Uncertainty and the welfare economics of medical care: An Austrian rebuttal

Part 2

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Abstract

Part 2 of this 3 part series continues a rebuttal to Kenneth Arrow’s famous argument that health care is special and free market economic principles do not apply. The rebuttal is based on concepts of Austrian Economics. Part 1 of the series framed the debate and discussed general concepts. Part 2 discusses specific examples of how health care is special and does not behave according to market principles. Uncertainty of demand and uncertainty of outcome are discussed in detail. Information asymmetry is a special form of uncertainty that Kenneth Arrow claimed was somewhat unique to health care. Free market solutions to these problems are discussed in general with specific examples provided. The conclusions are that free market insurance (as opposed to subsidy) handles uncertainty of demand, branding handles uncertainty of outcome, and the free market for specialized information handles information asymmetry.

Keywords: health care economics, free market, information asymmetry

We have demonstrated in Part 1 that a number of the special features of health care have to do with certain outcomes rather than uncertainty. Uncertainty is an element of health care. The next sections of the paper discuss different classes of uncertainty. We shall examine some of Kenneth Arrow’s arguments and see how the market can handle these circumstances.

The first class of uncertainty that Kenneth Arrow discusses is uncertainty of demand. This has been somewhat discussed in Part 1 as it is the most obvious uncertainty of health care.

The most obvious distinguishing characteristics of an individual’s demand for medical services is that it is not steady in origin as, for example, for food or clothing, but irregular and unpredictable. Medical services, apart from preventive services, afford satisfaction only in the event of illness, a departure from the normal state of affairs. It is hard, indeed, to think of another commodity of significance in the average budget of which this is true.

Even food and clothing have exceptional items with uncertain demand – a wedding cake and a wedding gown for example. There are robust markets for these items despite this problem. Auto repair has many features that are analogous to health care. We do not know when our car will break down. When the car does break down, it is usually an emergency to repair it, so our bargaining position is poor. The mechanic cannot tell us how much the repair will cost without examining the car. The car may not be repaired to its original condition. The cost of repair may exceed the cash we have immediately available. Yet despite all of these issues, there exists a robust...
market for auto repair. Nobody is demanding single payer auto repair services provided by government. Auto repair remains affordable.

Competition has ensured that customers who need auto repair services get satisfaction without price gouging. It has become standard practice to provide an estimate for the repair before charging the customer. AAA offers emergency service insurance. This avoids the problem of being stuck somewhere and gouged by the only readily available repair service. Warrantees are available to handle uncertain outcomes. Loans – not subsidies – are available to handle costs that exceed the available cash on hand. Competition among providers of auto repair ensures that customer satisfaction and convenience increase over time. Auto repair remains affordable as the providers cannot force customers to purchase the service. The owners of commuter vehicles are not required to subsidize the insurance for owners of Indy 500 cars, demolition derby participants, or someone who wishes to park his 1932 Rolls Royce at the local Walmart.

What about those with uninsurable problems? Do we abandon the patient with end stage renal disease if they cannot afford dialysis? The market solution to these problems is charity. Some people have greater happiness by donating wealth to worthy causes than they would have by keeping the money and seeing these uninsurable problems go untended. Since donations to charity are voluntary, charity is a market phenomenon. Charity is distinct from government solutions in that charity recognizes that health care is a scarce resource while government solutions pretend that health care is a human right. Charitable donations will not bankrupt those who are donating, while government does not recognize these limitations. In Part 3, I will demonstrate why health care is not a human right after discussing all of Kenneth Arrow’s classes of uncertainty.

The next major class of uncertainty is uncertainty of outcome.

Recovery from disease is as unpredictable as is its incidence.²

This is clearly a true statement, but why does this uncertainty make health care non-marketable? For every health care intervention, there is a probability that the intervention will improve the outcome, there is a probability that the intervention will make the patient worse off, and there is a probability that there will be no effect at all. For the Band-Aid example, we consider the likelihood that the untreated cut will get infected and cause serious illness against the cost and inconvenience of the Band-Aid. Since the cost and inconvenience are so low, we might very well over treat compared to the actual risk. This is why it is important that the person receiving the benefit be the same person who bears the cost.

Consider a phase 1 therapy for stage IV ovarian cancer. The cost might be quite high and the likelihood of benefit might be quite low. The patient might very well decide differently if they are paying the cost rather than some unknown third party. Insurance contracts handle these decisions by deciding what treatments are covered before the events occur.

Can health care offer a warranty? In most cases this is not possible. A warranty can be offered only if the outcomes can be actuarially determined, the outcomes are objective and can be verified by a third party, and the outcomes do not depend in any way on voluntary action. If these conditions are all met, then the health care provider can charge a fee with a warranty where the fee takes into account the probability of objective success. For situations with low chance of success, however, the fee would become astronomic and nobody would be able to pay it. If government or society required a warranty where it was not possible, nobody would supply the service at all and the result would be zero chance of recovery. We can see these effects in transplant programs where the program is judged based on outcome. In order to achieve a desired outcome result, the programs will not provide the service to high risk patients. Similar effects will be seen when outcomes determine payments for management of chronic diseases such as diabetes; providers will decline service to patients who are poorly compliant with diet and medication,
so that poor chances of recovery will become zero chance of recovery.

Patients and families generally understand that outcome cannot be guaranteed. They do not demand a certain outcome; rather they demand that providers give their best effort and be competent. The market is capable of handling this restriction by branding. A provider’s reputation becomes an important and marketable capital asset which can be maintained only by providing consistent quality of service. The customers do not expect a brand to be perfect; rather they expect results to be consistent.

