The Evolving Health Care System: Economic Integration Through Reciprocity

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Health care is one of the largest and fastest growing sectors of the economy, as evidenced by the fact that expenditures grew from 4.5 percent of GNP in 1955 to almost 11 percent of GNP in 1986. In light of this growth and the recognition that all individuals are consumers of health care at one time or another, it is not surprising that economists have focused increasing research effort in this area. Particular emphasis has been placed on using traditional microeconomic tools to explain the allocative aspects of health care provision. Largely ignored, however, is the role played by reciprocity in integrating health care into the social and economic system. This article seeks to redress the imbalance by analyzing several examples of reciprocity and by exploring the reasons for what appears to be an increasing reliance upon reciprocity as a form of social integration with respect to modern biotechnology. The erosion of control by physicians over market allocation mechanisms is

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considered as a factor in the emergence of reciprocal arrangements in
the health care sector.

Our analysis suggests a re-evaluation of the traditional economic
analysis of health care is needed. In conventional models of physician
behavior the focus is upon price, and the equality of price with marginal
cost is taken as documentation of economic efficiency. The present
analysis shows that this approach is too narrow. Exchange, after all, is
only one integrating mechanism. Reciprocity and redistribution are al-
ternative integrating mechanisms, and, in the health care sector, reci-
procity is an established and growing allocative device. For this reason,
any discussion of allocative control that hopes to shed light on current
health care policy issues must extend beyond narrowly defined ex-
change relationships.

*Reciprocity and the Allocation of Health Services*

Karl Polanyi maintained that the transactions of reciprocity, redis-
tribution, and exchange provide the means for integrating social and
economic relations [Polanyi 1957]. Polanyi understood reciprocity as
the obligatory gift-giving that occurs between kin and close social
groupings. He used the term "redistribution" to refer to the social ob-
ligation of payments to maintain a central authority in order to provide
community services. Exchange was used in reference to market trans-
actions.

Each of these transactions serves as an allocative mechanism in the
health services industry. However, reciprocity in conjunction with re-
distribution is becoming an increasingly important instrument for in-
tegrating social and economic relationships that pertain to health care.
To be sure, treating the sick has always been an important function of
home and family and, as such, is governed by reciprocal relationships.
Yet, an inspection of the allocation of modern biotechnology and the
treatment of new illnesses reveals that reciprocity extends beyond the
traditional care of kith and kin.

*Organ Transplantations and Reciprocity*

Perhaps the most illuminating example of the contemporary reliance
upon reciprocity and redistribution is the system for procurement and
allocation of transplantable organs for kidney, liver, cornea, heart, and
other transplants. Federal law explicitly prohibits the sale of transplant-
able organs and, therefore, mandates altruism as the only acceptable
motive for participation. Public law states: "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."1

Yet, there is no legislative provision to ensure an alternative, let alone adequate, source of supply. Provision of supply, therefore, must be understood as a symmetrical structure of reciprocity. As Polanyi notes "reciprocity as a form of integration gains greatly in power through its capacity of employing both redistribution and exchange as subordinate methods" [Polanyi 1957, p. 153]. To illustrate reciprocal symmetry, it is important to understand that for organ transplantation the central redistributive agency is the organ procurement center. In the United States, virtually all organs obtained for transplantation are secured by one of only ninety organ procurement centers. Once obtained by a center, organs are distributed to a suitable medical facility where they are allocated to waiting patients. The central criterion in the allocation decision is the probability of successful transplantation. A successful operation is central to the reciprocation process because the fundamental form of reciprocation is the extension of the life process. Donors wish to contribute to the health of a member of the social group. Donor families are frequently upset when the donated organ is used in a failed transplant procedure. In such circumstances the organ donation is described as "wasted," and the donor family may be hostile to the participating physicians or to the entire transplantation process.

