**UNIT 11: Patients as Consumers**

Overview:

Video 11A: Consumer driven health plans: The video briefly reviews findings associated with Consumer Driven Health Plans (CDHPs), introducing three methods for supporting patient decisions to encourage value. Information asymmetries cause effort-based patient transaction costs that may be mitigated by providing information. Tendencies towards decision myopia may be mitigated by decision aids highlighting long-term considerations. Patient tendencies to avoid consideration of health information might be addressed by tailoring information presentation to situations where patients actually desire that information.

11B: Patient decision making and disruptive innovation: The video very briefly notes and reviews the arguments for encouraging disruptive innovation in healthcare. It also notes that high levels of perceived risk in medical decision making might limit demand for “bottom of the market” innovations.

Learning Objectives

1. Understand the rationale for increasing value by creating greater patient financial responsibility
2. Understand common limits of patient decision making, specifically
   1. Asymmetries in information
   2. Myopia
   3. Limited motivation to engage in active decision making
3. Understand the rationale for encouraging disruptive innovations and the challenge of finding market segments to accept “bottom of the market” solutions in high perceived risk environments

Role in Course: In unit 11, we remain focused on patients, now as potential drivers of value as active consumers. The logical regarding patient consumers is the same as the logic for all consumers: If patients choose higher-value providers over lower-value providers, it will motivate providers to increase value. Further, patients may be best positioned to eliminate low-cost, but low-value sources of waste. For example, if patients share in the financial consequences of somewhat higher office visit fees or inefficiencies in the delivery of care over multiple appointments, they might be motivated to switch to more economical provider settings.

**Consumer Directed Health Plans**

Consumer directed healthcare plans attempt to encourage normal market forces by having patients share in the financial consequences of healthcare decisions. These plans encourage patients to become involved in cost-benefit tradeoffs for their own care. The conclusion that CDHPs can add value usually rests on an assumption patients will use valid information to make their decisions. Conversely, if patients routinely damage their own health to save money, then we’ve encouraged cost savings but not value.

There are multiple specific models through which patients can be made to share in the financial consequences of care. In the US, the relevant plans often have two components. First, patients put money into Healthcare Savings Accounts (HSAs). They use these accounts to pay directly for health care with pretax income. Second, HSAs are often combined with high-deductible health insurance plans. For instance, a family might be responsible for their first three thousand dollars’ worth of healthcare spending each year. The goal is for the patient to be protected against catastrophic outcomes such as a life-threatening illness but for the patient to also function more like an independent consumer for non-catastrophic care. Some additional safeguards are often in place as well, for instance preventive screening might be free to the consumer to encourage its use.

Of course, while the US has been experimenting relatively recently with various tax and policy structures for these sorts of plans, high deductible health plans are very common globally, particularly in many lower resource countries. And, individuals worldwide without either private insurance or comprehensive government health provision naturally must act as consumers, choosing their own care and paying with their own funds. Globally, then, there are many individual patient consumers and markets driven by patient consumers.

Overall, we find that patient financial responsibility often results in value through lower spending. For instance, the classic RAND study concluded that, overall, when insurance requires patients to pay higher percentages out of pocket for care, utilization of care goes down but health outcomes seem to stay the same. However, an auxiliary finding of the RAND study was that there were some negative health effects of higher deductibles for lower income patients who need care. The more recent Oregon experiment concludes that insurance access shows measurable benefits only for some clinical domains such as mental health, and in later analyses, diabetes care. Overall, then, the effect of financial responsibility (or, conversely, of insurance coverage) seems to vary by patient and clinical context.

Clearly, if we want to increase healthcare value through more patient control of health decisions, then we care about the quality of those decisions. The three aspects of patient decision processes I review below also represent potential places to invest in support of patient decision making. These involve: Information, myopia, and avoidance.

**Patient Decision Making**

*Information Asymmetries*

A central challenge with healthcare delivery is the presence of information asymmetries between patients and providers. One important aspect of investment in value-based care is creating information that is understandable and accessible to the general patient population.

