Caplan calling his scheme "presumed consent" in the first place, disappeared. All hospitals would simply be required to ask donors or their families for permission to remove organs. Caplan advocated this middle-ground approach as the solution as a way of increasing the availability of donor organs. It is clear that potential organ donors and their families want to continue to be the primary decisionmakers. Thus, the Task Force believes that present efforts should focus on enhancing the current voluntary system rather than on reducing the role of actual consent.

---


24. Id. at 28 ("[families should be asked not whether they will consent to the donation of organs but whether they have any objections").

25. Matas 1985, supra note 14, at 231 ("[o]ur proposal charts a middle path between the current ineffective policy based on 'encouraged voluntarism' and 'presumed consent' policies that promise effectiveness at the cost of violating traditional ethical and legal principles"). Matas and his colleagues proposed that families be told the following prior to removal of organs:

"As you probably know, it is official practice here, and everywhere else in our state, for suitable organs to be routinely removed from patients with brain death. Unless you and the rest of your family object, we will surgically remove one or more of your relative's vital organs in order that some other needy patient might live. In case you do object, we will certainly respect your wishes."

Id. at 238.

26. Id.
tion to the failure of encouraged voluntarism. 27 Although he now used the more accurate term "required request," his original use of the term "presumed consent" may have led some who had favored Sanders’ and Dukeminier’s proposal to believe that the two approaches were substantially the same.

In any event, required request became the preferred alternative in the mid-1980’s. A number of state legislatures adopted it, beginning with Oregon in 1985. 28 In 1986, the Task Force on Organ Transplantation of the U.S. Department of Health and Human Services endorsed it. 29 The UAGA was amended in 1987 to include a required request provision, 30 and eventually the federal government added the establishment of required request policies to the list of conditions that hospitals have to fulfill in order to be eligible for reimbursement under Medicare. 31

The historical background of the present debate over presumed consent would be incomplete without mention of a further key development, and one that is not widely known. Although it is generally true that, in the mid-1980’s, the principles of presumed consent were rejected in favor of required request, a number of states in fact enacted a presumed consent approach to organ removal. A recent survey, for example, shows that seventeen states permit coroners or medical examiners to remove corneas and/or pituitary glands without obtaining the consent of either the donor or the next-of-kin. 32 In these states, removal of organs is permissible so long as the coroner or medical examiner is unaware of an objection. 33 In addition, Hawaii permits any tissues to be removed regardless of whether or not there is an objection, 34 and Vermont allows pituitaries to be removed unless an objection is made based on religious grounds. 35 While the authority of the coroners and medical examiners in these

29. 1986 Task Force Report, supra note 22, at 31-34.
32. See Columbia Note, supra note 9, at 535, n.35-37 and accompanying text. The states are: Arkansas (pituitary); California (both); Colorado (pituitary); Connecticut (both); Delaware (cornea); Florida (cornea); Georgia (cornea and eye); Kentucky (cornea); Maryland (cornea); Michigan (cornea); Missouri (pituitary); North Carolina (cornea); Ohio (cornea); Oklahoma (pituitary); Tennessee (cornea); Texas (cornea); and West Virginia (cornea).
33. Id. at 535.
34. See id. at 536, n.38.
35. Id.
states is limited to removing organs from bodies in their custody, passage of these laws demonstrates that presumed consent currently is acceptable to some state legislatures under some circumstances.36

II. EXPERIENCE WITH REQUIRED REQUEST

Required request was devised to deal with what were believed to be the underlying reasons for the failure of encouraged voluntarism. Opinion polls showed that few people voluntarily donated their own organs or those of members of their own families. Yet the polls also showed that an overwhelming majority approved of organ donation in principle, and hospitals found that, when asked, most families consented to removing the organs of dead relatives.37 Asking families rather than the donors themselves therefore seemed the best approach to increasing the supply of organs. The problem was that, under encouraged voluntarism, the families were not being asked.38 Physicians and nurses were reluctant to ask families to consent to donation while their loved ones were still alive, and, once death had occurred, caregivers did not like to interrupt families during their time of grief.39 Physicians were also reported to be held back from discussing donation by the notion that the death of the patient was a medical failure.40 The typical separation of treatment and transplant teams within the hospital community also reduced structural incentives for establishing effective request procedures.41

The solution represented by required request was to overcome this professional and institutional resistance by using the force of the law. Accordingly, state and federal laws were amended to require hospitals to request donation from the families of suitable donors.

Although required request has been in operation for only a few years, there seems to be a growing sense that it has failed to solve the organ shortage problem. The data on whether or not required request has increased the rate of donation are mixed. Burris and his

36. For a discussion of court decisions upholding these statutes, infra notes 125-29 and accompanying text.
38. See 1986 Task Force Report, supra note 22, at 43.
39. See id. at 44.
41. The organ procurement agency, which is responsible for recovering, preserving and distributing organs for transplantation, depends on the referring physician to identify and refer potential organ donors. See Rivers, supra note 1, at 80.
colleagues report that monthly collections of eyes in Oregon increased 135 percent during the first year of routine request. The President of the Eye Bank Association of America claims that hospital donations of eyes increased 66 percent following the switch to required request. The New York State Department of Health reports that, in the year after the legislature passed a required request law in New York State, heart donations increased by 94 percent, livers by 96 percent, kidneys by 23 percent, and eyes by 58 percent. Other data present a less favorable picture. Kittur and his colleagues in Baltimore attribute a phenomenal 400 percent increase in donor referrals and a 500 percent increase in tissue donations to a vigorous “donor advocacy” program, but while their data show that more people were being asked to consent, the consent rate remained at only 39 percent of those asked, and the ratio of donations to requests increased only 3 percent compared to the year immediately preceding the inception of the program. Andersen and Fox state that, while eye, bone and skin donations in Oregon increased, kidney donations decreased the first year after required request was enacted. They also report no increase in the number of organ donors in Los Angeles and San Francisco following adoption of required request in California. Caplan, who is perhaps most closely associated with the required request concept, admits that, while donations have increased in many places, “these numbers ought to be even greater given the large number of persons who could donate tissue upon their deaths.” Finally, even if required request laws have increased the availability of donor organs, it is clear that the

42. Burris, supra note 28, at 226.
43. Letter from Tom Moore, 19 HASTINGS CNTR. REP. 44 (March/April 1989).
46. Andersen and Fox, supra note 44, at 75. The authors state that kidney donations increased 12 percent during the second year after required request was imposed, but do not indicate what the increase was in reference to.
47. Id.
48. Caplan, Professional Arrogance and Public Misunderstanding, 18 HASTINGS CNTR. REP. 34, 35 (April/May 1988). Caplan states that donation has increased from 10 to 20 percent in many states, but that there has been no increase in others. However, he argues that the fact that donations have remained constant in those states despite significant declines in traffic fatalities suggests that required request has had “a small positive impact.” Id.
number of organs still falls substantially short of the need.\textsuperscript{49}

Caplan cites two problems that procurement officials and state health department representatives believe to be responsible for the lack of success of required request laws. First, health professionals who must make the requests are not adequately trained to be effective, and second, physicians, regarding required request laws as a bureaucratic intrusion into the practice of medicine, refuse to comply.\textsuperscript{50} The design of many state required request laws is also partly responsible: the laws often contain major loopholes allowing the requirements to be circumvented and in many cases no penalties are established for failure to comply.\textsuperscript{51}

It might not yet be time to write off required request. Better efforts to educate those who must deal with families of potential donors, perhaps coupled with more stringent legal requirements, might increase the frequency and effectiveness of donation requests.\textsuperscript{52} Greater monitoring of hospital compliance with Medicare required request requirements also could help.\textsuperscript{53} Nevertheless, disappointment with required request has sparked renewed interest in other approaches, including presumed consent.\textsuperscript{54}

III. POTENTIAL BENEFITS OF PRESUMED CONSENT

A. Increasing the Supply of Organs for Transplantation

Interest in presumed consent stems chiefly from the expectation that it would significantly increase the supply of transplant organs. European experience with presumed consent is frequently cited in support. Benoit and his colleagues report that transplantation has

\textsuperscript{49} See Rivers, \textit{supra} note 1 and accompanying text. Andersen and Fox state that "[b]y itself, routine inquiry is not likely to affect significantly the supply of organs after early attention by the media." Andersen and Fox, \textit{supra} note 44, at 77. Even enthusiastic supporters of required request admit that waiting lists of prospective donees persist. See, \textit{e.g.} Burris, \textit{supra} note 28, at 230.

