MEDICINE AS A COMMODITY

Carl Elliott

In 1971, *The New England Journal of Medicine* published a classic defense of medical care as a market commodity. “Medical care is neither a right nor a privilege,” wrote Robert Sade, a cardiovascular surgeon, “it is a service that is provided by doctors and others to people who wish to purchase it.” In Sade's view, sick people do not have a right to demand medical care; doctors do not have an obligation to provide it; and it is improper for the state to interfere with services that doctors produce and own. Sade wrote: “In a free society, man exercises his right to sustain his own life by producing economic values in the form of goods and services that he is, or should be, free to exchange with other men who are similarly free to trade with him or not” (Sade 1971).

Sade's article appeared only six years after the introduction of Medicare and Medicaid in the Social Security Amendments of 1965, which greatly expanded access to medical care but which many American doctors at the time viewed as a threat to their autonomy as independent practitioners. What made Sade's article controversial was how explicitly he dismissed the traditional view of medicine as a profession. In the traditional view, far from being a commodity, medicine is a profession that carries duties and obligations beyond those of pure market exchanges. The most important of these duties is for doctors to ensure that their decisions and actions serve the welfare of their patients, even if there is a cost to doctors themselves. The fact that medicine carries ethical duties to patients beyond those of ordinary market transactions is what has traditionally exempted it from formal regulation as a business. The public generally grants professions a certain degree of trust to govern themselves.

That trust extends to medical research. Medical publishing operates on a kind of honor system; journal editors and other members of the scientific community simply trust medical researchers to conduct their research ethically and present data honestly. Of course, the scientific community has checks to ensure the quality of medical research—peer review, replication of results, financial disclosure statements, and so on—but there is little external oversight, and rarely are there any legal penalties for violations. The foundations of medical publishing rest on the integrity of medical researchers.

Yet the line between medicine and business has never been entirely clear, at least not in the United States. Most developed countries guarantee basic health care for all of their citizens, regardless of the ability of a citizen to pay. But the United States has embraced market-based medicine with open arms. If anything, American medicine looks far more like a commodity today than it did in 1971. Pharmaceuticals are advertised directly to consumers on television. Access to most of the medical literature is controlled by large, for-profit publishing companies. Hospitals are owned and managed by large corporations. Clinical trials are conducted by multinational Contract Research Organizations. The line between patient and consumer has been
blurred by cosmetic surgery practices, fertility clinics, and weight-loss centers. And, of course, American doctors are very well-paid.

**For and Against Commodification**

What does it mean to say that medicine is a commodity? To commodify something, in Michael Sandel's phrase, is to transform it into an “instrument of profit and use” (Sandel 2013). It is to assign market values to a good, service, or idea that was previously thought to be outside the sphere of the market. An extreme example of commodification would be the slave trade, in which human beings were owned, bought, and sold. Of course, slavery is almost universally condemned, but the commodification of some other goods and services is genuinely controversial. Reasonable people disagree, for instance, about whether it is a good idea to buy and sell sex, embryos, or gestational surrogacy.

The most common arguments for commodification in controversial cases are libertarian. Why should the state prohibit the market exchange of a good or service, as long as the exchange does not harm anyone? Just as the state should not prohibit anyone from selling their furniture, their vegetables, or their services as a computer programmer, neither should the state prohibit them from selling their kidney, their sperm, or their services as a surrogate mother.

But there is also a broader, less individualistic argument for commodification, which holds that market exchanges improve our collective well-being (Sandel 2013). This argument follows from the basic argument for capitalism as an economic system, dating to Adam Smith. If there is a demand for a product or service, people will compete to provide it, and the rest of us are free to buy it from wherever we get the best bargain. In this way, capitalism increases the production of goods and services and allocates them to whoever values those goods and services most highly. Both buyers and sellers are made better off.

In medicine, of course, there is always a demand for goods and services, because people always get sick or disabled. So, in theory, we could simply submit medicine to market forces, and then let people buy medical goods and services wherever they like. Market forces should generate the supply. A market-based system would allow all of us to sell goods and services that are useful to others in the medical marketplace, such as our services as an organ donor or a research subject.