Emphasis upon the criterion of success has increased success rates, but this, in turn, has created secondary problems. As organ transplant procedures have increased, a persistent shortage of transplantable organs has appeared. Importantly, the response of policymakers to this shortage further illustrates the strength of the commitment to reciprocity rather than to the market. Richard Schwindt and Aidan R. Vining have described a dual-allocation system that allows both purchases and donations of organs to coexist [Schwindt and Vining 1986]. This and similar market-oriented policy recommendations have been explicitly rejected by policymakers. The principle reason preferred is that sales would undermine the symmetrical system of reciprocity.

The Task Force on Organ Transplantation, for example, explicitly rejected the sale of organs and recommended a policy of routine inquiry [Task Force on Organ Transplantation 1986, p. 34]. Routine inquiry legislation would mandate that all hospitals establish a system to ensure that the next-of-kin of all suitable donors are informed of opportunities for donating organs. Supporters of this legislation believe that many
health professionals are reluctant to broach the subject of organ donation with families. Thus, routine inquiry would dictate that suitable prospects be approached.

The task force also considered the more forceful policy of presumed consent, which would obviate the need to approach the next-of-kin by presuming the decedent’s consent to remove and transplant organs in the absence of an expressed objection. As advocated by Arthur L. Caplan, all hospitals would be “required by law to utilize all suitable cadaver organs for donation unless an individual had (a) placed his or her name on a central computer registry indicating an objection to transplantation; (b) carried a card indicating that he or she did not wish to be a donor; or unless (c) family members had raised an objection [Caplan 1983, p. 28]”. The relative merits of required request and presumed consent are not at issue in this article. What is important is the recognition that both these proposals would emphasize economic integration through reciprocity rather than exchange.

**Further Instances of Reciprocity**

The task force’s explicit rejection of exchange as an integrating mechanism may point toward a growing tendency to rely upon reciprocity in the health care sector. Thus, although the country’s blood supply has been obtained through both donations and market purchases for decades, the system of organ procurement goes one step further by relying exclusively upon reciprocity and redistribution rather than exchange.² In a similar manner, the practice of surrogate motherhood is rapidly being removed from the marketplace. Seven states have pending legislation that will ban paid surrogacy, but allow unpaid surrogate arrangements. Two additional states and the District of Columbia have pending bills that will outlaw surrogate motherhood for profit and place unpaid surrogacy under extensive regulation.

One of the more interesting instances of reciprocity in the health care sector pertains to the duty of physicians to treat even though they place themselves in jeopardy. John D. Arras has advanced an interesting justification for the duty of physicians to treat infectious patients [Arras 1988]. Arras maintains that society bestows both economic power and social privilege upon physicians with the expectation that physicians will, in turn, minister to the needs of the sick. When viewed in this light, the duty of physicians to expose themselves to the risk of illness and death is part of a complex system of reciprocity. In this century, antiseptic techniques and antibiotics have reduced the occupational
risk for physicians. Nevertheless, the spread of the AIDS virus and the recent surge of HIV-infected patients make Arras's interpretation of reciprocity and the duty to treat particularly relevant.3

Organ transplantation, surrogate motherhood, and the treatment of AIDS patients are by no means the only examples of reciprocal integration of health care into the economy. However, they are important examples because each practice is a late twentieth-century phenomenon. As such, they suggest that integration through reciprocity is not an anachronism. Even though modern biotechnology has shifted the function of health care away from the family and tribe, integration through reciprocity remains through discretionary actions increasingly taken by policymakers. The pertinent question is why do practitioners and policymakers continue to rely upon reciprocity and redistribution to govern the allocation of health care? A number of conceivable reasons are explored in the following section.

**Explaining the Choice of Reciprocal Integration**

Some might argue that the historic care of relatives provides the sole explanation for contemporary integration through reciprocity, but this explanation neglects a number of meaningful aspects of health care. Consider the argument that medical care is a fundamental right and that non-market allocation schemes may be necessary to ensure equitable distribution of this good. John Rawls's classification of health as a primary good, to be distributed equally unless an unequal distribution is to everyone's advantage, exemplifies this argument [Rawls 1971]. Society may reject market allocations of health care for additional reasons. As Polanyi stressed, the subjugation of labor and land to the market threatens the continuity of society [Polanyi 1944]. In this light, it is apparent that society may be reluctant to subjugate human organs, children, and health care in general to price-making markets.

