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Increasing the Supply of Organs for Transplantation Through Paired Organ Exchanges

Michael T. Morley[†]

INTRODUCTION

“On an average day, 15 people die waiting for an organ that could have saved their lives—that’s someone every 96 minutes.”¹ Each year, thousands of preventable deaths occur due to an inadequate supply of organs for transplantation.² This well-documented organ shortage³ has led, in some parts of the world, to a thriving black market in organs.⁴ A wide range of suggestions for addressing this problem has been proposed, from presumed consent laws⁵ to

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1. Press Release, Health Res. and Servs. Admin., U.S. Dep’t of Health and Human Servs., HHS Will Expand Funds to Study Ways to Increase Organ and Tissue Donations (Apr. 17, 2001) (quoting Secretary of Health and Human Services Tommy G. Thompson), available at <http://newsroom.hrsa.gov/releases/2001%20Releases/organgrant.htm>.

2. 6,439 of the patients who had been on the waiting list in 2001 died without receiving an organ. Procurement and Transplantation Network, *About Donation—The Critical Shortage*, at <http://www.optn.org/about/donation/criticalShortage.asp> (last visited Nov. 10, 2002); see also Robert S.D. Higgins & Roger Evans, *Introduction: The Organ Donor Dilemma: Assessing the Need for Organ Donors and Methods to Increase the Supply*, in THE MULTI-ORGAN DONOR: SELECTION AND MANAGEMENT 3, 8 (Robert S.D. Higgins et al. eds., 1997) [hereinafter THE MULTI-ORGAN DONOR] (“8% of liver recipients and approximately 5% of kidney recipients may die before an appropriate donor organ becomes available.”); Alexander Powhida, Comment, *Forced Organ Donation: The Presumed Consent to Organ Donation Laws of the Various States and the United States Constitution*, 9 ALB. L.J. SCI. & TECH. 349, 353 (1999) (“Presently, potential organ recipients die while on organ transplant waiting lists.”).

3. See Daniel Yee, *Donation of Organs Low for Kids as Waiting List Grows*, ARK. DEMOCRAT GAZETTE, Mar. 10, 2001, at B3; Abe Aamidor, *Transplant Candidates Face Shortage of Available Organs*, INDIANAPOLIS STAR, Feb. 6, 2002, at 7B; Timothy A. McDermott, *Professor’s Untimely Death Highlights Critical Need for Organ Donations*, VIRGINIAN-PILOT, Jan. 28, 2002, at B8; Leonard Greene, *Shortage of Organs Leaves Few Options*, N.Y. POST, Jan. 20, 2002, at 5.

4. See, e.g., Nancy Scheper-Hughes, *The Organ of Last Resort*, UNESCO COURIER, July/Aug. 2001, at 50; Michael Finkel, *This Little Kidney Went to Market*, N.Y. TIMES MAG., May 27, 2001, available at <http://www.nytimes.com/2001/05/27/magazine/27ORGAN.html> (last visited Nov. 7, 2002); Jennifer O’Brien, *The Body Part ‘Black Market’; Sale of Organs Shows Human Desperation*, TORONTO SUN, May 27, 2001, at 18. For somewhat dated academic commentary on illegal organ trafficking, see Maria N. Morelli, Note and Comment, *Organ Trafficking: Legislative Proposals to Protect Minors*, 10 AM. U. J. INT’L L. & POL’Y 917 (1995); Christian Williams, Note, *Combatting [sic] the Problems of Human Rights Abuses and Inadequate Organ Supply Through Presumed Donor Consent*, 26 CASE W. RES. J. INT’L L. 315, 318-22 (1994).

5. See Williams, *supra* note 4, at 364 (“Presumed consent is the most efficient and least violative of the procurement methods currently in existence, and should be adopted by nations worldwide in conjunction with a ban on all organ sales.”). Some commentators have argued that presumed consent

a national organ draft.⁶ Some commentators have argued that parent-guardians should be permitted to tender proxy consent for organ donation on behalf of legally incompetent individuals (children and the mentally impaired) when the intended recipient is an immediate family member of the potential donor,⁷ while others have gone so far as to recommend the use of anencephalic infants as donors.⁸

One idea that has received a great deal of attention is the establishment of a market in organs.⁹ It has been argued that a person should be able to sell the rights to her organs, to take effect upon her death, in a “futures market.”¹⁰

laws are unconstitutional, *see* Powhida, *supra* note 2, at 374 (“[T]he presumed consent laws of the various states should be deemed unconstitutional, requiring the states to provide process before the wishes of family members are disregarded.”), while others maintain they are morally illegitimate, *see* R.M. Veatch & J.B. Pitt, *The Myth of Presumed Consent: Ethical Problems in New Organ Procurement Strategies*, 27 *TRANSPLANTATION PROC.* 1888 (1995), in part because they disproportionately impact the poor and minorities, who are least likely to be aware of their legal rights and to effectuate their will by opting out of the system.

6. *See* Theodore Silver, *The Case for a Post-Mortem Organ Draft and a Proposed Model Organ Draft Act*, 68 B.U. L. REV. 681 (1988) (arguing in favor of an “organ draft,” with an exception for people who object on religious grounds); *cf.* Erik S. Jaffe, 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, 574 (1990) (“The values that underlie both the due process and the takings clauses contain as much meaning when the government appropriates the body of one’s next of kin as when it takes one’s television set.”).

7. Michael T. Morley, Note, *Proxy Consent for Organ Donation by Incompetents*, 111 YALE L.J. 1215, 1217 (2002) (“[T]he constitutional rights of children and mentally impaired persons (collectively, incompetents) are violated when the law fails to provide a mechanism through which proxy consent may be tendered for donation of a nonvital organ to an immediate family member.”); *cf.* Cara Cheyette, Note, *Organ Harvests from the Legally Incompetent: An Argument Against Compelled Altruism*, 41 B.C. L. REV. 465, 469 (2000) (“[O]rgan harvests from children and mentally disabled adults should be categorically prohibited. . . . [U]sing the most vulnerable members of society to shield us from the pain of a loved one’s illness or imminent death is unfair.”).

8. Jay A. Friedman, *Taking the Camel by the Nose: The Anencephalic as a Source for Pediatric Organ Transplants*, 90 COLUM. L. REV. 917, 977-78 (1990) (arguing that the decision to donate the organs of an anencephalic infant should “rest in the hands of those whose love for the infant will guide them in selecting a plan that will give meaning to the child’s brief existence”). Other scholars have argued that to consider anencephalic infants legally dead and harvest their organs for transplantation is immoral. *See* Gloria Banks, *Legal and Ethical Safeguards: Protection of Society’s Most Vulnerable Participants in a Commercialized Organ Transplantation System*, 21 AM. J.L. & MED. 45, 63 (1995) (“Courts should continue to preserve the lives of dying incompetents even where some third party may benefit from the patient’s death.”); Alan Shewmon et al., *The Use of Anencephalic Infants as Organ Donors*, 261 JAMA 1773, 1780 (1989) (arguing that “the moral confusion unwittingly introduced into society” by harvesting organs from anencephalic infants “would constitute a far greater evil than the good done to the relatively few surviving recipients of these organs”).

9. The American Medical Association recently took a tentative step in this direction. In June, 2002, it enacted a resolution stating, “Physicians should encourage and support pilot studies . . . that investigate the effects of financial incentives for cadaveric organ donation for the purpose of examining and possibly revising current policies in the light of scientific evidence.” Council on Ethical and Judicial Affairs, Am. Med. Ass’n, *Cadaveric Organ Donation: Encouraging the Study of Motivation*, available at http://www.ama-assn.org/ama1/pub/upload/mm/369/ceja_report_1a02.pdf (last visited Nov. 7, 2002). It stressed, however, that “payment for an organ from a living donor should not be a part of any study.” *Id.* Furthermore, the pilot programs must not involve “the purchase of donated organs [by their intended recipients]; the distribution of organs for transplantation should continue to be governed by UNOS, based on ethically appropriate criteria related to medical need.” *Id.*

10. Banks, *supra* note 8, at 77-79 (discussing posthumous organ markets); Gregory S. Crespi, *Overcoming the Legal Obstacles to the Creation of a Futures Market in Bodily Organs*, 55 OHIO ST. L.J.

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Some academics have also suggested “spot” markets, where families of deceased individuals could sell the rights to the decedent’s organs.¹¹ Such proposals are invariably met with a wide range of ethical objections, discussed later in this Note.¹²

This Note suggests a new approach to organ donation, one that has received scant attention in medical journals,¹³ and has been mentioned in passing in only a handful of law review articles¹⁴—paired organ exchanges. Articles suggesting the creation of markets in organs ignore the possibility of such a system.¹⁵ It is not mentioned in Arthur Caplan and Daniel Coelho’s comprehensive compilation of works on the social, ethical, and legal aspects of organ transplantation policy,¹⁶ nor is it discussed in most examinations of “rewards” for organ donation.¹⁷

This Note argues that federal law should be amended so as to allow the already-existing registry of patients in need of organ transplants to bring together the families and friends of *different* patients on the waiting list in order to save lives. There are many people who, although willing to donate a nonvital

1, 28 (1994); Lloyd R. Cohen, *Increasing the Supply of Transplant Organs: The Virtues of a Futures Market*, 58 GEO. WASH. L. REV. 1, 3 (1989).

11. See, e.g., Banks, *supra* note 8, at 76-77.

12. See *infra* Part V.

13. A thorough examination of major medical journals reveals that paired organ exchange has been the topic of one four-page article written in 1986, F.T. Rapaport, *The Case for a Living Emotionally Related International Kidney Donor Exchange Registry*, 18 TRANSPLANTATION PROC. 5 (1986), one four-page editorial published in 1997, Lainie Friedman Ross et al., *Ethics of a Paired-Kidney Exchange Program*, 336 NEW ENG. J. MED. 1752 (1997), and one short letter to the editor in response to the editorial, addressing the possibility of establishing such a program in England, Robert A. Sells, *Paired Kidney-Exchange Programs*, 357 NEW ENG. J. MED. 1392 (1997). Rapaport’s article is also cited in passing in A.S. Daar et al., *Ethics and Commerce in Live Donor Renal Transplantation: Classification of the Issues*, 22 TRANSPLANTATION PROC. 922, 923 n.15 (1990). None of these sources delve deeply into the legal framework necessary for such a program, nor do they appear to have received widespread attention.

14. No prior law review articles propose a paired organ exchange program. Those few pieces which do mention the possibility of something similar dedicate no more than two or three sentences to the idea and do not develop it in any detail or suggest any concrete steps for implementation. See, e.g., Phyllis Coleman, “*Brother Can You Spare a Liver?*” *Five Ways to Increase Organ Donation*, 31 VAL. U. L. REV. 1, 17 (1996) (“Organ trading represents another alternative for live, intrafamily donors. Under this plan, a donor whose organ is not suitable for a family member could trade his kidney for one which was compatible.”); Note, *Regulating the Sale of Human Organs*, 71 VA. L. REV. 1015, 1036-37 (1985) (“[I]f a donor’s organ is incompatible with the recipient, the donor could trade his organ for a suitable match.”).

15. See *supra* notes 10-11.

16. THE ETHICS OF ORGAN TRANSPLANTS: THE CURRENT DEBATE (Arthur L. Caplan & Daniel H. Coelho eds., 1998).

17. See, e.g., RENEE C. FOX & JUDITH P. SWAZEY, SPARE PARTS: ORGAN REPLACEMENT IN AMERICAN SOCIETY 64-72 (1992); Banks, *supra* note 8, at 78; Arthur L. Caplan, *Organ Procurement: It’s Not in the Cards*, in LIFE CHOICES: A HASTINGS CENTER INTRODUCTION TO BIOETHICS 494, 495-96 (Joseph H. Howell & William Frederick Sale eds., 2d ed. 2000); Christopher Cates, Trend and Development, *Property in Human Tissues: History, Society, and Possible Implementations*, 4 APPEAL 32, 39-43 (1998); Julie Mull Strange & David C. Taylor, *Organ and Tissue Donation*, in TRANSPLANTATION NURSING: ACUTE AND LONG-TERM MANAGEMENT 77, 81 (Marie T. Nolan & Sharon M. Augustine eds., 1995) [hereinafter TRANSPLANTATION NURSING]; Williams, *supra* note 4, at 344-51.

organ to save the life of a loved one in need of a transplant, are unable to do so due to biological incompatibility.¹⁸ A system of paired organ exchanges would facilitate transplantation in situations where a friend or family member of Patient A is incompatible with him, but would be compatible with some other person on the waiting list (Patient B), *and* a close friend or family member of Patient B is incompatible with her, but compatible with Patient A. The family member of patient A would donate a compatible nonvital organ to patient B, on the condition that the family member of patient B donates a compatible nonvital organ to patient A; hence the phrase “paired organ exchange.” While potential enforcement issues can be avoided by conducting the transplants at the same time and, if possible, in the same hospital, this is not essential to my proposal.

I contend that paired organ exchanges should not only be permitted under federal law, but also facilitated, by expanding the existing national database of patients in need of organs to include information about individuals potentially willing to donate on behalf of each patient, and using this data to identify cross-matches. By permitting and facilitating paired organ exchanges, the government could bring together compatible donors and recipients who would otherwise never meet, and in each successful case allow two transplants to occur that might otherwise be impossible. This system would, of course, be limited to the exchange of nonvital or regenerable organs (kidneys and livers), where donation would not endanger the donor or adversely impact the donor’s major life activities.

This Note is divided into six parts. Part I explores the science behind organ donation, focusing on one of the major impediments to successful transplantation—compatibility. An “incompatible” organ would be “rejected” by its recipient’s body, further exacerbating her underlying condition and endangering her life. This discussion of compatibility establishes the criteria a paired organ exchange system should use to identify cross-matches. This Part also demonstrates the safety of organ donation, reviewing the extremely low mortality and morbidity rates for donors.

Part II explores the current legal and regulatory framework of organ donation in the United States. It explains the laws and administrative regulations governing local organ procurement organizations (OPOs), as well as the nationwide network coordinating their activities. In particular, this Part examines the way in which organs currently are allocated among patients on the waiting list. Part III discusses the logistics of a paired organ exchange system. It sets forth the statutory and regulatory changes required for its implementation, and describes the practical details of how an exchange would be executed. Finally, this part analyzes the relationship between paired organ

18. See *infra* Section I.B.

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exchanges and existing legal prohibitions against the sale of organs.

Part IV addresses two threshold philosophical issues that must be settled before a meaningful discussion about the moral legitimacy of paired organ exchanges can occur. First, it argues that it is possible for a family member to give legitimate voluntary consent to organ donation when the life of a loved one hangs in the balance. This Part further emphasizes that organ donors have the moral right to direct their gifts toward particular recipients. While these propositions may seem basic, and perhaps even obvious, they have been challenged repeatedly in recent years by academic commentators. These core principles underlie both paired organ exchanges as well as traditional voluntary organ donation. Part V demonstrates how paired organ exchanges are immune from the ethical criticisms that are often leveled against outright markets in organs. Part VI concludes.

Paired organ exchanges have largely been ignored by both the legal and medical literature. By proposing a specific statutory and regulatory framework to both permit and facilitate such exchanges, and responding to potential objections to this system, this Note seeks to take the first steps toward preventing unnecessary suffering and untimely death.