\textsuperscript{50} See Caplan, \textit{supra} note 48, at 35. Caplan reports that, in many states, no more than 50 percent of physicians comply with required request laws. \textit{Id}.


\textsuperscript{52} More severe penalties might provoke a backlash from physicians, however. See Caplan, \textit{supra} note 48, at 35 (physicians object to being told "what they must do," emphasis in original).

\textsuperscript{53} The enforcement of Medicare conditions of participation, which include the required request requirements, has been criticized as generally inadequate, however. \textit{See Institute of Medicine, National Academy of Sciences, I Medicare: A Strategy for Quality Assurance} 132-34 (1990).

\textsuperscript{54} Another approach that is receiving renewed attention is allowing transplant organs to be bought and sold. See, \textit{e.g.} Hansmann, \textit{The Economics and Ethics of Markets for Human Organs}, \textit{14 J. Health Pol., Pol'y & L.} 57 (1989).
increased since the introduction of presumed consent in France — from 551 to 1808 kidneys; from 15 to 622 hearts and hearts/lungs; from 7 to 409 livers; and from 2 to 43 pancreas.55 Roels and his colleagues state that the adoption of presumed consent in Belgium resulted in an 86 percent increase in cadaveric kidney procurement, and a 183 percent increase in the total number of organs available for transplant.56 They also report much higher transplantation rates in three countries that they claim have presumed consent systems — Belgium, France and Austria — compared with three other countries that do not — the United Kingdom, the Federal Republic of Germany, and the Netherlands.57 In a paper reporting more recent data from 1989, Roels and his colleagues state flatly that "data presented show that, at least in Europe, the problem of chronic organ shortage can adequately be solved in the setting of an [sic] opting-out legislation."58

Unfortunately, the information from Europe can be deceiving. While France technically adopted a presumed consent approach in 1976,59 French physicians routinely ask families for permission before removing organs.60 Therefore, the experience in France reflects the operation of an encouraged voluntary or routine request system, rather than a true presumed consent approach. A similar practice prevails in Belgium; although physicians in Belgium are permitted legally to remove organs without permission, as a practi-

55. Benoit, Spira, Nicolet and Moukarzel, Presumed Consent Law: Results of its Application/Outcome from an Epidemiologic Survey, 22 TRANSPLANTATION PROC. 320 (April 1990) [hereinafter "Benoit"].


57. Id. at 2078-79. The authors conclude that "the relationship of organ availability and legislation within these countries shows clearly the beneficial effect of national legislations [sic] based on the principle of presumed consent." Id. at 2079.

58. ROELS, VANRENTERGHEM, WAER, CHRISTIAENS, GRUWEZ AND MICHIELSEN, THREE YEARS EXPERIENCE WITH A [sic] "PRESUMED CONSENT" LEGISLATION IN BELGIUM: ITS IMPACT ON MULTI-ORGAN DONATION IN COMPARISON WITH OTHER EUROPEAN COUNTRIES 4 (undated, supplied to author by the National Kidney Foundation) [hereinafter "Roels Update"].


60. Communication from Pierre Korman, Director, French Transplant Association (Nov. 12, 1990). See also French Note, supra note 16, at 1025 ("... some French doctors simply disregard the Law and seek the permission of the family in every case possible, thereby continuing the 'long-established custom' which was to have been eliminated by the 1976 law"). Benoit reports that French physicians ask families for permission in 82.2 percent of cases. Benoit, supra note 55, at 321.
cal matter they inform families of the option to refuse and ask if the families have any objections. 61

One true presumed consent system in Europe is found in Austria. 62 A patient who does not wish to donate organs must state his objection in writing. Donation is not discussed with families unless they raise the issue. The only exceptions are cases involving pediatric patients and foreigners. 63

It is therefore noteworthy that the latest data from Eurotransplant on the availability of kidneys for transplantation show that Austria not only has a significantly higher rate than the Federal Republic of Germany, Luxemburg and the Netherlands, all of which have voluntary donation systems, but also a rate more than 11 percent higher than Belgium, which, despite its de jure presumed consent system, operates de facto on the basis of encouraged voluntarism or routine request. 64 The Austrian data on heart and liver donation are not as clear. If presumed consent provided more organs than other donation approaches, it would be expected that, as a percentage of the population, more hearts and livers would be

---

61. Personal communication from Bernadette Haase, General Manager, Eurotransplant (Dec. 17, 1990). Roels and his colleagues seem to realize the weak foundation for their claim that the experience in Belgium demonstrates the efficacy of presumed consent when they admit that, according to their data, the major reason for the increase in organ donation in countries like Belgium was “the participation of an increasing number of smaller non-university hospitals in organ procurement.” Roels Update, supra note 58, at 4.

There is confusion among other scholars regarding whether various countries have encouraged voluntary, routine request, or presumed consent systems. For example, Silver states that presumed consent systems operate in Finland, Greece, Italy, Norway, Spain and Sweden, whereas Matas and Vieth state that the laws in these countries require physicians to ask families if they object to donation. Compare Silver, supra note 7, at 703, with Matas & Vieth, supra note 16, at 156. If Matas and Vieth are correct, this undercuts Silver’s claim that European countries with presumed consent systems still lack sufficient organs for transplantation. See Silver, supra, at 706. But Matas and Vieth themselves describe the French system as one of presumed consent. See, Matas and Vieth, supra.

62. Personal communication from Bernadette Haase, General Manager, Eurotransplant (Dec. 17, 1990) and Herman Fetz, Transplant Coordinator, University Hospitals of Innsbruck, Austria (Dec. 18, 1990). It is not clear that presumed consent actually operates in any other European countries.

63. Personal communication with Herman Fetz, supra note 62.

64. See EUROTRANSPLANT FOUNDATION, ANNUAL REPORT 1989, Table 1.7 (1989). The number of kidneys available per million inhabitants in 1989 was 52.1 in Austria; 40.9 in Belgium; 30.3 in Germany; 20.0 in Luxemburg; and 24.9 in The Netherlands. In 1988, the rates were 39.3 (Austria); 38.0 (Belgium); 26.9 (Germany); 26.7 (Luxemburg); and 25.5 (The Netherlands). Id. Eurotransplant does not provide data on France, and therefore its data do not permit the kidney donation experience in Austria to be compared with the experience in France. A table in a paper by Roels and colleagues shows that Belgium and France in 1988 transplanted more kidneys per million inhabitants than Austria, but the question is not how many kidneys were transplanted, but how many were available through donation. See Roels 1990, supra note 56, at 2079, Fig. 2.
donated in Austria not only in comparison with countries that have *de jure* and *de facto* voluntary systems, like the United Kingdom, Germany and The Netherlands, but also in comparison with Belgium and France. According to Roels and his colleagues, Austria, Belgium and France all have much higher numbers of hearts and livers available for transplantation per million inhabitants than the United Kingdom, the Federal Republic of Germany and The Netherlands. But while Austria has a somewhat higher rate for livers than either France or Belgium, it has a lower rate for hearts. The Austrian experience therefore provides some support for the notion that adopting presumed consent increases the supply of donor organs over other donation approaches, but the data are incomplete, and a number of questions remain unanswered.

A significant question arises, however, regarding the relevance of the Austrian experience to the United States. Unlike the U.S. and other European countries, Austria has long permitted autopsies to be performed without consent, and this practice has been ingrained in physicians through their training. Austrian physicians therefore are likely to be more willing to remove organs for transplantation without express consent than their American or European colleagues. Since Austria is the only European country with a history of autopsy without consent, this also would explain why physicians in Austria refrain from seeking permission from families when that practice has overwhelmed the *de jure* presumed consent systems in countries such as France and Belgium.

B. More Humane for Families

While the prospect of increasing the supply of organs for donation is the major benefit anticipated from a shift to presumed consent, there may be other important benefits as well. To begin with, since presumed consent would eliminate the need to confront bereaved relatives with requests for donation, it may be more humane than required request. "To someone whose relative is about to die," wrote Dukeminier and Sanders, "asking for the kidneys may seem a ghoulish request." The same may be true for relatives whose loved one has just been declared legally dead.

