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The Price of Life: $50,000 for an Egg, Why Not $1,500 for a Kidney? An Argument to Establish a Market for Organ Procurement Similar to the Current Market for Human Egg Procurement

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THE PRICE OF LIFE: $50,000 FOR AN EGG, WHY NOT $1,500 FOR A KIDNEY? AN ARGUMENT TO ESTABLISH A MARKET FOR ORGAN PROCUREMENT SIMILAR TO THE CURRENT MARKET FOR HUMAN EGG PROCUREMENT

I. INTRODUCTION

Organ transplantation once again became a major headline when basketball star Alonzo Mourning announced his retirement from professional basketball on November 24, 2003, because of a life-threatening kidney disease which required an immediate kidney transplant.¹ Within the next two days, nearly 30 people had called the Kidney and Urology Foundation of America asking to donate a kidney specifically to Mourning.² Less than one month later, an unidentified family member donated a kidney to Mourning, who underwent a successful transplant.³ Mourning was very fortunate; in 2000, the average waiting period for a kidney transplant was 1,195 days, over 3 years.⁴

Solid organ transplants became a medical life-saving reality when Dr. Joseph Murray successfully transplanted a kidney from one identical twin to his brother on December 23, 1954.⁵ The progress of organ transplantation was slow, due partly to limited physiological knowledge and partly to doctors’ initial inability to control organ rejection.⁶ However, success did finally come for organs other than kidneys: the first successful

⁶.  PRICE, supra note 5, at 3 n.11 (noting that initial transplants were only performed between identical twins in order to avoid rejection problems).
liver transplant was performed in 1967, the first successful heart transplant was in 1968, and the first successful single lung transplant came in 1983. A major medical advance came in 1983 when cyclosporine, an immunosuppressant drug that reduces the probability of organ rejection, was first approved for use. This discovery enabled researchers to switch their focus solely from living organ donors to cadaveric organ donors. These advances in transplantation medicine inevitably led to an increased demand for organ transplants evidenced by a long waiting list that had formed by 1993.

The supply of transplantable organs has never been able to keep pace with the demand for transplantable organs, resulting in a shortage. As of January 16, 2005, there were 87,315 people in the United States on a waiting list for an organ transplant. This number, however, does not represent the actual organ shortage. The actual shortage of transplantable organs is measured by the increase in the number of people on the organ waiting list from one year to the next. At the end of 2001, there were

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7. *Id.* at 3 n.12; UNOS timeline, at http://www.unos.org/whoWeAre/history.asp (last visited Aug. 19, 2004).
10. 2003 UNOS Annual Report, *supra* note 9, at table 1.3 (showing that as of 1993, there were 31,694 people waiting for organ transplants); see also *Kaserman & Barnett,* supra note 5, at 8 (speculating that transplant waiting lists for cadaveric organs began to appear as early as the 1970s).
11. *Kaserman & Barnett,* supra note 5, at 2 (stating that the number of organs supplied each year is far below the number demanded for transplant). This is also evidenced by the fact that 6,385 people died in 2002 while awaiting an organ transplant. 2003 UNOS Annual Report, *supra,* note 9, at table 1.7.
13. David Kaserman, *Markets for Organs: Myths and Misconceptions,* 18 J. CONTEMP. HEALTH L. & POL’Y 567, 569–73, 579 (2002) (addressing four of the main economic misconceptions relating to proposals for organ markets commonly seen in academic literature and identifying one as assuming that the number of patients on the transplant waiting list is the direct measure of the shortage).
14. *Id.* at 571. Kaserman defines a shortage as “a condition in which the quantity of a product demanded exceeds the quantity supplied at the existing price.” *Id.* at 570 (emphasis added). Under existing policy in the United States, the price for organs is zero. Kaserman and Barnett argue that if the price for organs were raised, even minimally, this would result in an increase in the supply of transplantable organs, thereby eliminating the current shortage. *Kaserman & Barnett,* *supra* note 5,
80,586 people waiting for an organ transplant.\textsuperscript{15} At the end of 2000, there were 75,006 people on the waiting list, a difference of 5,580.\textsuperscript{16} This number represents the actual shortage of organs for the year 2001.\textsuperscript{17} Interestingly, in 2001, 6,584 people died while on the organ transplant waiting list.\textsuperscript{18} These figures suggest that if organ donations were increased to a level sufficient to alleviate the shortage, fewer people would have died while awaiting an organ transplant.\textsuperscript{19}

This Note proposes that a system of financial compensation, similar to the system already in place for egg (oocyte) donation, should be established for organ donation to increase the supply of transplantable organs and alleviate the current critical shortage. Financial compensation for the donation of human eggs is used as a basis for comparison because eggs, like organs, are not renewable; there is a fixed supply of each within the body.\textsuperscript{20} Additionally, the process of harvesting eggs is physically invasive, as is the process for harvesting human organs.\textsuperscript{21}

Part II of this Note briefly describes the current procurement systems for organ and egg donation, proposed methods to increase organ donation, and the scientific background and historic legal treatment of both organ

\textsuperscript{15} 2003 UNOS Annual Report, supra note 9, at table 1.3.
\textsuperscript{16} Id.
\textsuperscript{17} Kaserman, supra note 13, at 571. It is important to note that the possible supply of transplantable organs each year far exceeds the shortage of organs. See generally Ellen Sheehy, et al., Estimating the Number of Potential Organ Donors in the United States, 349 NEW ENG. J. MED. 667 (2003). Thus, there is room to grow and increase the supply of transplantable organs from an underused supply. Id. at 667. The Sheehy study analyzed the size of the possible pool of organ donors and assessed various ways to increase donation. Id. The estimated number of potential organ donors for 1999 was 13,317, while the actual number of donors was 5,849. Id. at 669 (table 1). The study recognized three areas where donations could be increased: hospital referral to the Organ Procurement Organizations (OPOs), requests made to families, and the consent rate of families. Id. at 672. See infra note 74 for a description of the functions of OPOs. Of these three options, “[t]he greatest opportunity for increasing the rate of donation . . . lies in increasing the consent rate.” Id. at 673. The study found that only 54% of families consented to donation, while 80% of hospitals referred potential donors to OPOs and 84% of family requests were made. Id. at 672. A system of financial compensation would likely result in a higher rate of consent from potential donors’ families, thus increasing the supply of transplantable organs and alleviating the critical shortage. Id. at 673.
\textsuperscript{18} 2003 UNOS Annual Report, supra note 9, at table 1.7.
\textsuperscript{19} Id. The shortage of organs for 2001 was 5,580 while the number of people who died while on the waiting list was 6,584. Id. Assuming that the shortage directly resulted in deaths for those awaiting transplants, elimination of the shortage would mean that only 1,004 people would have died while awaiting an organ transplant in 2001.
\textsuperscript{20} EMILY JACKSON, REGULATING REPRODUCTION: LAW, TECHNOLOGY AND AUTONOMY 165–66 (2001) (human eggs do not regenerate after birth, unlike human sperm, which are constantly renewed within the body).
\textsuperscript{21} Id. at 166. See infra notes 30–46, 117–34 and accompanying text (describing the medical procedures required for harvesting organs and egg donation).
donation and egg donation in the United States. Part III describes the proposal for financial compensation of organ donors and illustrates how it is justified because it is analogous to the current financial compensation system for egg donors.

II. HISTORY

A. The Current System of Organ Procurement and Allocation

Organ transplantation policy evolved amidst a system of altruism. Before immunosuppressant drugs were approved by the Food and Drug Administration (FDA) in the early 1980s, most organ transplants were procured from living donors, generally relatives of the recipient: “organ transplant candidates, in effect, brought the necessary donor with them when they checked into the hospital for the transplant operation.” However, with the emergence of immunosuppressant therapy, cadaveric organ donor transplantation became a viable alternative to living organ donor transplantation. This in turn caused recipients who were unable to find their own living donor to form waiting lists for cadaveric donor organs.

Third party payment for organ transplants became increasingly prevalent during the 1970s and 1980s with the Federal End Stage Renal Disease Program and many private insurance companies providing coverage for the costs of organ transplants. This coverage also increased the available pool of organ recipients, again leading to a longer waiting list and a larger shortage.