I. THE SCIENCE OF TRANSPLANTATION

This Part examines scientific issues pertaining to organ donation that affect the efficacy and morality of paired organ exchanges. For an organ transplant to be successful, the donated organ must be both suitable for transplantation and “compatible” with its intended recipient. Section A considers the medical procedures physicians use to determine whether an organ is suitable for transplantation. If the prospective donor suffers from certain medical conditions, transplanting one of her organs may pose enhanced risk to both the donor and the recipient. Section B explores the specific factors that determine an organ’s compatibility with a particular patient. A perfectly healthy yet incompatible organ would be “rejected” by its recipient’s body, triggering severe adverse medical consequences.¹⁹ This Section seeks to identify factors

19. If the recipient is ABO-incompatible with a donor, or is MHC-incompatible and has previously been exposed to the donor’s MHC antigens, she will immediately experience hyperacute rejection. THE MASSACHUSETTS GENERAL HOSPITAL ORGAN TRANSPLANT TEAM & H.F. PIZER, ORGAN TRANSPLANTS: A PATIENT’S GUIDE 21 (1991) [hereinafter PIZER, ORGAN TRANSPLANTS]. If a recipient is MHC-incompatible with a donor but has not been previously exposed to the donor’s incompatible antigens, it will take her body several days to recognize and develop antibodies to attack them; when this happens, she will suffer acute rejection, also called acute cellular rejection. *See id.* at 22 (“[B]etween five and ten days after transplantation, the recipient’s T cells begin to respond to the donor organ’s histocompatibility antigens. The injury caused by this cellular immune response is called *acute rejection*.”) (emphasis in original); *see also* Julie S. Tart, *Recovery Following Liver Transplantation*, in MEDICAL CARE OF THE LIVER TRANSPLANT PATIENT 137, 149 (Paul G. Killenberg & Pierre-Alain Clavien eds., 1997) (“Acute cellular rejection . . . leads to direct and indirect activation of recipient T-lymphocytes that then proliferate and travel to the transplanted organ. The infiltrating lymphocytes cause tissue damage by a number of mechanisms.”).

that a paired organ exchange system should use to match donors and recipients with each other to avoid such outcomes. Section C argues that these compatibility requirements are necessary, notwithstanding the existence of immunosuppressive drugs. Finally, Section D focuses on the safety of organ donation, arguing that kidney and liver donation do not pose undue risks to living donors.

A. General Requirements for Organ Donation

Physicians carefully examine individuals seeking to become living kidney or liver donors to see if they have any medical conditions that would pose a threat to the prospective recipient or make donation unusually dangerous to the donor. Routine testing includes “an electrocardiogram, chest X-ray, liver enzymes, serum cholesterol, and fasting glucose.”²⁰ Physicians screen for transmissible infectious diseases such as hepatitis B and C, HIV/AIDS, cytomegalovirus, and the Epstein-Barr virus.²¹ They also consider the anatomy of the potential donor’s kidney or liver to see if there are any physical contraindications to donation.²² While physicians analyze urine samples and perform other tests to ensure that a kidney to be transplanted is functioning properly,²³ no reliable tests currently exist to detect “donor-related nonfunction” in livers.²⁴

B. Determining Whether Organs are Compatible with Particular Patients

The considerations that determine whether a donated organ will be compatible with its intended recipient depend on the organ involved. Subsection 1 examines the factors relevant to kidney compatibility, while Subsection 2 discusses those related to liver compatibility.

20. Amy L. Friedman et al., *The Living Kidney Donor*, in THE MULTI-ORGAN DONOR, *supra* note 2, at 173, 180 [hereinafter Friedman, *The Living Kidney Donor*] (discussing testing of potential living kidney donors); Amy L. Friedman et al., *The Living Liver Donor*, in THE MULTI-ORGAN DONOR, *supra* note 2, at 265, 275-76 [hereinafter Friedman, *The Living Liver Donor*] (discussing testing of potential living liver donors).

21. Friedman, *The Living Kidney Donor*, *supra* note 20, at 180; Friedman, *The Living Liver Donor*, *supra* note 20, at 276; Peggy Schreck Pattella & Patricia D. Weiskittel, *Kidney Transplantation*, in ORGAN AND TISSUE TRANSPLANTATION, NURSING CARE FROM PROCUREMENT THROUGH REHABILITATION 43, 54 (M.K. Gaedeke Norris & Mary Anne House eds., 1991) [hereinafter ORGAN AND TISSUE TRANSPLANTATION] (“All [kidney] donors and recipients are further screened for the presence of certain viruses. Routine screening for hepatitis, HIV, cytomegalovirus (CMV), and Epstein-Barr virus (EBV) is common pre-transplant.”).

22. Friedman, *The Living Kidney Donor*, *supra* note 20, at 176-77; Friedman, *The Living Liver Donor*, *supra* note 20, at 268-72.

23. Friedman, *The Living Kidney Donor*, *supra* note 20, at 178.

24. Friedman, *The Living Liver Donor*, *supra* note 20, at 276.

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1. *Kidney Compatibility*

Assuming that a kidney meets the suitability requirements for transplantation discussed in Section I.A, it must still be histocompatible with its recipient for the transplant to be a success. Histocompatibility refers to the ability of an organ to be transplanted into a recipient's body without triggering an adverse reaction (rejection) from the recipient's immune system.²⁵

"Antigens" are proteins found on the outer membranes of most cells in the human body.²⁶ White blood cells (also called lymphocytes), the backbone of the human immune system, are able to recognize antigens on cell membranes. This ability enables white blood cells to protect the body by identifying and destroying foreign cells—that is, cells with foreign antigen signatures.²⁷ "If cells enter the system that have significantly different antigens on their surfaces, the existing or host system will mount an immune response, creating antibodies to coat or destroy the foreign antigens as well as their carrier cells."²⁸ This response is what gives rise to rejection.

For a kidney to be histocompatible with a potential recipient, only two sets of antigens must match—ABO and MHC (also called the HLA system).²⁹ If a donor is both ABO-compatible and MHC-compatible with the recipient, the donor is said to be "histocompatible" with the recipient. The ABO antigen system refers to blood types; there are only two types of antigens in the ABO system—A antigens and B antigens.³⁰ This gives rise to the following blood type possibilities: blood type A (the patient has only A antigens), blood type B (the patient has only B antigens), blood type AB (the patient has both A and B antigens), and blood type O (the patient has no antigens).³¹

As noted earlier, white blood cells trigger immune responses when they identify foreign antigens in the body. Thus, anyone can receive type-O blood because it does not contain any antigens that would trigger an immune

25. See Kathleen S. Rohrer, *Transplantation Immunology*, in *TRANSPLANTATION NURSING*, *supra* note 17, at 1, 6 ("The more alike the donor and recipient tissues are, the less rejection is likely to occur. Histocompatibility testing is the evaluation of donor antigens with recipient antibodies.").

26. THE DICTIONARY OF IMMUNOLOGY 15 (W. John Herbert et al. eds., 3d ed. 1985) (defining an antigen as "a molecule that elicits a specific immune response when introduced into the tissues of an animal If antigens are to stimulate a response they must normally be foreign to the animal to which they are administered . . .").

27. See PIZER, *ORGAN TRANSPLANTS*, *supra* note 19, at 14 ("In human transplantation, the immune response to the replacement organ occurs because our lymphocytes recognize—as they should—that the new organ is not really part of ourselves.").

28. Pamela Weinberg, *The Human Leukocyte Antigen (HLA) System, the Search for a Matching Donor, National Marrow Donor Program Development, and Marrow Donor Issues*, in *BONE MARROW TRANSPLANTATION: PRINCIPLES, PRACTICE, AND NURSING INSIGHTS* 105, 106 (Marie Bakitas Whedon ed., 1991).

29. See Rohrer, *supra* note 25, at 6-9; see also PIZER, *ORGAN TRANSPLANTS*, *supra* note 19, at 21-23; Pattella & Weiskittel, *supra* note 21, at 54-55; Weinberg, *supra* note 28, at 106.

30. PIZER, *ORGAN TRANSPLANTS*, *supra* note 19, at 23-24.

31. Rohrer, *supra* note 25, at 7.

response. In contrast, a type-O patient can *only* receive type-O blood, because the other blood types contain antigens that would cause an immune reaction. These limitations give rise to the following system of compatibility:³²

Patient's Blood Type	Antigens on Cell Membranes	Compatible Blood Types
A	A	A, O
B	B	B, O
AB	A and B	A, B, AB, O
O	None	O

"ABO grouping is the primary determinant for solid organ transplantation. The same compatibility rules that apply to blood transfusion apply to transplantation."³³ Thus, to ensure histocompatibility, a donor's blood type must match that of the potential recipient.³⁴

The second type of histocompatibility is MHC-compatibility.³⁵ There are six types of MHC antigens that are of particular relevance to organ transplantation—A, B, C, DR, DQ, and DP (these names have no relationship to the A and B antigens in the ABO-histocompatibility system). Each antigen type is named after the site ("locus") in the chromosome where the gene that codes for it is located.

Of these six important types of MHC antigens, physicians focus on three—A, B, and DR—in determining whether donors and patients are compatible.³⁶ Humans have two copies of most genes, one from each of our parents; for each of these three types of antigens, every person has two copies of the gene that manufactures it.³⁷ Consequently, there are six separate loci in the genome that

32. *Id.* at 6-7.

33. *Id.* at 6.

34. See L. Rydberg, *ABO-Incompatibility in Solid Organ Transplantation*, 11 TRANSFUSION MED. 325, 325 (2001) ("The most important transplantation antigen system in solid organ transplantation is the ABO histo-blood group system. Crossing the ABO barrier in solid organ transplantation is usually not done except for emergency liver transplantations.").

35. MHC stands for "major histocompatibility complex." See Robert L. Yowell & Barbara A. Araneo, *Mechanisms of Allograft Rejection*, in SOLID ORGAN TRANSPLANTATION PATHOLOGY 4, 4 (Elizabeth H. Hammond ed., 1994). MHC-compatibility was previously referred to as HLA, or "human leukocyte antigen," compatibility. Kathleen M. Siebold et al., *Organ Procurement*, in ORGAN TRANSPLANTATION: A MANUAL FOR NURSES 3, 38 (Barbara A. Helene Williams et al. eds., 1991) ("The MHC was formerly known as the human leukocyte antigen (HLA) system. The MHC defines self for the immune system by directing placement of certain unique protein markers on selected cell surfaces, called histocompatibility antigens, which can be detected in the laboratory.").

36. Rohrer, *supra* note 25, at 7-8 ("[T]he antigens at sites A, B, and DR have been demonstrated to be the most important in predicting successful kidney transplantation. A perfect donor-recipient relationship would produce a six-antigen match based on these three sites.").

37. The genes for MHC antigens are codominant, meaning that both genes are expressed—the "products of both parental genes are found on the same cells." Abdul Ghaffar, *MHC: Genetics and Role in Transplantation Immunology*, at <http://www.med.sc.edu:85/ghaffar/mhc2000.htm> (last visited Nov. 10, 2002).

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physicians test for MHC-compatibility; they are able to do so indirectly through serum testing.³⁸

Ideally, all six of a donor's A, B, and DR antigens would match those of a potential recipient (a "six-point match"); nonetheless, transplants can be successful with smaller numbers of MHC antigen matches. "The more antigens that match, the less severe is the problem of rejection. The potential for a six-antigen match with an unrelated donor is very rare."³⁹ The importance of MHC-compatibility for kidney transplants was recognized by the President's Task Force on Organ Donation⁴⁰ and by the United Network for Organ Sharing (UNOS).⁴¹

38. As previous commentators have explained:

The basic tissue typing technique involves placing the tissue cells to be typed into numerous 'wells,' each with a different type of serum known to contain antibodies to a specific antigen If the antibodies of a particular serum result in the death of the tissue cells that are to be typed, one can infer that the cells must have that particular antigen expressed on their surface.

Ian Ayres et al., *Unequal Racial Access to Kidney Transplantation*, 46 VAND. L. REV. 805, 815 n.47 (1993).

39. Rohrer, *supra* note 25, at 8.

40. TASK FORCE ON ORGAN TRANSPLANTATION, ORGAN TRANSPLANTATION: ISSUES AND RECOMMENDATIONS 7 (1986) [hereinafter TRANSPLANTATION TASK FORCE REPORT] ("Organ sharing should be mandated for perfectly matched (HLA A, B, and DR) donor-recipient pairs and for donors and recipients with zero antigen mismatches (assuming that at least one antigen has been identified at each locus for both donor and recipient).").

41. MHC-compatibility is one of the primary determinants of who receives organs under UNOS's allocation system for donated cadaveric organs. Under the UNOS system, if a patient is fully MHC-compatible (all six of the patient's MHC loci match those of the donated organ), the patient is entitled to the organ. United Network for Organ Sharing, *Organ Distribution: Allocation of Cadaveric Kidneys*, § 3.5.3.3 ("[I]f there is any patient on the UNOS Patient Waiting List for whom there is a zero-antigen mismatch with a standard donor, the kidney(s) from that donor shall be offered to the appropriate UNOS member for the patient with the zero antigen mismatch"). If no six-point matches can be found within a designated time period, *id.* § 3.5.3.5, the OPO that recovered the organ begins looking for a compatible recipient, first in the OPO's local service region, *id.* § 3.5.6.1 ("With the exception of kidneys that are 1) shared as a result of a zero antigen mismatch, [or] 2) offered as payback as defined in Policy 3.5.5 . . . all kidneys will be allocated first to local patients . . . in the locale where the kidneys are procured."), then in the larger UNOS region in which the OPO is located, *see id.* § 3.5.6.2 ("If a standard donor kidney is not accepted by any of the local transplant centers for local patients, the kidney is to be allocated next via the regional list consisting of all patients on the Waiting Lists of other UNOS Members within the [OPO's] UNOS region"), and finally, if no recipient has been found, on the nationwide waiting list. *See id.* § 3.5.6.3 ("If a standard donor kidney is not accepted by any transplant center in the UNOS region in which the UNOS member which procured the kidney is located, the kidney is to be allocated to UNOS Members for specific patients in the other UNOS regions nationally according to the point system"). The only exception to this scheme of gradually expanding geographic areas is where an OPO has previously received a kidney through UNOS from another OPO under exceptional circumstances, such as a six-point match kidney, or a kidney granted to the OPO out-of-order because it was necessary to facilitate a multi-organ transplant where the other organ had become available. In such cases, the receiver-OPO "owes" the donor-OPO an organ. When the receiver-OPO obtains a kidney of the same blood type as the one it received under exceptional circumstances, it must offer it to the donor-OPO, notwithstanding the usual geographic considerations. *See id.* § 3.5.5.

If multiple patients at the regional or national levels are compatible with a particular kidney, it is allocated according to a point system. *See id.* § 3.5.6.2 ("When a standard donor kidney is allocated regionally, it is to be offered to UNOS Members for specific patients in the region according to the point system"); *id.* § 3.5.6.3 (stating that kidney allocations on the national level must be made "according to the point system"). OPOs are not required to use the point system when distributing

2. *Liver Compatibility*

The criteria for liver compatibility are somewhat less stringent than for kidney compatibility—unlike kidneys, donated livers need not be MHC-compatible.

The most important consideration in matching liver donor and recipient is blood-type compatibility and body size. Therefore, accurate height and weight [and blood type] of the potential donor must be determined. Previous studies have found that the liver is not as immunologically active as other organs; unlike the kidney, no relationship has been found between tissue matching and rejection.⁴²

Existing UNOS criteria for allocation of livers take these factors into account.⁴³

organs within their local region. *See id.* § 3.5.6.1.