By no means minimizing the relevance of these important arguments, we wish to explore an alternative, though not contradictory, explanation for the persistent and, perhaps, increasing role of reciprocity. This argument concentrates on power, for as Philip Klein notes "human interaction is essentially based on conflict; therefore, the pursuit of power by participants in the economy—the ability to prevail over others—must always be assumed" [Klein 1980, p. 871]. Specifically, this argument explores the power of physician groups over the decision-making process in the health care sector.

In a market setting, price is the allocative mechanism, and the power
to establish price implies control over output. In the past, physicians have exerted control over their fees through a variety of tacit and overt mechanisms, and numerous economic studies have documented the market power of the medical profession. However, physicians' control over the market has recently been eroded. Efforts to contain the cost of health care has brought physician fees under the scrutiny of administrators and policymakers. This has lessened the power physicians exert over market allocation because, in the arena of pricing and fees, the opinion of the economist or accountant is as appropriate as that of the physician. Medical training is not a requisite for equating price with marginal cost.

When reciprocity is utilized to allocate health care, however, the physician is paramount. The physician decides who is suitable to give and who is most deserving to receive. Consider once again the case of organ transplantation. In a market system, transplantable organs would be sold to the highest bidder and the physician would wield no direct control over the allocation decision. In contrast, the present system of reciprocity places the physician in the preeminent position of deciding who, among many on a waiting list, will receive the gift of life.

_The Decline of Control Over Fees_

Thus, one key to explaining the role of reciprocity in the health sector is the diminished power of physicians to establish fees and influence market outcomes. Perhaps the most significant diminution of physician power is found in Medicare reimbursement policy. Since 1966, Medicare has based reimbursement on the lowest of three things: the physician's actual charge; the physician's customary charge; or prevailing charges in the physician's area. This system has been widely criticized for creating inflationary incentives. Should doctors in a geographic area raise fees in unison, the higher fees would pass the Medicare criteria of being customary, prevailing, and reasonable. Antitrust records chronicle various schemes used to coerce collective price increases.

The _Patrick v. Burget_ case is important because the facts illustrate a prevalent conspiratorial device, and the landmark decision severely limits such arrangements [108 S.Ct. 1658 (1988)]. In this case, surgeon Timothy Patrick claimed that his decision to operate an independent medical practice rather than join the Astoria Clinic group practice in the small city of Astoria, Oregon, was met with various reprisals, including a peer review proceeding that questioned the quality of care delivered by Patrick. Patrick alleged that the proceedings were designed
to reduce competition rather than improve patient care and, therefore, violated Sections 1 and 2 of the Sherman Act.

The respondents claimed immunity from antitrust prosecution on the basis of the state-action doctrine because hospitals in Oregon have a statutory obligation to establish and conduct peer review under the general supervision of the state Health Division. Yet, the Court refused to exempt the peer review process because the Oregon peer review requirements were open-ended enough to allow anti-competitive abuse to transpire under the guise of legitimate business conduct. Hence, the respondents were convicted of Section 1 and 2 violations.

A reasonable interpretation of the near-universal outcry from physicians following the Patrick decision is that the use of the peer review process to coerce collusive pricing was a recurrent practice in the medical community. A parallel assault upon physician control of the reimbursement process is the Resource-Based Relative Value Scale (RBRVS). The RBRVS was recommended by a Harvard University study commissioned by Congress. The study advocates a complete abandonment of Medicare's criteria of customary and prevailing practice for the determination of fees. Instead, reimbursements would be based upon the resources used to perform a medical procedure. By doing so, the RBRVS would base all Medicare reimbursement upon a measure of cost and remove the potential for collusive control of fees.