22. See infra Part II.
23. See infra Part III.
24. Kaserman & Barnett, supra note 5, at 7–9 (describing the technological evolution of organ transplants and arguing that “a system of ‘altruistic’ supply seemed to make sense in such a setting.”).
25. Id. at 7. This was due to tissue-matching and organ rejection problems. If a donor could not find a compatible living donor she generally would not receive a transplant because of the lack of immunosuppressant drugs that would defeat rejection. Id.
26. Id. at 8.
27. Id.; see also supra note 10 and accompanying text (speculating that waiting lists for organs began to form in the 1970s).
28. 42 U.S.C. § 426-1 (2000); 42 U.S.C. § 1395rr (2000); see also Kaserman & Barnett, supra note 5, at 8 (during the mid-1980s, private insurance companies increasingly began to provide coverage for . . . organ transplants.”). This movement began in part because organ transplantation moved from the realm of experimental treatment to accepted medical treatment with its increased success rate. Id.
29. Kaserman & Barnett, supra note 5, at 8 (stating that third party payment for kidney dialysis and transplants "undoubtedly increased the effective demand for kidney transplants . . . by
There are two types of organ donors: living and cadaveric. Before immunosuppressant drugs were widely available, only related living donors were used in organ transplants and almost exclusively for kidney transplants. Today, living donors are still mainly used for kidney and, more recently, liver transplants. Three requirements must be met before a living donor transplant will be performed: (1) the chance of success must be high; (2) the risk to the donor must be low and acceptable to the donor, the recipient, and the physician; and (3) the living donor must give her informed consent for the donation. Once these conditions are satisfied, keeping many more potential transplant recipients alive for much longer periods of time through dialysis treatments. This increase in the available recipient pool, with no similar increase in the available donor pool, has led to greater shortages of transplantable organs. Id. 30. Richard D.M. Allen et al., The Living Organ Donor, in ORGAN AND TISSUE DONATION FOR TRANSPLANTATION 162 (Jeremy R. Chapman et al. eds., 1997); Mark Deierhoi, Organ Recovery From Cadaveric Donors, in ORGAN AND TISSUE DONATION FOR TRANSPLANTATION, supra, at 152. Within the cadaveric donor category there is a further distinction between non-heart-beating cadaveric donors and brain dead cadaveric donors. Kelly Ann Keller, Comment, The Bed of Life: A Discussion of Organ Donation, Its Legal and Scientific History, and a Recommended “Opt-out” Solution to Organ Scarcity, 32 STETSON L. REV. 855, 875 (2003). Non-heart-beating cadaveric donors are declared dead upon a cessation of cardiac activity. Id. Brain dead cadaveric donors are declared dead when the entire brain is void of any activity. Id. For the purposes of this Note, non-heart-beating donors and brain dead donors will be treated as a single group called cadaveric donors. 31. Allen et al., supra note 30, at 162–63; see also supra notes 5–9 and accompanying text. Recently, many transplant centers have begun to perform paired organ exchanges as an alternative to related living donor transplants. Karen Rivedal, Teamwork Makes Transplants Possible, WIS. STATE J., Nov. 23, 2003, at I-4. Paired organ exchanges “allow a donor who is incompatible with an intended recipient to instead give the organ to another couple, in exchange for a usable organ from that couple.” Id. In addition to helping save a loved one’s life, the organ donors also benefit in that if they later become ill and are in need of an organ transplant, they are automatically placed at the top of the waiting list. Id. For a more in-depth analysis of paired organ exchanges see Michael T. Morley, Increasing the Supply of Organs for Transplantation Through Paired Organ Exchanges, 21 YALE L. & Pol’y REV. 221 (2003). For an article opposing paired organ exchanges, arguing that they violate the no valuable consideration provision of the National Organ Transplant Act (NOTA), see Jerry Menikoff, Organ Swapping, 29 HASTINGS CTR. REP. No. 6, at 28 (1999). 32. Allen et al., supra note 30, at 162. Every person has two kidneys, but needs only one to maintain proper functioning, which allows the donor to give up one kidney if she chooses. Id. at 169. Living liver donation is a more recent medical advance, with its first success in 1989. UNOS timeline, at http://www.unos.org/whoWeAre/history.asp (last visited Aug. 19, 2004). While each person has only one liver, it “can be thought of as two separate organs.” Allen et al., supra note 30, at 186. Thus, living liver donors will have half of their liver surgically detached and removed for transplantation. Id. Living liver donation recipients are most often children with hereditary liver disease. Id. In addition to living kidney and liver donations, some hospitals perform living lung, pancreas, or small bowel transplants as well, though with less success. Id. at 192–94. 33. Allen et al., supra note 30, at 162. Allen recognizes that the first two requirements are easily established by the medical team supervising the transplant. Id. However, the third requirement is more troublesome because the medical team must determine if the donor is experiencing outside pressure from family and the transplant team to consent to the donation. Id. This requirement is where many
the donor and the recipient must be tissue-matched to ensure a successful transplant. The donor is then screened for various diseases that would preclude donation including HIV, hepatitis, hypertension, diabetes, cardiovascular disease, and respiratory disease. Both the recipient and the donor undergo their operations in the same hospital. Once the organ is removed from the donor, it is cooled with organ preservation fluid and almost immediately transplanted into the recipient.

As medical technology advanced, especially in the area of immunosuppressive therapy, cadaveric organ donor transplantation became a feasible alternative to living organ donor transplantation. Cadaveric donors are screened for infectious diseases, cancers, diabetes, and other diseases. Additionally, specific medical tests are run for each organ that may be transplanted to assess its viability. Once a cadaveric donor is identified, consent must be obtained for the organ donation. If possible, cadaveric donors are generally kept on life support systems after brain death to keep the organs “alive” and functioning as long as possible.

Harvesting organs involves many surgeons working simultaneously. Before the harvesting operation begins, the cadaveric donor has cold preservation fluid pumped into her bloodstream to extend the viability of the organs intended for transplantation. The heart is removed first, then the lungs, liver, pancreas, and kidneys. Additionally, the skin, corneas, and bone marrow can be removed for transplantation.

ethical considerations come into play. Id. at 173. Initially a blood test is done, and if there is a match, further tissue-typing of antibodies is performed to ensure that the risk of rejection will be low. Id. at 172 (table 10.3 shows absolute and relative exclusion criteria for living kidney donations).

43. Id. at 157.
44. PRICE, supra note 5, at 159.
45. Deierhoi, supra note 30, at 159.
46. Most recently, Dr. John Barker, director of plastic surgery research at the University of Louisville in Kentucky, claimed that his team has all the necessary medical knowledge to transplant a human face. William Allen, Louisville Doctors Studying Face Transplants Weigh Ethical Issues, THE COURIER-JOURNAL (Louisville, Ky.), Nov. 16, 2003, at 1A. Barker asserts that the medical procedure is essentially the same as a hand transplant, which was successfully
C. Legal Treatment of Organ Donation

In 1984, Congress passed the National Organ Transplant Act (NOTA), which implicitly implemented a policy of altruism by making it “unlawful for any person to knowingly acquire, receive, or otherwise transfer any human organ for valuable consideration for use in human transplantation.”\(^47\) The NOTA delegated the power to establish and operate an Organ Procurement and Transplantation Network (OPTN) charged with maintaining a national list of those waiting for organ donations and establishing nationwide procurement and allocation systems to the Secretary of the Department of Health and Human Services.\(^48\) The United Network for Organ Sharing (UNOS) has held the federal contract for operating the OPTN since its establishment in 1986.\(^49\) UNOS manages organ procurement and allocation for the entire United States.\(^50\)

47. 42 U.S.C. § 274e (2000); see also KASERMAN & BARNETT, supra note 5, at 8 (explaining that the NOTA was passed in response to pressure from the medical community due to a physician in Virginia who attempted to set up a brokerage business for human kidneys); Susan Hankin Denise, Regulating the Sale of Human Organs, 71 VA. L. REV. 1015 (1985) (providing a detailed account of the Virginia doctor and his attempt to broker human kidneys).

The NOTA specifically defines a “human organ” as “human (including fetal) kidney, liver, heart, lung, pancreas, bone marrow, cornea, eye, bone, and skin or any subpart thereof and any other human organ (or any subpart thereof, including that derived from a fetus) specified by the Secretary of Health and Human Services by regulation.” 42 U.S.C. § 274e(c)(1).