To designate a kidney recipient through the point system, UNOS begins by identifying the universe of patients on the waiting list who are potentially eligible to receive the kidney. ABO-compatibility with the donor organ is an absolute prerequisite for a waiting list patient to have a chance of receiving it. *See id.* § 3.5.11 (“When information about a donor is entered into the UNOS Match System, all patients who have an ABO blood type that is compatible with that of the donor and who are listed as active on the UNOS Patient Waiting List will be assigned points and priority . . .”). Moreover, UNOS policy requires that kidneys of certain ABO types be given only to patients of that blood type, despite the fact that patients of other blood types would be biologically compatible with it. For instance, due to the relative scarcity of type-B kidneys (roughly 10% of the population in the United States is type B), “kidneys from a type B donor are to be allocated only to blood type B patients,” *id.* § 3.5.2, despite the fact that type-B organs could be successfully transplanted into type-AB patients. Similarly, although type-O kidneys can be transplanted into recipients of any blood type (due to their lack of antigens), because type-O patients can receive *only* type-O kidneys, “blood type O donor kidneys are to be allocated only to blood type O patients . . .” *Id.*

The number of points each eligible patient receives is based primarily on the degree to which the patient is MHC-compatible with the organ. *See id.* § 3.5.11.2 (“Points will be assigned to a patient based on the number of mismatches between the patient’s antigens and the donor’s antigens. An antigen mismatch occurs when a donor antigen would be recognized by the recipient as being different from the recipient’s own antigens.”). Extra points are awarded based on the length of time the patient has been on the waiting list. *See id.* § 3.5.11.1.1 (“[O]ne point will be assigned to the patient waiting for the longest period with fractions of points being assigned proportionately to all other patients, according to their relative time of waiting.”). Patients for whom it is especially difficult to find histocompatible organs receive extra points, *see id.* § 3.5.11.3 (“A patient will be assigned 4 points if he or she has panel reactive antibody (PRA) level of 80% or greater.”), as do minors, *see id.* § 3.5.11.5 (“Kidney transplant candidates who are less than 11 years old shall be assigned four additional points for kidney allocation. Candidates who are 11 years old or older but less than 18 years old will be assigned three additional points . . .”). While the seriousness of a patient’s medical condition is not taken into account in allocating kidneys on the regional or national level, local OPOs can take patients’ medical statuses into account in allocating kidneys on the local level. *See id.* § 3.5.11.4 (“No points will be assigned to patients based upon medical urgency for regional or national allocation of kidneys.”). People who have previously donated organs also receive extra points. *See id.* § 3.5.11.6 (“A patient will be assigned 4 points if he or she has donated for transplantation within the United States his or her vital organ or a segment of a vital organ . . .”). Notwithstanding the above point system, patients under 18 who have been on the waiting list beyond certain time periods have priority for receiving organs. *See id.* § 3.5.11.5.1 (“Kidneys that are not shared mandatorily for 0 HLA mismatching, or for renal/non-renal organ allocation, shall be offered first for transplant candidates who are less than 18 years of age at listing and who have not received a kidney transplant within [certain specified time periods].”).

42. Siebold, *supra* note 35, at 27; *see also* Laurel Williams, *Liver Transplantation*, in *ORGAN AND TISSUE TRANSPLANTATION*, *supra* note 21, at 113, 123 (“The criteria for matching donors and recipients for liver transplantation include compatible blood type and liver size.”).

43. In allocating livers, UNOS takes into account the size of the donated liver, *see* United Network for Organ Sharing, *Organ Distribution: Allocation of Livers*, § 3.6.1 (“For every potential liver recipient, the acceptable donor size must be determined by the responsible surgeon. The UNOS Match System will consider only potential liver recipients who are an acceptable size for that particular donor

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C. Immunosuppressive Drugs

Some critics have argued that, especially with the rise of immunosuppressive therapies, antigen matching is not as essential as it used to be to ensuring positive outcomes.⁴⁴ The most popular immunosuppressive drug is cyclosporine.⁴⁵ “Since its use in clinical practice, marked improvements in outcome have been accomplished.”⁴⁶ As one commentator points out, however,

[t]he greatest advantage of cyclosporine is that it is a more focused agent than those previously employed and does not weaken all aspects of the body’s immunological defenses. However, it does not act so specifically as to prevent rejection of the transplanted organ without compromising the patient’s resistance to other invasions, such as infections. The use of this drug therefore requires treading a narrow and shifting path between organ rejection and serious infectious illness.⁴⁷

Cyclosporine can also have severe side effects “such as hypertension, hyperlipidemia, and nephropathy, and little has been gained with regard to the most important problem: the prevention of chronic allograft vasculopathy.”⁴⁸ Although it is an important part of modern transplant practice, cyclosporine

liver.”), as well as its blood-type, *see id.* § 3.6.2. UNOS also considers the severity of patients’ medical conditions, *see id.* § 3.6.4 (“Each patient is assigned a status code or mortality risk score (probability of pre-transplant death) which corresponds to how medically urgent it is that the patient receive a transplant.”), and the amount of time they have spent on the waiting list, *see id.* § 3.6.3. While patients in the locality of the OPO that recovered the liver are given some preference in the allocation algorithm, they do not have absolute priority as they do under UNOS’s kidney distribution policy. *See id.* § 3.6 (describing the circumstances under which patients on the local or regional levels receive priority in the liver allocation process).

44. *See, e.g.,* Benjamin Mintz, *Analyzing the OPTN Under the State Action Doctrine—Can UNOS’s Organ Allocation Criteria Survive Strict Scrutiny?*, 28 COLUM. J.L. & SOC. PROBS. 339, 392-93 (1995) (“Some medical studies have revealed that the putative benefits (with respect to survival rates) of antigen matching are disappearing.”). It has also been argued that antigen-matching requirements lead to racial disparities in access to organs.

The antigen matching rules are a “but for” cause of this racial disparity. Because antigens are distributed differently among racial groups, a white patient is more likely than a black patient to have antigens that match those on a kidney from a white donor. . . . Because the proportion of blacks on the waiting list is significantly higher than the proportion of kidneys donated by blacks, white patients are more likely to have antigens that match those on donated kidneys.

Ayres, *supra* note 38, at 808-09.

45. *See* Venkataraman Ramanathan & J. Harold Helderman, *Cyclosporine Formulations, in CURRENT AND FUTURE IMMUNOSUPPRESSIVE THERAPIES FOLLOWING TRANSPLANTATION* 111, 111 (Mohamed H. Sayegh & Giuseppe Remuzzi eds., 2001) [hereinafter IMMUNOSUPPRESSIVE THERAPIES] (“Approved in 1983 by Food and Drug Administration (FDA) for widespread clinical use, this drug has improved the graft survival [sic] and has been the cornerstone in most immunosuppression protocols.”).

46. *Id.*

47. JEFFREY PROTAS, *THE MOST USEFUL GIFT: ALTRUISM AND THE PUBLIC POLICY OF ORGAN TRANSPLANTS* 6 (1994).

48. P. Schnuelle & F.J. van der Woude, *Clinical Trials in Transplant Immunosuppression: What Have We Learned?*, in IMMUNOSUPPRESSIVE THERAPIES, *supra* note 45, at 19, 20. Hyperlipidemia is “an excess of lipids [fat] . . . in the plasma [blood],” MOSBY’S MEDICAL, NURSING, AND ALLIED HEALTH DICTIONARY 791 (Kenneth Anderson et al. eds., 5th ed. 1998), that can lead to heart problems. Nephropathy is “any disorder of the kidney, including inflammatory, degenerative, and sclerotic conditions.” *Id.* at 1095. Chronic allograft vasculopathy is a long-term, progressive disease of the blood vessels stemming from a transplanted organ. *See* STEDMAN’S MEDICAL DICTIONARY 50, 339, 1909 (Thomas Lathrop Stedman ed., 26th ed. 1995) (defining “allograft,” “chronic,” and “vasculopathy,” respectively).

should not be viewed as a substitute for organ compatibility. Given that histocompatibility contributes to high transplantation success rates without causing adverse side effects,⁴⁹ the factors discussed in the preceding section should be taken into account in a system of paired organ exchanges.

D. *The Safety of Organ Donation*

Living organ donation, the cornerstone of paired organ exchanges, is widely accepted as safe for donors.⁵⁰ “Perioperative mortality for nephrectomy [kidney removal] is very low, approximately 0.03%, with other major complications occurring in less than 2% of cases Most centers with surgeons who have considerable experience in partial hepatectomy [removal of part of the liver] report very low mortality and morbidity for such operations.”⁵¹ According to another study, “the mortality for renal [kidney] donors was reported as .06%, and the mortality associated with liver donation was estimated as 1% to 2%.”⁵² Even more encouragingly, “[l]ong-term follow-ups of the [kidney] donor’s health do not give any increased evidence of disease or disability. Less than 1% of the donors in this series regretted the donation.”⁵³

II. REGULATORY FRAMEWORK

This part sets forth the existing regulatory framework for organ

49. Among the studies Mintz cites that discuss the benefits of MHC-compatibility (which was then known as HLA-compatibility) are Y.C. Zhou & J.M. Cecka, *Effect of HLA Matching on Renal Transplant Survival*, in CLINICAL TRANSPLANTS 499, 509 (Paul I. Terasaki & J.M. Cecka, eds., 1993) (“There was a stepwise decline in graft survival with increasing numbers of mismatched HLA antigens.”) and V.A. Lazda & M.E. Bleasing, *Is Allocation of Kidneys on Basis of HLA Match Equitable in Multiracial Populations*, 21 TRANSPLANTATION PROC. 1415, 1416 (1989) (noting that “HLA matching appears to correlate favorably with transplant outcome”). See Mintz, *supra* note 44, at 394 n.271.

50. Pattella & Weiskittel, *supra* note 21, at 55 (“Studies indicate there is no significant risk to the health of the living [kidney] donor.”); J.D. Pirsch et al., *Living-Unrelated Renal Transplantation: Results in 40 Patients*, 12 AM. J. KIDNEY DISEASES 499, 502 (1988) (“Our results support the use of living-unrelated donors to treat ESRD [End-Stage Renal Disease], especially for patients who do not have available living-related donors or who do not want to wait for cadaver kidney transplants.”).

51. Mark J. Cherry, *Persons and Their Bodies: Rights, Responsibilities, and the Sale of Organs*, in PERSONS AND THEIR BODIES: RIGHTS, RESPONSIBILITIES, AND THE SALE OF ORGANS 1, 3 (Mark J. Cherry ed., 1999).

52. Marie T. Nolan, *Ethical Issues in Transplantation*, in TRANSPLANTATION NURSING, *supra* note 17, at 361, 367 (citing R.W. Busuttill, *Living-Related Liver Donation: CON*, 23 TRANSPLANTATION PROC. 43-45 (1991)). Of course, even when the risk of harm is low, tragedies can still occur. See Sylvia Wood, *Officials Examine 1999 Donor Death; North Carolina Case Involved Patient Who Gave Part of His Liver*, TIMES UNION, Apr. 5, 2002, at A1; Michael Lasalandra, *Patient’s Death Prompts Fears of ‘Live Donor’ Liver Transplants*, BOSTON HERALD, Apr. 4, 2002, at 31.

53. Ingela Fehrman-Ekholm, *Kidney Donors Don’t Regret*, 69 TRANSPLANTATION 2067, 2070 (2000); D. Weiland et al., *Information on 628 Living-Related Kidney Donors at a Single Institution, With Long-Term Follow-Up in 472 Cases*, 16 TRANSPLANTATION PROC. 5, 6 (1984) (“[T]he immediate and long-term morbidity is sufficiently low to make the risk of kidney donation acceptable for fully informed and motivated relatives of patients with ESRD.”).

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transplantation in the United States. Section A explains the duties of organ procurement organizations, which are responsible for the front-line work of obtaining cadaveric organs for transplantation. Section B turns to the Organ Procurement Transplantation Network (OPTN), the private entity under contract with the federal government to oversee and coordinate the work of organ procurement organizations. The OPTN is responsible for maintaining the national registry of patients awaiting transplants; this Note suggests expanding this database to facilitate the coordination of paired organ exchanges.⁵⁴ Section C examines the extent of federal government funding for kidney and liver transplants. Finally, Section D explores the state and federal laws governing organ donation.

A. Organ Procurement Organizations

When a doctor or nurse identifies a hospitalized patient who may make a suitable cadaveric organ donor, she contacts the organ procurement organization (OPO) for her region;⁵⁵ each geographical area in the United States is served by its own OPO.⁵⁶ When the patient dies, the OPO is responsible for obtaining consent from the patient's family (unless the decedent had previously consented to organ donation) and removing the organ from the donor.⁵⁷ The OPO must also tissue-type the organ,⁵⁸ determine its recipient based on UNOS organ allocation criteria,⁵⁹ and "provide or arrange for the transportation of donated organs" to the transplant center where the operation will occur.⁶⁰ "OPOs have four basic functions that they are required to perform:

54. See *infra* Part III.

55. Each OPO is required to have "effective arrangements, to identify potential organ donors, with a substantial majority of the hospitals and other health care entities in its service area which have facilities for organ donations." 42 U.S.C.A. § 273(b)(3)(A) (West Supp. 2002).

56. Each OPO must confine its activities to a "defined service area that is of sufficient size to assure maximum effectiveness in the procurement and equitable distribution of organs." *Id.* § 273(b)(1)(E).

57. *Id.* § 273(b)(3)(C) ("[The OPO must] arrange for the acquisition and preservation of donated organs."). Often, "even if the deceased had shown a verbal or written intent to donate his or her organs, the staff feels obligated to ask the family, who may then refuse to give permission." Luke Skelley, *Practical Issues in Obtaining Organs for Transplantation*, in HUMAN ORGAN TRANSPLANTATION: SOCIETAL, MEDICAL-LEGAL, REGULATORY, AND REIMBURSEMENT ISSUES 261, 264 (Dale H. Cowan et al. eds., 1987).

58. 42 U.S.C.A. § 273(b)(3)(D) (West Supp. 2002).

59. See 42 C.F.R. 121.7(a)(1) (2001) ("An OPTN member procuring an organ shall operate the OPTN computer match program within such time as the OPTN may proscribe to identify and rank potential recipients for each cadaveric organ procured."). For a description of the criteria used to determine which patient on the registry receives an available organ, see *supra* notes 41, 43. Federal law further requires each OPO to "have a system to allocate donated organs equitably among transplant patients according to established medical criteria," for organs that may be allocated by an OPO on the local level. 42 U.S.C.A. § 273(b)(3)(E) (West Supp. 2002); see also United Network for Organ Sharing, *Organ Distribution: Allocation of Cadaveric Kidneys*, § 3.5.6.1 (allowing OPOs to give preference to their "local patients" in distributing kidneys, without directing them to use the UNOS point system).

60. 42 U.S.C.A. § 273(b)(3)(F) (West Supp. 2002). Each OPO is also required to "have arrangements to coordinate its activities with transplant centers in its service area." *Id.* § 273(b)(3)(G).

recovery, preservation, and transportation of donated kidneys and the maintenance of a system to locate prospective recipients for all recovered organs.”⁶¹

Federal law closely regulates many aspects of OPOs, including their fiscal affairs⁶² and the composition of their boards of directors.⁶³ Most saliently, OPOs are required to participate in the federal Organ Procurement Transplantation Network (OPTN).⁶⁴ The responsibility of OPOs is limited to harvesting cadaveric organs; they do not play a role with regard to living donors.

B. *Organ Procurement Transplantation Network*

The Secretary of Health and Human Services (HHS) is required to contract with a “private nonprofit entity that has an expertise in organ procurement and transplantation . . . for the establishment and operation of an Organ Procurement and Transplantation Network.”⁶⁵ The OPTN is required to establish “a national list of individuals who need organs” and a “national system . . . to match organs and individuals” who need them.⁶⁶ To determine which patients get scarce organs as they come available, the OPTN is responsible for establishing medical criteria by which to allocate them.⁶⁷ It also maintains a 24-hour hotline so an OPO that retrieves an organ can ascertain the patient to whom it must go.⁶⁸

In addition to maintaining the waiting list for organs, the OPTN acts as a standard-setting organization. It must “adopt and use standards of quality for the acquisition and transplantation of donated organs,” including standards to prevent the transmission of AIDS.⁶⁹ Since 1986, the Secretary has contracted

61. Siebold, *supra* note 35, at 10-11.

62. OPOs must conform to accounting standards set forth by the HHS Secretary, 42 U.S.C.A. § 273(b)(1)(B) (West Supp. 2002), enter into agreements with the Secretary to be reimbursed under the Social Security Act for procuring kidneys, *id.* § 273(b)(1)(C), and have mechanisms for receiving payments for non-renal organs delivered to transplant centers. *Id.* § 273(b)(1)(D).

