

The Supply and Demand of Healthcare

Name:

Institution:

Course Title:

Assignment Name:

Instructor:

Date:

The Supply and Demand of Healthcare

The supply and demand of healthcare refer to the synergetic relationship between the providers of the care and the consumers of the healthcare services, depending on the price, availability, and quality of care. Their analysis can help healthcare managers anticipate the effect of changes and adjustments in prices, technology, or policies on healthcare. However, the demand for healthcare services remains inelastic as it does not affect much due to changes in prices or policies. Therefore, the balance between supply and demand is the dire need of the healthcare system so that care providers can be encouraged to induce necessary care services to maintain care quality in the healthcare market. This paper discusses the supply and demand for the two important industries namely automobile and healthcare, draws a comparison in the supply and demand of automobile and healthcare industries, explains the latest legislative trends that influence supply and demand, and discusses reimbursement methods that impact healthcare services' supply and demand.

1. Demand for Healthcare Services vs. Demand for Automobiles

As compared to the other industries of the United States, the healthcare sector is largely at the edge of the supply and demand shortage because of the increasing reimbursement models, high insurance rates, chronic illnesses, aging population, and an ever-evolving regulatory system of healthcare services. The demand for healthcare rises due to the rise of the desire of consumers to be in good health. Therefore, the supply and demand of the healthcare industry is exponentially increasing and remain insufficient for the U.S. population due to which the future of the healthcare sector is uncertain, affecting the quality of service to a great extent.

On the other hand, the automobile industry is thriving in the United States because of the high demand of consumers for automobiles. The industry, therefore, depends on the fuel and petroleum prices because when the gas prices rise, demand for small-scale vehicles proportionally rises and when the costs for gas or fuel decrease, the demand for large-scale drive vehicles increases with the increase in demand for automobiles. Resultantly, when the economy of the automobile industry flourishes, the lifestyle of individuals also improves, directly coinciding with people's lifestyles with the automobile's purchasing demand.

a. Important Factors Determining the Demand for Healthcare Services

Importantly, health access and healthcare costs are the two factors that determine the need for healthcare services across the United States. These two factors also depend upon several other factors including the patient's income, government policies, healthcare costs, and insurance coverage of the individuals. Firstly, access to healthcare is a significant factor that determines the demand for care services because many U.S. citizens are unemployed and uninsured which greatly impacts people's way of accessing care they need. Secondly, the factor of accessing care contributes further to the factor of healthcare costs because people are likely to demand less of it when the care costs rise (Wellay et al., 2018). Nation Institute of Health conducted a survey in the year 2017 which revealed that 18% of patients skipped their medication dosages because they could not pay for their treatment and 20% omitted "filing prescriptions" because of the costs of follow-up appointments and treatments (Sarkodie, 2021).

b. Important Factors Determining the Demand of Automobiles

The contributing factors that determine the demand for automobiles include weather, geography, gasoline prices, and wages or income. For instance, if an individual lives in an area

where there is a lot of snowfall around the year, the demand for 4-wheelers or all-wheel vehicles increases because the people of the area need a reliable and safe means of transport.

Furthermore, the demand for automobiles increases with the increase in demand for the prices of gasoline. It can be an important factor because when gasoline's price begins to skyrocket, the demand for electric, hybrid, and fuel-saving vehicles increases (Hensher & Smith, 1984).

Additionally, income and economy contribute to the low and high demand for the automobile as when the price of a 4-wheel vehicle increases, the demand decreases and when the price of a vehicle decreases, the demand increases. Using basic supply and demand concepts, people will tend to delay the purchase of a new vehicle, opting for a less expensive and different vehicle option, or use another form of transportation like the subway.

c. Similarities & Differences of the Demand Curve of Healthcare Services and Automobiles

The biggest similarity between the automobile and healthcare industries is the product which is provided to the consumer or the patient. On the other hand, service is the biggest difference in both industries. For instance, in the automobile industry, one can deny a car to a person who is not ready to pay for the vehicle outright. However, in the case of the healthcare industry, one cannot deny a person any medical treatment or immediate response to a medical emergency because healthcare is the basic right of every human being and one cannot deny it in any situation. Choosing the consumers is another big difference between both industries because, in the automobile industry, people can choose their consumers like people do in almost all industries. However, a doctor at a hospital cannot choose their consumer of the service because they have to deal with every patient on a prior and equal basis.

2. Supply of Health Services vs. Supply of Automobiles

The supply of healthcare services within the healthcare industry influences how services or procedures are performed on patients seeking care from hospital facilities or any private health provider. A CNN report published in 2017 revealed that the U.S. healthcare system is in dire need of hiring 2 million healthcare professionals well-versed in diverse care fields to mitigate the risk of staff shortage by 2025 to tackle the aging population and their care needs qualitatively (Pagano, 2020). The demand for healthcare professionals and workers is growing faster in the care industry than the supply because physicians retire every following year and the increasing number of aging population in the country.