---

65. See Roels Update, *supra* note 58, fig. 2.
66. *Id.*
67. Personal communication with Bernard Cohen, Director, Eurotransplant (Feb. 25, 1991).
68. Dukeminier and Sanders, *supra* note 7, at 416.
69. The distastefulness of approaching families may be compounded when the body is
C. Increased Patient Autonomy and Informed Consent

Presumed consent may increase the likelihood that decisions about donation are voluntary and informed. Since the decision to object to donation would be made voluntarily by the patient or the family (depending on how the presumed consent system were designed), the decision could be made at a time when the decisionmakers were not confronting their own or their loved one’s death. It therefore might be more deliberative and dispassionate than a decision under required request.70

Presumed consent also may enhance patient autonomy. Under required request, the ultimate decision to donate typically is made by the patient’s family, rather than by the patient. Even in the infrequent case in which the patient had signed a donor card or otherwise expressed a desire to donate, surgeons are unlikely to remove organs unless the family has given permission.71 When the family disagrees with the patient’s disposition, required request therefore may frustrate the patient’s actual wishes.

Depending on how it was implemented, presumed consent might reduce the ability of the family to override the decedent.72 The family might be given no right to object when the patient, as-
suming he or she was competent, had not refused donation. More likely, the role of the family might be limited, at least nominally, to expressing what they believed to be the patient’s desires rather than their own. 73

D. Effectuating Public Preferences

Although it is commonly believed that the public is opposed to presumed consent, some commentators argue that most people in fact are favorable or indifferent and simply cannot admit it or act upon it. 74 In support, these commentators cite the fact that far more people state that they are willing to donate their organs than fill out donor cards. This suggests that people are in favor of donation in the abstract, but that psychological factors involved in contemplating their own deaths, or those of their loved ones, make them unable to articulate their true wishes. 75 By eliminating the need to confront donation actively in order to donate, presumed consent might overcome these psychological impediments and allow individuals to give effect to their true beliefs.

Before leaving the subject of why presumed consent might be beneficial, it is worth pointing out that, while it is important to attempt to create a donation system that is more humane, in which decision-making is more autonomous and informed, and that is more consistent with underlying personal beliefs, the chief purpose of presumed consent is to increase the supply of donor organs. Therefore, even if presumed consent did not provide any of these secondary benefits, it still might be preferred to existing approaches so long as it yielded a significantly greater number of transplant organs.

IV. OBJECTIONS TO PRESUMED CONSENT

Opponents of presumed consent raise ethical, religious, legal

73. This is the rule in France, whereby law the family is only supposed to assert the patient’s own objections. See Ministere de la Sante et de la Securite Sociale, Circulaire du 3 avril 1978 concernant le Decret No. 78-501 du 31 mars 1978, 1978 J.O. 1530, 1978 Bulletin Legislatif Dalloz [B.L.D.] 249, sec. II (B). As a practical matter, however, the family often will express, or be asked to express, its own preferences. See Benoit, supra note 55, at 321 (study showed French families asked for their own wishes 51.4 percent of the time).

74. See Silver, supra note 7, at 697; Matas 1985, supra note 14, at 236.

75. See Silver, supra note 7, at 697 (“[t]hat seventy-five percent of the populace should say ‘yea’ to organ donation from an armchair, while eighty-three percent say ‘nay’ from the deathbed, suggests that most people believe they should donate their organs but cannot bring themselves to do so”); Matas 1985, supra note 14, at 236 (pointing out that people find organ donation “too troubling or frightening to think about,” or “cannot really comprehend their own death or do not wish to think about it”).
and practical objections. In the first place, they doubt that presumed consent would increase the supply of donor organs.\(^{76}\) Citing the experience in France, critics assert that health professionals in the United States would behave no differently than their French counterparts, and would refuse to harvest organs without express permission.\(^ {77}\) This is an empirical question, and underscores the need for definitive data from Austria and other countries demonstrating the impact of presumed consent on organ availability.

Critics of presumed consent do not rest on this point, however. They take the position that, contrary to those who argue that presumed consent would yield the secondary benefits described above, such a system would be so inhumane, manipulative and unpopular that it must be rejected for those reasons alone. In other words, the end does not justify the means. The question then is, assuming that presumed consent would significantly increase the supply of donor organs, must it be rejected for other reasons?

A. Ethical Objections.

The ethical objections to presumed consent can best be summarized by referring to the five ethical values that the Task Force on Organ Transplantation of the Department of Health and Human Services in 1986 identified as necessary for any organ procurement system to promote:

1) “saving lives and improving quality of life”;
2) “promoting a sense of community through acts of generosity”;
3) “respecting individual autonomy”;
4) “showing respect for the decedent”; and
5) “showing respect for the wishes of the family.”\(^ {78}\)

There would seem to be little disagreement that, assuming that presumed consent significantly increased the supply of cadaveric organs, it would promote the first value of saving lives and improving

\(^{76}\) See, e.g., French Note, supra note 16, at 1029. Youngner argues, for example, that “the notion that we can quickly resolve our society’s ambivalence with laws and regulations is misguided,” and states that such an approach will create a “rebound” effect that will reduce rather than increase donations. Youngner, Organ Retrieval: Can We Ignore the Dark Side?, 22 TRANSPLANTATION PROC. 1014, 1015 (1990). See also Youngner, supra note 40, at 14 (attempting to bypass resistance to donation through laws and regulations “will, in the long run, prove no more productive than pointing accusatory fingers”).

\(^{77}\) See French Note, supra note 16, at 1029 (“... if the French experience is to serve as a guide, such a change would have little, if any, effect on the supply of organs for transplant”).

\(^{78}\) 1986 Task Force Report, supra note 22, at 28.
the quality of life. Several studies have demonstrated, for example, that kidney transplants provide a better quality of life for end stage renal disease patients than dialysis, and that transplantation is more economical.79

Ethical objections to presumed consent therefore must be based on its inability to meet one or more of the other four objectives. The second objective is a restatement of Ramsey's defense of voluntary behavior, which was mentioned earlier: the more the state takes away the opportunity to act voluntarily, the less of an opportunity individuals have to be altruistic, and therefore the less virtuous our community will be.80 Since presumed consent laws eliminate the need to express our willingness to donate organs, they arguably reduce our ability to act generously.

One response to this objection is that presumed consent laws facilitate rather than reduce altruistic behavior. This follows from the argument, described earlier, that people really want to donate their organs, or those of their loved ones, but for psychological reasons cannot bring themselves to do so.81 According to this argument, presumed consent allows people to fulfill their altruistic impulses by refraining from objecting, which is psychologically easier for them than having to give their express consent. While altruistic action ideally might be preferred to altruistic inaction, altruistic behavior, even of an inactive sort, is better than non-altruistic behavior.

In addition, Ramsey's position seems to lead to an absurd result. Imagine telling a patient waiting for a life-saving transplant that he will be allowed to die just in case someone decides at the last minute to be benevolent and to donate the needed organ. Given the fact that people have not been willing to donate enough organs under encouraged voluntarism and required request, it is hard to accept the idea that we should avoid saving lives and improving quality of

79. See Simmons and Abress, Quality-of-Life Issues for End-Stage Renal Disease Patients, 15 AM. J. OF KIDNEY DISEASES 201 (1990) (successful transplant patients have a higher quality of life than dialysis patients); Bremer, McCauley, Wrona and Johnson, Quality of Life in End-State Renal Disease: A Reexamination, 13 AM. J. OF KIDNEY DISEASES 200 (1989) (transplant patients quality of life higher than dialysis patients); Eggers, Effect of Transplantation on the Medicare End-Stage Renal Disease Program, 318 NEW ENG. J. MED. 223, 228 (1988) (dialysis costs approximately three times as much as successful transplantation); Morris and Jones, Transplantation Versus Dialysis: A Study of Quality of Life, 20 TRANSPLANTATION PROC. 23 (1988) (transplant patients report better quality of life than dialysis patients).

80. See supra note 20 and accompanying text.

81. See supra notes 74-75 and accompanying text.
life on the off-chance that people's behavior suddenly will change.\textsuperscript{82}

The potential failure of presumed consent to promote the remaining three values in these task force's list is a more telling objection. By allowing organs to be removed without permission, it might be said, presumed consent would conflict with individual autonomy and would be highly disrespectful of the decedent and of the wishes of the family. Imagine the horror of the family upon learning that, not only was their loved one dead, but that his organs had been removed without consent. The suffering that this would inflict on the family, the disempowering of the patient that would result from denying him an opportunity to control the disposition of his own body, and the distrust of health care providers that this would breed are so significant that they could outweigh any benefit that transplantation might provide. Indeed, they could undermine the organ donation system as a whole.