63. Each OPO must ensure that its board of directors consists of representatives from each hospital and transplant center in its territory, *id.* §§ 273(b)(1)(G)(i)(I), (V), members of the general public, *id.* § 273(b)(1)(G)(i)(II), and experts in histocompatibility and neurology. *Id.* §§ 273(b)(1)(G)(i)(III), (IV). Alternatively, these groups can be represented on an “advisory board . . . [with] the authority to recommend policies for the procurement of organs and the other functions” the OPO must perform. *Id.* § 273(b)(1)(G)(ii).

64. *Id.* § 273(b)(3)(H); *see infra* Section II.B.

65. 42 U.S.C.A. §§ 274(a), (b)(1)(A) (West Supp. 2002). The OPTN must have a board of directors including “representatives of organ procurement organizations . . . transplant centers, voluntary health associations, and the general public.” *Id.* § 274(b)(1)(B)(i).

66. *Id.* §§ 274(b)(2)(A)(i), (ii).

67. *Id.* § 274(b)(2)(B); *see also id.* § 274(b)(2)(D) (“[The OPTN must] assist organ procurement organizations in the nationwide distribution of organs equitably among transplant patients.”). The OPTN must also “provide to members of the public an opportunity to comment with respect to . . . [its] criteria” for organ allocation. *Id.* § 274(b)(2)(B).

68. *Id.* § 274(b)(2)(C).

69. *Id.* § 274(b)(2)(E).

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with UNOS to administer the nation's OPTN. All OPOs and transplant centers are required to be members of the OPTN, which is overseen by the Division of Transplantation within the Health Resources Services Administration of the Department of Health and Human Services.⁷⁰

"[S]o extensive is its governmental character that people both inside and outside the government argue that the OPTN is in effect a government agency and ought to be structured like one."⁷¹ There had once been complaints about the fact that the government had vested authority over OPOs and transplant centers in a private (albeit federally funded and regulated) organization.⁷² Most notably, hospitals and OPOs must comply with "the rules and requirements of[] the [OPTN]" to be eligible for Medicare and Medicaid reimbursement.⁷³ To avoid problems, the Secretary of HHS issued a rule stating, "The [OPTN] Board of Directors shall . . . [p]rovide to the Secretary, at least 60 days prior to their proposed implementation, proposed policies it recommends to be enforceable . . . (including allocation policies). These policies will not be enforceable until approved by the Secretary."⁷⁴ Thus, "[u]nless the Secretary has given approval to an OPTN policy, that policy remains voluntary and unenforceable."⁷⁵ To date, none of UNOS's policies has been approved by the Secretary, although voluntary compliance is the norm.

C. Government Funding for Kidney and Liver Transplants

In 1973, the federal government "began to fund kidney transplants as a medical therapy appropriate to the treatment of end-stage renal disease [ESRD]."⁷⁶ Under this program, people who meet certain statutorily-specified criteria⁷⁷ are "entitled to benefits under Part A" of Medicare, and are "eligible

70. See Div. of Transplantation, U.S. Dep't of Health and Human Servs., *About the Division of Transplantation (DoT)*, at <http://www.hrsa.gov/osp/dot/about.htm> (last visited Nov. 7, 2002).

71. PROTAS, *supra* note 47, at 19.

72. Fred H. Cate, *The Legal Regulation of Transplantation*, in *TRANSPLANTATION NURSING*, *supra* note 17, at 377, 382 ("[T]he question was raised whether Congress's provision for the required membership of transplant centers and OPOs in the private OPTN (and the required compliance by these entities with the Network's rules) vested in the OPTN federal regulatory power.").

73. See 42 U.S.C. §§ 1320b-8(a)(1)(B), (b)(1)(D) (1994); see also *id.* § 1320b-8(b)(1)(E) (1994) (stating that a hospital must "allocate[] organs, within its service area and nationally, in accordance with medical criteria and the policies of the [OPTN]" to be eligible for reimbursement of its "organ procurement costs attributable to payments made to an [OPO]"); Ingrid Kinkopf-Zajac, Note, *Assessing Patient Compliance in the Selection of Organ Transplant Recipients*, 6 HEALTH MATRIX 503, 510 (1996) ("To ensure compliance with UNOS policies, Congress made Medicare and Medicaid reimbursement to transplant centers contingent upon UNOS membership and adherence to the rules set forth by UNOS.").

74. 42 C.F.R. § 121.4(b)(2) (2001).

75. Mintz, *supra* note 44, at 349.

76. Sheldon F. Kurtz & Michael J. Saks, *The Transplant Paradox: Overwhelming Public Support for Organ Donation vs. Under-Supply of Organs: The Iowa Organ Procurement Study*, 21 J. CORP. L. 767, 771 (1996).

77. To be eligible, a person suffering from end-stage renal disease must be either "fully or currently insured under the social security program (title II of the [Social Security] Act)" or "[e]ntitled to monthly

to enroll under part B.”⁷⁸ In addition to the hospitalization benefits provided under Part A, federal law expressly authorizes reimbursement of “transplantation services” for patients with ESRD.⁷⁹ The federal government covers the expenses of kidney donors as well:

[A]ny individual who donates a kidney for transplant surgery shall be entitled to benefits under parts A and B of this subchapter with respect to such donation. Reimbursement for the reasonable expenses incurred by such an individual with respect to a kidney donation shall be made (without regard to the deductible, premium, and coinsurance provisions of this subchapter) . . . for all reasonable preparatory, operation, and postoperation recovery expenses associated with such donation⁸⁰

Coverage of liver transplants is less generous. The federal government pays for some liver transplants for veterans and their families through the Veteran’s Administration and CHAMPUS (Civilian Health and Medical Program of the Uniformed Services).⁸¹ Some states choose to fund liver transplants under Medicaid; there is a split among United States Courts of Appeals about whether they are required to do so.⁸²

This Note does not address the issue of whether the federal government should play an expanded role in funding organ transplants for two reasons. First, a paired organ exchange program will save lives without requiring the government to incur new types of financial liabilities. I do not wish to cloud debate on this issue by also advocating that the government take on an

social security or railroad retirement benefits,” or be the spouse or child of such a person. See 42 C.F.R. §§ 406.13(c)(1), (2) (2001); see also 42 U.S.C. §§ 426-1(a)(1), (2) (1994).

78. *Id.* § 426-1(a). According to the Health Care Financing Administration, “You can get Medicare Part A no matter how old you are if your kidneys no longer work” HEALTH CARE FIN. ADMIN., MEDICARE COVERAGE OF KIDNEY DIALYSIS AND KIDNEY TRANSPLANT SERVICES 9, at <http://www.medicare.gov/Publications/Pubs/pdf/esrdCoverage.pdf> (last visited Nov. 4, 2002). In fact, the official Medicare website describes Medicare, in part, as a “Health Insurance Program for . . . People with End-Stage Renal Disease (permanent kidney failure requiring dialysis or a transplant).” U.S. Dep’t of Health & Human Servs., *What is Medicare?*, available at <http://www.medicare.gov/Basics/WhatIs.asp> (last visited Oct. 8, 2002).

79. 42 U.S.C. § 1395rr(b)(1)(A) (1994).

80. *Id.* § 1395rr(d).

81. See Peter H. Schuck, *Government Funding for Organ Transplants*, in ORGAN TRANSPLANTATION POLICY: ISSUES AND PROSPECTS 169, 170, 173 (James F. Blumstein & Frank A. Sloan eds., 1989) [hereinafter, ORGAN TRANSPLANTATION POLICY].

82. See Lisa B. Deutsch, *Medicaid Payment for Organ Transplants: The Extent of Mandated Coverage*, 30 COLUM. J.L. & SOC. PROBS. 185 (1997) (arguing that coverage for organ transplants is mandatory under the correct interpretation of the federal Medicaid Act). Compare *Ellis v. Patterson*, 859 F.2d 52, 55 (8th Cir. 1988) (holding that “Congress intended the states to have discretion whether to include organ transplants in their Medicaid plans”) and *Dexter v. Kirschner*, 984 F.2d 979, 983 (9th Cir. 1993) (“[O]rgan transplants are excepted from Medicaid funding even when they are medically necessary because they are not among the listed required services.”) with *Pereira v. Kozlowski*, 996 F.2d 723, 727 (4th Cir. 1993) (“Finding the plain language of the statute compelling . . . we hold that the Commonwealth is required by the terms of section 1396d to provide funds for medically necessary transplants to children under the ages of twenty-one who are otherwise qualified under the State’s Medicaid plan.”) and *Pittman v. Sec’y, Fla. Dep’t of Health & Rehabilitative Servs.*, 998 F.2d 887, 891 (11th Cir. 1993) (“We, like the Fourth Circuit, doubt that § 1396(b)(i)(1) gives the states discretion to elect not to cover organ transplants.”), *cert. denied*, 510 U.S. 1030 (1993).

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enormous financial responsibility, thereby engendering unnecessary opposition to my basic proposal. Second, the issue of expanded access to health care is extremely complex, and it seems arbitrary to advocate that the government pay just for transplants stemming from paired organ exchanges, or even for transplants in general. Given the wide range of unmet health needs throughout our society, the proper scope of the federal government's role in ensuring equitable access to health care deserves thoughtful consideration in its own right. Thus, transplants occurring under the proposed paired organ exchange system would be funded through either existing statutory mechanisms or private sources such as health insurance.

D. State and Federal Regulation of Organ Donation

The primary federal restriction on organ donation is the National Organ Transplantation Act's prohibition on selling organs,⁸³ discussed in detail later in this Note.⁸⁴ All fifty states have enacted the Uniform Anatomical Gift Act (UAGA) of 1968.⁸⁵ A revised version of the UAGA was released in 1987,⁸⁶ but only twenty-three states and territories have adopted it.⁸⁷ Both versions of the UAGA grant a person of legal age the right to donate her organs after her death;⁸⁸ neither Act governs living organ donation. The Acts further provide

83. 42 U.S.C. § 274e (1994).

84. See *infra* Section III.C.

85. See UNIF. ANATOMICAL GIFT ACT (1987) prefatory note, 8A U.L.A. 20 (1993) [hereinafter 1987 UAGA] ("The Uniform Anatomical Gift Act was promulgated in 1968. It has been adopted in all 50 states and the District of Columbia.").

86. The biggest change under the 1987 Act is its "required request" provision. It requires hospitals to ask each admitted patient whether he or she is an organ or tissue donor. "If the answer is negative or there is no answer and the attending physician consents, the person designated shall discuss with the patient the option to make or refuse to make an anatomical gift." *Id.* § 5(a), 8A U.L.A. 47. Similarly, "[i]f, at or near the time of death of a patient, there is no medical record that the patient has made or refused to make an anatomical gift, [a hospital representative] shall discuss the option to make or refuse to make an anatomical gift and request the making of an anatomical gift" *Id.* § 5(b), 8A U.L.A. 47. Hospital personnel who fail to comply with these requirements are "subject to appropriate administrative sanctions." *Id.* § 5(f), 8A U.L.A. 47.

The 1987 Act also sought to correct a problem that arose under its predecessor. Even though the 1968 UAGA authorized people to express their consent to donating their organs in written form, "few transplant centers were willing to procure organs solely on the basis of a donor card or driver's license consent by the deceased." *Id.* § 2 cmt., 8A U.L.A. 37. Consequently, in many cases where a hospital had written evidence that a decedent had consented to organ donation, it would nonetheless seek the permission of the decedent's family before removing his organs. "In situations in which family members could not be located, less than twenty-five percent of respondents [in a survey of hospitals] said they would proceed with organ procurement despite the presence of a written directive." *Id.* To overcome hospitals' reluctance to rely on written consent, the 1987 UAGA emphasizes that "[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." *Id.* § 2(h), 8A U.L.A. 34. The 1987 UAGA also permits a coroner to remove a decedent's organs if the coroner cannot reach the decedent's immediate family within a reasonable amount of time, "taking into account the useful life of the part," *id.* § 4(a)(2), 8A U.L.A. 43, and "does not know of a refusal or contrary indication by the decedent or objection by [an immediate family member]." *Id.* § 4(a)(3), 8A U.L.A. 43.

87. See *id.* table of jurisdictions wherein act has been adopted, 8A U.L.A. 3 (Supp. 2002).

88. UNIF. ANATOMICAL GIFT ACT (1968) § 2(a), 8A U.L.A. 99 (1993) [hereinafter 1968 UAGA]

that a donor may either make an unrestricted gift (which under federal law would be distributed according to UNOS criteria)⁸⁹ or “limit an anatomical gift” to a particular recipient, such as an individual in need of a transplant.⁹⁰ The 1987 UAGA contains an additional provision prohibiting the sale of organs “if removal of the part[s] is intended to occur after the death of the decedent.”⁹¹

III. REGULATORY FRAMEWORK OF A PAIRED ORGAN EXCHANGE PROGRAM

Having explored the science of organ transplantation and the legal structure of the U.S. organ procurement system, I will now describe the details of my proposed paired organ exchange policy. Section A explains how paired organ exchanges would actually work. Section B sets forth suggested statutory and regulatory provisions to implement this program. Finally, Section C examines how paired organ exchanges relate to existing state and federal prohibitions on the sale of organs.

(“Any individual of sound mind and 18 years of age or more may give all or any part of his body . . . the gift to take effect upon death.”); 1987 UAGA, *supra* note 85, §§ 1(1), 2(a)(i), 2(a)(iii), 8A U.L.A. 29, 33 (recognizing the right of “[a]n individual who is at least [18] years of age [to] . . . make an anatomical gift . . . [or] refuse to make an anatomical gift,” where the definition of “anatomical gift” is limited to “donation of all or part of a human body to take effect upon or after death”). Immediate family members of a decedent are also allowed to consent to donation of the decedent’s organs “in the absence of actual notice of contrary indications by the decedent.” 1968 UAGA, *supra*, § 2(b), 8A U.L.A. 99; *accord* 1987 UAGA, *supra* note 85, §§ 3(a), (b)(2), 8A U.L.A. 40-41.

A person may consent to organ donation in a will or by signing an organ donor card. 1968 UAGA, *supra* note 88, §§ 4(a), (b), 8A U.L.A. 109; 1987 UAGA, *supra* note 85, §§ 1(3), 2(b), 8A U.L.A. 30, 33. The 1987 Act clarifies that driver’s licenses may also contain an area to be used for this purpose. *Id.* §§ 1(3), 2(c), 8A U.L.A. 30, 34. A person may revoke his decision to donate at any time. *See* 1968 UAGA, *supra* note 88, § 6, 8A U.L.A. 122; 1987 UAGA, *supra* note 85, §§ 2(f), (g), 8A U.L.A. 34.

The Acts prevent a physician “who tends the donor at his death, or, if none, the physician who certifies the death. . . [from] participat[ing] in the procedures for removing or transplanting a part” from a decedent. 1968 UAGA, *supra* note 88, § 7(b), 8A U.L.A. 124; *accord* 1987 UAGA, *supra* note 85, § 8(b), 8A U.L.A. 56. Once the donated organs are removed, “custody of the remainder of the body vests in the surviving spouse, next of kin, or other persons under obligation to dispose of the body.” 1968 UAGA, *supra* note 88, § 7(a), 8A U.L.A. 124; *accord* 1987 UAGA, *supra* note 85, § 8(a), 8A U.L.A. 56. Both Acts specify that “A person who acts in good faith in accord with the terms of this Act or with the anatomical gift laws of another state [or a foreign country] is not liable for damages in any civil action or subject to prosecution in any criminal proceeding for his act.” 1968 UAGA, *supra* note 88, § 7(c), 8A U.L.A. 124 (brackets in original); *accord* 1987 UAGA, *supra* note 85, § 11(c), 8A U.L.A. 59-60.