**Transaction costs**, specifically the costs of making any exchange such as when a consumer makes a purchase, are an obviously important aspect of consumer behavior. We know that decision makers often fall back on habit or simple heuristics in their decision making, for instance. These simple strategies make sense because our time and cognitive effort are scarce resources.

One challenge with some healthcare decisions is that the cognitive effort required for these decisions can seem overwhelming to some people. Some findings suggest a potential for information overload: too much choice may cause some decision makers to become overwhelmed, ultimately causing them to avoid the category altogether (something I’ll come back to in the context of myopia) or perhaps causing choice of lower quality options.

Beyond the fact that patient consumers may neglect to use available information due to transaction costs, another source of concern is that patients might not have the information we’d like them to have. Providing information to consumers is therefore one way to improve the value of care. There are some interesting and promising initiatives in this space (e.g., HealthcareBlueBook, Castlighthealth, etc.).

*Myopia*

Even if patients had perfect information, we would not necessarily expect perfectly rational decisions that always maximize care value. One pervasive issue is that all decision makers, including patients, tend towards myopia, or specifically tend towards over-emphasizing short-term considerations in favor of longer-term considerations. The tendency towards myopia is common for health decisions.

Much healthcare is characterized by short-term individual cost such as insurance premiums and co-pays. The benefit of much health care is both long term and probabilistic. More generally, healthcare is often a **credence good** in that the consumer, here the patient, cannot fully assess the quality of care even after it’s received. This again renders the benefits of care abstract and psychologically distant. Decision settings with short term costs and long-term probabilistic benefits tend to create myopic decision making where choices reflect extremely severe discount rates for the future. That is, decision makers tend to overweight the here and now in these settings.

It might be useful to invest in decision support that goes beyond simple information presentation. If we know that consumer health decisions tend to be biased towards myopia, we can create information and decision aids that push in the opposite direction.

*Motivation*

Particularly in situations characterized by negative services such as life insurance or healthcare, we tend towards avoidance. Information that is available might often be neglected because active choices just aren’t made.

If we look at patients as consumers, our tendency is to assume that each time a patient accepted care, he or she was making a conscious decision to choose the provider, treatment, etc. If we step back, though, it’s easy to recognize that there is likely to be a good deal of inertia in these decisions. Sometimes, what looks like a decision in the medical record isn’t actually experienced by the patient as a decision at all.

For example, several conditions typically need to be in place for healthcare quality information, such as provider report cards, to actually change provider choice:

* Patients must perceive that they have a choice of providers.
* The individual patient must also perceive that quality matters, specifically that there are meaningful quality differentials across providers.
* Next, the individual patient must perceive a need for third-party quality-ratings information. We know that generally decision makers tend to overweight salient case-based information (e.g., recommendations from friends) over statistically preferable base-rate-information summarizing outcomes.
* Finally, patients have to find the information to be credible and understandable to use it.

What all of this suggests is a need to invest not just in high-quality, understandable information but also in an understanding of when patients actually perceive themselves to be in need of quality information. That is, it’s useful to invest in strategies for getting information in front of patients when they are or can easily be motivated to use that information.

We have some insight into when consumers are likely to engage in active healthcare decisions. For instance, some specific medical events such as first-time maternity and elective surgery seem to be “shoppable” or encourage active decision making. In addition, patient life experiences such as moving or changing insurance also can create the need and hence the motivation to evaluate provider choices. Finally, patients tend to increase their investment in provider-based decisions once they have experienced what they perceive as poor medical care or error.

Information-focused initiatives might benefit from investing in how to tailor information to these particular situations, as well as from investing in ways to identify other triggers for active decision making and hence desire for and use of information.

**Disruptive Innovation in Healthcare**

Disruptive innovation is a broad theory regarding innovation across many economic sectors, and it is often presented as the business case for innovation in health care. With disruptive innovation, less skilled workers in lower-cost locations begin to produce products that serve needs currently addressed by more skilled workers in inconvenient and expensive central locations. Further, and related, disruptive innovations generally start with less demanding customers, those customers that incumbent companies often think of, or even label, as the bottom of the market. This occurs partly because incumbents tend to overshoot the needs of the less demanding segment, providing solutions that are more complicated, technical, and expensive than those customers desire. So, disruptive innovation generally involves a value proposition of lower cost where that cost is usually in monetary terms but could be in terms of effort or other costs as well.