Restaurants provide an example. There is no way to know ahead of time whether or not a meal and service provided by a restaurant will meet a customer’s expectation. The restaurant’s reputation or brand is a valuable capital asset. A restaurant with high reputation can charge a price premium for the customer expectation of consistent quality, but the restaurant can continue to charge a premium price only if the reputation is maintained over time. Note that branding will be effective only if providers can charge price premiums for higher quality. Medicare and Medicaid have made this practice illegal, so these programs have eliminated incentives for providers to seek brand recognition.

In most commodities, the possibility of learning from one’s own experience or that of others is strong because there is an adequate number of trials. In the case of severe illness, that is, in general, not true; the uncertainty due to inexperience is added to the intrinsic difficulty of prediction.\(^2\)

Kenneth Arrow seems to be alluding to the branding mechanism here, but is claiming this is not practical for the health care industry. While he may have a point for an individual, this objection breaks down for an insurer or an expert selling advice about reputation. This will be covered in greater detail when discussing the next topic of information asymmetry.

Further, there is a special quality to the uncertainty; it is very different on the two sides of the transaction. Because medical knowledge is so complicated, the information possessed by the physician as to the consequences and possibilities of treatment is necessarily very much greater than that of the patient, or at least so it is believed by both parties.\(^2\)

Kenneth Arrow and the paper that we are discussing have become associated with the term information asymmetry. The term means that the seller knows more about the product than the buyer. The implication is that the demand curve would be different if all buyers knew as much about the product as all sellers; this change in demand would result in a different market clearing price. The conclusion reached by Progressives is that government must step in to bridge the information gap. As my opponents in the Single Payer Debate claimed in their rebuttal, “Fundamentally, the degree of information asymmetry between the buyer (the patient) and the seller (the provider) prevents health care from conforming to the theoretical tenets of free-market economics.”\(^3\)

This argument is flawed on several levels. The first problem relates to the Ideal Gas Equation analogy presented in Part 1. While it is true that information asymmetry will lead to a different price from what would exist without the asymmetry, the relationships of supply and demand to government interference persist. Subsidies still make prices higher than they would be without the subsidy. We cannot know in advance how much the price will be changed by the asymmetry. The supply and demand curves are not known in advance. All we can do is infer them from observations of price discovery. Therefore, any agency, such as government, cannot know in advance how much different the price would be in the absence of information asymmetry, so there is no way for government to make an informed “adjustment” or “correction” for the information asymmetry.

The next flaw is that somehow health care is different from other commodities with respect to information asymmetry.

To avoid misunderstanding, observe that the difference in information relevant here is a difference in information as to the consequence of a purchase of medical care. There is always an inequality of information as to production methods between the
producer and the purchaser of any commodity, but in most cases the customer may well have as good or nearly as good an understanding of the utility of the product as the producer.\(^2\)

Kenneth Arrow acknowledges that information asymmetry exists for all transactions, but he asserts that there is something special about health care without any proof or justification. This is another in a long line of assertions that Kenneth Arrow considers to be self-evident. In my practice as a pulmonologist, I only wish that Kenneth Arrow were correct about, say, smoking cessation. There are many examples where physicians wish their patients would comply with physician recommendations due to information asymmetry. Our problem is that patients often have very strong ideas about what they want and they refuse to take our advice. It is ironic that in these cases advocates of government solutions are not concerned about eliminating information asymmetry; the prescribed government solution is a mandate or coercion that forces patients to accept the opinions of experts and exaggerates the asymmetries.

Finally, there is no way for government to possess information without the information being available to the market. The market solution to information asymmetry is the market for asymmetric information. Experts sell advice. Advice that changes a decision to purchase something very costly is very valuable. The market solves the problem of information asymmetry by selling the advice for a much lower price than the price of the decision to be made. Examples include magazines that advise which cars are more reliable and retain resale value. Many people consult online advice websites before purchasing computers. Theater and restaurant critics are well established markets for asymmetric information.

Movies offer a good example of how the market solves the problem of information asymmetry. At any given time, my local theater, The Alamo Drafthouse, has about a dozen movies playing. Customers have no way of knowing ahead of time which movies they will prefer. Yet somehow, some theaters are nearly empty and others are full. How did the customers decide which movies to see? A combination of brand recognition and expert advice is used by customers to decide which movies they will attend. Parents of small children are far more likely to take their children to the latest Disney cartoon than the latest offering by Quentin Tarantino. Customers will also read reviews to help decide which movie to see. The movie critic generally does not provide the service for free even if the customer does not pay directly for the advice. Websites use a revenue model based on site visits; advertisers pay the website to get the attention of clients who they feel are interested in their advertisements. Movie theaters usually do not offer refunds if you are not pleased with the movie. The customer does not pay after seeing the movie based on satisfaction. Yet, somehow, the market for movies seems to be working just fine.

There is no reason that asymmetry of information about health care cannot be solved by critics who sell advice. Physicians should probably get used to being rated by their patients, but this type of solution to asymmetry of information requires the ability to charge a higher price for a higher quality service to be effective. Medicare and Medicaid make this practice illegal and are, therefore, disincentives against solving the problem of information asymmetry. Unlike a factory, a physician cannot expand capacity at will; time is limited. With a fixed price for a service set by Medicare, the physician who has a higher quality service will have a longer line for visits until the inconvenience of waiting for a visit offsets the value of the higher quality.

In Part 3, we will examine the argument that health care is special and cannot be treated as an economic commodity because health care is a human right.

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REFERENCES