Should there be any limits on what goods and services are placed in the market sphere? Objections to commodification generally fall into one of a few broad categories. The first concern is about fairness and inequality. Once goods and services are moved into the realm of the market, they are generally distributed according to a buyer’s willingness—or ability—to pay. This system of distribution is the basic mechanism behind the law of supply and demand. Yet while this may seem like an acceptable way to distribute luxury items, or even basic consumer goods and services, it seems morally problematic as a way of addressing genuine human needs, such as nutrition, police and fire protection, or medical care. It feels unfair to withhold crucial, life-sustaining goods or services from people who are unable to pay.

This concern often arises when there is controversy over the distribution of (arguably) public goods, such as water, public lands, or scientific knowledge. For instance, the vast majority of the medical literature today is published in journals owned and managed by for-profit publishers. From 2000 to 2005, Elsevier, the largest publisher of scientific journals, earned profits of close to $10 billion, largely by charging university libraries extraordinarily high electronic licensing fees (Smith 2006). Access to scientific publications is thus largely limited to people who are affiliated with universities or specialized corporations, or who are wealthy enough to pay out of pocket for access. A growing number of critics argue that this arrangement is unjust and that science should be seen as a public good. Richard Smith, the former editor of the *British*
Medical Journal, has written, “The whole business of medical journals is corrupt because owners are making money from restricting access to important research, most of it funded by public money” (Smith 2006).

A second, somewhat related concern is about constraints on voluntariness (Sandel 2013; Walzer 1983). Many people can be persuaded to do things that are risky, uncomfortable, or degrading, as long as they are paid enough. An economist might argue that if people do such things, it is because they value the payment enough to justify taking the risks. This may well be true, but it is also true that the voluntariness of these choices depends not just on the value of what is being offered, but on the background conditions of the choice. If a person provides a service that is dangerous or degrading for money, it might well be a result of the fact that the person is desperately poor. To many people, it seems wrong to take advantage of that desperation.

Both of these concerns emerge in debates over the legalization of markets for transplant organs. The current system of harvesting organs for transplantation relies on volunteers—either people who agree to donate their organs after they die or living organ donors who volunteer to donate while they are still alive. Once harvested, these organs are generally distributed according to a complex algorithm based on factors such as the patient’s medical need, the likelihood of medical benefit, and the length of time the patient has been on a waiting list.

The problem is that the need for organs far outstrips the supply. Critics of the volunteer system argue that the shortage could be remedied with a market-based solution, in which patients in need of transplantation would be permitted to pay for organs and potential donors would be paid to donate. In this way, at least in theory, the supply of organs would increase to meet the demand (Cherry 2005).

Defenders of a volunteer system usually object to a market-based solution on two related grounds. First, it seems unfair to distribute organs based on wealth, rather than need. Why should wealthy patients be able to jump the queue ahead of those who may be in greater need or who may have been waiting longer? Second, it is argued that financial incentives would lure potential organ donors into risking their own health, especially potential living donors who are very poor and do not have access to the high-quality, follow-up medical care that is necessary after donation (Schep-Hughes 2002). Whether these problems could be prevented or mitigated by regulatory mechanisms—such as, say, a futures market for cadaveric organs—is a matter of some debate (Cohen 1993).

A third general concern about commodification is more elusive. According to many critics, some goods become corrupted or degraded when they are moved into the market sphere (Sandel 2013). This type of concern is very different from those based on fairness or on problems with voluntariness. It relies on the notion that some institutions, practices, and attitudes must be insulated from market forces in order to preserve their integrity. For example, some people object to the legalization of sex work not simply because they believe it exploits the poor, whose economic circumstances force them into work they would otherwise avoid, but because they believe it degrades women and encourages harmful social attitudes toward sex. Similar arguments lie behind the widespread prohibition against buying or selling babies for adoption. It is argued that children ought to be valued for themselves as human beings, rather than as instruments of profit.