48. 42 U.S.C. § 274(a) (2000); 42 U.S.C. § 274(b)(2) (2000). It is important to note the difference between a system of organ procurement and a system of organ allocation. Organ procurement involves acquiring transplantable organs from donors. Kaserman, supra note 13, at 575. Organ allocation involves distributing those transplantable organs to recipients on waiting lists. Id.


50. Id. UNOS set up and manages the following allocation process for transplantable organs. Once organs are donated, the local OPO alerts the UNOS organ center and a donor/recipient match is run for each potential transplantable organ. UNOS, at http://www.unos.org/whatWeDo/organCenter.asp (last visited Aug. 19, 2004). The match list is then ranked according to specific criteria for each organ (blood type, size of organ, and the medical emergency of the recipient, for example). Id. The OPO that procured the organ calls the transplant center that has the highest listed patient and offers the organ. Id. Successive calls are made until the organ is placed. Id. Arrangements are then made for transportation of the organ and for the transplant surgery. Id. Currently, every hospital that has a transplant program, every OPO, and every histocompatibility lab in the United States is a member of UNOS. UNOS, at http://www.unos.org/whoWeAre/membership.asp (last visited Aug. 19, 2004). There are 59 individual OPOs in the United States today, divided among 11 regions, each covering a specific geographic area. UNOS, at http://www.unos.org/whoWeAre/OPOs.asp (last
In addition to the NOTA, all states and the District of Columbia have adopted some form of the Uniform Anatomical Gift Act (UAGA). The UAGA allows anyone over the age of 18 to make, or refuse to make, an anatomical gift of a part of their body. The UAGA defines a part as “an organ, tissue, eye, bone, artery, blood, fluid, or other portion of a human body.” The UAGA provides guidelines for authorizing a gift and for removal of any organs. Finally, the UAGA prohibits any person from “knowingly, for valuable consideration, purchas[ing] or sell[ing] a part for transplantation or therapy, if removal of the part is intended to occur after the death of the decedent.”

Thus, both state and federal laws have prohibited the sale of human organs for nearly two decades. However, these prohibitions have not stopped some from trying to sell their organs.


51. The Uniform Anatomical Gift Act (UAGA) was originally drafted in 1968 (and revised in 1987); by 1973 every state and the District of Columbia had adopted some form of it. UNIF. ANATOMICAL GIFT ACT Prefatory Note, 8A U.L.A. 4–6 (2003).


53. UNIF. ANATOMICAL GIFT ACT § 1(7), 8A U.L.A. 18 (2003). There is some debate over whether this definition is broad enough to include the sale of human eggs, but it is generally agreed upon that it does not prohibit the sale of human eggs. See generally Susan L. Crockin, Statutory and Case Law Governing Oocyte and Embryo Donation, in PRINCIPLES OF OOCYTE AND EMBRYO DONATION 241, 254 (Mark V. Sauer ed., 1998) (surveying various state and federal laws prohibiting the sale of babies and organs to determine if they apply to the sale of human eggs).

54. UNIF. ANATOMICAL GIFT ACT § 2, 8A U.L.A. 24–27 (2003). In order to make an anatomical gift the donor must execute a signed document stating her intent to donate. Id. § 2(b). Additionally, the document of gift may name a specific doctor or surgeon who is to perform the operation. Id. § 2(d). Finally, any anatomical gift may be revoked or amended in writing or orally in the presence of witnesses. Id. § 2(f).

55. UNIF. ANATOMICAL GIFT ACT § 4, 8A U.L.A. 38–39 (2003). This section authorizes a coroner, medical examiner, or other local public health official to release and permit the removal of the donor’s organs for transplantation or therapy in accordance with the donor’s wishes. Id.

56. UNIF. ANATOMICAL GIFT ACT § 10(a), 8A U.L.A. 62 (2003). This language seemingly leaves the sale of human organs from living donors unregulated. In fact, the Comment to this section of the UAGA specifically states that “[i]t does not cover the sale by living donors if removal is intended to occur before death.” UNIF. ANATOMICAL GIFT ACT § 10 cmt., 8A U.L.A. 62 (2003) (emphasis added). However, the NOTA provisions presumably would still work to prohibit the sale of human organs from a living donor. See 42 U.S.C. § 274e. It is also worth noting that the 1968 UAGA did not include a section prohibiting the sale of human organs, so this practice was completely unregulated until the 1984 NOTA was enacted. UNIF. ANATOMICAL GIFT ACT § 1 et seq., 8A U.L.A. 109–55 (2003).

57. See supra notes 47–56 and accompanying text.

58. Recently, a British man listed his kidney for sale on the online auction site eBay for a minimum bid of $85,000 in order to raise money for treatment of his daughter’s cerebral palsy. EBay Removes Ad for Sale of Human Kidney, at http://www.cnn.com/2003/TECH/internet/12/05/britain.kidney.ap/index.html (last updated Dec. 5, 2003). Representatives of eBay quickly removed the ad citing a policy forbidding the sale of any human body parts on the auction site. Id.
D. Proposed Reforms to the Current System of Organ Procurement  
Designed to Increase Organ Donation

The first system that has been proposed for increasing organ donation is termed presumed consent or opt-out. This system begins with an initial presumption that organs will be procured unless individuals have specifically stated their intent to the contrary. Thus, potential cadaveric donors will have their organs removed for transplantation under this system, unless they have affirmatively opted-out at some point during their life. This would presumably increase the number of transplantable organs because it requires affirmative action to become a non-donor, as opposed to the current system in the United States, which requires affirmative action to become a donor. Thus those who do not take action will be donors under a presumed consent system when they would not be donors under the current system.

A number of European countries have adopted this regime and some, but not all, have seen an increase in organ procurement rates. Additionally, many states in the United States have adopted a presumed consent regime for cornea procurement. Finally, the UAGA allows for organs to be removed under a presumed consent regime, with certain qualifications. While the presumed consent system has been successfully

59. Keller, supra note 30, at 861.

60. Paul Michielsen, Informed or Presumed Consent Legislative Models, in ORGAN AND TISSUE DONATION FOR TRANSPLANTATION, supra note 30, at 344. See generally Linda C. Fentiman, Organ Donation as National Service: A Proposed Federal Organ Donation Law, 27 SUFFOLK U. L. REV. 1593 (1993) (proposing that the United States adopt a system of presumed consent for organ donation and presenting a draft of the proposed law).

61. This opting-out could be done in many possible ways, through a will, a non-donor card, or a driver’s license designation of non-donor. Keller, supra note 30, at 861.

62. See generally supra notes 24–29 and accompanying text.

63. Michielsen, supra note 60, at 358 (concluding that “[t]he bulk of evidence indicates that presumed consent laws create an environment more likely to lead to higher rates of organ retrieval than informed consent.”).

64. PRICE, supra note 5, at 86–89. Thirteen of 28 European countries surveyed had some form of presumed consent regime. Id. After Belgium passed its law there was a 114% increase in kidneys available for transplant. Id. at 89. However, the Netherlands and Germany, which adopted similar regimes, did not experience similar increases. Id.


66. UNIF. ANATOMICAL GIFT ACT § 4, 8A U.L.A. 38–39 (2003) (allowing for organ procurement via presumed consent provided that a reasonable effort has been made to determine the decedent’s wishes and the wishes of the decedent’s family).
implemented in a variety of contexts, there are several reasons why this is not an adequate solution to the current shortage of transplantable organs in the United States.\textsuperscript{67}

The main criticism of a presumed consent regime is that it results in a reduction of personal autonomy or, phrased differently, it causes coercion.\textsuperscript{68} This system makes silence the equivalent of consent.\textsuperscript{69} Some people may fail to consider their own mortality and never make known their wishes not to be organ donors; thus, they lose their autonomy and are forced into having their organs harvested despite their wishes to the contrary.\textsuperscript{70}

The second proposed reform for increasing the supply of transplantable organs is simply increasing public awareness; this is best exemplified by a recently-passed amendment to the NOTA.\textsuperscript{71} The bill provides funding for demonstration projects, education, and public awareness of organ donation, with the intent of increasing the rate of organ donation.\textsuperscript{72} This

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\textsuperscript{67} See infra notes 68–70 and accompanying text.