Contrary to the healthcare industry, the automobile supply increases with the increase in the demand for a higher number of cars or vehicles. Coinciding with the demand for the vehicles, suppliers increase the supply costs as they expect to make more profits and revenues per unit of automobiles they sell to the buyers so the cost of the car depends on the targeted class of buyer. Levinsohn (1994) states that the supply of automobiles becomes lower when the price of an automobile rises, resulting in a smaller volume of consumers who purchase the vehicles (Levinsohn, 1994).

a. Important Factors Determining the Supply of Healthcare Services

The contributing factors that determine the supply of health services include hospital availability, employee burnout, and physician shortage which are areas of concern within the healthcare industry. The decline in hospitals or care facilities is the major factor as the residents of rural areas in the United States often face challenges in accessing quality healthcare due to the shortage of care facilities in their respective areas (Cruz-Gomes et al., 2019). Approximately,

more than 150 hospitals in rural communities have been at risk of closing their doors since 2010 and 100 hospitals have shut down due to supply shortages which could result in serious life-or-death implications for rural communities across the United States (Smith & Brown, 2024). Lack of staff or employee burnout is another significant factor determining the supply of healthcare services as the demand for healthcare workers is high, but the rate of professionals in the field is comparatively low, making access to care more challenging for the unhealthy population.

b. Important Factors Determining the Supply of Automobiles

Automobiles need rubber, metal, lithium, plastic, and other important materials to make vehicles so these materials need to be available in order to manufacture and produce drive vehicles. In addition, every vehicle has approximately 20,000 individual parts which workers make through assembly lines and are sourced or manufactured by a third party in the automobile industry. In terms of factors that contribute to the supply of vehicles, the manufacturing, distribution, and supply processes of automobiles can be slowed down with a delay in any one section of the supply chain. This can cause a serious shortage of the supply of automobiles resulting in a lack of production of vehicles.

Moreover, the cost of production severely influences the supply of automobiles in the respective industry because if there are not enough production lines in the industry, a limited number of automobiles will be manufactured and produced. For instance, if automobiles cost more resources to be produced, they will need more cost to be purchased which will affect the supply and demand of automobiles. Therefore, a few number of automobiles are produced due to the cost of production if manufacturing costs significantly increase. Furthermore, if the cost is

too high due to the high cost of manufacturing, the consumers will shift their purchasing choice and buy a different as well as less-expensive vehicle or choose different forms of transportation.

c. Similarities & Differences of the Supply Curve of Healthcare Services and Automobile

Like the automobile industry, the healthcare sector is an ever-emerging variable depending on the availability of hospitals, healthcare professionals, and other workers to render care to unhealthy people. Although supply is limited as compared to the demand which is increased at times due to hospitals and healthcare providers' unavailability, the sector is flourishing due to the demand for care continuing with every passing day. Comparing the automobile sector with the healthcare industry, if the consumer does not like the available supply, he might reject it as he has the freedom to go elsewhere to buy resources for manufacturing, distribution, and production. However, in the healthcare sector, the demand for healthcare services continues to increase due to which supply decreases.

3. Current Legislative Trends Influencing the Supply and Demand of Healthcare

Within the contemporary healthcare industry, several legislative trends that influence the supply and demand of healthcare services include telemedicine, scope of practice, Medicare reforms, and price expansion. Since the Covid-19 pandemic, the U.S. healthcare system has adopted and expanded telemedicine or telehealth services. Due to the acceleration of the efforts, legislators are working hard to make temporary telehealth services, such as overcoming geographic restrictions and reimbursement rates, flexible and permanent. Moreover, adjustments to Medicare and changes to payment policies include maintaining telehealth facilities post-pandemic era and addressing payment reform in the Medicare program for low-income

individuals. Various states in the United States are considering expanding the scope of practice allowing physician assistants and nurse practitioners to address workplace staff shortages and perform their responsibilities independently. In addition, legislators have pushed for greater transparency in medical pricing as there is a dire need in the U.S. healthcare system to strengthen price transparency requirements for insurance companies, nurses, hospitals, and pharmacy benefit managers.

a. Impact of Medicare and Medicaid

Medicare and Medicaid, the government's initiatives to aid U.S. citizens in paying medical and healthcare expenses, eliminate hindrances to access to quality care for uninsured people and those with low income who cannot afford high care expenses. Medicare, an age-based federal health program, guarantees health coverage for 60 years and older, whereas Medicaid, a public health assistance program, guarantees care assistance for low-income individuals regardless of their age (Andrulis, 1998). Both healthcare programs grant consistent sources of healthcare supply to primary and preventive health services. However, payment prices of the Medicare health program are insensitive to supply and demand as they are not beneficial unless the federal government provides effective strategies that are competitive with private insurance companies. In addition, payment prices of the Medicaid health program are the main reason why doctors are always "apprehensive" which results in lower care quality for low-income individuals.

