The Economics of Health Care

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What do people want from healthcare? All of us want to be healthier, live longer and have a more fulfilling life. We also want security in times of need, assurance that we can access the services we need at a price we can afford. In other words, we aim for better healthcare for as many people as possible. Is healthcare services improving in the UK and all around the world? What do improvements mean to us? Do the current structures of healthcare systems serve us well? How can we make it more effective and efficient for the benefit of everyone? I will take a look at all these questions in detail below and I will suggest a few possible answers and explanations as well.

If we want to analyze health improvements first of all we need to clarify our *values*,[1] core *priorities*,[2] and our *principles*[3] on which we take action. As Stephen R. Covey put it, *"Most of us spend too much time on what is urgent and not enough time on what is important."*[4] We need to be clear about what we consider valuable and what quality care means to us. Without clarifying our values we cannot know whether an outcome of an action is an improvement or a setback.

According to Michael E. Porter defining value in health care can be problematic and the concept of value is often misunderstood.[5] Healthcare organizations often have conflicting goals and priorities. However, he argues, in a well-functioning organization value is always defined based on customer needs. In other words, the ultimate goal of a healthcare organization should be increasing value for patients.[6]

Scholars argue healthcare improvements can be classified into three major clusters, *quality*, *accessibility*, and *cost*.[7] First, we can define health care quality based on two main dimensions: *quality of care for individual patients* and *effectiveness*. We can also distinguish between the effectiveness of clinical care and the effectiveness of individual care.[8] Other

factors that indicate improvement in healthcare delivery can be: decreased medication errors,[9] [10] [11] hospital admission for preventable conditions,[12] [13] and diagnostic errors.[14] [15] [16]

Regarding *cost*, more and more people started to realize, with the accelerating wealth gap[17] high-quality healthcare has become less and less affordable for more and more people. Clayton Christensen in his insightful book reached a similar conclusion.[18] He argues, today more and more people find themselves unable to access even basic healthcare services.

When it comes to security and peace of mind the situation isn't any better. Today an increasing number of people have become unable to afford even the most basic care insurances.[19] [20]

In terms of *accessibility*, there is also room for improvement[21]. At a famous 2005 Supreme Court decision Chief Justice Beverley McLachlin drew a memorable and widely quoted conclusion: *"Access to a waiting list is not access to health care."*[22]

The question is how can we approach these problems to achieve the most significant improvements?[23] [24] What are the most effective ways of executing improvement initiatives in healthcare?[25] John Maxwell leadership expert argues, to change an organization's most basic processes and values, we have to start from the top.[26] Improving an organization's leadership can have the greatest positive impact on its state.[27] Improving organizational culture can also be a catalyst of organizational performance improvement.[28] [29] Especially in healthcare, where the majority of services are delivered in a person-to-person manner, the role of organizational culture is significant. As the popular saying goes, *"Culture eats strategy for breakfast."*.[30] Establishing an open organizational culture based on open communication, strong community[31] and psychological safety[32] can greatly improve person-centered care. Customer satisfaction starts with employee satisfaction[33]. According to former MIT professor Edgar Schein, every culture has three levels: *Artifacts* (the most visible part), *Espoused Values* (commonly held values), and the less visible part, *Tacit Assumptions* (taken for granted assumptions that really drive behavior).[34] By opening up channels of communication between organizational levels[35] we can make sure *"bad news is circulating faster than good news"*.[36]

Lean thinkers developed a process-based approach to deliver greater customer value. They call it *Continuous Improvement* (CT) Process[37] [38] (also called *Kaizen).*[39] Simply put, it is based on three major steps:[40] identifying value from the perspective of the customer, identifying all non-value-adding activities—also called *waste*—(using tools like *Value Stream Mapping)*[41] eliminating all of these non-value-adding activities in a continuous manner.[42] Evidence shows, applying the Continuous Improvement Process to healthcare can lead to outstanding results in

terms of organizational efficiency,[43] [44] [45] even in times of crisis and disruption, like the COVID-19 pandemic.[46]