\textsuperscript{68} PRICE, supra note 5, at 113. Recently the United Kingdom rejected the adoption of a presumed consent regime for organ donation because of the belief that “consent must be obtained to use human organs and tissue whether from the living or after death.” Reuters, UK Rules Out Presumed Consent for Organ Donation (Jan. 14, 2004), at http://www.reuters.com/printerFriendlyPopup.jhtml?type=topNews&storyID=4128579 (statement of Health Minister Rosie Winterton). British government officials also noted that “[there is no evidence that a policy of presumed consent increases the number of organs for transplantation.” Id.

\textsuperscript{69} PRICE, supra note 5, at 113. “There is a distinct possibility of organs being removed under a [presumed consent] regime where the deceased has remained silent, despite the deceased possessing an objection to organ donation.” Id.

\textsuperscript{70} Id. Presumed consent “takes advantage of the public’s general reluctance to dissent and ignorance or temporary confusion of those who do not wish to donate but do not register their objection.” Id. (citation omitted).

\textsuperscript{71} Organ Donation and Recovery Improvement Act, S. 573, 108th Cong. (2003). The stated purpose of the bill is to:

improve the overall process of organ donation and recovery, enhance our knowledge base in these fields, encourage novel approaches to this growing problem [of a critical shortage of transplantable organs] and increase the number of organs available for transplants each year. The bill also seeks to remove potential barriers to donation, while identifying and focusing on best practices in organ donation.


\textsuperscript{72} S. 573, 108th Cong. § 4 (2003). The demonstration projects provision essentially allows for studies to be performed, in a clinical setting, to test how various incentives will affect organ donation rates. Id. The bill appropriates $15 million for fiscal year 2004 to be granted to states, hospitals, and other entities to carry out programs designed to increase organ donation. Id. § 4(e).

Another bill was introduced by Senator Frist on the same day called the Gift of Life Congressional Medal Act of 2003. S. 572, 108th Cong. (2003). This bill provides that organ donors (or their family in the case of cadaveric donors), will be eligible to receive a commemorative congressional medal to recognize their gift of life. Id. § 3. The purpose of this bill is to “encourage potential donors and enhance public awareness of the importance of organ donation to the over 80,000 Americans waiting

http://openscholarship.wustl.edu/law_lawreview/vol82/iss3/10
very conservative approach will fund clinical studies in an effort to increase awareness and ideally, rates of organ donation. 73 The bill also allows grants to be made to states and qualified Organ Procurement Organizations (OPOs) 74 for the purpose of reimbursing the travel expenses of living donors associated with organ donation. 75 However, the bill also provides that if the donor’s expenses are already paid by another source (an insurance policy, state program, or the organ recipient) then the living donor is not eligible to receive any further payment under the bill. 76 With this provision it is clear that the payment of travel expenses is not treated as financial compensation for donating an organ, thus the NOTA’s provision prohibiting valuable consideration for organ donation is left intact. 77

A third proposed reform to the current system of organ procurement is to increase the supply of transplantable organs through xenotransplantation (transplantation between species, generally from animals to humans). 78 The major medical obstacle with xenotransplantation is organ rejection due to physiological differences for a transplant.” 149 CONG. REC. S3330 (daily ed. Mar. 6, 2003) (statement of Sen. Frist).


74. S. 573, 108th Cong. § 3(a) (2003). OPOs are non-profit entities that perform the following functions: approaching families about organ donation after a loved one has died, determining the medical suitability of possible donors, increasing public awareness of organ donation, and managing the recovery, preservation and transportation of donated organs. UNOS, at http://www.unos.org/whoWeAre/OPOs.asp (last visited Aug. 19, 2004).

75. S. 573, 108th Cong. § 3 (2003). The bill also states that preference for funding shall be given to those who “are more likely to be otherwise unable to meet such expenses.” Id. § 3(b). For each fiscal year, 2004 through 2008, $5 million will be appropriated to fund this endeavor. Id. § 3(f).


77. The NOTA itself states that valuable consideration does not include the travel expenses of a living donor. 42 U.S.C. § 274e(c)(2) (2000) (“The term ‘valuable consideration’ does not include . . . expenses of travel, housing, and lost wages incurred by the donor of a human organ in connection with the donation of the organ.”).

78. David J.G. White, Xenotransplantation—A Solution to the Donor Organ Shortage, in ORGAN AND TISSUE DONATION FOR TRANSPLANTATION, supra note 30, at 446–47. White notes that the shortage of transplantable organs could be alleviated if xenotransplantation became an effective substitute because breeding programs of suitable animal donors could be set up to ensure that an adequate supply of animal organs are available for transplant. Id. at 447.

Xenotransplantation made headlines in 1984 when a baboon heart was transplanted into a 15 day-old infant, dubbed Baby Fae, who was born with an incomplete heart; she survived for 20 days. Frank Morgan, Babe the Magnificent Organ Donor? The Perils and Promises Surrounding Xenotransplantation, 14 J. CONTEMP. HEALTH L. & POL’Y 127, 142–44 (1997). However, xenotransplantation was not new in the 1980s; it began as early as the 1960s with patients receiving chimpanzee hearts and baboon kidneys. Id. at 142–43. More recently, scientists have been using pig pancreatic cells to treat diabetes in teenagers, reportedly with some success. A.S. Daar, Xenotransplantation: Recent Scientific Developments and Continuing Ethical Discourse, 35 TRANSPLANTATION PROCEEDINGS 2821 (2003).
between humans and animals. Additionally, there are major ethical and moral issues associated with xenotransplantation which are beyond the scope of this Note.

The final reform proposed for increasing organ donation is some sort of market system or financial compensation for organ donors. As a starting point, it is important to note that markets for human body parts already exist, specifically for blood, blood products, sperm, eggs, and even human hair. However, opponents of markets for human organs are quick to point out the distinction between the above products, usually termed tissues, and organs or body parts. These opponents claim that tissues are renewable, whereas organs are nonrenewable. The United States legal system has embraced this distinction by treating the sale of blood products to be the sale of services, not the sale of goods, implying that people do not have a property interest in their blood. Because of this renewable-nonrenewable

79. White, supra note 78, at 447–48; see also S. Gregory Boyd, M.D., Comment, Considering a Market in Human Organs, 4 N.C. J.L. & TECH. 417, 428–30 (2003) (discussing xenotransplantation as a new source of donor organs). A government body in Australia recently recommended that clinical trials should be carried out in transplanting pig tissues and organs into humans. Patrick Goodenough, Pig-to-Human Organ Transplant Trials Recommended in Australia, Cybercast News Service, Jan. 14, 2004, at http://www.cnsnews.com/ViewForeignBureaus.asp?Page=%5CForeignBureaus%5Carchive%5C200401%5CFOR20040114a.html (last visited Aug. 19, 2004). The recommendation was partly based on research at Massachusetts General Hospital where genetically modified pig kidneys were transplanted into baboons. Id. The grafts survived for 81 days, suggesting that rejection in xenotransplantation due to physiological differences between species could be controlled. Id.

80. For a succinct overview of the advantages and disadvantages of xenotransplantation see C. Hammer, Xenotransplantation, The Good, The Bad and The Ugly or How Far Are We to Clinical Application?, 35 TRANSPLANTATION PROCEEDINGS 1256 (2003).

81. See generally Boyd, supra note 79, at 417–18; David E. Jeffries, Note, The Body as Commodity: The Use of Markets to Cure the Organ Deficit, 5 IND. J. GLOBAL LEGAL STUD. 621 (1998) (describing various countries that currently employ a free market system for organ procurement).

82. RUSSELL SCOTT, THE BODY AS PROPERTY 180, 190 (1981). In fact, human teeth and hair were being sold on the open market as early as the Elizabethan era. Id. at 180.

83. Charles M. Jordan, Jr. & Casey J. Price, First Moore, Then Hecht: Isn’t it Time We Recognize a Property Interest in Tissues, Cells, and Gametes?, 37 REAL PROP. PROB. & TR. J. 151, 153 (2002) (stating that tissues are treated differently under the law than body parts); see also 42 U.S.C. § 274e(c)(1) (defining organ to specifically exclude blood and blood products).