89. 1968 UAGA, *supra* note 88, § 4(c), 8A U.L.A. 109 (“The gift may be made to a specified donee or without specifying a donee. If the latter, the gift may be accepted by the attending physician as donee upon or following death.”); 1987 UAGA, *supra* note 85, § 6(b), 8A U.L.A. 53.

90. 1968 UAGA, *supra* note 88, § 3(4), 8A U.L.A. 106-07 (allowing “any specified individual” to receive an organ donated to him “for therapy or transplantation”); *accord* 1987 UAGA, *supra* note 85, § 6(a)(3), 8A U.L.A. 53; *see also* 1968 UAGA, *supra* note 88, §§ 3(1)-(3), 8A U.L.A. 106-07 (allowing any hospital, physician, medical or dental school, college or university, or organ bank to be designated to receive donated organs for educational or therapeutic use); *accord* 1987 UAGA, *supra* note 85, §§ 6(a)(1)-(2), 8A U.L.A. 53.

91. *Id.* § 10(a), 8A U.L.A. 58.

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A. *The Program*

When a patient learns that she needs a nonvital organ, her immediate family members, and sometimes her close friends, are tested to see whether they are biologically compatible. Currently, the test results for non-compatible individuals (“potential donors”) are simply discarded because their organs would not be appropriate for transplantation into their loved one. Under a paired organ exchange system, physicians conducting compatibility examinations would attempt to obtain the informed consent of non-compatible potential donors to include their compatibility information in the national UNOS database, along with the patient’s information.⁹² Upon receiving a potential donor’s consent, the physician would submit his or her ABO blood type, MHC antigen information, height, weight, and contact information to UNOS. Potential donors would be free to decline or to have their information removed from the system at any time without notice to the patient. The UNOS database would have to be expanded to accommodate these records.

The database would be configured to search regularly for cross-matches, wherein a person willing to donate to Patient A is compatible with Patient B, and a person willing to donate to Patient B is compatible with Patient A. Cross-matches initially would be based strictly on biological compatibility. Only if cross-matches existed between one donor and several patients would the existing organ-specific UNOS point systems⁹³ be utilized to determine which patient would have the chance to participate in the organ exchange.

Once the database identified a potential exchange, both potential donors would be contacted without the patients’ knowledge. The potential donors would be asked to submit to further noninvasive testing to ensure compatibility,⁹⁴ and would also be given the opportunity to withdraw from the exchange and the database.⁹⁵ Withholding news of the initial match from the patient alleviates additional pressure to consent. If the potential donors elected

92. The National Organ Transplantation Task Force found that establishing a registry of donors was unnecessary. TRANSPLANTATION TASK FORCE REPORT, *supra* note 40, at 51 (“A national registry of human organ donors [should] not be established.”). Its reasons for this conclusion are applicable only to registries of people who agree to donate upon death. According to the Task Force Report:

The time between declaration of death and contact with the family usually is quite short. Often there is no time to query a computer, to find out if the patient is listed. Because so much emphasis is placed on next-of-kin consent, querying a registry is an unnecessary step. The costs of maintaining a registry are large and the chances are great that a name could remain in the registry long after the person is dead.

Id. This reasoning does not counsel against the living donor registries that would be necessary for a paired organ exchange program.

93. See *supra* notes 41, 43.

94. See *supra* Section I.B.

95. A doctor testing a person to determine his suitability for a paired organ exchange would be paid from the same source that would render payment if the person were being tested for his suitability to donate directly to a loved one. As discussed earlier, remedying the inequities of the current system for organ-transplant funding is beyond the scope of this Note. See *supra* Section II.C.

to continue, they would be tested for various medical conditions that would render their organs unsuitable for transplantation or make the organ removal process particularly dangerous for them.⁹⁶ It has also been suggested that each donor have the opportunity to undergo psychiatric screening to give them yet another opportunity to withdraw from the exchange "on unspecified medical grounds."⁹⁷ Although this does not appear to be an essential step in the process, it could be incorporated as a safeguard.

If both donors continue to participate in the exchange and there are no medical contraindications to donation, the patients would be informed of the impending donations. Both sets of patients and donors would be required to sign releases, agreeing not to sue each other if an organ removal or transplantation attempt is unsuccessful, or any of the parties involved are injured or killed in the process (this agreement would not, of course, protect the physicians involved in the operations from medical malpractice or other standard negligence claims).

The largest logistical obstacle would be ensuring that the transplants occur at roughly the same time, to prevent a donor from backing out once "his" patient has received the necessary organ from the other donor. Even if the donors sign contracts ahead of time, no court is likely to demand specific performance under the circumstances.⁹⁸ An aggrieved patient, or a donor who has given up an organ, would at best be able to receive damages if the other donor backed out after one of the transplants occurred.⁹⁹

F.T. Rapaport suggested that the organ removals occur in two different hospitals at the same time. "Each family would be treated at their own participating transplant center . . . with an immediate exchange of the two kidneys by special courier between the two involved centers, followed by immediate implantation into the two recipients."¹⁰⁰ Using two hospitals allows the patients to have the operations performed close to home, minimizing the inconvenience and expense of travel. It would also allow them to remain in a more familiar, comfortable environment, closer to family members and friends.

However, this system raises coordination problems by requiring the physicians at the two hospitals to remain in contact with each other.¹⁰¹ More

96. See *supra* Section I.A.

97. See Ross, *supra* note 13, at 1752.

98. See, e.g., CAL. CIV. CODE § 3390 ("The following obligations cannot be specifically enforced: 1. An obligation to render personal service; 2. An obligation to employ another in personal service."); *Montaner v. Big Show Prods.*, 620 So. 2d 246, 248 (Fla. Dist. Ct. App. 1993) ("Contracts for employment or personal services should not be enforced by injunction or specific performance. The appropriate remedy is an action for damages for breach of contract. An injunction to prevent the breach of a personal services contract is not available.").

99. See *id.*

100. Rapaport, *supra* note 13, at 8.

101. Cf. Ross, *supra* note 13, at 1754 ("Our protocol involves only one hospital, which may simplify the timing of the procedure and communication between the surgical teams.").

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importantly, it unnecessarily introduces an extra variable into the equation—the two couriers. If something happened to one of the couriers, or one of the organs in transit, the result could be devastating to both its donor as well as its intended recipient. By having the operations conducted simultaneously at the same hospital, the chances for mishap are reduced significantly. Nonetheless, the logistical difficulties involved in arranging for the operations to occur in the same hospital, or even in two different hospitals at the same time, may be too great to make this an absolute requirement.

Neither operation could begin until both donors were under anesthesia.¹⁰² Donors would have the right to withdraw consent at any point until they were anesthetized, in which case the exchange would be called off. Once they were both rendered unconscious, the simultaneous organ removals would begin. When both organs were removed, they would be transplanted into their respective recipients.

If, at any point, it appears as if one organ removal will be unsuccessful, the physician operating on the other donor should be notified immediately. Although it may not be practicable in all situations, organ removal from one donor should be terminated if it turns out the other donor's organ cannot be successfully removed. Undoubtedly, circumstances will occasionally arise in which the surgeons complete only one of the removals. Although such a scenario is highly problematic and admits of no easy or satisfactory resolution, it does not outweigh the benefits offered by a system of paired organ exchanges, especially in light of the steps that can be taken to minimize the likelihood of such an occurrence. As noted earlier, the mechanism for paying the expenses associated with testing potential donors and conducting the transplants would remain the same as under current law.¹⁰³

B. *Necessary Statutory and Regulatory Changes*

The best way of ensuring that a paired organ exchange system is established would be to amend 42 U.S.C. § 274(b)(2)(A), the portion of the National Organ Transplant Act governing the OPTN registry of patients requiring organ transplants. This section currently states:

The Organ Procurement and Transplantation Network shall . . . establish in one location or through regional centers—

- (i) a national list of individuals who need organs, and
- (ii) a national system, through the use of computers and in accordance with established medical criteria, to match organs and individuals included in the list, especially individuals whose immune system makes it difficult for them to receive

102. It is possible that a donor may have a living will or similar document that allows a third party to make medical decisions on his behalf if he is unconscious or incapacitated. Prior to the operation, each donor would have to execute a narrowly-tailored document amending his living will to divest his surrogate decisionmaker of the authority to stop the organ-removal procedure.

103. See *supra* Section II.C.

organs.¹⁰⁴

I propose that a new provision, 42 U.S.C. § 274(b)(2)(A)(iii) be added.¹⁰⁵

(iii) a database to facilitate paired organ exchanges.

(I) For each patient on the waiting list specified in 42 U.S.C. § 274(b)(2)(A)(i) who is in need of a nonvital organ, this database shall contain a list of persons who are willing to donate such nonvital organ to that patient, but who are not compatible with that patient. For purposes of this section, individuals included in this database shall be referred to as “potential donors.” The list of donors willing to donate to a particular patient shall be referred to as that patient’s “database listing.”

(II) This database shall contain, for each potential donor, contact information and such organ compatibility information as the Secretary [of Health and Human Services] may deem necessary to identify cross-matches, including but not limited to the potential donor’s ABO blood type, MHC-compatibility information, height, weight, and age.

(III) This database shall be structured in such a way so as to facilitate the identification of cross-matches between patients on the waiting list. For purposes of this section, a “cross-match” is defined as a group of two patients, where a potential donor in the database listing for the first patient is biologically compatible with the second patient, and a potential donor in the database listing for the second patient is biologically compatible with the first patient. The Organ Procurement and Transplantation Network, shall promulgate minimum standards, subject to the approval of the Secretary, that must be met for a potential donor to be deemed “biologically compatible” with a patient.

(IV) A potential donor may at any time request that he be deleted from this database; neither having one’s information in the database nor identification in a cross-match shall constitute a binding agreement to donate an organ.

(V) This database shall be confined to potential donors for patients in need of kidneys, livers, and other nonvital organs which the Secretary determines may be donated, in whole or in part, without impairing a major life function of the donor or jeopardizing his life

104. 42 U.S.C. §§ 274(b)(2)(A)(i), (ii) (1994).

105. Slight grammatical changes to § 274(b)(2)(A) would also be necessary to reflect the addition of paragraph (iii). Specifically, the ‘and’ at the end of paragraph (i) would have to be moved to the end of paragraph (ii).

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or safety beyond the degree of risk normally associated with a kidney-removal operation.¹⁰⁶

(VI) Notwithstanding any other provision of federal law, paired organ exchanges as described in this section are permissible. Donor participants in a paired organ exchange do not receive “valuable consideration” as that term is used in 42 U.S.C. § 274e. It shall be a violation of 42 U.S.C. § 274e to offer financial compensation to a donor to participate in a paired organ exchange under this section, except that donors may receive compensation for reasonable medical, travel, housing, and related expenses, and reimbursement for lost wages, associated with any stage(s) of the paired organ exchange process (including preliminary medical testing).

It is also possible that a paired organ exchange program could be established solely through administrative rulemaking, without statutory changes. The National Organ Transplant Act calls upon the OPTN to “carry out studies and demonstration projects for the purpose of improving procedures for organ procurement and allocation”¹⁰⁷ and to “work actively to increase the supply of donated organs.”¹⁰⁸ A paired organ exchange program is one way the Secretary may specify for the OPTN to implement these requirements. Moreover, the Secretary has the authority to “make and publish such rules and regulations” as “may be necessary to the efficient administration”¹⁰⁹ of the Medicare and Medicaid programs, which fund many kidney and liver transplants.¹¹⁰ The Surgeon General is also empowered to “promulgate all other regulations necessary to the administration of the [Public Health] Service.”¹¹¹ Existing regulations governing the OPTN are based on these two statutory provisions.¹¹² Thus, whether or not the above legislative recommendations are implemented, the following rules should be promulgated:

42 C.F.R. § 121.20 For each patient on the waiting list established by 42 C.F.R. § 121.11(a)(1)(i) in need of a nonvital organ, the OPTN shall maintain a computerized record of all individuals willing to donate such organ to that patient, but who are not compatible with him or her (“potential donors”). This record will include each

106. Kidney donation is used here as a benchmark to assess the safety of donating other organs. A person would not be permitted to become a living donor in a paired organ exchange unless donation of the organ she wished to donate were at least as safe as kidney donation.

107. 42 U.S.C.A. § 274(2)(J) (West Supp. 2002).

108. *Id.* § 274(2)(K).

109. *Id.* § 1302(a).

110. *See id.* § 1320b-8 (setting forth criteria that hospitals and OPOs must meet to qualify for federal reimbursement of certain expenses related to organ transplantation under Medicare and Medicaid); *see also supra* Section II.C.

111. 42 U.S.C.A. § 216(b).

112. *See* 42 C.F.R. §§ 121.1 to 121.12 (2001).

potential donor's name, mailing address, phone number, e-mail address, ABO blood type, MHC-compatibility data, height, weight, and age. "Database," as used in this Subpart, will refer to the collection of donor records for all patients on the waiting list. A patient's "database listing," as used in this Subpart, will refer to the list of potential donors willing to donate a nonvital organ to that patient.

- 42 C.F.R. § 121.21** When a person is tested for compatibility with a patient on the waiting list established by 42 C.F.R. § 121.11(a)(1)(i) by a physician who is affiliated with a hospital or transplant center that belongs to the OPTN, or is serviced by an OPO that belongs to the OPTN, such physician shall ask if that person wishes to be included in the database listing for that patient. If the person agrees, the physician shall forward the information about the person specified in 42 C.F.R. § 121.20 to the OPTN, which shall promptly enter it into the database. The OPTN shall periodically contact each potential donor in the database to request that they notify the OPTN of any upcoming changes in their contact information.
- 42 C.F.R. § 121.22** A potential donor may at any time request that his information be removed from the database by contacting either the OPTN or the physician who initially forwarded his information to the OPTN. In no case shall the patient be notified when a potential donor removes himself from that patient's database listing, nor may a patient examine his database listing of potential donors.
- 42 C.F.R. § 123.23** Each week, the OPTN will search the database for cross-matches. As used in this section, a "cross-match" is defined as a group of two patients, where a potential donor in the database listing for the first patient is compatible with the second patient, and a potential donor in the database listing for the second patient is compatible with the first patient.
- 42 C.F.R. § 123.24** The OPTN shall issue guidelines, subject to the approval of the Secretary of Health and Human Services, for determining the minimum criteria which must be met for a patient to be considered "compatible" with a potential donor for purposes of this Subpart, taking into account ABO-compatibility, MHC-compatibility (for kidney transplants), the relative height and weight of the patient and potential donor, and such other factors as the OPTN may determine to be medically appropriate.
- 42 C.F.R. § 123.25** When a cross-match is identified, the OPTN shall notify the two compatible donors, again informing them of their

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right to be removed from the database. Such notice shall also request that they contact the physician who conducted their initial compatibility testing for any further testing which needs to be conducted to ensure medical compatibility.

42 C.F.R. § 123.26 If both donors in a cross-match consent to further testing, they must be found to be compatible with their intended recipients, and free of diseases or other medical conditions that would either render their organs unsuitable for transplantation (as determined by the OPTN, subject to the approval of the Secretary), or make the removal procedure unusually dangerous as compared to the average nephrectomy. If these criteria are met for both donors, the patients with whom the donors are affiliated in the database may be notified, and the patients' transplant centers may arrange for a paired organ exchange in accordance with these regulations.

42 C.F.R. § 123.27 Either donor may withdraw consent to a paired organ exchange at any time prior to being anesthetized for the organ removal operation. Prior to the organ removal operations, each donor must revoke any documents that have the effect of vesting legal authority in a third party to revoke consent to a procedure such as this once the donor is unconscious.

42 C.F.R. § 123.28 Removal of organs from living donors paired through a cross-match under this Subpart shall occur as close to simultaneously as reasonably possible, consistent with the safety of the donors. Removal of organs from both donors, and transplantation into recipients, shall occur in the same transplant center, whenever reasonably possible.