As suggested earlier, the objection that presumed consent would interfere with patient autonomy may be misplaced if presumed consent is being compared with required request, since required request as a practical matter allows the family to override the patient's wishes with regard to donation.\textsuperscript{83} Nevertheless, there is such an inescapable, underlying unease created by the prospect that health care providers will be permitted to perform acts on dead bodies regardless of the wishes of the patient and the family that a presumed consent system must address these concerns in order to be a viable policy option.

One alternative would be to adopt a presumed consent system but to conceal it from public knowledge. After all, if patients and their families were unaware that organs were being removed, they would have no occasion to be upset. Assuming families retained the option of viewing the dead relative at the funeral, this would not only entail harvesting organs in such a way that the absence of the organs would not be noticeable, which would be desirable anyway to spare the family, but refraining from conducting any public information programs about the donation system.

\textsuperscript{82} Ramsey's position is reminiscent of Cahn's approach to the classic lifeboat dilemma in which he argues that no one should be thrown overboard even though this means everyone will drown. See E. CAHN, THE MORAL DECISION: RIGHT AND WRONG IN THE LIGHT OF AMERICAN LAW 71 (1955). As Cahn makes clear, however, he does not actually intend for everyone to die; instead, he hopes that some altruistic occupant will sacrifice himself to save the others. \textit{Id.} Even if this were to occur, it would have the paradoxical result that the person who most deserved to live inevitably would die — either by committing suicide or by being drowned with the others.

\textsuperscript{83} See supra notes 72-73 and accompanying text.
This approach would be both unethical and impractical. By attempting to hide the truth, it would deprive patients and their families of a meaningful opportunity to object to donation. The result would not be a system of presumed consent, but of mandatory organ removal.\textsuperscript{84} Physicians are unlikely to accept such an approach. Nor could such a system be kept secret for long. For one thing, the press would be sure to find out and to seize upon it.\textsuperscript{85} The resulting public backlash would almost certainly lead to legal action against providers and force the repeal of any presumed consent legislation that had been passed.

A better approach would be to educate patients and their families about how presumed consent worked and to construct an effective opting-out method by which they can express their objections to donation. In this way, a presumed consent system can be consistent with the ethical objectives of achieving individual autonomy and respecting the decedent and the wishes of the family, at the same time that it increased the supply of transplant organs by avoiding the need for express consent.

Constructing an effective educational program and opting-out system would not be easy. Experience with encouraged voluntarism and required request shows that educating the public and providers about organ donation is expensive and difficult. Furthermore, little attention has been given to how to design an opting-out system for the United States. The experience of European countries with presumed consent legislation is of little value. In Austria, a patient’s objections must be made by written document, and there does not appear to be any method by which a family’s objections can be asserted.\textsuperscript{86} France allows objections to be recorded by individual hospitals, but makes no provision for coordinating this information so that the objection will be honored if the patient is treated at another institution.\textsuperscript{87} Belgium employs a computerized central registry where objections may be recorded and which may be accessed by transplant centers.\textsuperscript{88} However, there is considerable opposition in

\textsuperscript{84} For a defense of such a system, see Silver, supra note 7. One of Silver’s arguments in favor of his “organ draft” proposal is that people would not be sufficiently aware that a presumed consent system was in operation to object to donation, and that presumed consent therefore would represent mandatory harvesting in disguise. Id. at 706.

\textsuperscript{85} One is reminded of Alexander’s expose of the operation of the Seattle Artificial Kidney Center during the dialysis crisis of the 1960s. See Alexander, They Decide Who Lives, Who Dies, 53 LIFE, Nov. 9, 1962, at 102-04.

\textsuperscript{86} Personal communication with Herman Fetz, supra note 62.

\textsuperscript{87} See Benoit, supra note 55, at 320.

\textsuperscript{88} See Roels 1990, supra note 56, at 2078.
the United States to the use of centralized computer registries. In any event, the practice of physicians in France and Belgium of requesting permission to remove organs suggests that neither country has established an opting-out system that is satisfactory.

Furthermore, the opting-out system would have to address a number of thorny issues. What should the role of the family be in relation to the patient? Should objections by the family be able to override a patient’s wishes to donate? Under the current system, the decedent’s instructions are controlling, so long as the decedent complies with the requirements of the UAGA. Effectuating the decedent’s wishes under a presumed consent system would be more difficult, however. If the decedent wanted to donate his organs, he merely could refrain from registering an objection under whatever opting-out system was adopted. However, the same lack of objection would occur in the case of a decedent who did not want to donate but who was unaware of the need to object. In either case, there would be no binding instructions left by the decedent, and therefore no way to determine if an objection from family members was consistent with or contradicted the decedent’s wishes.

A presumed consent system also would need special rules to govern removal of organs from minors, from patients who had never been competent, and from patients who died without family members being available. Under the UAGA, for example, a minor cannot make a binding disposition of his organs; only the family can grant permission for organs to be removed. A similar approach might be taken under presumed consent, in which case organs could be removed unless the family objected. Alternatively, the minor’s inability to make binding decisions may justify an exception to the

---

89. See, e.g., 1986 Task Force Report, supra note 22, at 49-51 (rejecting national registry for recording willingness to donate voluntarily).

90. One commentator asserts, for example, that physicians in France are concerned that people are not sufficiently informed about the law to make known their objections, and feel that having to check hospital records for objections is more burdensome than merely asking families. See French Note, supra note 16, at 1025-26.

91. See UAGA(1987), § 2(b) (“[a]n anatomical gift that is not revoked by the donor before death is irrevocable and does not require the consent or concurrence of any person after the donor’s death”); § 3(a) (family may donate organs “unless the decedent, at the time of death, has made an unrevoked refusal to make that anatomical gift”); UAGA(1968) § 2(b) (family may donate “in the absence of actual notice of contrary indications by the decedent”).

92. The opting-out system also would have to establish a priority list of relatives to sort out disagreements within the family. Such a priority list is incorporated in the UAGA. See UAGA(1987) § 3(a); UAGA(1968) § 2(b). A similar priority list is proposed for presumed consent systems in Note, The Constitutionality of ‘Presumed Consent’ for Organ Donation, 9 Hamline J. Pub. L. & Pol’y 343, 357 (1989) [hereinafter “Hamline Note”].

93. See UAGA(1987) §§ 2(a), 3(a); UAGA(1968) §§ 2(a), 2(b).
usual rule of presumed consent and necessitate adopting a require-
ment that the family give express permission to donation. Finally,
the opting-out system would need an effective means by which a
decedent who had objected to donation could change his mind.94

While it would be difficult to design an acceptable opting-out
system, the problems might not be insurmountable. With adequate
research, it is possible that an opting-out system could be con­
structed that, on the one hand, was not so burdensome for dece­
dents, families or health providers that it unduly discouraged organ
retrieval, and on the other hand, satisfied ethical concerns by giving
adequate consideration to the participants' wishes and sensibilities.

B. Religious Objections

In addition to the objection that presumed consent would not be
sufficiently sensitive to the feelings of decedents and their next-of­
kin in general, some of its opponents are particularly concerned that
it would conflict with religious views against donation and trans­
plantation.95 This could make enactment of presumed consent laws
extremely difficult politically, and could lead courts to declare them
unconstitutional on first amendment grounds.96

There is considerable confusion over the extent of valid religious
objections to donation and transplantation. Despite its rejection of
presumed consent, for example, the HHS Task Force on Organ Transplantation in 1986 asserted that "no major religious group in
the United States opposes organ donation as a matter of formal
doctrine."97

One source of religious opposition, however, is believed to be
orthodox Judaism. An Israeli rabbi, Mordechai Halperin, was
quoted in 1985 as saying that "Jewish law would treat as 'murder'
the removal of organs from a body whose heart was beating but
whose EEG record was flat," voicing a traditional Jewish objection

