

DRIVERS OF HEALTH CARE SPENDING

Discussion of health care spending frequently revolves around drivers – the forces that lead to increases in health care spending. This paper will provide a high-level framework for these conversations.

It is important to distinguish between forces that increase health care spending and forces that change how the needed revenue is raised. For example, cost-shifting reduces the financial burden on one payer, while increasing the burden on another. High-deductible health plans primarily shift costs from insurers to beneficiaries, although to the extent that they reduce utilization, they reduce aggregate spending.

This paper discusses spending. It does not address the value of spending, nor does it consider spending offsets (i.e. additional spending in one area that produces a larger reduction in spending in another area).

While this paper discusses the drivers of health care costs, it does not try to indicate the relative magnitude of the influence of each. Other than population, which has a fairly small effect, especially in Vermont, it is difficult to allocate relative importance to specific drivers. This is true for several reasons.

The first is that there is no agreement among health economists. Some emphasize price, while others emphasize increasing capability, while still others emphasize the prevalence of disease.

The second is that in one area of health care spending for which the ability to quantify the different drivers – pharmaceuticals – the pattern has changed substantially over time.

Population

Population affects health care in two ways. The first is simply population growth. All other things held the same, health care spending will grow as a population grows. This is true whether the growth is a function of broad forces like natural increase or migration, or a consequence of a change in program eligibility.

The second population effect is demographic. Age is one of the most reliable predictors of health care costs, so as a population ages (e.g. average age increases, proportion of seniors increases) health care costs will increase.

Disease

Obviously, there is a close relationship between disease and health care spending. The simplest way to structure the relationship is that increasing prevalence of disease leads to increased health care spending. This may be a result of an increase in the true prevalence of the disease in a population or an increase in the rate at which the disease is diagnosed. Ken Thorpe's work has identified the major role of the increase in the rate of diagnosed disease in increased health care spending.

Increase in the true prevalence of disease may be a consequence of demographic change (as a population ages, age-related disease increases), behavioral change (e.g. rates of smoking or obesity), or the advent of new diseases, such as AIDS.

An increase in the rate of diagnosis, as opposed to rate of prevalence, can happen as a result of a new screening program or the introduction of a new diagnostic tool.

A third disease-based effect is the severity of illness. Anything that reduces severity at time of treatment will reduce spending. For example, many infectious diseases are less expensive to treat when identified early in the disease process, and much more expensive to treat when treatment is delayed.

The final disease-based effect is "medicalization" – the process by which non-medical conditions are re-identified as being diseases.

Treatment

There are many ways in which treatment affects health care spending. The first is increasing capability to treat, usually in the form of new technology. This driver includes both introduction of treatments for diseases that had no treatment previously and new, more effective (and more expensive) treatments that replace older treatments. Some researchers, David Cutler among them, attribute much of the growth in health care spending to increasing capability.

The second relationship between treatment and spending is based on the relationship between capacity to treat and utilization. Numerous studies, including the work of John Wennberg and Elliot Fisher have identified a close correlation between the level of resources available and health care spending. This is the justification for regulation of capital investment, such as Vermont's Certificate of Need process.

The third driver in this category is quality of care. Both overuse (treatments whose benefits are outweighed by their risks) and misuse (medical errors) lead to increased medical spending.

A fourth driver is patient demand. This may be a consequence of patients having better information or of effective advertising (not necessarily different things). The role of patient demand is also a consequence of third party payment. By reducing or eliminating the financial consequences of care choices, patients may choose to use more care than they would if they were paying directly for care. As mentioned above, increased use of care may have positive effects on patient health.

The fifth treatment-related driver is medical uncertainty. In many instances, the best treatment (however that is defined) is not certain. Uncertainty may lead to increased use of services (and spending) in the belief that the service may improve the patient's health. For example, should a service be provided when:

- The likelihood of harm is small
- The possible benefits outweigh the possible risks
- The possible benefits outweigh the costs

The final treatment-related driver is defensive medicine. In response to a fear of lawsuits, practitioners may choose to provide or order additional services.

Prices

Like treatments, there are several drivers associated with price (the cost to treat). The first of these is inflation. Like everything else in the economy, prices for medical care are subject to inflation. Some of the inputs to the health care process, like fuel and electricity, grow at the general inflation rate, while others, such as medical equipment, may grow faster.

The second factor, somewhat related to inflation, is workforce shortage. Generally, health care salaries would be expected to rise at a similar rate to salaries in other sectors, but for classes of employees where

there is a shortage, such as nurses or medical technicians, salaries will rise faster than the overall rate of wage growth.

Prices are also driven in part by reimbursement policies. This mechanism operates in several ways. Most basically, fee-for-service reimbursement has a built-in incentive to provide more care, as opposed to capitation, which has an incentive to provide less. Providers will gravitate to services that have a higher margin. Most reimbursement systems pay relatively more for interventions, especially those that require expensive equipment, than they do for basic care.

One of the more controversial areas of discussion is how market forces (or their lack) affect health care spending. One position is that a lack of competition permits unfettered price increases. Others believe that competition leads to redundancy and excess capacity (which as discussed above, leads to higher utilization).

Closely related to the role of markets is the role of price regulation. Some states tightly regulate prices, usually in the hospital sector, while others regulate at a higher level (e.g. Vermont's hospital budget process). Many states have no regulation at all in this area.

The final factor in pricing is the cost of malpractice insurance.