42 C.F.R. § 123.29 Costs associated with transplants performed under this section shall be reimbursed under existing applicable statutory and regulatory provisions.

42 C.F.R. § 123.30 A donor participating in a paired organ exchange does not receive "valuable consideration" for purposes of 42 U.S.C. § 274e. Donors involved in a paired organ exchange may be reimbursed for reasonable medical, travel, housing, and related expenses, as well as lost wages, associated with any stage(s) of the paired organ exchange process (including preliminary medical testing).

C. Prohibitions Against Organ Selling

42 U.S.C. § 274e(a) provides, "It shall be unlawful for any person to knowingly acquire, receive, or otherwise transfer any human organ for valuable

consideration for use in human transplantation if the transfer affects interstate commerce.”¹¹³ Individuals violating this provision “shall be fined not more than \$50,000 or imprisoned not more than five years, or both.”¹¹⁴ The term “human organ” is defined as including, among other things, kidneys and livers, as well as any other organ, or any “subpart” thereof, specified by the Secretary.¹¹⁵ The statute does not define “valuable consideration,” except to note that it “does not include the reasonable payments associated with the removal, transplantation, implantation, processing, preservation, quality control, and storage of a human organ or the expenses of travel, housing, and lost wages incurred by the donor of a human organ in connection with the donation of the organ.”¹¹⁶

Although the 1987 Uniform Anatomical Gift Act (UAGA) prohibits the sale of organs, it does so only if “the removal of the [body] part is intended to occur after the death of the decedent.”¹¹⁷ It “does not cover the sale by living donors if removal is intended to occur before death.”¹¹⁸ The 1968 version of the UAGA did not contain any prohibitions on organ sales.¹¹⁹ Thus, § 274e(a) of the National Organ Transplantation Act is the only prohibition relevant to paired organ exchanges.

There is no indication that Congress intended to disallow paired organ exchanges through this prohibition. Nonetheless, because a donor in a paired organ exchange trades his organ for a compatible organ for his loved one, some may argue that the donor receives “valuable consideration.”¹²⁰ To avoid problems under this provision, I recommend that Congress enact my proposed 42 U.S.C. § 274(b)(2)(A)(iii)(VI), which excludes paired organ exchanges from the scope of § 274e. Even in the absence of congressional action, paired organ exchanges can be permissible if the Department of Health and Human Services issues an interpretive rule, such as my proposed 42 C.F.R. § 123.30, stating that the phrase “valuable consideration” as used in 42 U.S.C. § 274e(a) does not include any rights obtained pursuant to a paired organ exchange agreement.

One can also make the somewhat unorthodox claim that interpreting § 274e(a) so as to prohibit paired organ exchanges would raise serious

113. 42 U.S.C. § 274e(a) (1994).

114. *Id.* § 274e(b).

115. *Id.* § 274e(c)(1).

116. *Id.* § 274e(c)(2).

117. 1987 UAGA, *supra* note 85, § 10(a), 8A U.L.A. 58.

118. *Id.* § 10(a) cmt., 8A U.L.A. 59.

119. 1968 UAGA, *supra* note 88, 8A U.L.A. 63.

120. See *Carlisle v. T & R Excavating, Inc.*, 704 N.E.2d 39, 43 (Ohio Ct. App. 1997) (holding that, to constitute consideration, “a benefit need not even be actual, as in the nature of a profit, or be as economically valuable as whatever the promisor promises in exchange for the benefit; it need only be something regarded by the promisor as beneficial enough to induce his promise”); *Steinberg v. Chicago Med. Sch.* 371 N.E.2d 634, 639 (Ill. 1977) (“Any act or promise which is of benefit to one party or disadvantage to the other is a sufficient consideration to support a contract.”).

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constitutional difficulties. The Speech Clause of the First Amendment protects not only speech,¹²¹ but “expressive conduct” as well. Expressive conduct is generally defined as any act “intend[ed] to convey a particularized message . . . [where] in the surrounding circumstances the likelihood was great that the message would be understood by those who viewed it.”¹²² Organ donation is commonly viewed as a symbolic act deeply infused with social meaning; as discussed later in this Note,¹²³ many commentators view organ donation as a critical and distinctive means of altruistically expressing one’s connection with and concern for others.¹²⁴ “[G]ifts of the body such as blood, tissues, and organs are an important and powerful way in which we affirm our relationships with other members of our community.”¹²⁵ While selling one’s organs does not convey such messages, participating in a paired organ exchange is a unique expression of love and devotion to a family member or close friend. Sacrificing part of one’s body to save the life of a loved one is incomparably meaningful. Thus, given the deep social and personal meaning of such acts, a general prohibition on the receipt of “valuable consideration” for donating an organ might be unconstitutional as applied to paired organ exchanges.¹²⁶

121. U.S. CONST. amend. I (“Congress shall make no law . . . abridging the freedom of speech . . .”).

122. *Spence v. Washington*, 418 U.S. 405, 410-11 (1974). This requirement for a “particularized message” was subsequently loosened by the Court, which held “[A] narrow, succinctly articulable message is not a condition of constitutional protection, which if confined to expressions conveying a ‘particularized message,’ would never reach the unquestionably shielded painting of Jackson Pollock, music of Arnold Schoenberg, or Jabberwocky verse of Lewis Carroll.” *Hurley v. Irish-American Gay, Lesbian & Bisexual Group*, 515 U.S. 557, 569 (1995) (internal citation omitted). For a discussion of the Court’s expressive conduct doctrine and its application to particular activities, see Michael T. Morley, Comment, “*Extremely Vexed and Difficult*,” *Games and the First Amendment*, 112 YALE L.J. 361 (2002).

123. See *infra* Section V.B.

124. James F. Blumstein, *Government’s Role in Organ Transplantation Policy*, in ORGAN TRANSPLANTATION POLICY, *supra* note 81, at 5, 28 (noting that the current cadaveric organ procurement system is based on “a total commitment to the purported benefits of communitarian expressions of solidarity through families’ choosing to donate the organs of their next of kin at the time of death”); Crespi, *supra* note 10, at 22 (“[T]he willingness to donate an organ is regarded as a high expression of altruism and communitarian sentiment . . .”).

125. Thomas H. Murray, *Altruism and Health Care: What Community Shall We Be?*, in ALTRUISM, SOCIETY, AND HEALTH CARE 67, 71 (Anders Nordgren & Claes-Göran Westrin eds., 1998) (citing Roberta G. Simmons, *Altruism and Sociology*, 32 SOC. Q. 1 (1991)).

126. The Supreme Court set forth the four-prong test for evaluating restrictions on expressive conduct in *United States v. O’Brien*, 391 U.S. 367 (1968), in which it held,

[A] government regulation is sufficiently justified if it is within the constitutional power of the Government; if it furthers an important or substantial governmental interest; if the governmental interest is unrelated to the suppression of free expression; and if the incidental restriction on alleged First Amendment freedoms is no greater than is essential to the furtherance of that interest.

Id. at 377. Interpreting a ban on organ selling so as to apply to paired organ exchanges may be permissible under the first three prongs of the *O’Brien* test. However, banning paired organ exchanges is unlikely to be “essential” to furthering whatever goals the government may seek to promote by a general prohibition on offering consideration to organ donors. See *infra* Part V.

IV. PHILOSOPHICAL FOUNDATIONS OF PAIRED ORGAN EXCHANGES

A paired organ exchange program ultimately depends on acceptance of two fundamental moral principles. First, it must be possible for an individual to give informed consent to donate a non-vital organ. Second, a living donor must be able to specify the intended recipient of his gift. Although these ideas underlie our existing system of voluntary living organ donation, they have been challenged in recent years. While a thorough discussion of these principles is beyond the scope of this Note, this Part discusses why objections to them are unpersuasive.

A. *The Legitimacy of Consent*

In most situations, a physician is required to obtain a patient's informed consent before initiating a medical procedure such as organ donation.¹²⁷ The principle of informed consent is a cornerstone of medical ethics,¹²⁸ and is essential for respecting patient autonomy.¹²⁹ It has been suggested that this ideal of voluntary consent cannot be achieved with regard to living organ donation because of the inherently coercive nature of situations where a parent, sibling, or child is in dire need of an organ. Joel D. Kallich and Jon F. Merz most forcefully expounded this position in *The Transplant Imperative: Protecting Living Donors From the Pressure to Donate*.¹³⁰ They argued that many donors do not consent voluntarily to organ donation because their submission to the procedure stems primarily from the fact that they "may not be able to deal with the guilt of not donating."¹³¹

Kallich and Merz began with the observation that "[t]he potential [organ] recipient, family members, and even physicians or other health care providers (e.g., procurement coordinators) may exert subtle (and not so subtle) pressures on a potential donor."¹³² They went on to reference the "'altruistic' social mores that govern family social behavior," and claimed that "many people in the transplant community are naively unaware of the coercive power of these mores and how living donors often do not have a 'free' choice not to volunteer

127. Norman Fost, *Waived Consent for Emergency Research*, 24 AM. J.L. & MED. 163, 173-74 (1998) (citing informed consent as "a cultural norm," and explaining the exceptions to this general requirement).

128. BENEDICT ASHLEY & KEVIN O'ROURKE, *ETHICS OF HEALTH CARE: AN INTRODUCTORY TEXTBOOK* 38 (1994) ("To protect the basic need of all persons for health care and their primary responsibility for their own health, no physical or psychological therapy may be administered to them without their free and informed consent.").

129. See *Scaria v. St. Paul Fire & Marine Ins. Co.*, 227 N.W.2d 647, 653 (Wis. 1975) ("The right to be recognized and protected is the right of the patient to consent or not to consent to a proposed medical treatment or procedure.").

130. Joel D. Kallich & Jon F. Merz, *The Transplant Imperative: Protecting Living Donors from the Pressure to Donate*, 20 J. CORP. L. 139 (1994).

131. *Id.* at 153.

132. *Id.* at 143.

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to donate an organ.”¹³³

They stated:

[S]ocial mores of the family dictate that all members should offer to donate their organs to help another family member. Violating this norm entails substantial and likely penalties that few would endure willingly, such as excommunication from the entire family unit. The potential for such familial sanctions clearly is coercive.¹³⁴

According to Kallich and Merz, family members are not the only source of undue influence. Physicians must “develop mechanisms to assure that no pressures are created from outside the family. It is clearly unethical for care givers (i.e., physicians and nurses), either by appearance or fact, to add to the already potentially overwhelming pressure to donate.”¹³⁵

This is by no means an isolated claim; others have maintained that simply by informing potential donors that organs from living donors lead to much higher recipient survival rates than those from cadavers, physicians impermissibly pressure patients to consent.¹³⁶ Bioethicist Arthur Caplan writes:

[M]any critics of live donation worry that the environment in which live donation takes place makes it impossible for anyone to give free and voluntary consent. Family members will often feel extraordinary pressure to ‘volunteer.’ The realization that one could be blamed for the failure to help a spouse, a sibling, or a child may be so frightening that potential donors see themselves as having no choice. . . . [F]amily members may feel overwhelmed by the pressure to then ‘volunteer’ as donors.¹³⁷

One commentator went so far as to argue that “individuals who ‘voluntarily’ decide to donate a kidney to a relative may be subject to greater coercion than those who sell their organs Donors often describe their choice as ‘necessary’ and family members may even openly pressure them to donate.”¹³⁸ This “pressure” is described as “subtle coercion.”¹³⁹ The question is often presented, “[H]ow can a parent be expected to make an informed, uncoerced, free choice when asked to consider donating an organ to his/her dying child? In this emotionally charged arena, there is a fine line between asking for the donation, and compelling the parent to donate.”¹⁴⁰

It is difficult to pinpoint exactly why these commentators question the legitimacy of consent under such circumstances. An implicit assumption in some of these arguments is that consent is not freely tendered if the donor is motivated by something other than an inherent desire to act as a donor or to

133. *Id.* at 145.

134. *Id.* at 146.

135. *Id.* at 153.

136. FOX & SWAZEY, *supra* note 17, at 33.

137. Arthur L. Caplan, *Biomedical Technology, Ethics, Public Policy, and the Law: Am I My Brother's Keeper?*, 27 SUFFOLK U. L. REV. 1195, 1200 (1993).

138. Note, *supra* note 14, at 1034.

139. *Id.*

140. R.W. Busuttil, *Living-Related Liver Donation: CON*, 23 TRANSPLANTATION PROC. 43, 44 (1991).

help the potential recipient. That is, if the donor is primarily driven by the desire to avoid the “guilt of not donating,”¹⁴¹ her consent is not freely given. However, such guilt would likely stem from the fact that the potential donor feels, at least in part, that morality requires one to donate a nonvital organ when necessary to save the life of a family member. This reveals a fundamental flaw in the critics’ arguments. A patient is not coerced into a decision when she acts in accordance with her personal moral beliefs. The guilt that would stem from not donating would be a result of her violating these beliefs; acting so as to avoid such feelings of guilt is evidence of autonomy, not coercion.

Another theme common to these arguments is that it is wrong for family members to pressure a potential donor into consenting.¹⁴² Some bioethicists feel that legitimate familial influence crosses the line from desirable to impermissible when the potential donor would likely be “excommunicat[ed]” from the family should he refuse to consent.¹⁴³ It is not clear that such external pressures to donate constitute coercion.

There are two ways to conceptualize coercion. First, coercion is any application of pressure to “convince” an actor to perform an act he otherwise would not perform. When used in this context, one can say things like “Coercion by the state to prevent tortious harms and contract breaches is legitimate.”¹⁴⁴ This sense of the word, however, is morally uninformative; we would need a separate moral theory to help us determine whether a particular act of coercion is permissible or not.

The commentators discussed above implied that coercion is intrinsically wrong. Thus, they used the term in a second, morally informative (or normative) sense which connotes not only that an actor is being pressured to perform a certain act, but that the pressure is unjustified or immoral. This understanding of coercion most clearly applies where the person making a

141. Kallich & Merz, *supra* note 130, at 153.

142. Howard S. Schwartz, *Bioethical and Legal Considerations in Increasing the Supply of Transplantable Organs*, 10 AM. J.L. & MED. 397, 424 (1985) (“[F]amily members may be under subtle or not so subtle pressure from other relatives or from the potential recipient.”). Some commentators believe that

no matter what efforts the medical team may make to protect the members of a prospective recipient’s family from feeling coerced or self-coerced, the pressure to offer this gift of life is powerful. Above and beyond the medical reasons that favor a live kidney donation, its symbolic meaning virtually obliges every family member at least to consider making such a gift.

FOX & SWAZEY, *supra* note 17, at 33.

143. Kallich & Merz, *supra* note 130, at 146; see also Russell Scott, *The Terrible Imbalance: Human Organs and Tissues for Therapy—A Review of Demand and Supply*, 9 J. CONTEMP. HEALTH L. & POL’Y 139, 143 (1993) (“[P]rourement of tissues from living donors can raise issues concerning human dignity, undue influences, [and] family pressure upon a family member to donate.”).

144. Charles K. Rowley, *Wealth Maximization in Normative Law and Economics: A Social Choice Analysis*, 6 GEO. MASON L. REV. 971, 976 (1998); see also *American Airlines v. Wolens*, 513 U.S. 219, 243 (1995) (O’Connor, J., concurring in part and dissenting in part) (“[A] State is enforcing its ‘law’ when it brings coercive power to bear on a party who has violated a contractual obligation.”).

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threat does not have the right to perform the specified act. For instance, a mugger who threatens to shoot a victim acts coercively in the normative sense because he does not have the right to carry through with his threat.

When family members threaten to shun a relative who is compatible with a close relative yet refuses to donate, they are fully within their legal and moral rights. Indeed, it would be strange to argue that a person has an ethical duty to associate with someone—even a family member—with whom that person has serious moral differences (especially when they entail major practical consequences), or whom that person feels has neglected an important moral duty.¹⁴⁵ The mere fact that others severely disapprove of an act or omission, and take steps to distance themselves from the actor, cannot be said to constitute coercion in the normative sense. Were this the case, then a free society would be possible only if we stifled our moral opinions and maintained interpersonal relationships regardless of fundamental ethical disagreements.