Sometimes commodification may erode the value of a good by changing it into something else entirely (Andre 1992; Walzer 1983). For example, we do not allow the buying and selling of awards and prizes, such as the Nobel Prize or the Congressional Medal of Honor. Partly this is based on grounds of fairness: we think the distribution of these awards should be based on merit, not wealth. But another reason is because a market in these awards would corrupt their value. The very meaning of the Nobel Prize would vanish if receiving one were no longer an honor.
A related concern is sometimes raised about the corrosion of medicine as a profession, especially in the context of so-called enhancement technologies, such as cosmetic surgery, sexual enhancements, or performance-enhancing drugs for athletes (Parens 1998). Traditionalists argue that the purpose of medicine is to treat illnesses and disabilities and to relieve suffering, not to improve a person’s appearance or performance. Of course, many people are more than willing to pay for medical enhancements such as cosmetic surgery, and many physicians are equally willing to provide them. But traditionalists argue that the willingness of physicians to take part in a market for medical enhancements has degraded their professional status as healers, transforming them into mere vendors of medical goods and services.

Markets may also generate potentially perverse financial incentives. Many people believe this has occurred with the privatization of clinical research, as will be illustrated by the case below.

Example: The Commodification of Drug Research

Until the early 1990s, most clinical research on pharmaceuticals took place in academic settings. Pharmaceutical companies provided the funding, but the companies would generally partner with academic physicians in medical schools and teaching hospitals to carry out the research. These arrangements began to change in the early 1990s, when pharmaceutical companies started outsourcing clinical research to the private sector. This change was driven largely by economic factors. Clinical trials were becoming larger and more complex, and the business model of the pharmaceutical industry was shifting toward the production of so-called blockbuster drugs, such as Prozac, Prilosec, and Lipitor. (Blockbuster drugs generate at least $1 billion in annual revenue and are often aimed at common medical problems such as depression, diabetes, asthma, or high cholesterol.) In 1994, about 70% of clinical researchers were affiliated with academic health centers, but by 2006, that figure had decreased to 36% (Getz 2007).

This shift to the private sector has created a niche for businesses specializing in various aspects of the research enterprise. The largest and most important are Contract Research Organizations (CROs), such as Covance, Quintiles, and Parexel, which manage and organize clinical trials (Fisher 2008; Petryna 2009). But other, smaller companies have emerged to take advantage of more specialized tasks. Today, for example, clinical trials are likely to be conducted in private clinical trial sites, overseen by contract researchers. The research subjects might be recruited by specialized patient recruitment companies. The publication of the results of these trials may be managed by a team of medical writers and “publication planners” working for a specialized medical communications company. And the ethical oversight of the trials will likely be conducted by a for-profit Institutional Review Board (IRB), which is paid by the sponsor of the study (Emmanuel et al. 2006). (The Food and Drug Administration requires that clinical trials submitted in support of marketing approval of a new drug be approved by an IRB. Traditionally, IRBs were staffed by volunteers and located in universities and hospitals, but today many IRBs are free-standing, for-profit entities that charge fees to research sponsors for reviewing their protocols.)

In theory, transforming medical research into a market commodity should have produced a faster, more efficient system of drug development, resulting in better products. And it is true that privatization has helped the pharmaceutical industry generate extraordinary profits. By the mid-2000s, the pharmaceutical industry was easily the most profitable business in the world (Angell 2005). But the changes of the 1990s and 2000s also introduced an unprecedented series of scandals, many of them involving the manipulation of research results to
promote drugs of dubious benefit. By 2010, according to Public Citizen, the pharmaceutical industry had surpassed the defense industry as the leading defrauder of the federal government. Over a 20-year period, pharmaceutical companies were forced to pay $19.8 billion in federal penalties (Public Citizen 2010).