84. “Current national and state laws permit both the donation and sale of regenerative tissue such as blood, sperm, ovum, cells, hair, and other such body products.” Gloria J. Banks, Legal & Ethical Safeguards: Protection of Society’s Most Vulnerable Participants in a Commercialized Organ Transplantation System, 21 AM. J.L. & MED. 45, 47 (1995). Banks’ statement is incorrect in a fundamental way; ovum (human eggs) are not regenerative: “each woman has a finite, if large, number of eggs.” JACKSON, supra note 20, at 165.

85. Perlmutter v. Beth David Hosp., 123 N.E.2d 792 (N.Y. 1954) (holding that the sale of blood is the sale of a service, not the sale of goods, so as to avoid products liability issues). Since Perlmutter, most states have codified its holding that blood sales are sales of services, not sales of goods. SCOTT, supra note 82, at 193. This distinction is supported by the assumption that the tissue being sold is “incidental to the provision of medical services.” Banks, supra note 84, at 73.
Despite the fact that the law does not recognize a generalized property interest in one’s body parts, many commentators and, more recently, even the American Medical Association (AMA) have advocated investigating some system of financial compensation for organ donors to increase the supply of transplantable organs. Suggestions have included a futures market for human organs, an open market for human organs, a tax incentive for organ donors, and a funeral stipend for the families of cadaveric organ donors.

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86. Moore v. Regents of the Univ. of Cal., 793 P.2d 479 (Cal. 1990) (holding that a patient whose cells were used for medical research that resulted in a large profit could not prevail against the researchers on a theory of conversion of his cells). See generally Helen R. Bergman, Comment, Moore v. Regents of the University of California, 18 AM. J.L. & MED. 127 (1992) (providing an in-depth analysis of the Moore decision). Some commentators argue that property interests should be recognized in body tissue and cells. See, e.g., Jordan & Price, supra note 83, at 152. “[T]he law has failed to address many of the legal issues raised by . . . medical innovations in an adequate fashion.” Id. at 153. Jordan and Price argue that existing property rights were created before explosive growth in the biotechnology industry, which has proved to be a “lucrative market for human tissue and cells.” Id. at 170. Thus, commentators argue that a right of commerciality in one’s body tissue and cells should be recognized. Id.

87. Assessing Initiatives to Increase Organ Donation Before the Subcomm. on Oversight and Investigations of the House Comm. on Energy and Commerce, 108th Cong. 51 (2003) (testimony of Robert M. Sade, Member, American Medical Association Council on Ethical and Judicial Affairs) [hereinafter Hearings]. The American Medical Association (AMA) “policy developed [in 2002] supports the scientific study of financial incentives and other motivators to increase the supply of organ donations from patients who recently died . . . . [F]inancial incentives are not intrinsically unethical, but may be ethical depending upon the balance of benefits and harms as established by factual data.” Id. UNOS supports the AMA position: “UNOS . . . endorsed the proposal to look at studies and support the study of financial incentives to see if there would be any benefit in the organ donation process with financial incentives.” Hearings, supra, at 43 (testimony of Robert Metzger, President-Elect, UNOS). However, both the National Kidney Foundation and the American Society for Transplant Surgeons oppose any financial compensation for organ donation. Hearings, supra, at 3, 59 (statement of Rep. Chairman Greenwood; testimony of Abraham Shaked, President, American Society of Transplant Surgeons).


89. For an article advocating the establishment of an international open market for human organs see Jason Altman, Organ Transplantations: The Need for an International Open Organ Market, 5 TOURO INT’L L. REV. 161 (1994); see also Clifton Perry, Human Organs and the Open Market, 91 ETHICS 63 (1980).

A futures market for human organs would allow individuals to form a contract where their organs and tissues would be delivered to the purchasing entity upon the donor's death.92 In exchange for the donor’s promise to donate, a certain sum would be paid to the donor’s estate for each organ or tissue successfully harvested.93 This proposal would apply only to procurement of organs, not to allocation, thus avoiding many potential problems.94 However, this system would likely not yield a large increase in organ donation because very few of the people who would form a futures contract would die in a manner that would allow for organ donation.95 Additionally, this system has the same failing as a presumed consent system: young, healthy people may often fail to consider their own mortality, and thus even if they wish to become donors, they may not take the necessary steps to form a futures contract ensuring that their organs will be donated upon their death.96

An open market for human organs would allow an individual to contract with a government agency for the donation of a specific organ upon the death of the donor.97 In exchange, the individual donor’s estate would receive some type of payment upon delivery of the organ after the donor’s death.98 This proposal differs from a futures market in that it could be applied not only to organ procurement, but to organ allocation as well, meaning that a prospective organ recipient could buy a new kidney or liver.99 This system is the most ethically unconscionable because of the costs associated with their donation from their federal adjusted gross income in computing their state income tax liability. Id. The annual loss in tax revenue due to the new law is estimated to be about $115,000. Xiao Zhang, Organ Donors Given a State Tax Deduction, WIS. STATE J., Jan. 31, 2004, at B1.

91. In 1994 Pennsylvania enacted a law creating the Organ Donation Awareness Trust Fund, allowing families of organ donors to receive compensation for funeral expenses. 1994 Pa. Legis. Serv. 102 (West); see also Boyd, supra note 79, at 459–60 (describing how the Pennsylvania law has been implemented and its early success).
93. Id.
94. Id. See infra Part III.A (discussing potential problems with an organ market).
95. KASERMAN & BARNETT, supra note 5, at 4. “Of the 2 million or so deaths that occur in the United States each year, estimates indicate that somewhere between 13,000 and 29,000 occur under circumstances that would allow the organs of the deceased to be transplanted.” Id. Only between 0.0065% and 0.0145% of deaths each year could possibly result in organ donation, therefore a futures market would seem to yield a very small increase in the supply of transplantable organs.
96. See supra note 70 and accompanying text.
97. Altman, supra note 89, at 178.
98. Id. at 179.
99. Id. at 180–81.
inequities it would create: it would allow wealthy people to buy new organs, while poor people would be left to die for want of a transplant.100

Tax incentives for organ donation could operate in one of two ways.101 First, if individuals agree to donate their organs upon death, they could receive a refundable income tax credit during their lifetime.102 Second, the Internal Revenue Code could be amended to allow both living and cadaveric organ donations to qualify as a charitable deduction for income, gift, and estate tax purposes.103 These tax incentive systems create the same problem as a futures market: people who agree to donate today and receive a tax credit may not ultimately die in a way that allows for their organs to be donated.104 Additionally, the problem of young, healthy people not considering their own mortality is also relevant here and may lead to a very small increase in the number of organs available for transplant.105

The final proposed system of financial compensation for organ donation, a funeral stipend to the donor’s family, has been implemented in Pennsylvania.106 Citizens of that state are allowed to make contributions to the Organ Donation Awareness Trust Fund when renewing their driver’s licenses; this fund is used to compensate the organ donor’s family for reasonable funeral expenses.107 Any payments from the fund are made directly to the funeral home or other organization, not to the donor’s family, thus avoiding potential problems of coercion and improper motives for consenting to the donation.108 While this is a step in the right direction, there is no evidence that funeral stipends alone will alleviate the entire shortage of transplantable organs in the United States.

100. Banks, supra note 84, at 82–83 (“Society must ensure . . . that a commercial system does not condone ‘life exchanges’ between vulnerable citizens and rich, powerful organ recipients.”).
101. Parker et al., supra note 90, at 175.
102. Id.
103. Id.; see also supra note 90 (describing the newly enacted tax deduction for living organ donors in Wisconsin).
104. See supra note 95 and accompanying text.
105. See supra note 70 and accompanying text.
107. 20 PA. CONS. STAT. § 8621, § 8622(b)(1) (2003). In addition to funeral expenses, the law also allows payment for “reasonable hospital and other medical expenses . . . and incidental expenses incurred by the donor or donor’s family in connection with making a vital organ donation.” Id. Payments are capped at $3,000 per donor. Id.
108. 20 PA. CONS. STAT. § 8622(b)(1) (2003). This provision ensures that the statute complies with the NOTA’s prohibition on payment of valuable consideration in exchange for organs. 42 U.S.C. § 274e.
E. The Current System of Egg Donation and Allocation

The United States government does not currently regulate egg donation in the same way that organ donation is regulated. It is, therefore, left to private companies to retrieve eggs from donors and allocate them to recipients. The internet has proven to be a haven for these companies. Generally, potential donors fill out an application and go through a screening process, completely designed and administered by the facility. Egg recipients then choose their own donor, based on whatever characteristics they desire. Egg donors are usually compensated between


110. “The United States . . . with its currently unregulated, market-driven system of oocyte donation, has a donor pool that adequately meets demand.” Baum, supra note 109, at 139; see also Cynthia B. Cohen, NEW WAYS OF MAKING BABIES: THE CASE OF EGG DONATION xiii–xiv (Cynthia B. Cohen ed., 1996) (briefly describing the procedures and policies of four egg donation clinics).