If the means by which family members exert pressure (“ex-communication”) are not morally prohibited, then we must question whether their goals or motives are immoral. I do not believe it inappropriate for a family to try to save the life of one of its members, nor do I feel it wrong for a family to expect its members to be willing to undergo the small risk of a transplant operation to accomplish this goal. The preservation of life is of critical importance¹⁴⁶ and the close relationship that generally exists between family members¹⁴⁷ makes a threat to the health of one person a matter of grave concern for the rest of the family. Empirically, this seems to be the attitude with which many families approach organ donation.¹⁴⁸

The primary remaining argument is that the threat of ex-communication is coercive because the only choice the actor can reasonably make is to donate; the actor’s primary alternative to donation leaves him significantly worse off.

145. It should also be remembered that the choice as to whether to “maintain certain intimate human relationships” is a “fundamental element of personal liberty.” *Roberts v. United States Jaycees*, 468 U.S. 609, 617-18 (1984). When a family member refuses to donate an organ to a loved one, she undermines the “special community of thoughts, experiences, and beliefs” that underlies her family; she acts in apparent disregard of the “deep attachments and commitments to the necessarily few other individuals” to whom she is so bound. *Id.* at 619-20.

146. See *Herceg v. Hustler Magazine, Inc.*, 814 F.2d 1017, 1029 (5th Cir. 1987) (recognizing that the prevention of “loss of life and limb” is “a legitimate, indeed compelling state interest”).

147. I limit myself to situations involving relatively strong bonds between family members, because in the absence of such relationships, “ex-communication” would not have such allegedly coercive force.

148. According to one study, a remarkable proportion of family members were willing to undergo a very serious and—at least temporarily—debilitating operation in order to benefit their son or daughter, mother or father, sister or brother. Perhaps even more remarkable was the speed with which the decision typically was made. People did not hesitate for the most part. The answer in most cases was a virtually instantaneous “yes.”

Murray, *supra* note 125, at 72; Fehrman-Ekholm, *supra* note 53, at 2070 (finding that “[t]he great majority (86%) [of living donors] reported that they made the decision [to donate] by themselves . . . It is reassuring that very few regretted the donation (0.8%).”).

Such “lesser-of-two-evils” situations are not inherently coercive in the normative sense; indeed, we frequently face them in everyday life. People pay thousands of dollars in taxes to avoid the far worse consequence of spending years in jail. While this may be coercive in the morally uninformative sense of the word discussed above, few would argue that it is coercive in the normative sense discussed here. To determine whether a decision is coerced in this latter sense, we need to know not only the array of possible choices facing an actor, but also the moral justifications offered by those who are influencing the ultimate decision.

Thus, when a ship comes across a man stranded on an uncharted desert island in the middle of the ocean and offers to take him home for \$10 million, and there is no reasonable prospect of another ship coming in the foreseeable future, we have no problem concluding that the situation is normatively coercive. Not only does the stranded man have only one reasonable choice, but the ship’s captain also is immorally attempting to exploit his situation. Although this is patently unrealistic, if for some reason it actually cost \$10 million for the ship to stop, take on an extra passenger, and deliver that passenger back to the mainland, the captain’s motives and goals no longer seem ignoble, and the situation is no longer normatively coercive; it is just a case of tough luck.

It is impossible to condemn external pressures being brought to bear on a decision by terming them normatively coercive without making the admittedly subjective judgments about whether the person creating the external pressure has the moral right to commit the threatened act, and whether that person has immoral goals or motives. Organ donation is a life-or-death choice; I believe that, in most cases, family members act reasonably in treating a refusal to donate as a serious breach of familial obligations. The fact that such considerations may make donation the clearly preferable course of action does not make the choice coercive or detract from the voluntariness of the ultimate decision; even when there’s only one reasonable choice, it can still be selected voluntarily.

B. Directed Giving

Some scholars have criticized the idea of “designated organ donation,” wherein a donor is able to specify the recipient of his donated organ. Such commentators argue that for a person to donate an organ to any recipient other than the next compatible person on the waiting list is immoral. The rationale behind this claim is that donated organs are communal resources to be allocated according to publicly established criteria, and not private property to be bestowed upon an individual of the donor’s choosing. According to the National Organ Transplantation Task Force:

Organs are donated on behalf of all potential recipients; this implies that the organ

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is to be used for the good of the community, and ultimately the community must decide what best serves the public interest. . . . [S]urgeons and organ procurement agencies should view themselves as stewards or trustees of this resource.¹⁴⁹

The Task Force went on to state, “[O]rgans are donated by individuals for the good of the public as a whole.”¹⁵⁰ Others have maintained that once a donor “has decided to give, the donation is subject to the constraints of equality and justice. This means that if it really is given—if it really is to be used as an organ—it does become part of the pool whose distribution must adhere to these ethical principles.”¹⁵¹

The most common situations in which such objections arise are “life appeals,” where a particularly photogenic individual, usually a child surrounded by loving family members, makes a highly publicized plea for an organ. Life appeals that result in a designated donation “undercut[] the notion of organs as belonging to ‘the community.’ These recurring situations raise questions about whether organ procurers or the family of a cadaver donor should have the ‘distributional authority’ to stipulate who shall receive the gift being made.”¹⁵²

Some commentators have gone so far as to argue that individuals who accept designated organ donations (as opposed to waiting for organs distributed according to UNOS criteria) are stealing from other patients on the list.

[T]he individual [patient] cannot request a designated donation, and when designated as recipient with or without such a request, he or she cannot accept. He or she must gently reject the offer, that is, without denigrating the laudable spirit that underlies the donation as a donation But reject it he or she must.¹⁵³

To do otherwise would deprive of that organ whomever would have received it according to the waiting list criteria; “[t]o accept a designated donation is to interfere in the distribution pattern and to take something that, all other things being equal, someone else should have.”¹⁵⁴ Consequently, “if the designated recipient accepts the organ in violation of these [principles], he or she will be committing theft.”¹⁵⁵

149. TRANSPLANTATION TASK FORCE REPORT, *supra* note 40, at 86. James Childress has explained,

From this perspective, organ procurement and transplant teams receive donated organs as trustees and stewards for the community as a whole, and they should determine who will receive available organs according to public criteria that have been developed by a publicly accountable body with public representation and that reflect principles of justice as well as medical standards.

James Childress, *Ethical Criteria for Procuring and Distributing Organs for Transplantation*, in ORGAN TRANSPLANTATION POLICY, *supra* note 81, at 87, 102.

150. TRANSPLANTATION TASK FORCE REPORT, *supra* note 40, at 104.

151. Eike-Henner W. Kluge, *Designated Organ Donation: Private Choice in Social Context*, in LIFE CHOICES, *supra* note 17, at 503, 515.

152. FOX & SWAZEY, *supra* note 17, at 79.

153. Kluge, *supra* note 151, at 514-15.

154. *Id.* at 515.

155. *Id.*

Notwithstanding these criticisms, I believe that directed organ donation is morally permissible. Nothing belongs to an individual so much as his own body. "The rights to possess, use and exclude others from one's body while one is alive are all relatively evident."¹⁵⁶ This concept "of the body as a form of property possessed by its 'owner' dates back at least to John Locke, whose influential theory of property derived all ownership from the property possessed by individuals in their own persons."¹⁵⁷ As a *prima facie* matter, it seems reasonable to believe that a person has the right to control the disposition of his own body. It is not immediately apparent why this right does not apply (at least while he is alive) to a part of his body, such as an organ, that has become disconnected from the rest of him. Indeed, none of the commentators discussed above explain how or why an organ becomes community property upon its separation from a donor's body.

A person's claim to control the disposition of his organs is bolstered by the fact that, in order to have them removed, he must submit to an invasive surgical procedure that carries with it the small but real chance of injury or death. Far from dissipating his right to maintain control over his body parts, a person who undergoes the risk and inconvenience of the organ removal process solidifies his right to designate a recipient for the organ. It seems contrary to notions of "just desert" to deny a person who has submitted to an intrusive medical procedure to make an organ available for transplantation the opportunity to designate the beneficiary of his endeavors. Were expropriation of organs permitted, the public would receive the benefits of donation by allocating organs according to communally developed criteria, but the costs would be concentrated on the minority of donors.

As a practical matter, prohibiting directed donation would be disastrous for organ procurement from living donors. Very few living donors give their organs to strangers. If donors were not permitted to direct their gift to a particular patient, the overwhelming majority would decline to donate. Thus, a ban on directed giving would result in many more avoidable deaths. While altruism may be a desirable social goal,¹⁵⁸ mankind's generosity extends only so far. The goal of any realistic organ procurement and allocation policy should be to take people as they are and figure out acceptable ways to maximize the number of lives saved.

V. OBJECTIONS TO COMPENSATION

As noted earlier, in the absence of statutory or regulatory amendments, it is possible that a paired organ exchange system would run afoul of the federal law

156. Jaffe, *supra* note 6, at 545.

157. Radhika Rao, *Property, Privacy, and the Human Body*, 80 B.U.L. REV. 359, 367 (2000).

158. *See infra* Section V.B.

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prohibiting organ donors from receiving “valuable consideration” for their donation.¹⁵⁹ Because the donor in a paired organ exchange would be providing his organ in order to obtain a compatible organ for his loved one, it can be argued that the donor is receiving consideration for his act.

Most major medical organizations have taken strong positions against compensation for organ donors.¹⁶⁰ Many of the common objections to compensation, however, apply solely to financial incentives and are inapplicable to paired organ exchanges. Concerns that the poor will be exploited or coerced,¹⁶¹ that the quality of available organs will drop,¹⁶² or that

159. See *supra* Section III.C.

160. See World Health Organization, *Guiding Principles on Human Organ Transplantation*, 337 LANCET 1470, 1470 (1991) (“The human body and its parts cannot be the subject of commercial transactions. Accordingly, giving or receiving payment (including any other compensation or reward) for organs should be prohibited.”); COUNCIL ON ETHICAL AND JUDICIAL AFFAIRS, AM. MED. ASS’N, CODE OF MEDICAL ETHICS: CURRENT OPINIONS WITH ANNOTATIONS § 2.15, at 50-51 (2002-03) (“[I]t is not ethical to participate in a procedure to enable a living donor to receive payment, other than for the reimbursement of expenses necessarily incurred in connection with removal, for any of the donor’s non-renewable organs.”); Council of the Transplantation Society, *Commercialisation [sic] in Transplantation: The Problems and Some Guidelines for Practice*, 1985 LANCET 715, 716 (“No transplant surgeon/team shall be involved directly or indirectly in the buying or selling of organs/tissues or in any transplant activity aimed at commercial gain to himself/herself or an associated hospital or institute.”); TRANSPLANTATION TASK FORCE REPORT, *supra* note 40, at 9-10 (“The Task Force condemns commercialization of organ transplantation and the exploitation of living unrelated donors Transplanting kidneys from living unrelated donors should be prohibited when financial gain rather than altruism is the motivating factor. . . . [S]tates should prohibit the sale of organs from cadavers or living donors”).

Recently, however, several groups have indicated a willingness to revisit the issue. See, e.g., Bruce Jaspens, *AMA: Study Paying for Organ Donation*, CHI. TRIB., June 19, 2002, at Business, 1 (“[T]he American Medical Association on Tuesday said it would support studies to determine whether money should be used to motivate potential donors and their families.”); Sean Salai, *Group Seeks Study on Money for Organs*, WASH. TIMES, June 28, 2002, at A12 (discussing the UNOS vote “to lobby Congress for studies on purchasing organs from relatives of the recently deceased”); Editorial, *Dealing for Organ Donors*, COLUMBUS DISPATCH, July 1, 2002, at 6A (“The American Society of Transplant Surgeons earlier this year also decided to support some forms of incentive, such as charitable contributions on behalf of the donor or small sums to help with funeral expenses. But the group opposed outright cash payments or tax breaks for the estates of donors.”).

161. Lori Andrews, *My Body, My Property*, in LIFE CHOICES, *supra* note 17, at 463, 470 (“Congress and some state legislatures have already decided to prohibit payment [for organs] out of fear that poor, minority, or otherwise vulnerable people will be coerced to exchange body parts for money.”); Coleman, *supra* note 14, at 16-17 (“Because many poor people worry about how their families will survive after they die, donations might not be completely voluntary. Instead, fear about their families’ welfare—rather than a wish to donate—may coerce consent.”).

This ubiquitous argument overlooks several key points. First, as discussed earlier, donating a kidney or a portion of a liver poses very little short- or long-term risk to the donor. See *supra* Section I.D. Indeed, compensated organ donation is far safer than many jobs we already allow people—both rich and poor—to perform. “The risk to a healthy thirty-five-year-old in donating a kidney is the same as the risk in driving a car sixteen miles every working day.” Andrews, *supra*, at 471. As one commentator has argued:

It is hard to see how kidney sales from living donors differ in more than degree, if even in that, from a host of other unpleasant, degrading, and dangerous, but legal activities, such as boxing, coal mining, lumbering, cleaning toilets, or collecting garbage, that people engage in because of the remuneration.

Cohen, *supra* note 10, at 29; Laurence E. Karp & Roger P. Donahue, *Preimplantation Ectogenesis: Science and Speculation Concerning In Vitro Fertilization and Related Procedures*, 124 WEST. J. MED. 282, 295 (1976) (arguing, in the context of commercial surrogacy, “it seems inconsistent to categorically

existing disparities in access to organs for transplantation will be widened¹⁶³ are inapplicable to a system where the only "compensation" the donor receives is saving the life of a loved one.

Nonetheless, there are two objections to compensating organ donors that extend beyond financial incentives, potentially embracing paired organ exchanges. Section A addresses the claim that even non-financial compensation may lead people to commodify their bodies by viewing body parts as goods to be bartered. Section B discusses the argument that any form of compensation for organ donors is objectionable because it is inconsistent with the altruism that is supposed to underlie our nation's organ procurement system.

deny such women this kind of livelihood while we permit and even encourage people to earn money by such dangerous means as coal mining, or racing little cars around a track at 200 miles per hour").

Moreover, this objection to compensation is at best shortsighted, and at worse hypocritical: [B]anning payment on ethical grounds to prevent such scenarios overlooks one important fact: to the person who needs money to feed his children or to purchase medical care for her parent, the option of not selling a body part is worse than the option of selling it. Society has not benefited individuals by banning organ sales unless it also provides a means to escape desperate conditions.

Andrews, *supra*, at 470; B.M. Dickens, *Human Rights and Commerce in Health Care*, 22 TRANSPLANTATION PROC. 904, 904 (1990) ("Prohibition of sales, purchases, and markets is proposed for [indigents'] protection, although this itself is a poor response since it does nothing to relieve poverty.").

162. See, e.g., Cates, *supra* note 17, at 36 ("This fear centres [sic] around the belief that the poor, indigent, malnourished, or alcoholic will make up the largest proportion of the new class of donors, and that people in these groups will misrepresent their medical condition in order to qualify for the potential monetary rewards of organ donation."). Arguments along these lines are often based on Richard Titmuss's research regarding blood procurement policies. Comparing the quality of the blood supply in America, where the sale of blood was permitted, to Britain, where it was prohibited, he found that "[c]ommercial blood-bank systems waste blood, and shortages, acute and chronic, characterize the demand-and-supply position. . . . [T]he risk of transfusing contaminated blood is greater if the blood is obtained by a commercial source." Richard Titmuss, *Why Give to Strangers?*, 1971 LANCET 123, 124. It seems likely, however, that such concerns could be addressed through rigorous donor screening.