One of the most alarming consequences of this period was the corruption of the medical literature. As Richard Horton, the editor of The Lancet, has pointed out, a market-based research system forces medical researchers to compete with one another in a market economy and treat scientific data as a trade secret. And because success is measured by profits, a market-based system gives industry-backed researchers financial incentives to produce results that are favorable to their employers. In Horton’s view, market forces have corrupted the very institution of medical publication. He writes, “Journals have devolved into information laundering operations for the pharmaceutical industry” (Horton 2004).

Over the past two decades, study after study has found that scientific articles published by researchers with pharmaceutical industry funding are more likely than independently funded articles to contain results favoring the industry sponsor (Flacco et al. 2015; Lexchin et al. 2003; Lundh et al. 2012). In 1994, for instance, a meta-analysis of studies of nonsteroidal anti-inflammatory drugs for arthritis found that not a single industry-funded article presented results that were unfavorable to the sponsor (Rochon et al. 1994). Similarly, a 2006 meta-analysis in the American Journal of Psychiatry examined head-to-head comparisons of three different atypical antipsychotic drugs for the treatment of schizophrenia. It found that 90% of those studies favored the antipsychotic produced by the company that funded and designed the trial (Heres et al. 2006).

Findings such as this can be partly explained by the suppression of unfavorable results. A 2008 analysis in The New England Journal of Medicine found that the manufacturers of antidepressants buried the results of the vast majority of studies that reflected poorly on their products. The drug makers published only 14% of studies with poor or ambiguous results, as compared to 94% of the studies with positive results. Yet the suppression of unfavorable studies only explains part of the problem. According to the same 2008 analysis, many of the antidepressant studies that did wind up in print misrepresented their results, reporting findings that were positive for the sponsor’s drug even when such a conclusion was not warranted by the data (Turner et al. 2008).

As Richard Smith has explained, the easiest way for pharmaceutical companies to get the results they want is by rigging the design of the studies in advance. Some of these tricks are simple. A study sponsor might choose a low dosage of a competitor drug so that it appears less effective. Or it might choose an excessively high dosage so that the competitor drug appears toxic and causes unpleasant or dangerous side effects. It might also underpower the trial by choosing a sample size unlikely to demonstrate a statistically significant difference between the two drugs and then claim equivalence. If a company designs its study in the right way, using these or other more statistically sophisticated tricks, it will not need to worry about burying unfavorable results. A positive result is all but guaranteed (Smith 2005).

Many pharmaceutical companies outsource the publication of their studies to specialized medical communications agencies, which integrate marketing goals into the “publication planning” for new drugs (Matheson 2008). Publication planners will explore the ways in which a new drug differs from other drugs on the market, which journals and specialists should be targeted, and the ways in which publication can be integrated into academic conferences, public relations efforts, and Continuing Medical Education events. A medical writer—or “ghostwriter”—will write up the publications. Finally, the agency will often recruit an academic physician to serve as “author” for the study, sometimes in exchange for a fee. The academic affiliation of the “author” of the study gives it a veneer of objectivity and helps
disguise the fact that the article was produced by a pharmaceutical company working in con-
cert with a communications agency.

Although medical ghostwriting has played a part in many of the fraud scandals of the past 15 years (and has been widely condemned as a result), it is hard to know just how often it occurs. In 2003, David Healy and Dinah Cattell tracked all of the scientific publications on the antidepressant Zoloft (sertraline) produced by a medical communications agency called Current Medical Directions, on behalf of Pfizer, the manufacturer of Zoloft, over a three-year period. They found that over half of all Zoloft publications during that period had been pro-
duced by the agency. The agency-produced articles were published in more prestigious journals and were cited at a rate five times more often than the “traditionally authored” articles (Healy and Cattell 2003).

The distortion of the medical literature is clearly a problem for practicing physicians, who rely on honest studies in order to make prescribing decisions for their patients. But it is also a serious problem for research subjects, many of whom take risks to their health when they sign up for research studies. Would these subjects enroll in research studies if they knew that the results were likely to be buried or manipulated? If so, under what conditions would they be willing to enroll?

