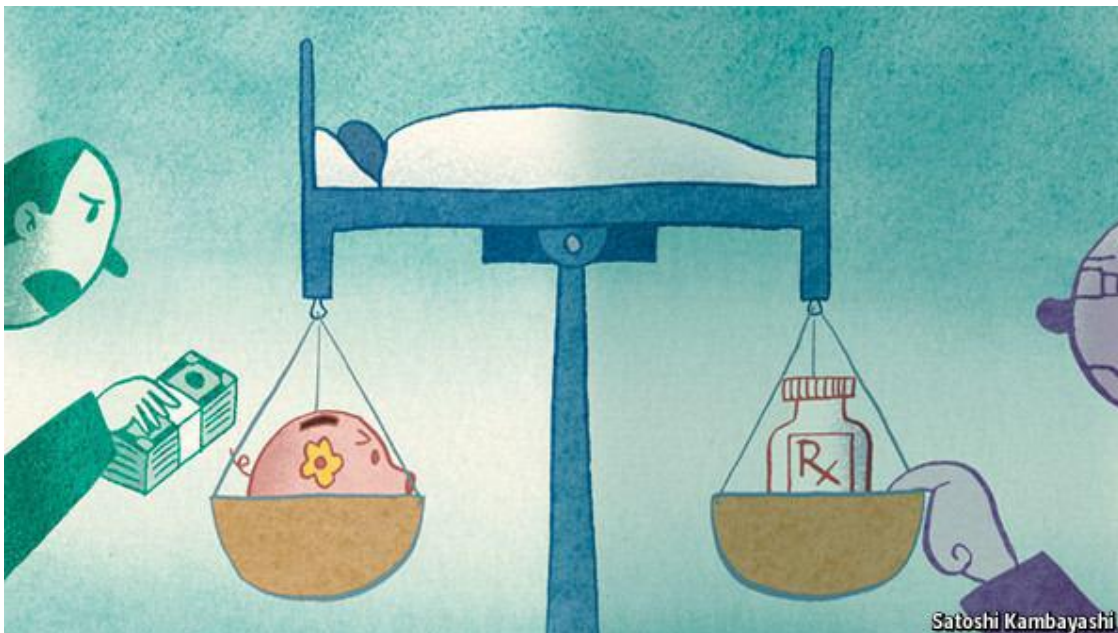


HEALTH ECONOMICS: DEMAND & UTILIZATION

Health economics is a branch of **economics** concerned with issues related to efficiency, effectiveness, value and behaviour in the production and consumption of **health** and **healthcare**.

Healthcare economics, as you can imagine, takes the basic principles and methods of economics and applies them to the study of the healthcare field. Why do people want to do this? Why is studying the economics of healthcare important?



If, for instance, a public health official looks at paediatric vaccination rates and sees that they are lower than the determined goal, she wants to understand why that is? She could simply send a memo to all paediatricians and hospitals telling them to increase their vaccination rates. However, the problem is likely more complicated than physicians simply forgetting to vaccinate children, and her memo will be ineffective. In order to better understand this problem, the public health official will need to consider the economic issues associated with paediatric vaccinations.

The concept of healthcare resources was presented in the definition of healthcare economics, and we should take a moment to identify what these resources are? Santerre and Neun group these into three categories: medical supplies, personnel, and capital inputs.

Shri Guru Ram Rai Institute of Technology & Science

Patel Nagar, Dehradun

Medical supplies consist of bandages, medications, and patient gowns, among others.

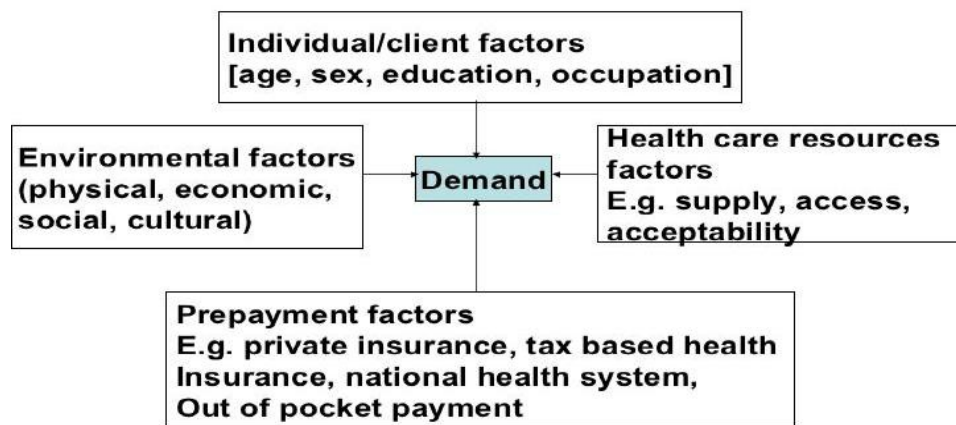
Medical personnel include the obvious doctors, nurses, and dentists as well as the receptionists, equipment technicians, and administrators who keep operations functioning.

Capital inputs include care facilities like hospitals and nursing homes, and diagnostic and therapeutic equipment like MRIs and dialysis machines.

Acco to Grossman consumers have demand for health for two reasons:

1. Health is a consumption commodity – it helps consumer feel better.
2. Health is a investment commodity – a state of health will determine the time available to the consumer for productivity.