111. Organizations such as Egg Donation, Inc., at http://www.eggsdonor.com/ (last visited Aug. 19, 2004), and OPTIONS National Fertility Registry, Inc., which was forced to shut down operations and its internet site as recently as October 10, 2003 at 10:25 pacific time, at http://www.fertilityoptions.com/ (last visited Aug. 19, 2004), are examples of internet-based companies. Both of these websites, and countless others, recruit young women to become egg donors, as well as solicit infertile couples who desire to be egg recipients. Many of the websites allow recipients to specify physical traits of ideal donors, and the more desirable a donor is, the more she is generally paid. See Egg Donation, Inc., at http://www.eggsdonor.com/?section=aboutus&page=ourprogram (last visited Aug. 19, 2004). Egg Donation, Inc. boasts that potential egg recipients are able to view color photos and educational backgrounds of donors, as well as use a database equipped to search for donors by physical traits, racial groups, or religious background. Id. Additionally, Egg Donation, Inc. advertises that “Asian and Jewish egg donors are always in demand” and thus may receive higher rates of compensation. Egg Donation, Inc., at http://www.eggsdonor.com/?section=donor&page=dfaq (last visited Aug. 19, 2004).

One particularly noteworthy website was created by Ron Harris, fashion photographer and creator of Aerobicise, where infertile couples can bid on the eggs and sperm of beautiful models, with the sperm or eggs going to the highest bidder, at www.ronsangels.com (last visited Aug. 19, 2004). His egg auction allows women to find “[a] better looking version of you” for a price of course. Id. Egg donors are reportedly paid between $15,000 and $150,000 for one completed cycle, at http://www.ronsangels.com/index2.html (last visited Aug. 19, 2004).

112. See David H. Barad, M.D. & Brian L. Cohen, M.D., Oocyte Donation Program at Montefiore Medical Center, Albert Einstein, in NEW WAYS OF MAKING BABIES: THE CASE OF EGG DONATION, supra note 110, at 15; Nancy A. Klein, M.D. et al., Donor Oocyte Program at University of Washington Medical Center, in NEW WAYS OF MAKING BABIES: THE CASE OF EGG DONATION, supra note 110, at 3; Patricia M. McShane, M.D., Oocyte Donation Service at IVF America-Boston, in NEW WAYS OF MAKING BABIES: THE CASE OF EGG DONATION, supra note 110, at 29; Paulo D. Serafini, M.D., Oocyte Donation Program at Huntington Reproductive Center: Quality Control Issues, in NEW WAYS OF MAKING BABIES: THE CASE OF EGG DONATION, supra note 110, at 35.

113. See NEW WAYS OF MAKING BABIES: THE CASE OF EGG DONATION, supra note 110, at 3–48. Recipients are allowed to browse through donor notebooks, which contain donor profiles including information related to the donor’s “ethnic background, physical traits, past fertility, academic interests, talents, motivation for donation, and general health information on the donor and her family.” Klein et
$1,000 and $5,000 per donation; however, some reports list donor compensation as high as $50,000. The current system of egg donation and allocation in the United States is essentially a free market system. Those willing to donate do so, for compensation, and those wishing to be recipients must pay out of pocket.

The Ethics Committee of the American Society for Reproductive Medicine has stated that payment rates above $5,000 require justification and payments over $10,000 “go beyond what is appropriate.” Financial Incentives in Recruitment of Oocyte Donors, 82 FERTILITY & STERILITY S240, S243 (Supp. I 2004). These numbers are based on a 1993 study estimating that egg donors spend an average of 56 hours in the donation process and comparing compensation for sperm donors who typically spend an average of one hour in the donation process and are compensated between $60 and $75. Id.

In addition to compensation for healthy, fertile women donating their eggs, another compensation scheme is available for infertile women undergoing in vitro fertilization (IVF) themselves, called oocyte sharing. Id. at S240. In this process, infertile women are already undergoing the medical process to retrieve their own eggs for fertilization. Id. If the women agree to donate a certain proportion of the eggs retrieved to other infertile women, usually around half, their out of pocket expenses for the IVF procedure will be reduced by about half. Id. at S241. This egg sharing procedure is somewhat analogous to paired organ exchanges discussed at supra note 31.

The Ethics Committee of the American Society for Reproductive Medicine justifies financial compensation for egg donors on four distinct ethical grounds. Id. at S242. First, it claims that financial incentives increase the number of egg donors, thereby increasing the number of infertile couples able to have children. Id. Second, it contends that financial incentives do not discourage altruistic donations. Id. Third, financial incentives “advance the ethical goal of fairness to donors” by ensuring that the donors are allowed to benefit from their action. Id. Fourth, any undue influence or coercion associated with financial incentives may be less than the pressures felt by altruistic donors who are donating to friends or relatives. Id.

Insurance does not generally pay the costs of IVF for egg recipients. See generally Tanun Jain, M.D. et al., Insurance Coverage and Outcomes of In Vitro Fertilization, 347 NEW ENG. J. MED. 661 (2002); Peter J. Neumann, Should Health Insurance Cover IVF? Issues and Options, 22 J. HEALTH POL’Y & L. 1215 (1997) (describing how most health insurance plans exclude infertility treatment because it is not medically necessary and collecting state laws mandating insurance coverage of infertility treatment). Some commentators argue that denying insurance coverage of infertility treatment is a violation of the Americans with Disabilities Act of 1990.
F. The Science Behind Egg Donation

Recruitment of egg donors is commonly done through community or college newspapers. Women wishing to become egg donors go through a rigorous screening process before any medical procedures are performed. Initially, most clinics perform a telephone evaluation of the potential donor, screening for age and fertility history. Clinics generally do not accept donors over the age of 35, due to an increased risk of genetic abnormalities. Next, a full donor application and program information sheet are sent to the potential donor. Once the completed application is approved by the clinic, the donor attends an orientation program at the clinic, after which there is a waiting period before any medical screening occurs.

The American Society for Reproductive Medicine has published general standards governing the genetic screening of potential egg donors. These guidelines state that donors should not have certain genetically-linked diseases personally or have immediate family members with those diseases. Potential donors are also screened for infectious diseases including HIV, syphilis, and hepatitis B and C. Finally, potential donors undergo psychological screening for emotional stability,
religious beliefs, and motivation for becoming a donor, among other things.126

The medical process for one egg donation cycle takes about three to four weeks to complete.127 The donor receives daily injections of hormones for 27 days, as well as periodic doctor’s office visits, blood draws, and ultrasounds.128 For the first 14 days, the donor receives injections for ovarian suppression, so that doctors can manipulate and control her reproductive system.129 For the last 9 to 12 days, a second daily injection is added to induce the donor’s ovaries to release multiple eggs.130 During the last five days, the donor must also undergo daily blood draws to monitor the progress of the hormone therapy.131 Finally, the donor is sedated for the actual harvesting procedure.132 The doctor uses a vaginally-inserted needle and an ultrasound guide to retrieve the eggs.133 The donor’s reproductive cycle returns to normal about two weeks after the donation cycle is completed.134

G. Legal Treatment of Egg Donation

There is no federal law prohibiting financial compensation for egg or sperm donation.135 Louisiana is the only state with a law explicitly prohibiting payment to egg donors, although no prosecutions for the unlawful sale of human eggs have been filed.136