Another great way to improve the quality of healthcare delivery is to focus on the experience of end-users.[47] Relationship scientist Harry T. Reis developed a *universal model of human relationships* that can be also applied to customer experiences with great success.[48] He argues, the most important factor of extraordinary interpersonal experiences is *responsiveness*. It rests on three pillars: *understanding* (the other person knows how I see myself and what is important to me), *validation* (my partner respects my needs and who I am as a person), and *caring* (the other person takes active and supportive steps in helping me meet my needs). By making *responsiveness* to customers a part of the organizational culture we can greatly enhance the quality of person-centered care.[49]

According to the popular saying, attributed to the great management guru, Peter Drucker, *"What gets measured gets managed"*. If we want real improvement, measurement is key. As Michael E. Porter put it: *"Rigorous, disciplined measurement and improvement of value is the best way to drive system progress [in healthcare]."*[50]

The first step for effectively measuring improvements in health and social care would be to set realistic and measurable goals and clear targets.[51] A good way to achieve that is to follow Edwin Locke's goal-setting approach by setting *SMART goals*.[52] [53] If we want a more comprehensive approach we can use the *OKRs* (Objectives and Key Results) goal-setting system[54] [55] (initially developed by former Intel CEO and chairman, Andy Grove).[56]

Secondly, we can create a clear and accurate measurement system by developing actionable metrics and indicators.[57] We need both qualitative and quantitative data, gathered from every important stakeholder of the organization. By taking a systematic approach and measuring improvements through ratios rather than absolute numbers we can make all measurements standardized, comparable, and therefore more actionable.[58]

It is also important to get the terms right if we want to achieve real improvement. We have to make a clear distinction between *inputs, outputs,* and *outcomes.*[59] We also have to clarify the real meaning of the numbers by measuring *productivity, effectiveness, and efficiency.* This way we can understand complex problems and gain an in-depth understanding of the correlation between different causes and effects. As an example let's say we organize an educational program for the staff of a healthcare organization. The program aims to increase the quality of care delivered to patients. It costs £15 000 *(this is an input)*, provides 100 hours of training *(this is an output),* and results in a 30% decrease in medication errors *(this is an outcome)*. If we want to get a full picture of our investment we also have to examine the number

of decreased medication errors per pound spent on training *(productivity)*, the number of decreased medication errors per training hour *(effectiveness)*, and the number of training hours per pound *(efficiency)*.[60] This way we can create a standardized baseline across multiple initiatives. We can use this baseline to evaluate different improvement initiatives and select the one that has the greatest overall effectiveness in the long run. This way we can develop meaningful indicators of our improvements and not just a short-term one that shows just a partial, incomplete picture. Using this system of metrics we can better evaluate the overall administrative efficiency of the organization.[61] We can also combine these overall baselines across multiple organizations, measured in multiple timeframes and even across multiple industries.

Thirdly, it is crucial to take real action based on our improvement indicators. Dealing with too much data can be as harmful as not having any data at all.[62] Management experts Alistair Croll and Benjamin Yoskovitz suggest using a metrics prioritization system to determine the most important metric that drives business success.[63] They call it *OMTM* (One Metric That Matters).[64] By using this system we can take action based on our most important priorities without being distracted by too many details.

If we think in terms of general healthcare improvements throughout society, it is important to enhance the quality of communication and collaboration between different parties of the healthcare sector. All three parties (governmental, private, and the third sector).[65] Involving the *"third sector"*[66] (including non-governmental, faith-based, community-based, and patient-based organizations as well as professional associations, the World Health Organization) can also be a catalyst for change.[67] Donella Meadows in her insightful book[68] suggests the greatest way to improve the effectiveness of complex systems is to improve the quality of the communication between its parts. This way we can better respond to urgent health and humanitarian needs,[69] such as the COVID-19 epidemic,[70] HIV/AIDS crisis[71] , and other urgent healthcare emergencies. By improving the quality of the communication between different organizations we can make the healthcare environment more homogeneous by developing standardized protocols, practices, measurement, and quality standards.[72]

Demand and supply for healthcare as well as recent trends in healthcare expenditures are in strong correlation with one another. We can develop a better understanding of the current market demand by following two different approaches. By looking at the big picture, by examining the forces that shape supply and demand for healthcare and by looking at the details, and by examining particular factors of consumer behavior.