94. The UAGA sets forth a number of methods by which an anatomical gift may be
revoked, including by a communication from a terminally ill patient addressed to a physician
or surgeon. See UAGA(1987) § 2(f)(3); UAGA(1968) § 6(a)(3). More elaborate methods for
revoking an objection to donation might be needed under a presumed consent system to
ensure that the wishes of decedents and their families were being respected.
95. See, e.g., Matas 1985, supra note 14, at 238 ("[g]roups professing disapproval of
organ donation on explicitly religious grounds could argue convincingly that a 'presumed
consent' policy would make it especially difficult for their members to practice their chosen
faith . . . ").
96. See id. For a discussion of first amendment issues, see infra notes 142-43 and ac­
companying text.
to accepting brain death as a definition of death.\textsuperscript{98} On the other hand, a leading orthodox Jewish ethicist, Fred Rosner, explains that opinion is shifting on the brain death issue and that “[w]hether or not total, irreversible brain stem death, as evidenced by sophisticated medical testing, is the Jewish legal equivalent of decapitation [and therefore qualifies as a criterion of death] is presently a matter of intense debate in rabbinic circles.”\textsuperscript{99}

Aside from the issue of the determination of death, which relates to the availability of suitable cadaveric organs,\textsuperscript{100} Jewish doctrine is unclear on the issue of donation itself. Halperin, for example, believes that “[t]he removal of livers for transplantation would be permissible because artificial organs are not available, but kidney transplants are not always justifiable because kidney dialysis is possible.”\textsuperscript{101} Rosner states however that “[a]ll rabbinic authorities would agree that such a case [kidney transplantation] constitutes \textit{piku'ach nefesh}, or danger to life, and, therefore, the prohibitions revolving around the dead donor would all be set aside for the overriding consideration of saving a life.”\textsuperscript{102} Rosner notes that there is less consensus when life is not at stake, such as when the issue is corneal transplants, but concludes that “corneal, renal and cardiac transplantation are sanctioned by most rabbis and even mandated by some . . . .”\textsuperscript{103}

Persons of Asian descent are also thought to object to donation and transplantation for religious reasons.\textsuperscript{104} In Japan, an attempted heart transplant in 1968 and a simultaneous kidney/liver transplant in 1984, using organs obtained from brain dead patients, triggered criticism and, in the former incident, prompted an investigation by the prosecutor.\textsuperscript{105} Moreover, Japanese lawmakers continue to resist establishing any legal definition of death, much less a brain death criterion. However, legislation in 1979 allows kidneys and corneas to be removed upon the donor’s written request or with the permission of the family, and one commentator observes that, “in the fu-

\textsuperscript{99} F. Rosner, \textit{Modern Medicine and Jewish Ethics} 251 (1986).
\textsuperscript{100} Maintaining respiration and circulation in brain dead individuals by artificial means greatly increases the usefulness of their organs for transplantation.
\textsuperscript{101} Nature, \textit{supra} note 98, at 97.
\textsuperscript{102} Rosner, \textit{supra} note 99, at 270.
\textsuperscript{103} \textit{Id.}
\textsuperscript{104} Personal communication from Stephen Post, Ph.D., Center for Biomedical Ethics, Case Western Reserve University School of Medicine (Dec. 18, 1990).
ture Japan will become as active in organ transplantation as most nations in the West." 106

Religious concerns are believed to be in part responsible for the lower donation and transplant rates for African-Americans. 107 A recent Gallup poll found that, while 29 percent of white respondents stated that they are very likely to want to donate their organs and 80 percent stated that they would give permission for the organs of a loved one to be donated, the figures for African-Americans dropped to 17 and 71 percent respectively. 108 Yet the effect of religious opposition in this population may be small in comparison with other factors, such as lack of information, financial constraints and distrust of the white medical establishment. 109

In summary, although the extent of religious opposition may be uncertain, and although some religious groups may be moving toward a more favorable attitude toward donation and transplantation generally, religious concerns cannot be ignored in designing a presumed consent program. For one thing, both the orthodox Jewish and Japanese Shinto religions seem to be dead set against any approach that would deny the family the right to object to donation. 110 Educational efforts that accompanied the adoption of presumed consent therefore would have to pay particular attention to religious groups with known objections, and the methods for opting-out would have to be highly effective and "user-friendly." It might even be necessary for the opting-out system to include special mechanisms for ensuring that religious objections were identified and respected. 111 Given an adequate opting-out system, however,

106. Id. at 341-42.
107. Engel, Project's Goal Is To Increase Blacks' Contribution of Organs, Wash. Post, July 26, 1984, at C1 ("[r]eligious fears, lack of information and distrust of a mostly white medical community are all factors in the low rates of donors who are black").
108. See Gallup Poll 1990, supra note 71, at 3.
109. Cf. Engel, supra note 107. The Gallup survey did not investigate the relative impact of these factors.
110. See Rosner, supra note 99, at 261, 265 (removal of organs without consent would be theft, according to Jewish doctrine); Feldman, supra note 105, at 342 (Shinto beliefs "reflect a commitment to the idea that the family should have the ultimate say in what happens to the corpse after death").
111. One alternative would be to reverse the presumption in favor of donation when the decedent was known to be a member of a religious group that was opposed to donation, and instead to require express consent by the donor or the family in order for organs to be removed. This would increase the administrative burdens and liability risks on health providers, however. Another issue is whether public policy towards religious objections to donation should be reciprocal in terms of access to transplantation — that is, whether members of religious groups that oppose donating organs for religious reasons ought to be disqualified from receiving donor organs.
religious concerns need not preclude the adoption of presumed consent.

C. Legal Objections

Legal concerns raised by presumed consent fall into two general categories — constitutional issues, and criminal and civil liability. Neither area presents any serious impediments to adopting a presumed consent approach.

1. Constitutional Concerns

Constitutional issues arise because of the need for government involvement in implementing and operating a presumed consent system. Since presumed consent would alter the existing legal rules regarding organ donation, it would have to be adopted by state legislative action. In particular, states would have to replace or amend the UAGA. In addition, the opting-out system might be supervised or sanctioned by the government.

The presence of governmental or "state" action means that presumed consent would have to meet constitutional requirements. Two major constitutional principles are involved — the first amendment prohibition against government interference with the free exercise of religion, and the fifth amendment, which prohibits the government from depriving persons of liberty or property without due process, or taking private property for public use without just compensation.

It is extremely unlikely that a court would declare a presumed consent law with an effective opting-out system unconstitutional on the basis that it deprived persons of substantive property rights in violation of the fifth amendment. Most courts have not regarded

112. Federal legislation may require hospitals and other health care providers to establish presumed consent procedures in order to qualify for Medicare and Medicaid, although this could create a serious conflict for providers in states whose legislatures have not yet amended the UAGA.

113. This paper addresses these issues from the perspective of the U.S. Constitution. There is no reason to believe that a presumed consent program that complied with federal constitutional mandates would encounter any problems from the provisions of state constitutions, but this question may require further research when a presumed consent system has been more fully outlined.

114. The first amendment states, inter alia, that "Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof . . . ." U.S. Const. Amend. I, cl. 1.

115. See U.S. Const. amend. V. The provisions of the fifth amendment are applicable to actions under state (as opposed to federal) law under the due process clause of the fourteenth amendment.
donor organs as property within the terms of the amendment. Historically, English law conferred jurisdiction over the disposition of corpses on ecclesiastical courts rather than on the secular authorities and their common law courts. As a consequence, English common law, which was the source of the legal principles governing property rights in the United States, never included dead bodies or their constituent parts within its rules. American courts followed suit, holding that neither the decedent nor the next of kin have a property right in the body in the usual sense. Instead, family members at most have a right to dispose of the deceased's remains, consistent with laws and government regulations on the subject. While this right is often referred to as a "quasi-property" right, most courts have held that it does not confer upon the family the type of property rights that are protected by fifth amendment. However, the Court of Appeals for the Sixth Circuit recently held that families had a "substantial interest in the dead body" that was protected by due process.

Even if organs were accorded the status of constitutionally protected property, a presumed consent system would not necessarily constitute a "taking" under the due process clause of the fifth amendment. Assuming that the body were returned to the family in a condition suitable for burial following removal of organs for trans-

116. See Columbia Note, supra note 9, at 550, n.106; Naylor, supra note 6, at 170; Silver, supra note 7, at 689, n.29; Dukeminier and Sanders, supra note 7, at 414.


119. But see Naylor, supra note 6, at 175 ("the family's right to the corpse is now explicitly based on protection from mental distress rather than quasi-property rights"), citing Strachan v. John F. Kennedy Memorial Hosp., 109 N.J. 523, 531, 538 A.2d 346, 350 (1988). Naylor also quotes the statement in Prosser and Keeton that the family's quasi-property right "is something evolved out of thin air to meet the occasion, and . . . in reality the personal feelings of the survivors are being protected, under a fiction likely to deceive no one but a lawyer." W. KEETON, D. DOBBS, R. KEETON & D. OWEN, PROSSER AND KEETON ON THE LAW OF TORTS § 12, at 63 (5th ed. 1984).