126. Id. at 44–45. Other aspects of the psychological evaluation include an assessment of job and relationship stability, current life stress, sexual history (including abuse), financial status, and legal history. Id. at 44 (table 4.7).
127. Id. at 37.
128. Id. at 39 (figure 4.1 gives a detailed overview of the medical procedures for both the egg donor and recipient).
129. Id.
130. Id.
131. Id.
132. Id.
133. Id.
134. Id.
135. The NOTA specifically excludes gametes from the definition of human organ, so the prohibition against financial compensation does not apply to gametes. 42 U.S.C. § 274e; see also Boyd, supra note 79, at 458 (“[NOTA] does not interpret an organ to include blood, sperm, and ova.”). There is some debate over whether the UAGA prohibits the sale of eggs because of its broad definition of organ which includes “blood, fluid, or other portion of a human body.” UNIF. ANATOMICAL GIFT ACT § 1(7), 8A U.L.A. 18 (2003). However, it is generally agreed upon that the UAGA does not prohibit the sale of human eggs. Crockin, supra note 53, at 254.
136. LA. REV. STAT. ANN. § 9:122 (2000) (“The sale of a human ovum, fertilized human ovum, or human embryo is expressly prohibited.”); see also John A. Robertson, Legal Uncertainties in Human Egg Donation, in NEW WAYS OF MAKING BABIES: THE CASE OF EGG DONATION, supra note 110, at 182–83 (analyzing various state laws prohibiting the sale of organs to determine if the sale of eggs falls under the prohibitions and stating that no prosecutions have been initiated under such state laws.
III. PROPOSAL

The current altruistic system of organ donation in the United States must be modified to alleviate the critical shortage of transplantable organs. This Note proposes that organ donation should be compensated in a fashion similar to the current system of compensation for egg donation. Egg donation and organ donation are analogous for several reasons. First, both egg donation and organ donation are physically-invasive procedures with some health risks to the donor. Second, neither eggs nor organs are renewable within the body; the supply of each is limited. Additionally, it could be argued that organ donation serves a more important social function, saving already existing lives, than egg donation does, allowing infertile couples to reproduce genetically-similar children when they could adopt.

A market for organ procurement, as opposed to a market for allocation, should be established to increase the supply of transplantable organs and the current system of organ allocation should be left untouched. Under this proposed system either the OPO or the state would compensate donors for the transplantable organs donated, again, leaving in place the current system of organ allocation. This is similar to how infertility clinics currently operate. By leaving the current system of organ allocation in place while modifying the organ procurement system, there would likely

for the sale of eggs). For a collection of state statutes banning the sale of body parts see Baum, supra note 109, at 126 n.54.

137. See supra notes 30–46, 117–34 and accompanying text. Health risks of egg donation include side-effects from daily hormone injections (hot flashes, fatigue, emotional instability, bloating, and cramping), complications during egg retrieval (pain, infection, bleeding, and an adverse reaction to anesthesia), and long term consequences (infertility and an increased risk of ovarian cancer). Gorrill, supra note 117, at 40 (table 4.4). Health risks associated with living organ donation include lung collapse, nerve injuries, urinary tract infections, wound site infections, pneumonia, and death. Allen et al., supra note 30, at 181–85.

138. Unlike human sperm, which are constantly renewed within the body, there are a finite number of eggs in every female at the time of her birth. JACKSON, supra note 20, at 165; see also supra notes 30–46, 117–34 and accompanying text.

139. A good description of the differences between markets for procurement and markets for allocation can be found in Kaserman, supra note 13, at 575. Generally, a market for procurement involves payment to the organ donor, by either the state or an OPO, to obtain a supply of transplantable organs, whereas a market for allocation involves payment by the organ recipient to the state or an OPO to obtain a new organ for personal use. Id.; see also supra note 48 and accompanying text. For a description of the current system of organ allocation in the United States, see supra note 50 and accompanying text.

140. Clinics recruit the egg donors and give them compensation for their donated eggs; the compensation generally does not come directly from the egg recipients. See supra notes 109–16 and accompanying text. However, some agencies, such as www.ronsangels.com, supra note 111, allow recipient couples to bid on donor eggs, with the eggs going to the highest bidder.
be an overall increase in the supply of transplantable organs with no resultant harm to the present equitable system of distribution.

A. Arguments Opposing a Market for Organ Procurement

The main argument against establishing a market for organ procurement is economic coercion. Market opponents insist that poor, destitute people from around the world will be forced into selling their organs without making an informed decision. There are several flaws with this argument. First, the economic coercion argument is based on the false premise that the prices donors will be paid for their organs will be high enough to override their doubts and ethical concerns about becoming a donor. In the proposed market system for organ procurement, either OPOs or the state will be paying the donors; thus preventing potential wealthy recipients from driving up the prices paid for organs. With only moderate prices being paid to organ donors, economic incentives would likely not outweigh a donor’s moral objections to donation, and thus no economic coercion would occur. Additionally, the current market system for egg donation suggests that economic coercion would not be a problem in a market for organ procurement. A majority of egg donors are not poor or minority women, and the amounts paid to them for their donations are usually not an “undue inducement to undergo the medical

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141. Abdallah S. Daar, Paid Organ Donation: Towards an Understanding of the Issues, in ORGAN AND TISSUE DONATION FOR TRANSPLANTATION, supra note 30, at 48 (describing countries that allow paid donation as being involved in “rampant commercialism” where donors are being used without regard to their future health); Jefferies, supra note 81, at 622–23 (describing India and various South American countries as having free market procurement systems for nonregenerative organs where the poor are exploited to provide organs to the rich); see also Banks, supra note 84, at 74–75 (discussing a report of an Egyptian man who sold his kidney because he had no prospect of work); Kaserman & Barnett, supra note 5, at 75–79 (discussing coercion and other ethical arguments against markets for organs).

142. Opponents cite reports of people offering to sell their kidneys for various monetary reasons. Price, supra note 5, at 368; Banks, supra note 84, at 74–75.

143. Kaserman & Barnett, supra note 5, at 76–77 (discussing four major problems with the economic coercion argument).

144. Id. Kaserman and Barnett provide a very detailed economic analysis of how a market system for organ procurement would work and suggest that “the equilibrium price of cadaveric organs is likely to be quite low.” Id.

145. Id. at 78 (explaining that the economic coercion argument fails because it neglects to distinguish between markets for procurement and markets for allocation).

146. Id. at 77.

147. Only one state has expressly outlawed payments associated with egg donation, which suggests that the practice is not seen as coercive and worthy of legislation in the other 49 states. La. REV. STAT. ANN. § 9:122 (2000).
risks involved." These facts suggest that if a system of financial compensation for organ donation were established, comparable to the system already in place for egg donation, there would similarly be no economic coercion of donors.

A second argument commonly advanced against proposed markets for organ procurement is that any such market would reduce altruism and people who would have donated their organs under an altruistic system will no longer want to donate their organs under a market system because they find a market for human organs despicable. However, there is no evidence that altruism and a market system cannot coexist. A comparison to the current blood market in the United States shows that there is no evidence of reduced altruism in that system, which relies on altruistic donations as well as paid donations.

A final argument commonly advanced against proposed markets for organ procurement is that such markets would create unequal access to organs depending on the potential recipient’s wealth. This concern only applies to markets for organ allocation, not procurement as advocated here. A market for organ allocation would likely have this problem; wealthy recipients would be able to bid for their new kidneys, while poor recipients would be left helpless. However, a market system of

148. Crockin, supra note 53, at 255; see also Erica K. German et al., Does Increasing Ovum Donor Compensation Lead to Differences in Donor Characteristics?, 76 FERTILITY & STERILITY 75 (2001) (this study showed that an increase in the amount paid to the egg donor did not result in a change in the population of women willing to donate).

149. KASERMAN & BARNETT, supra note 5, at 79 (stating that a “market environment may cause some former altruists to refuse to supply their organs at death”); PRICE, supra note 5, at 389 (outlining the main arguments against establishing a market in organs, including a “consequential reduction in altruism.”).

150. PRICE, supra note 5, at 397 (“Indeed, some suggest that a market for organs may even enhance altruism by allowing one to ‘give’ without payment while one could instead be paid.”).

151. KASERMAN & BARNETT, supra note 5, at 86 (stating that the “blood market evidence appears to provide no indication of a significant reduction in total collections as the result of payments to donors.”); see also Baum, supra note 109, at 136–40 (discussing a well known book, The Gift Relationship, written by Robert Timm that argued that paid blood donations would undermine altruism and “devalue the meaning of charitable donations.”).