Based on the *substitution- and income effect*[73] economists assume that people are satisfaction maximizers.[74] If the price of services goes up, customers will automatically consume less. However, understanding demand for healthcare based on traditional microeconomic models can be problematic for several reasons.[75] Healthcare expenditures cannot always be planned in advance[76] and therefore are not always following the logic of the *"invisible hand"*.[77] For example, during an emergency people are not going to base their decision on price.

If we want to understand what drives demand for healthcare we have to take a closer look at customer behavior. A common explanation of people's behavior from an economics perspective is the *"Rational Actor"* model.[78] Traditional economics assumes every actor behaves rationally and tries to maximize his or her gains. However, decades of research in cognitive sciences[79] and the emergence of *Behavioural Economics*[80] showed us that people behave much less rationally than we previously thought. Quite often people behave opposite to their self-interest, depending on circumstances.[81] This can also have implications related to healthcare consumption. Let me mention one well-researched example. People have a tendency for "overconsuming" healthcare services if it is covered by an insurance policy. (It is the finding of one of the greatest health insurance experiments conducted in the mid-1970s).[82] [83]

Another noteworthy trend that greatly influences demand for healthcare is changes in the age structure of the population[84] [85] and the emergence of aging societies.[86] Particularly in western countries societies, people are living longer,[87] which increases the demand for healthcare services.[88] The emergence and improvement of medical technologies can also increase demand.[89] As an example, with the development of *X-ray* technology a whole new industry has emerged based on the technology.[90] Developing new medications can also greatly influence healthcare demand.[91] Societal, environmental, and political factors also correlate with fluctuating demand for healthcare.[92] For example, with the improved quality of education people also focus more on their health.[93] Global warming and weather disasters also contribute to certain spikes in demand for healthcare in certain areas.[94] The legalization of different substances can also increase the demand for certain medications.[95] Increased economic wealth can also cause increased demand for healthcare.[96] Studies also show, in the past 40 years many industrial countries showed a great increase in demand for healthcare due to increased life expectancy, increased quality of life.[97]

Different economies have different healthcare systems based on entirely different structures.[98] For example, there is a Single-Payer System (where hospitals and healthcare facilities are public property and staff is public employees). This system is based on taxation

and the government pays for most of the prescriptions and medical expenditures. It is in direct correlation with healthcare demand and supply because every citizen is required to get health insurance[99].

The UK for example has a different kind of healthcare system. It is called the Socialized Healthcare System, founded and controlled by the government. In this system healthcare workers are directly paid by the government. This system allows people to access healthcare even in situations in which other systems would not[100]. For example low-income families or patients with special medical conditions. The US healthcare system is still different[101]. Most healthcare providers are private firms, the majority of households are covered by private insurance that people have to individually pay for. But the US system also has a single-payer system for individuals over 65 and for those below the poverty line.

Based on these different structures of health care sectors, the supply of healthcare can vary greatly. For example, as every huge bureaucratic organization, Socialized Healthcare Systems (for example in the UK) sometimes can operate quite inefficiently.[102] Therefore the level of supply in some cases is not capable of following in real-time the fluctuations in demand. For example, when we think about the long waiting lists of hospitals and GP practices.[103] In this regard, the mostly privatized US healthcare system is answering more quickly to fluctuations in demand. However, more and more scholars and healthcare professionals realize, access to healthcare in the US has become a luxury for many people and this trend is continuing.[104] The structure of the UK healthcare system, therefore, is better in terms of accessibility,[105] which can make a life and death difference in many people's lives, especially from low-income households.[106]

In conclusion, we can say, healthcare improvements sometimes can be hard to define and measure. Healthcare is a very complex and highly interconnected environment. If we try to improve an individual part of the system we might cause unforeseen consequences at some other sub-part of the system. Therefore it is important to take a systemic approach for understanding and improving the system as a whole. Looking at customer needs can always be a good starting point. However, we have to consider many other areas of healthcare delivery as well, if we want to achieve real improvements. For example, examining and understanding the benefits and tradeoffs of different healthcare structures and systems; looking at short- and long-term consumption trends; examining consumer behavior can all be part of the big picture. This way we can assure we will not mistake short-term gains and quick fixes with long-term results and real improvements.

Endnotes

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