Some of the main suggestions made regarding applying disruptive innovation to healthcare include:

* Match clinical skill to problem difficulty. This might, for instance, involve using lower expertise providers for clear cut disease diagnosis or very straightforward procedures.
* Encourage a variety of settings for care, including offering care through new organizations (e.g., walk-in centers for retail care or freestanding procedure-focused specialty hospitals).
* Invest in simplifying technology.

There is one basic requirement that must be in place for these sorts of ideas to create rewards. That is, there must be a market willing to purchase the resulting innovative care. In many cases, regulatory changes would be required for such a market to exist. Regulatory shifts aren’t necessarily based on the ideas of disruptive innovations but they often follow from a similar general logic. Further, we’d often need more flexible payer models. Finally, we need patients who are active consumers willing to pursue less costly options while screening on quality to ensure that less costly care doesn’t mean shoddy or incomplete care.

Focusing on the requirements for patient consumers points to some of the potential difficulties with disruptive innovation in healthcare. One way we can classify consumer decisions is by level of perceived risk. **Perceived risk** follows from uncertainty about outcomes that are judged, by the consumer, to be potentially consequential. In general, perceived risk in medical care tends to be very high because:

* Medical decisions are often **credence goods**, meaning that their quality is difficult for patients to assess, even after a purchase is made. In many situations, not only will a potential patient have difficulty sampling or shopping for care, but that patient may never know if he or she made a good decision when choosing care. We can distinguish credence goods from search goods where, with effort, consumers can assess quality before purchase as well as from experience goods where consumers can assess quality during actual consumption.
* In addition, many healthcare solutions or decisions are **permanent** and hence perceived as consequential. It might be impossible to re-do procedures that don’t work well, or going down one treatment path might make a patient ineligible for other paths. And even when it’s possible to re-do care, remediation of poor care is likely to be associated with increased pain and inconvenience, as well as poorer expected outcomes.
* Finally, because of the above and related factors, there is a lot of potential for negative emotion with medical decisions. There is potential for fear and anxiety ex ante and regret ex post. These decisions often feel risky.

A significant issue regarding disruptive innovation in healthcare is that high perceived risk is often inconsistent with a desire for ”bottom of the market” solutions. As perceived risk goes up, consumers tend to rely on experts, or known brands, or other guarantees or at least signals of high quality. To generate truly disruptive innovation, healthcare innovators therefore have some extra challenges stemming from patient decision making. It’s often quite challenging to find patient segments happy to risk acceptance of a bottom of the market type offering, particularly a novel one.

**Summary**

Consumer driven health insurance plans can increase the value of care by requiring patients to have more financial responsibility for their own medical care, increasing their motivation to become active consumers. We often see positive, but not overwhelmingly strong, effects of patient financial responsibility on the value of delivered care. If we apply what we know about decision making to patients as consumers, there are a few sources of concern, also suggesting some ideas for making improvements.

* First, we can use **information availability** to address the ubiquitous information asymmetry that disadvantages patient as decision makers. Making better value-based information available to patients often seems to be a necessary but not sufficient step along the way to better patient decision making.
* Second, we know that patient healthcare decisions tend to be biased towards over-emphasis on short term considerations, or **myopia**. We can address this with decision support tools designed to explicitly draw attention to long-term considerations, supporting short versus long-term tradeoffs.
* Third, it’s useful to keep in mind that decisions regarding price-quality tradeoffs in healthcare aren’t exactly what most individuals are inclined to spend their time thinking about. If we want patients to use quality information, we need to address this issue by matching information availability to often-transitory **patient motivation** to search.

Disruptive innovation can be a useful model for thinking about value in healthcare. In this context, it’s again useful to understand some details of patient decision making, for instance so we can predict the incidence and success of disruptive innovation in part based on patient **perceived risk** levels.