152. KASERMAN & BARNETT, supra note 5, at 78 (discussing a “fear that, if organs are purchased from suppliers, only wealthy individuals will be able to afford transplants.”). There is already a great divide in access to health care in the United States between the rich and the poor. See generally John Z. Ayanian, et al., Unmet Health Needs of Uninsured Adults in the United States, 284 JAMA 2061 (2000) (noting that insured people in the United States have much greater access to needed health care than uninsured people); R.F. St. Peter et al., Access to Care for Poor Children. Separate and Unequal?, 267 JAMA 2760 (1992) (finding that children below the poverty line do not receive the same medical care that children above the poverty line receive).

153. See supra notes 48, 139 and accompanying text (discussing the differences between markets for organ procurement and markets for organ allocation).

154. Recent reports from South Africa state that a black market organ transplant ring charged up
procurement will not in any way affect how organs are currently allocated by UNOS.

B. Arguments Favoring a Market for Organ Procurement

In addition to the dire need for an increase in the supply of transplantable organs, there are two main arguments favoring a market system for organ procurement over other possible systems designed to increase the supply of organs. First, every person has an interest in self-determination and autonomy. American society puts a very high value on individual autonomy, allowing people to make decisions about their bodies and lives personally, without interference from the government or others. Indeed, it is quite legal to sell one’s blood, sperm, eggs, or hair today. Additionally, people are currently allowed to altruistically donate their organs, either while living or after their death. This personal autonomy should be extended to allow people to sell their organs in a market for organ procurement if they so choose.

The other main argument supporting a market for organ procurement over other possible reforms is based on utilitarian grounds. If a market to $120,000 to the recipient of a new kidney. Michael Wines, 14 Arrested in the Sale of Organs for Transplant, N.Y. TIMES, Dec. 8, 2003, at A7. This incident demonstrates that if organs are allocated based on ability to pay, the wealthy would likely be the beneficiaries, leaving the poor with little hope of receiving a new organ.

155. Jeffries, supra note 81, at 649 (stating that any proposed reform must maximize the increase in supply of organs, eliminate shortages, and minimize invasions into individual autonomy).
156. PRICE, supra note 5, at 227 (noting John Stuart Mill’s harm principle that states that the only justification for prohibiting the conduct of individuals is the protection of others); Daar, supra note 141, at 54 (“The decision to assume a risk should be made by the individual person concerned.”).
157. T. BEAUCHAMP & LEROY WALTERS, CONTEMPORARY ISSUES IN BIOETHICS 19 (5th ed. 1999). Beauchamp and Walters state that personal autonomy “is rooted in the liberal moral and political tradition of the importance of individual freedom and choice.” Id. They define autonomy as “freedom from external constraint and the presence of critical mental capacities such as understanding, intending, and voluntary decision-making capacity.” Id. Beauchamp and Walters continue to argue that personal autonomy should only be restricted “[i]f an individual’s choices endanger the public health, potentially harm another party, or involve a scarce resource for which the patient cannot pay.” Id. at 20; see also PRICE, supra note 5, at 385 (stating that the main argument supporting a market for organ procurement is that “individuals have the right to supply parts of their body for therapeutic purposes if they wish where this does not cause harm to others.”).
158. See supra note 82 and accompanying text.
159. See supra notes 24–27, 30 and accompanying text.
160. BEAUCHAMP & WALTERS, supra note 157, at 10. Beauchamp and Walters explain that “[u]tilitarianism is rooted in the thesis that an action or practice is right (when compared to any alternative action or practice) if it leads to the greatest possible balance of good consequences or to the least possible balance of bad consequences in the world as a whole.” Id. The desired outcome of any moral decision is to “promote human welfare by minimizing harms and maximizing benefits.” Id. at 11.
for organ procurement is created, this will likely increase the supply of transplantable organs thereby increasing the total good for society because fewer people will die waiting for a transplant.\textsuperscript{161}

Finally, it is worth pointing out that there are no tangible problems with a market for organ procurement per se; rather, any problems that may arise can be attributed to potential abuses of the market system.\textsuperscript{162} This concern only suggests that any market for organ procurement that is implemented should be closely regulated to ensure that these abuses do not come to fruition.\textsuperscript{163} The proposal in this Note already addressed several possible problems. First, because only a market for procurement is proposed, there will be no inequitable distribution of transplantable organs based on ability to pay.\textsuperscript{164} Second, because either the OPO or the state will be paying compensation to the donors, prices will be kept low and economic coercion will likely not be a concern.\textsuperscript{165} Finally, the system proposed is very similar to the system currently in place for egg donation, which has not exhibited the potential abuses frequently cited by opponents of market systems for organ procurement.\textsuperscript{166}

\textbf{IV. CONCLUSION}

Organ transplantation became a medical reality in 1954.\textsuperscript{167} Since that time, medical advances in immunosuppressive therapy and life-sustaining treatment such as kidney dialysis have dramatically increased the demand for transplantable organs.\textsuperscript{168} As of January 16, 2005, there were 87,315

\begin{itemize}
\item \textsuperscript{161} If a market for organ procurement were created there would presumably be a greater number of transplantable organs available. \textit{See generally} Daar, \textit{supra} note 141, at 54 ("Paid organ donation is justified ethically on utilitarian grounds because it will increase transplants and therefore the total amount of good for society."). Donors would be paid, a good consequence under utilitarianism, and recipients would receive life-saving organs, another good consequence. Thus, a market system for organ procurement would maximize benefits and be desirable in a utilitarian system.
\item \textsuperscript{162} Daar, \textit{supra} note 141, at 54 ("There are no compelling arguments against the sale of organs per se. It is the potential abuse which is worrying."); \textit{see also supra} notes 141–54 and accompanying text.
\item \textsuperscript{163} Currently, the Food and Drug Administration (FDA) is charged with issuing and enforcing regulations to ensure that the nation’s blood supply is safe, labeled properly, and to prevent the introduction and spread of communicable diseases. 42 U.S.C. §§ 262–264 (2000). The blood supply in the United States is heavily regulated. 21 C.F.R. §§ 606.3–606.171 (2004). If a market for organ procurement were established, a similar level of regulation would be warranted to ensure safety and protect against potential abuses.
\item \textsuperscript{164} KASERMAN & BARNETT, \textit{supra} note 5, at 78.
\item \textsuperscript{165} \textit{Id.} at 76 (stating that prices for organs in a market system will likely be low).
\item \textsuperscript{166} \textit{See supra} note 140 and accompanying text.
\item \textsuperscript{167} \textit{See supra} note 5 and accompanying text.
\item \textsuperscript{168} \textit{See supra} notes 24–29 and accompanying text.
\end{itemize}
people waiting for an organ transplant.\textsuperscript{169} In 2001, 6,584 people died while on the waiting list for an organ transplant.\textsuperscript{170} Today, there is a critical shortage in the number of organs available for transplantation and something must be done to increase the supply of transplantable organs.

This Note proposes a market for organ procurement, analogous to the current market for egg donation, where OPOs or the state would pay donors for their organs. This system is desirable because organs and eggs are similar in many respects.\textsuperscript{171} They are both nonrenewable and donation of each involves invasive procedures with substantial medical risk to the donor.\textsuperscript{172} Even the AMA has endorsed a “scientific study of financial incentives . . . to increase the supply of organ donations.”\textsuperscript{173} Congress responded to pressure from the medical community in 1984 and passed the NOTA, prohibiting financial compensation for organ donation.\textsuperscript{174} Circumstances have changed dramatically since 1984, and Congress should once again respond to this health care crisis by establishing a market for organ procurement in the United States.

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\textsuperscript{169} UNOS, at \url{http://www.unos.org} (last visited Jan. 16, 2005).
\textsuperscript{170} 2003 UNOS Annual Report, \textit{supra} note 9, at table 1.7.
\textsuperscript{171} \textit{See supra} notes 20–21, 137–38 and accompanying text.
\textsuperscript{172} \textit{See supra} notes 20–21, 137–41 and accompanying text.
\textsuperscript{173} \textit{Hearings, supra} note 87, at 51 (testimony of Dr. Sade).
\textsuperscript{174} \textit{Kaserman & Barnett, supra} note 5, at 8 (stating that the NOTA was passed in response to the medical community’s outrage at a Virginia physician who brokered living donor kidneys; political pressure to ensure an altruistic system led to the passage of the NOTA).

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