The Emergence of Paid Research Subjects

For many years it was seen as ethically troubling for researchers to pay potential subjects to sign up for studies. Critics worried that payment might tempt people to risk their health in studies that were painful, unpredictable, or dangerous. On the occasions where subjects were offered money, it was usually only a small amount, often to reimburse them for expenses such as meals, transportation, or parking.

As clinical research moved into the private sector, however, the amount of money available for subjects began to increase. By the mid-2000s, it was not unusual to see clinical trial sites advertising studies with payments of $6,000 and up. The highest-paying studies today are Phase 1 clinical trials, which are generally conducted at the beginning of drug development. Their main aim is generally to determine if an experimental compound is safe. In contrast to later-stage trials, which are conducted on ill patients in search of a new treatment, Phase 1 trials are usually conducted on healthy subjects. These trials usually require subjects to check into an inpatient unit for at least three weeks, so that they can be carefully monitored. Some trials also include invasive procedures, such as biopsies and endoscopies, in which case the pay-
ment is generally higher. In some areas, this approach has generated an underground economy of semi-professional research subjects, who enroll in one study after another in exchange for a fee (Abadie 2010; Elliott 2014).

The range of studies offering payment has broadened as well. Until recently, patients who were ill and looking for new treatments were generally not paid, largely because it was felt that sick people were too vulnerable to potential manipulation. Today, however, many trial sites offer payment to patients with illnesses such as asthma, diabetes, anxiety disorders, and even schizophrenia. In some areas, for instance, clinical trial sites recruit mentally ill subjects from recovery houses and homeless shelters (Elliott 2014).

The arguments in favor of paying subjects are straightforward and pragmatic. For many types of trials, it is hard to imagine many people enrolling without a considerable financial incen-
tive. Unlike later-stage clinical trials, for instance, which can offer sick patients the possibility of effective therapy, Phase 1 trials offer subjects nothing but risk and discomfort. Their very purpose is to determine how toxic an experimental drug is. And since most Phase 1 trials are
sponsored by pharmaceutical companies, which are generally ranked among the world’s least trusted industries, it is unlikely that many subjects would volunteer purely for altruistic reasons.

The primary objection to payment is related to constraints on voluntariness. If a desperately poor person tests the safety of an experimental drug for money, to what extent is the decision truly voluntary? The standard conceptual framework for addressing such concerns is that of “undue influence” (Jones et al. 2010). The motivating idea behind the concept of undue influence is that payments should not be so large as to persuade people to take risks that they would not otherwise take. But measuring how much money constitutes an undue influence is conceptually fraught. When a subject is desperately poor, even a small amount of money might persuade him or her to enroll in a dangerous study, whereas for a rich person, no amount of money would be enough.

If payment is conceptualized as compensation for work, then keeping payment low seems unfair (Elliott and Abadie 2008). Why shouldn’t subjects be well-compensated for what is, after all, an unpleasant and possibly risky endeavor that results in a social good? Concern about undue influence merely magnifies the problem. Why should payment rates be designed so that the poorer the subject, the less he or she is paid?

Research subjects may be paid, but they get few of the protections and benefits that come with other kinds of employment, such as worker’s compensation, health insurance, and the right to unionize. In fact, if a subject is injured in a research study in the United States, chances are that he or she will be responsible for his or her own medical expenses (Elliott 2012). (The United States is the only developed country that does not require sponsors to pay for the medical care of injured subjects.)

Although no central agency tracks the number of deaths and injuries in clinical trials, there have been a number of high-profile cases in which paid subjects in clinical trials have died or been severely injured. The most notorious recent case was the Northwick Park disaster near London in 2006, where six healthy subjects nearly died in a “first-in-man” study of a monoclonal antibody named TGN1412. In 2004, a paid volunteer named Tracy Johnson committed suicide in an Eli Lilly–sponsored, Phase 1 study of its antidepressant Cymbalta. And in 2007, Walter Jorden, a mentally ill man living in a Philadelphia recovery house, died after being paid to test an experimental antipsychotic drug produced by Astellas Pharma (Elliott 2014).