Grossman's demand model



10

“Health-care services” can mean many very different things:

- Labor time of various trained professionals, such as GPs, specialists, nurses, medical technicians, pharmacists, and many others
- Procedures and testing, such as magnetic resonance imaging (MRI) scans and laboratory analyses of blood samples
- Hospital and nursing care services
- Emergency services such as ambulances
- Pharmaceutical products (which itself covers a huge range, from bandages to chemotherapy drugs)

Shri Guru Ram Rai Institute of Technology & Science

Patel Nagar, Dehradun

You can probably think of other components as well. So it is more than a little misleading to treat health care as something homogeneous that is bought and sold in a single market.

Our main point is that the simple framework of supply and demand is not sufficient for understanding health care. There are too many different markets, each with its own peculiarities and unusual features. And those features mean that there are several reasons why we might expect inefficiency. One, as we have already noted, is the presence of market power. Another is the various information problems we have mentioned. A third is that some aspects of health care have the characteristics of a public good.

THE DEMAND FOR HEALTH CARE

There are other factors which influences the demand side of health care .

Response to Price

The law of demand applies to health care as in other markets: as the price of health care increases, you demand less of it. But we must be careful. What matters is the price of health care to *you*. If you have health insurance, this price may be much lower than the actual cost of providing you with care. Under most health-insurance contracts, the *marginal private cost* of care to a household is less than the **marginal social cost** of providing that care. The household has an incentive to purchase a lot of health-care services because its purchases are, in effect, being subsidized by insurance companies.

Another key characteristic of health care is that demand is relatively inelastic. If you are sick and require care, you will purchase health-care services at almost any price. Of course, your ability to purchase health care is ultimately limited by your income, but you are likely to trade off spending on many other products to purchase the medical care you need. This is why we often read stories about people without insurance being bankrupted by medical expenses.

Health as Investment

Everyone prefers being healthy to being sick. The demand for health care is in part an expression of this preference. One thing that makes health care different from most other

Mrs . Bincy.P.Tiwari
Asst. Professor
Department of Hospital Administration

Shri Guru Ram Rai Institute of Technology & Science

Patel Nagar, Dehradun

goods and services, though, is that it is simultaneously an investment. Money you spend on being healthy today will also benefit you in the future. There are several different ways in which spending on health care represents an investment.

Mortality.

One clear impact of our health-care choices can be seen in terms of mortality rates. Mortality rates measure how likely we are to die at different ages. It is not surprising that the mortality rate increases with age—that is, that young people have a lower probability of dying than older people. (Infants are an exception: a 6-month-old child is more likely to die than an 18-month-old child because very young children are particularly susceptible to certain diseases.) But these average mortality rates disguise a lot of variation, much of which is under our control. There are many behaviors that have predictable effects on our likelihood of dying. Smokers have a higher probability of dying than nonsmokers. Those who are obese have a higher probability of dying than those who are not. Diet, exercise, and risky behaviors (which includes everything from unprotected sex to skydiving) affect mortality rates as well.

Cigarette smoking is linked to lung cancer and thus to mortality. If you compare two similar individuals of the same age, one who is a smoker and the other a nonsmoker, then the mortality rate is significantly higher for the smoker. This does not mean that the smoker will necessarily die before the nonsmoker. It means that all else being the same, smoking increases the probability of death. Refraining from smoking is a type of investment in your future.

Our diet also affects our probability of becoming ill and of dying. As with cigarettes, there are often trade-offs between eating and drinking things we enjoy and the effects of such consumption on our long-term health. Making these types of choices is an economic decision. Each of us makes different choices because we value the taste of particular foods differently, and we value our overall health differently as well. If a thirty-year-old discovers he has elevated cholesterol levels that pose a long-term risk of heart disease, he may decide to adjust his diet, perhaps consuming less red meat. If an eighty-year-old learns the same news, he may not think the long-term benefit is worth giving up his steaks for.

Productivity.

Mrs . Bincy.P.Tiwari
Asst. Professor
Department of Hospital Administration

Shri Guru Ram Rai Institute of Technology & Science

Patel Nagar, Dehradun

Being healthy also means that you can work and earn wages. One of the costs of poor health is lost days at work. This is a cost not only to the individual but also to society as a whole: the economy's population is producing less output. If you are in poor health, then you risk losing wages for the days when you cannot come to work. Many employers provide insurance for these lost wages through the provision of sick days: if you are sick, you are not expected to work but you will still be compensated up to a contracted number of days per year.

Information Problems

Health care is an example of a good for which the typical individual is unable to determine the quality of what is being purchased. You can think of other examples, such as legal services and used cars. In such situations, how can we make good decisions? Generally we do so by relying on the advice of experts. In the case of health, these are the doctors, dentists, and other health professionals who are trained to analyze our health situation and make suggestions to us. We listen, try to understand, and, using their advice, make an informed choice.

Suppose you get a phone call from someone telling you they know of a stock, trading on Wall Street, that will double in price the following day. You might be very skeptical, suspecting that they have other reasons for wanting you to buy. Compare this to a conversation with a medical expert. Generally you are going to believe that the expert is acting in your best interests. Although you might get a second (or third) opinion, you do so because health problems are complex and the first expert may have missed something, not because you are afraid the doctor is misleading you in order to profit from your visit. But why do we trust medical experts so much more than the provider of stock tips? We generally do so because we trust that their incentives are aligned with our goals; that is, we hope that they are motivated to act in our best interests.

Shri Guru Ram Rai Institute of Technology & Science

Patel Nagar, Dehradun

Mrs . Bincy.P.Tiwari
Asst. Professor
Department of Hospital Administration