Diminished control over fees is not, however, limited to Medicare reimbursement. The general emergence of third-party payers has also greatly reduced the power of physicians to control the health care market. Third-party payers have both more information and more power than individual patients. Hence, they constitute a strong countervailing force to the physician and physician groups. In particular, Health Maintenance Organizations (HMOs) and Preferred Provider Organizations (PPOs) have become a large and important presence. In particular, Health Maintenance Organizations (HMOs) and Preferred Provider Organizations (PPOs) have become a large and important presence. HMOs are the older and more familiar group. PPOs are a newer and faster growing constraint on physician pricing. The most common PPO arrangement involves a corporate employer negotiating reduced rates for medical treatment for its employees. In essence, the corporation uses a critical mass of patients as a negotiating lever to induce physician groups and hospitals to reduce prices.

*The Physician as Technocrat*

Taken together, antitrust, the evaluation of Medicare reimbursement, and third-party payers have clearly diminished the power of phy-
sicians to control fees. Yet, physicians exert growing control over reciprocity and its handmaiden, redistribution, for in these arenas the physician is the preeminent technocrat. Indeed, the reliance upon physicians to govern the increasing use of reciprocal allocations is changing the nature of the contemporary physician's job. In the past, there were two distinct phases to a doctor's career—training and medical practice. Increasingly, doctors move into a third stage of administration and technical consultation. In doing so, physicians exert increasing control over global allocation decisions.

Economists' traditional emphasis upon the power of physicians to set fees obscures the complete function that physicians exert over the allocation of medical technology. Consider a current example. The elderly are routinely denied access to the newest and best medical procedures. They are denied, not because they lack the ability to pay, but because they are poor risks and, therefore, provide a lackluster showcase for new biotechnology. The elderly also elicit less sympathy and, correspondingly, less press coverage, than children. As a result, the elderly are often passed over in the allocation of organ transplants, new drugs, and surgical techniques, and the best efforts of much of the medical profession.

This discussion is not intended to imply that physicians allocate biotechnology as a medical potlatch in order to confirm their status. Indeed, as professionals, physicians may display Thorstein Veblen's instinct of workmanship by promoting production and reproduction of real life rather than accepting allocation based upon the existing distribution of income. Yet, it would be premature to conclude that physicians are guided solely by the criterion of instrumental valuation. The point of this article is to document the importance of reciprocity in the allocation of health care and to demonstrate the power exerted by physicians in reciprocal allocations. In doing so, this article strongly suggests the need for further research to determine whether physician decisions are in accord with the societal good. The present analysis shows the ability of physicians to exert their will in reciprocal allocations. Precisely what the will of physicians is, is yet to be determined.

**Conclusion**

Polanyi viewed reciprocity as one of three key elements for economic integration. This article has examined reciprocal relationships in the health care sector and shown that the allocation of much modern biotechnology is governed by reciprocity. In the arena of reciprocal health
care arrangements, the allocative decisions of physicians are critical. This suggests that reciprocity may serve as a device for perpetuating physician autonomy. It also points to the need for future research to explore both the general extent of physician control and the complex criteria that physicians use to guide non-market allocations.

Notes

1. The penalty for the sale of human organs is a fine of not more than $50,000, or imprisonment for not more than five years, or both (PL 98–507).
2. For an interesting exchange of views on market versus non-market acquisitions of blood see Richard M. Titmuss [1971] and Kenneth J. Arrow [1972].
3. Some economists would argue that treating infectious patients is simply a matter of voluntary contracts with the price of any medical procedure reflecting the risk imposed upon the physician. If this argument were true, one would expect to see differential rates for treatment of infectious and noninfectious illnesses. The fact that such differential rates are not observed tends to support Arras’s explanation of reciprocity.
4. In 1986, 9.4 percent of the U.S. population were members of HMOs and 2.5 percent were enrolled in PPOs [Eastaugh 1987].

References

Task Force of Organ Transplantation. 1986. Organ Transplantation: Issues and