It is also worth pointing out that while oversight bodies are instructed to ensure that payments do not unduly influence subjects, there are no such restrictions on the amount of money paid to contract researchers for conducting the trials. In fact, payment to trial sites is often on a per-head basis: the more subjects a trial site recruits, the more money it receives. For contract researchers seeing patients who might otherwise receive standard treatment, there is another perverse incentive, according to sociologist Jill Fisher: any given medical service will generate two to five times the amount of money when a pharmaceutical company is paying the bill, rather than a health insurance company or a government agency (Fisher 2008). So if a private physician is conducting a trial, it is in his or her financial interests to enroll patients in a trial rather than simply to treat them.

Federal guidelines permit research sponsors to pay subjects, although they do require selection of subjects of clinical trials to be “equitable” and stipulate that special protection must be provided to subjects who are “economically disadvantaged.” Yet the very structure of many inpatient trials, such as Phase 1 and bioequivalence studies, generally excludes most people with regular jobs. Not many people are able to check into an inpatient facility for three or four weeks at time. The only populations easily able to do that are generally students, unemployed people, contract workers, and people prohibited from taking other jobs, such as undocumented immigrants (Abadie 2010; Elliott and Abadie 2008).
A better framework for conceptualizing this issue might be exploitation, rather than undue influence. To exploit someone is to take unfair advantage of them, usually in a relationship of unequal power. A common example of exploitation is sweatshop labor, in which large corporations take advantage of the poverty of people in the developing world by offering them poorly paid jobs under dangerous conditions. A similar case could be made for paid subjects in clinical trials. The ethical issue would then be whether a research sponsor is taking unfair advantage of a subject’s poverty and desperation (Elliott 2014).

Conclusion

An old philosophical debate about the costs of commodification has become gradually more important for American medicine. On the one hand, a capitalist economy makes the production of goods and services far more efficient by introducing the principles of mass production. In theory, this should be as true of medical practice as it was for Adam Smith’s pin factory. Yet the problem, as Marx famously pointed out, is that these principles also alienate workers from their labor and its products. If a job requires little skill or creativity, and has no larger moral purpose, its meaning is drained away.

In many ways, such a transformation has been well under way in American medicine for decades. While the figure of the solo family practitioner may be idealized in the popular imagination, in reality that figure has been replaced by teams of specialists working in group settings owned by large corporations, where they often practice according to rigid treatment guidelines and reimbursement plans developed by distant managers and experts. Whether this transformation has produced more efficient delivery of medical care is a matter of some debate, but it has clearly demoralized doctors, who have grown increasingly unhappy and more alienated in their work. A 2008 survey of more than 12,000 physicians found that a mere 6% thought that the morale of the profession was positive. Approximately 60% said they would not recommend medicine as a career. Only 22% said the practice of medicine was highly rewarding (Physicians’ Foundation 2008).

There are many reasons for this demoralization—declining reimbursement rates, pressure to limit the amount of time spent with patients, the crushing burden of paperwork—but it is hard to separate these things from the transformation of medicine into a business. Many doctors went into medicine precisely because they believed that it was not simply a business selling goods and services, but rather, a profession with a larger moral purpose. Yet that purpose seems contrary to the spirit motivating much of American medicine today. In a recent survey, nearly one-third of American medical school faculty members said that their institution discourages altruism. More than half felt that medical school administrators are “only interested in me for the revenue I generate” (Pololi et al. 2012). The collective sense of alienation is summed up by a physician quoted by Dr. Sandeep Janduwar, author of the memoir Doctored: “I feel like a pawn in a moneymaking game for hospital administrators. There are so many other ways I could have made my living and been more fulfilled. The sad part is we chose medicine because we thought it was worthwhile and noble, but from what I have seen in my short career, it is a charade” (Jauhar 2014).

References

MEDICINE AS A COMMODITY


**Further Reading**

Angell, Marcia (2005) *The Truth about the Drug Companies* (New York: Random House), remains the most persuasive critique available of pharmaceutical industry corruption.