120. See State v. Powell, 497 So. 2d 1188, 1192 (Fla. 1986) (no constitutionally recognized property right in dead bodies); Georgia Lions Eye Bank, Inc. v. Lavant, 255 Ga. 60, 335 S.E.2d 127 (1985) (same). See also Moore v. Regents of the Univ. of Calif., 51 Cal. 3d 120, 271 Cal. Rptr. 146, 793 P.2d 479 (1990) (patient has no property right in cells removed from him for research and commercial purposes).

plantation, the family would not be deprived of its right to dispose of the body or of any of its value. Furthermore, the opting-out system would allow the family to prevent removal of organs (assuming no contrary indication by the decedent), so that the family’s failure to exercise its opting-out rights could be deemed to be acquiescence, rather than a taking without permission. In any event, in view of the legal prohibition against the sale of organs, it is hard to imagine how donors or their families could receive “just compensation” under the takings clause of the fifth amendment.

The constitutionality of a presumed consent law under the property clauses of the fifth amendment is supported by recent state court decisions upholding the constitutionality of state statutes authorizing nonconsensual removal of corneal tissue. In State v. Powell, the Florida Supreme Court, by a vote of six to one, held that the removal of corneal tissue for transplantation during statutorily required autopsies was not a constitutionally protected taking of private property. It is noteworthy that the Florida law does not establish an explicit opting-out system; the coroner is permitted to remove corneal tissue so long as he does not know of an objection by the next of kin. The Georgia Supreme Court reached the same result in a case involving a similar statute.

In a recent federal case, however, Brotherton v. Cleveland, the

122. See Hamline Note, supra note 92, at 369 (“[t]he value of a dead body to the next of kin [assuming that the next of kin does not want the cadaver organs for their own transplant] is not appreciably diminished when one or several organs are removed”). But see, Brotherton, supra note 121 (“[a]fter the cornea is removed, it is not returned and the corpse is permanently diminished”).


124. The prohibition on the sale of organs also would preclude calculation of a fair market value for the organs for purposes of establishing just compensation. See Columbia Note, supra note 9, at 571-72.

125. 497 So. 2d 1188 (Fla. 1986).

126. 497 So. 2d at 1192. While the court was construing the statute under the Florida constitution, the language of the state and federal constitutions, while different, presumably impose the same requirements. Compare U.S. CONST., amend. V with FLA. CONST., art. X, § 6 (1968 revision) (“[n]o private property shall be taken except for a public purpose and with full compensation therefor paid to each owner or secured by deposit in the registry of the court and available to the owner”).


128. Georgia Lions Eye Bank, Inc. v. Lavant, 255 Ga. 60, 335 S.E.2d 127 (1985). In a brief dissent, one judge asserted that the failure of the statute to provide notice to the next of kin and “a realistic opportunity to object” violated due process. Id. at 129. Conceivably, an appropriate opting-out system would satisfy even this dissenter.
Court of Appeals for the Sixth Circuit held that state statutes permitting removal of corneas did trigger due process requirements. In that case, the plaintiff alleged that the hospital in which her husband died had asked her for permission to harvest his organs, and that, based on her husband’s wishes, she had refused. She further alleged that her refusal was recorded on the hospital’s “Report of Death.” The body was taken to the county coroner’s office, and the corneas were removed. The hospital records did not accompany the body, so the coroner did not review the medical records or hospital paperwork to ascertain if an objection had been asserted. The plaintiff discovered that the corneas had been removed when she read the autopsy report, and brought suit under section 1983 of title 43 of the U.S. Code on the basis that the coroner’s action had deprived her of a right secured under the U.S. Constitution. The court, with one judge dissenting, held that the plaintiff had an interest in her husband’s body that was protected under the due process clauses. This interest was premised on the provisions of the UAGA, which, according to the court, expressly gave the plaintiff the right “to control the disposal of Steven Brotherton’s body,” and on prior cases that recognized a right in the spouse to possess the body and to recover damages against those who mishandle it.

The opinion did not prescribe the procedural steps that the state was obliged to follow. For the most part, the court seems to focus on the coroner’s failure to conduct even a minimal inquiry into whether or not the family objected to removal. The opinion refers to what it termed the coroner’s “intentional ignorance,” which was “induced” by the Ohio corneal removal statute. According to the court’s opinion, this statute “allows the [coroner’s] office to take corneas from the bodies of deceased without considering the interest of any other parties, as long as they have no knowledge of any objection to such a removal.” In this regard, it is noteworthy that the Ohio statute was amended in 1983 to delete a requirement that the coroner “make a reasonable effort to notify the family of the deceased.” Thus, the court might simply be saying that there must be some procedure for notifying the coroner when the hospital is aware of an objection, and that failure to do so is a violation of

129. See Brotherton, supra note 121.
130. Personal communication with Philip L. Zorn, Jr., Assistant Prosecutor, Cincinnati, Ohio (Feb. 22, 1991).
131. Id.
132. Id.
133. H.B. 239, 1983 Ohio Legis. Serv. 5-370 (Baldwin).
due process. If this was what the court had in mind, however, it could easily have said so. Instead, it remanded the case to the district court for further proceedings. Furthermore, in discussing the requirement of due process, the court pointed out that "[t]he Supreme Court has often reiterated that a property interest may not be destroyed without a hearing." 134 This suggests that the court would insist on a predeprivation hearing of some sort before corneas could be removed.

If the Sixth Circuit is insisting that a formal hearing be held before organs could be donated, this could invalidate current donation procedures, including the donor card system provided for in the UAGA. Arguably, these procedures might not satisfy a formal hearing requirement, particularly if due process rights inhere in the family and given that the UAGA permits the donor's disposition to override the family's wishes.

If removal of organs for transplantation under state law triggers due process requirements, and if this means that there must be an actual administrative or judicial hearing before organs can be removed, then a presumed consent approach would be largely useless. Hearings would be expensive and cumbersome and would cause delay that might reduce or eliminate the usefulness of the organs for transplantation purposes. More importantly, since the next-of-kin would be interested parties entitled to participate in the hearing, requiring a hearing would be tantamount to prohibiting removal of organs without express familial permission for donation.

One way to avoid this result is for the *Brotherton* case to be overturned. The losing parties may petition the U.S. Supreme Court to review the case, and the Court may overrule the Court of Appeals. Even if the case is not overturned, it does not control the law in jurisdictions outside of the Sixth Circuit.

Another approach would be for the Ohio legislature to state that the family possesses no property rights in the deceased other than those rights expressly granted under state law, or that the family has no property right that triggers due process requirements. Since *Brotherton* involves the imposition of due process requirements on state action through the fourteenth amendment, and since fourteenth amendment rights are contingent on state law, 135 the impact of *Brotherton* could be avoided if the legislature clarified that it did

---

not intend to create property-type rights when it passed the UAGA, or that whatever rights had inadvertently been created were extinguished. Finally, even if the decision in *Brotherton* were allowed to stand, it need not be read to preclude the adoption of a presumed consent approach so long as the system incorporated an effective opting-out mechanism. In *Mathews v. Eldridge*, the Supreme Court set forth the following balancing test to determine what process was required by the fifth amendment:

First, the private interest that will be affected by the official action; second, the risk of an erroneous deprivation of such interest through the procedures used, and the probable value, if any, additional or substitute procedural safeguards; and finally, the Government's interest, including the function involved and the fiscal and administrative burdens that the additional or substitute requirement would entail. Given the limited nature of the private interest in donor organs and the public interest in increasing the supply of transplant organs, an opting-out system that reasonably reduced the risk of an unintended donation would be likely to satisfy the requirements of due process. Under such a system, the family would be deemed to have waived its rights to a "hearing" unless it objected to donation. Nor would a hearing be required in the event the family did not waive its right to one, since this would mean that the family had asserted an objection, that the organs would not be removed, and that therefore the family would not have its property rights diminished. In order for the opting-out system to satisfy due process in this fashion, however, it might be necessary to show that the family had received notice of the existence of the presumed consent system and had understood how it operated. This would entail a comprehensive educational program, and would probably require some sort of actual notification of the family, such as by posting a notice in hospitals and providing the family with written information.