163. See Cohen, *supra* note 10, at 26 ("Many believe that certain basic and bare necessities of life and health . . . should be available to all regardless of ability and willingness to pay. If there is an insufficient quantity for all to obtain the minimum, then allocation should not be on the basis of purchasing power."); Monique C. Gorsline & Rachelle L.K. Johnson, Note, *The United States System of Organ Donation, the International Solution, and the Cadaveric Organ Donor Act: 'And the Winner Is...'*, 20 J. CORP. L. 5, 37 (1994) (stating that the availability of transplants "should not be a function of the financial ability to buy organs"). As many commentators have noted, however, organ markets need not be entirely *laissez-faire*. Were the government to procure organs through financial payments to donors, it could allocate them according to existing UNOS criteria, which does not take into account ability to pay. See Dickens, *supra* note 161, at 905 ("If the purchaser was the state, which allocated the resource [organs] on an equitable basis such as medical need, proximity of death or prospect of recovery that did not improperly favour the rich, payment might be less objectionable."). Even absent a state-sponsored organ-purchase program, the fact remains that

doctors' services, hospital services, and drugs will probably always account for most of the cost of a transplant. Thus, those who would be unable to pay for a transplant if there were a charge for the organ would generally also be unable to pay for it without such a charge. Moreover, it is not clear why distributional concerns call for the organs themselves to be allocated on a nonmarket basis while these other items are priced on a commercial basis.

Henry Hansmann, *The Economics and Ethics of Markets for Human Organs*, in ORGAN TRANSPLANTATION POLICY, *supra* note 81, at 57, 80.

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A. Preventing Commodification

Many academics argue that certain things are “market inalienable”—they should not be traded or bartered in open markets.¹⁶⁴ Critics believe that, by attempting to commercialize something that is market inalienable, the seller would be “selling something so precious that no man should part with it.”¹⁶⁵ Another variation of this argument is that “one *may* not purport to sell what *cannot* be sold, for in the very process of sale that which is purportedly sold is transformed and its value is destroyed or diminished.”¹⁶⁶ Such commodification is seen as inherently immoral.¹⁶⁷ This argument is motivated by the same impulse that leads many people to condemn commercial surrogacy.¹⁶⁸

Some people who object to compensation on these grounds reject the idea of “putting a price tag” on organs. “The presence of a monetary price or tariff for a service once considered to be beyond price is seen to debase the service, and reduce it from a priceless gift given as a token of love, esteem and dedication to a mere incident of commerce.”¹⁶⁹ The commodification objection extends beyond financial incentives, however. To view something as a commodity is to see it as something to be exchanged for something of greater use or value; it is to perceive the object being bartered as instrumentally valuable for its trading potential. While no money changes hands in a paired organ exchange, the heart of the concept is still based on a bargain.

I do not believe that concerns over commodification are a legitimate basis for opposing paired organ exchanges. First, while it is incontrovertibly wrong to commodify a human being, I am not persuaded that individual parts of a person’s body merit the same ethical status as the *person* as a whole. Our internal organs are essentially biological machines that perform functions necessary for our survival. While we need them to live, they are not important parts of who we are. They are not intertwined with one’s consciousness, personality, memory, or anything else connected to individuality. Although a

164. Margaret Jane Radin, *Market-Inalienability*, 100 HARV. L. REV. 1849, 1850 (1987) (“Something that is market-inalienable is not to be sold, which in our economic system means it is not to be traded in the market.”).

165. Cohen, *supra* note 10, at 26; Cherry, *supra* note 51, at 4 (“The emerging consensus against a for-profit market in human organs is marked by a view that organs should not be treated as commodities.”).

166. Cohen, *supra* note 10, at 26 (emphasis in original).

167. Crespi, *supra* note 10, at 22 (“Allowing organ sales necessarily places a monetary value on parts of the human body. To some commentators, this is a major step towards subjecting persons to the depersonalizing influence of market rhetoric, and constitutes a ‘commodification’ of an object that should be held sacred and above market bartering.”).

168. See, e.g., Neil Duxbury, *Law, Markets, and Valuation*, 61 BROOKLYN L. REV. 657, 687 (1995) (“The commercial surrogate mother, in selling her reproductive capabilities, commodifies and thereby degrades both herself and the child or children she produces.”).

169. Bernard M. Dickens, *Moral and Legal Markets in Transplantable Organs*, 2 HEALTH L.J. 121, 130 (1994); Crespi, *supra* note 10, at 22 (“The human body and its constituent organs are argued to be literally ‘priceless’ and incommensurable with the normal articles of commerce.”).

liver or kidney may be a part of a person's body, it is not part of that *person*. These amalgamations of cells have none of the features of human beings that are thought to bestow intrinsic value. Thus, our instinctive revulsion to commodifying people is not easily extended to internal organs.

Second, a theme that underlies many commodification arguments is that trading certain types of things (such as human organs) is an act of disrespect because, given the nature of that which you are trading, whatever you receive in return cannot possibly be of comparable value. Such a trade would falsely imply that an organ *is* of equivalent value to the item received in exchange for it. From this perspective, the central focus of the commodification thesis is not the trade itself, but the "cheapening" or irreverence implied by the exchange.

A paired organ exchange, however, is truly an exchange of equivalents: the gift of life is traded for something of equal value. Even if organs are thought to be of special moral importance and deserving of heightened respect, a paired organ exchange manifests the appropriate appreciation for the values implicated by the transaction. Such an exchange hardly involves the type of devaluation of the human body to which an outright market could give rise.

Third, in light of First Amendment constraints on the government's lawmaking powers, the commodification objection is not a constitutionally legitimate basis for laws banning organ sales or exchanges. While there are many other justifications that can support such measures, the belief that these acts improperly commodify or show insufficient respect for the human body may not be used as the basis for a prohibition due to the First Amendment.¹⁷⁰

Selling one's organs would generally not be considered a form of expressive conduct; people do not engage in such transactions in order to communicate an idea.¹⁷¹ However, when the government seeks to prohibit such sales to prevent commodification, the *government* is claiming that such acts *do* have an expressive component—they express disrespect for the human body and convey the actor's view that the body is a commodity subject to market exchanges. Indeed, banning such sales out of concerns about commodification prohibits this conduct *precisely because* of the message it conveys. Laws that regulate acts because the government finds the ideas they express to be

170. U.S. CONST. amend. I ("Congress shall make no law . . . abridging the freedom of speech . . ."). Of course, the fact that a few legislators might have been motivated to vote for such a law due to such concerns is not a basis for invalidating it. See *United State v. O'Brien*, 391 U.S. 367, 384 (1968) ("What motivates one legislator to make a speech about a statute is not necessarily what motivates scores of others to enact it We decline to void [a law] . . . which could be reenacted in its exact form is the same or another legislator made a 'wiser' speech about it."). My argument is simply that the government is not permitted to argue that preventing commodification is a justification for a ban on organ selling or paired organ exchanges, were such a ban to be challenged in court.

171. Although, as I argued earlier, participating in a paired organ exchange to save the life of the loved one may be seen as a moving symbolic gesture expressing love and devotion. See *supra* notes 121-126 and accompanying text.

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repugnant are subject to strict scrutiny under the Speech Clause.¹⁷²

Consider, for example, *Spence v. Washington*, wherein the Supreme Court struck down an ordinance that prohibited people from superimposing peace signs or other symbols in front of an American flag.¹⁷³ The Court ruled that if the government interest at stake in prohibiting Spence's conduct was "preserving the national flag as an unalloyed symbol of our country," then it "is directly related to expression," and subject to strict scrutiny.¹⁷⁴ Moreover, the Court stated that people may not "be punished for failing to show proper respect for our national emblem."¹⁷⁵

The Court reaffirmed this approach in *Texas v. Johnson*, the famous flag-burning case, stressing "If there is a bedrock principle underlying the First Amendment, it is that the government may not prohibit the expression of an idea simply because society finds the idea itself offensive or disagreeable."¹⁷⁶ It went on to declare, "[N]othing in our precedents suggests that a State may foster its own view of the flag by prohibiting expressive conduct relating to it."¹⁷⁷ The Court further held,

The State's argument cannot depend here on the distinction between written or spoken words and nonverbal conduct. That distinction, we have shown, is of no moment where the nonverbal conduct is expressive, as it is here, and where the regulation of that conduct is related to expression, as it is here.¹⁷⁸

This doctrine is by no means limited to cases involving the American flag. In *R.A.V. v. City of St. Paul*, petitioner burned a cross in the yard of an African-American family, and was charged with violating a local ordinance that prohibited "plac[ing] on public or private property a symbol, [or] object . . . including, but not limited to, a burning cross or Nazi swastika, which one knows or has reasonable grounds to know arouses anger, alarm or resentment in others on the basis of race, color, creed, religion, or gender"¹⁷⁹ In striking down the statute, the Court held, "The First Amendment generally prevents government from proscribing speech or even expressive conduct because of disapproval of the ideas expressed."¹⁸⁰

172. See, e.g., *Clark v. Cmty. for Creative Non-Violence*, 468 U.S. 288, 295 (1984) (holding that a statutory prohibition on conduct is permissible under the First Amendment if, among other things, it "is not being applied because of disagreement with the message presented"); *United States v. O'Brien*, 391 U.S. 367, 375 (1968) (holding that conduct may not generally be regulated simply because it "express[es] views" with which the government disagrees).

173. *Spence v. Washington*, 418 U.S. 405 (1974).

174. *Id.* at 415.

175. *Id.* at 412; see also *Street v. New York*, 394 U.S. 576, 593 (1969) (holding that a person may not be punished because he "failed to show the respect for our national symbol which may properly be demanded of every citizen").

176. *Texas v. Johnson*, 491 U.S. 397, 414 (1989).

177. *Id.* at 415.

178. *Id.* at 416.

179. 505 U.S. 377, 380 (1992) (quoting ST. PAUL, MINN., LEGIS. CODE § 292.02 (1990)).

180. *Id.* at 382 (internal citations omitted).

Although the ordinance, as authoritatively construed by the Minnesota Supreme Court, prohibited only conduct amounting to “fighting words,”¹⁸¹ it nonetheless targeted such conduct only when it expressed animus toward certain groups. The Court noted that the ordinance applied only to displays that “insult[ed], or provoke[d] violence ‘on the basis of race, color, creed, religion, or gender.’”¹⁸² Consequently, “[d]isplays containing abusive invective, no matter how vicious or severe, [we]re permissible unless they [we]re addressed to one of the specified disfavored topics.”¹⁸³ This made the statute unconstitutional, because “[t]he First Amendment does not permit St. Paul to impose special prohibitions on those speakers who express views on disfavored subjects.”¹⁸⁴

The cases discussed throughout this Section dealt with expressive conduct. As mentioned earlier, if the government seeks to prevent organ sales or exchanges because they commodify or exhibit disrespect for the human body, the government is treating those acts as expressive—that is, as conduct that conveys a particular message. If the government cannot prohibit acts because they express racial animus¹⁸⁵ or disrespect for the American flag, it surely cannot prohibit acts to maintain the dignity of, or promote respect for, the human body.

Finally, even if one believes that paired organ exchanges improperly commodify the human body and that Congress may constitutionally prohibit them, one must ask whether we should sacrifice the lives that a paired organ exchange system could save in order to secure the largely symbolic benefit of preventing some people from voluntarily commodifying their nonvital body parts to help loved ones.

B. *Preserving Altruism*

Paired organ exchanges are vulnerable to another criticism—that organ donation should be motivated by altruism and not by the desire to get something in return. Many scholars claim that organ donation should stem from a desire to help the community.¹⁸⁶ It has been argued that “[A]ltruistic donation

181. *Id.* at 381.

182. *Id.* at 391.

183. *Id.*

184. *Id.*

185. *But see* *Wisconsin v. Mitchell*, 508 U.S. 476, 487-88 (1993) (upholding sentencing enhancement for “bias-inspired conduct because this conduct is thought to inflict greater individual and societal harm”).

186. TRANSPLANTATION TASK FORCE REPORT, *supra* note 40, at 28 (“[Organ donation] promot[es] a sense of community through acts of generosity . . . [and attaches] value [to] social practices that enhance and strengthen altruism and our sense of community.”); Ann McIntosh, Comment, *Regulating the ‘Gift of Life’—The 1987 Uniform Anatomical Gift Act*, 65 WASH. L. REV. 171, 178 (1990) (“The donor’s experience in enhancing or saving another’s life brings the social community together.”); Murray, *supra* note 125, at 71 (“As individuals and as communities, we need the kinds of relationships

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has powerful psychological and social repercussions which are of value to society and interpersonal relationships. Altruistic donation is seen as a free expression of important human values as well as of communal commitments.”¹⁸⁷

One might claim that a donor in a paired organ exchange is motivated primarily by the desire to help a loved one, and that such an act does not demonstrate the selflessness and dedication to the public interest that an unrestricted donation conveys.¹⁸⁸ I find this objection unpersuasive on several grounds.¹⁸⁹ First, nearly all living organ donations are currently made to a family member of the donor. A paired organ exchange system is no less altruistic than the status quo; it is merely more effective in matching available organs with compatible recipients. Second, I reject the premise that a donor in a paired organ exchange is not acting altruistically. Donating an organ is an act of generosity and love, whether the recipient is a family member, friend, or stranger. Submitting to an invasive procedure to save the life of a loved one is a selfless act of courage and compassion that should be encouraged and facilitated.¹⁹⁰

VI. CONCLUSION

A paired organ exchange program would be the ideal supplement to the U.S. organ procurement system. Paired organ exchanges promise to increase the number of organs available for transplantation while avoiding the most

that gifts make possible . . . [G]ifts of the body such as blood, tissues, and organs are an important and powerful way in which we affirm our relationships with other members of our community.”).

187. Cherry, *supra* note 51, at 6.

188. Put somewhat less charitably, “[o]nce the donor is getting something more than a warm glow in return for consent to organ removal, the act is no longer properly called a donation at all, and so consent for organ removal no longer expresses an altruistic concern for the beneficiaries of transplanted organs.” T. Tomlinson, *Inducements for Donation: Benign Incentives or Risky Business?*, 24 TRANSPLANTATION PROC. 2204, 2205 (1992).

189. Although this is not necessary to my argument, it is also worth reconsidering the centrality of altruism to our organ procurement system. “[I]n our society, the basics of life—food, shelter, health care—are already sold.” Andrews, *supra* note 161, at 477. In organ transplantation, everyone receives compensation—including surgeons, nurses, and hospitals—*except* for the donor. While “hospitals make volumes of money from transplantation, physicians and associated health professionals advance careers and incomes, drug companies profiteer, and the medical-industrial complex is enriched, the original donor of tissues is expected to be altruistic.” Dickens, *supra* note 161, at 905. Moreover, restricting compensation for organ donation unfairly allows society as a whole to gain the ostensible benefits of altruism, while the most serious burdens are placed on the shoulders of patients facing an organ shortage. T.G. Peters, *Life or Death: The Issue of Payment in Cadaveric Organ Donation*, 265 JAMA 1302, 1303 (1991) (“[O]ur unwavering belief that altruism must prevail dooms some of our own patients who could be saved.”). If altruism is truly a societal good, then it should be imposed in an area where everyone incurs part of the cost of fostering it.

190. This is made even more apparent by the fact that some people will not help relatives in need. See *McFall v. Shimp*, 10 Pa. D. & C.3d 90, 90 (C.P. 1978) (“Morally, this decision [to donate bone marrow to a “close relative”] rests with defendant and, in the view of the court, the refusal of defendant is morally indefensible. For our law to *compel* defendant to submit to an intrusion of his body would change every concept and principle upon which our society is founded.”).

serious moral quandaries associated with financial incentives. They offer patients a ray of hope by allowing them to look not only to their own close friends and families for compatible organs, but to the close friends and families of the thousands of others patients on the transplant waiting list. Paired organ exchanges bring strangers together to save lives; nothing can be more compatible with the tenets underlying the American organ procurement system.