Apart from questions arising under the property clauses, the presumed consent law might be challenged on the ground that it deprived persons of liberty without due process as required by the fifth amendment. In *State v. Powell*, the Florida Supreme Court

---

136. This might give rise to a claim that the state was "taking" property in dead bodies without just compensation. See *supra* notes 116-21 and accompanying text.

137. 424 U.S. 319, 335 (1976).

138. *But see* Brotherton, *supra* note 121, at 11 ("[t]he only governmental interest enhanced by the removal of the corneas is the interest in implementing the organ/tissue donation program; this interest is not substantial enough to allow the state to consciously disregard those property rights which it has granted").
rejected the argument that the right of the next of kin to dispose of
the body of a loved one amounted to the type of fundamental right
protected under either the federal or state constitution. Similarly, an appellate court in Michigan rejected a fifth amendment
argument against that state's cornea removal statute, holding that
constitutional rights concerning the integrity of the body ended
with death. The recent decision in the *Cruzan* case, in which
the U.S. Supreme Court upheld a state court's requirement of clear
and convincing evidence before a person in a persistent vegetative
state could be deprived of nutrition and hydration, is further evi-
dence that liberty interests will be narrowly construed in cases in-
volving the rights of persons who are no longer competent to make
their own decisions, and perhaps in cases involving the rights of
their families as well.

Constitutional objections to presumed consent laws also might
be asserted on first amendment grounds. The court in *State v. Powell*
expressly noted that the plaintiffs had not alleged that their ob-
jection to the removal of corneal tissues was based on religious
convictions, suggesting that the case might have come out differ-
ently if they had. As discussed earlier, however, a well-designed
opting-out system that permitted religious objections to block organ
retrieval ought to avoid the first amendment's ban on laws prohibit-
ing the free exercise of religion.

2. Civil and Criminal Liability

Apart from confronting constitutional issues, persons who re-
moved organs without express permission from the decedent or the
family might be concerned that they could be subject to criminal
and civil liability. State law generally makes it a crime to mutilate
or to mistreat a corpse. The term "mistreatment" is usually de-

139. 497 So. 2d at 1193. The court held that the constitution only recognized rights in-
volving relationships between living persons. *Id.*
142. 497 So. 2d at 1193.
143. *See Silver*, supra note 7, at 709-12; Hamline Note, supra note 92, at 360-63.
Ann. ch. 272, § 71 (West 1990); N.Y. Pub. Health Law § 4218 (McKinney 1990); Ohio
Rev. Code Ann. § 2927.01 (Baldwin 1991).*
have been mutilated, it may be deemed to have been mistreated if removal without express permission is regarded as offensive or outrageous.

Removing organs under a presumed consent approach might also give rise to civil liability for tortious interference with the right of burial. The Restatement (Second) of Torts, which attempts to codify the common law, states that "[o]ne who intentionally, recklessly or negligently removes, withholds, mutilates or operates upon the body of a dead person or prevents its proper internment or cremation is subject to liability to a member of the family of the deceased who is entitled to the disposition of the body." The family might seek damages on the theory that removing organs without express permission was an intentional operation upon the deceased.

In a recent Florida decision, *Kirker v. Orange County*, a state appellate court held that the mother of a deceased child stated a cause of action for intentional infliction of emotional distress when she alleged that the county medical examiner had removed the child's eyes over the mother's objection. The mother claimed that she discovered that the eyes had been removed after she noticed at the funeral that the eyes appeared depressed. Furthermore, she asserted that the child's attending physician had asked for permission to remove the child's corneas and kidneys, that the mother had refused, and that the refusal had been noted on the child's hospital chart. Finally, the mother claimed that the medical examiner had been aware of her objection and had attempted to cover up the unauthorized removal by falsifying the autopsy report.

The *Kirker* case is distinguishable on its facts from a presumed consent case in which the body is returned to the family without visible signs of organ removal, in which no express objection to removal has been made by the decedent or the family, and in which no attempt has been made to conceal unauthorized behavior. In a recent Tennessee case, *Hinze v. Baptist Memorial Hospital*, the court held that an eye bank and a hospital had not violated the UAGA by removing a decedent's eyes without permission when the decedent had not refused donation, the hospital had obtained writ-

---

147. 519 So. 2d at 682-83. The charge of a cover-up was based on the allegation that the autopsy report described the child's eyes as blue and as having a certain size and shape when the child's eyes in fact were brown and had been removed prior to the autopsy.
ten consent from someone purporting to be the decedent’s grandson and representing himself as authorized to consent, and the hospital had not been given actual notice that anyone authorized to consent had objected. The facts showed that the defendants had not acted in bad faith, and, under the UAGA, good faith is a defense. Good faith compliance with a presumed consent law similarly might avoid liability under the approach in Kirker.

Nevertheless, the court in Kirker characterizes the family’s right of burial in such broad terms that even those who acted in good faith in removing organs might be liable for damages. The court states that the right of action for mutilating a corpse is based on the right of the surviving family members to bury the body “in the condition found when life became extinct.” Arguably, a body whose organs had been removed for transplantation, even without any visible signs that this had been done, would no longer be in the same condition as at the time of death. Furthermore, the opinion notes that “[t]he courts are not primarily concerned with the extent of the mishandling or injury to the body, per se, ‘but rather with the effect of the same on the feelings and emotions of the surviving relatives, who have the right to burial.’” This suggests that family members who were foreseeably distressed upon learning that organs had been removed from their next of kin without express permission might be able to recover for their emotional upset regardless of the manner in which the organs had been removed and regardless of the appearance of the corpse.

The possibility that physicians and hospitals who complied with presumed consent legislation nevertheless might be subject to civil and criminal liability can be eliminated, however, by enacting carefully drafted immunity provisions as part of the legislation. Such provisions should not only contain general protection for good faith

149. See UAGA(1968) § 7(c) (“[a] person who acts in good faith in accord with the terms of this Act . . . is not liable for damages in any civil action or subject to prosecution in any criminal proceeding for his act”). The 1987 version of the UAGA, which was not involved in Hinz, insulates a person from liability if he or she “attempts in good faith” to act in accordance with the statute. UAGA(1987) § 11(c).

150. The plaintiff in Kirker does not appear to have alleged a violation of the UAGA.

151. 519 So. 2d at 684, quoting 22 AM. JUR. 2D, Dead Bodies, §§ 31, 32 (1965).

152. 519 So. 2d at 684, quoting Jackson v. Rupp, 228 So. 2d 916, 918 (Fla. Dist. Ct. App. 1969), affirmed 238 So. 2d 86 (Fla. 1970); see also Kirksey v. Jernigan, 45 So. 2d 188, 189 (Fla. 1950).

153. To recover, however, the plaintiffs would have to show that they were not peculiarly susceptible to emotional distress but rather, that the defendants had acted in a manner that would outrage ordinary sensibilities. See Restatement (Second) Torts § 46 (intentional or reckless infliction of emotional distress).
behavior, as in the UAGA, but should spell out precisely what steps providers must take to verify the absence of an objection to donation in order to satisfy the good faith criterion.

D. Public Opposition

As noted earlier, public opposition was cited by the HHS Task Force on Organ Transplantation in 1986 as the sole basis for rejecting the presumed consent approach. An article in the *Journal of The American Medical Association* in 1985 reported, for example, that presumed consent "would not be very popular among the American public." This conclusion was based on a survey finding that "an overwhelming majority of Americans (86.5 percent of all respondents surveyed) believe that physicians should not have the power to remove organs from people who have died and who have not signed an organ donor card without consulting the next of kin."

In fact, the survey reported in *JAMA* is the only opinion poll to report that the public is opposed to presumed consent. It is widely believed that the Gallup organization, which routinely conducts public opinion surveys on public attitudes toward organ donation, has reported similar results. However, the closest that the Gallup poll has come to inquiring about attitudes toward presumed consent is when it asked respondents in its 1985 and 1986 surveys if they agreed or disagreed with the statement: "Even if I have never given anyone permission, I wouldn't mind if my organs were donated upon my death." The question used by Gallup does not make it clear whether or not organs would be donated only if the family had been asked, and therefore the responses cannot be said to bear directly on the respondent's attitudes toward presumed consent. Nevertheless, the fact that 62 percent of respondents in 1985 and 61 percent in 1986 stated that they would want their organs donated even without their ever having given permission can hardly be construed as opposition to presumed consent.

This leaves the report in *JAMA* as the only survey that claims to demonstrate public opposition to presumed consent. Yet the valid-

---

154. See supra note 149 and accompanying text.
155. See supra notes 22-23 and accompanying text.
156. Manninen and Evans, supra note 13, at 3114.
157. Id.
158. Personal communication from Stuart Youngner, M.D., Center for Biomedical Ethics, Case Western Reserve University (Jan. 2, 1991).
159. Gallup Poll 1985, supra note 71, at VII; Gallup Poll 1986, id. at iv.
ity of its findings is questionable. The question that was asked about attitudes toward presumed consent apparently was: "Should doctors have the power to remove organs from people who have died but have not signed an organ donor card without consulting the next of kin?"160 The question made no mention of the possibility of opting-out. Respondents may have assumed that no objection could be made to donation. The question therefore may have elicited negative attitudes toward a system of mandatory harvesting without a right of refusal, rather than toward a system of presumed consent. In addition, it appears that the survey asked the "presumed consent" question after it had asked respondents about their willingness to donate their own organs, and that the question about donating one's own organs was asked after a question about willingness to donate the organs of a relative.161 It is well-known that people report a greater willingness to donate someone else's organs than their own.162 Therefore, the questions appear to have been asked in an order that was likely to produce a decreasing percentage of positive responses, which may well have biased the results.

In short, public attitudes toward presumed consent presently are unknown. It is conceivable that an unbiased survey that explained the operation of an opting-out system and then asked if respondents would agree that organs could be removed if neither the decedent nor the next of kin had registered an objection would reveal a large degree of support. Depending on how the question were asked, support for presumed consent might well come close to the level of strong support for donating one's own organs, which, according to Gallup polls, has hovered around only 30 percent over the last five years.163

In fact, if public opinion polls reveal anything, it is that the pub-

160. Manninen and Evans, supra note 13, at 3113. The authors of the report describe the presumed consent question as quoted in the above text, but do not state that this was the actual form of the question.

161. At least, this is the order in which the results of the survey are reported. See id. at 3112-13.

162. See id. at 3111 (53 percent willing to donate relative's organs while 50 percent willing to donate own organs). The Gallup organization reported in 1985 that, while 73 percent of respondents stated that they were very likely to donate the organs of a relative, only 27 percent were very likely to donate their own organs. Gallup Poll 1985, supra note 71, at IV. The results for 1986 were 70 percent very likely to donate the organs of relatives, 32 percent very likely to donate their own. Gallup Poll 1986, id. at iii. The results in 1987 were 66 percent and 30 percent. Gallup Poll 1987, id. at 2, 5 (author's pagination). The form of questions changed for the 1990 survey, with 78 percent reporting that they were very likely to donate the organs of a relative and 28 percent reporting that they were very likely to donate their own organs. Gallup Poll 1990, id. at 2 (author's pagination).

163. See id.
lic by and large seems to be upset by the notion of death and the prospect of removal of organs for transplantation, and would rather not be confronted with having to think about it. A presumed consent program that did not force people to consider these issues might be relatively noncontroversial, as appears to be the case with state statutes permitting medical examiners to remove corneas and pituitaries without consent.164 Most people are probably unaware, for example, that after a man dies, string is tied around his penis, cotton is stuffed up his rectum and his body is exsanguinated before burial.165 If told about it, people might well be uncomfortable about being told, rather than about what was done.

Removal of organs for transplantation does raise one particular concern in the minds of some members of the public that might be exacerbated by a presumed consent approach. There are people who are afraid that "over-zealous" organ procurers might pronounce them dead prematurely or even hasten their deaths to obtain their organs.166 For example, the 1985 Gallup poll found that 20 percent of respondents who did not want to give permission for their organs to be removed rated as a very important reason the fear that "doctors might hasten my death if they needed my organs," while 23 percent rated as very important the possibility that "they might do something to me before I am really dead."167 This is a fear created by organ donation programs in general. However, a presumed consent system might be especially suspect because eliminating the need to get permission from the family might be seen as reducing the ability of the family to protect patients from unscrupulous physicians.168

The UAGA deals with this concern by prohibiting either the attending physician at the time of death or the physician who determines the time of death from participating in the removal or transplantation of organs.169 Additional safeguards might be needed under a presumed consent approach if these protections were regarded as insufficient.

164. See Hastings Center, Ethical, Legal and Policy Issues Pertaining to Solid Organ Procurement 20 (1985) ("weak presumed consent laws pertaining to corneas have generated little controversy in those states that have adopted them").
165. See Dukeminier and Sanders, supra note 7, at 416.
166. See Naylor, supra note 6, at 168, 186.
167. Gallup Poll 1985, supra note 71, at VII.
168. See Naylor, supra note 6, at 186.
169. See UAGA(1968) § 7(b). The 1987 version will allow either of these two physicians to participate in removal or transplant of organs if the document of gift designates that particular physician or surgeon. UAGA(1987) § 8(b).
V. PRACTICAL PROBLEMS

Assuming that presumed consent is viewed as an attractive theoretical possibility, policymakers must address a number of practical difficulties before it can become a reality and be expected significantly to increase the supply of transplant organs. One critical problem has been discussed earlier: the need to design an effective opting-out system that would permit large numbers of organs to be removed at the same time that it comported with ethical, religious and due process requirements. A lingering question is whether adopting a presumed consent approach would produce a change in provider behavior. As noted above, the unwillingness of physicians and hospital staff to approach families to seek consent was the major reason for the failure of encouraged voluntarism, and also has been blamed for the lack of success of required request. The French and Belgian experience suggests that providers might continue to insist on express familial consent even if a presumed consent law were enacted.

Careful design of the opting-out system and drafting of immunity provisions may help to alleviate provider concerns.170 Greater information about how presumed consent works in Austria may suggest ways of reducing provider resistance. The key is likely to be a successful educational campaign aimed at providers.171 However, it is unclear how these efforts could be made more successful under a presumed consent approach than they have been under required request.

Finally, an attempt to enact presumed consent legislation would have to overcome significant political obstacles. Politicians would need to be convinced that increasing the supply of transplant organs was important and worth taking some political risks. The design of the opting-out system would have to mollify religious and ethics lobbies. Public opinion polls either would have to be redone in a less biased fashion, or disregarded. The provider and hospital communities would have to be mobilized in favor of the proposal. The

170. Another approach would be to impose civil, criminal or regulatory sanctions on providers who did not harvest organs in the absence of an objection by the decedent or the family. Medicare's requirement that hospitals establish required request policies in order to qualify for Medicare reimbursement is a step in this direction. However, providers are likely to oppose an attempt to enact such penalties, and it is doubtful that presumed consent legislation could be passed without strong provider support.

171. See Caplan, supra note 48, at 37, for an argument that educational efforts aimed at providers rather than at the public are what is needed to increase donations under required request. For a discussion of the need for educational programs in connection with the movement to adopt required request, see 1986 Task Force Report, supra note 22, at 45-49.
public would have to be persuaded that presumed consent would not result in premature deaths. In short, passage of presumed consent legislation would require a massive and highly sophisticated lobbying effort.

The most promising approach might be to try to enact a presumed consent approach on an experimental basis in a single state. Legislation would be needed to suspend conflicting provisions of the UAGA and to provide immunity from liability. Lobbying efforts could highlight actual persons in need of lifesaving transplants, and emphasize the economic benefits of transplantation. After a sufficient amount of time, the success of the experiment could be assessed in terms of the effect on the number of organs available for transplantation. Dramatic, positive results could lead to adoption of presumed consent legislation in other jurisdictions, and eventually to uniform state laws along the lines of the required request system embodied in the 1987 version of the UAGA.

VI. CONCLUSIONS AND RECOMMENDATIONS

Given the benefits expected from an increased availability of cadaveric organs for transplantation, and in view of the shortcomings of the current required request approach to donation, it is worthwhile to conduct further research on a system of presumed consent. Research is necessary in order adequately to assess the merits and feasibility of presumed consent, and to design a system that would fulfill ethical, religious and legal requirements. The following specific areas for further research have been identified:

1) Designing an opting-out system that would enable persons who objected to donation to refuse to donate in a manner that was sensitive to the feelings of patients and their families, that was efficient and cost-effective, and that met religious, ethical and legal requirements.

2) Designing an educational program for both providers and the public that addressed their concerns and that educated them about the benefits and operation of a presumed consent approach.

3) Designing and executing a public opinion survey that ascertained reactions to an appropriately designed presumed consent system.