b. Impact of the Uninsured Population

Since the pandemic of Coronavirus-19 around the world, many young Americans lost their employment due to the non-availability and accessibility of workforce employment. In turn,

many Americans have lost their health insurance which left a large number of unhealthy populations unemployed and uninsured. Subsequently, those who remained uninsured are less likely to receive preventive services for chronic health conditions. For any medical conditions, they are expected to pay for their healthcare services out of their pockets and are considered self-pay patients (Dixon et al., 2017). However, as human beings and citizens of the United States, they still have their basic right to emergency healthcare service whether they are insured or not, but the high demands of the uninsured population result in a great burden for the hospitals and the overall healthcare system. The cost to collect from such self-pay patients for the services provided to them is higher than the cost to individuals who are insured due to the reason many Americans have low-paying jobs which hinder their capacity to pay for hospitals by themselves. Therefore, by providing healthcare services to uninsured individuals, hospitals are unable to supply high-quality care to people with no insurance while struggling to increase revenue as well as reduce healthcare costs, dealing with low reimbursements in the care industry, and trying to meet the demand of the unhealthy population of the United States.

4. Reimbursement Methods Influencing the Supply and Demand of Healthcare Services

Capitation, Fee-for-Service (FFS), and Bundled Payments are the three common forms of reimbursement methods in the healthcare marketplace where each payment model and methodology impact the supply and demand of the care service in various ways. The capitation reimbursement methodology is the process in which an insurer pays a fixed amount for the healthcare service provided to the individual patient by the doctor or hospital (Torrey, 2022). This process ensures that healthcare providers meet the needs of the patients in various ways while meeting the supply and demand of the care service. The Fee-for-Service reimbursement

process incurs a high amount of self-pay from patients for the services provided to them as the members of the care team are always available to help patients with their treatments and procedures. It is a volume-based approach where patients have to pay high out of their pockets because the care team order unnecessary diagnostic tests to increase their reimbursement to provide care for their patients (Miller-Breslow & Raizman, 2020). Lastly, the Bundled Payments process makes healthcare costs much more predictable for the payers of the service such as insurance companies as the system utilizes telemedicine and often restricts supply if the providers may have “incentives” while taking healthier patients to increase their reimbursements.

a. Stakeholders Paying for Healthcare Services

Some of the stakeholders who pay for healthcare services are physicians, employers, patients, insurance companies, the government, and pharmaceutical firms. Purchasing healthcare services is not like purchasing an automobile based upon personal choice of color options and vehicle upgradation but a patient and the government or insurance companies have to pay for the healthcare services because he cannot buy ingredients for the cancer treatment and put them all together to make a medication of his own choice. These insurance companies and government programs are not in business to make revenues and earn profits as they operate based on the customer's needs and wants.

b. Impact of Reimbursement Methodologies and Payment Models

The supply and demand of healthcare services are significantly impacted by the payment models and reimbursement methodologies as they influence healthcare delivery by shaping care providers' behavior, affecting overall healthcare costs, and impacting patients' access to quality care services. Capitation incentivizes preventive care as healthcare providers receive a fixed

amount per patient. However, it can risk under-provision of care and efficient resource use if not managed properly. Similarly, the FFS model aims to provide care quality and improve patient outcomes but it can lead to overutilization of services that may result in higher healthcare costs. In a nutshell, these models and reimbursement methodologies can promote cost control but can limit service availability if the budgets and resources are too restrictive.

References

- Andrulis, D. P. (1998). Access to care is the centerpiece in the elimination of socioeconomic disparities in health. *Annals of Internal Medicine*, 129(5), 412–416.
- Cruz-Gomes, S., Amorim-Lopes, M., & Almada-Lobo, B. (2019). The Demand for Healthcare Services and Resources: Patterns, Trends and Challenges in Healthcare Delivery. *Operational Research: IO 2018, Aveiro, Portugal, September 5-7 19*, 91–106.
- Dixon, M. S., Cole, A. L., & Dusetzina, S. B. (2017). Out-of-pocket spending under the Affordable Care Act for patients with cancer. *The Cancer Journal*, 23(3), 175–180.
- Hensher, D. A., & Smith, N. C. (1984). Automobile classification for choice and demand modelling. *Transport Reviews*, 4(3), 245–271.
- Levinsohn, J. (1994). International trade and the US automobile industry: Current research, issues, and questions. *Japan and the World Economy*, 6(4), 335–357.
- Miller-Breslow, A. J., & Raizman, N. M. (2020). Physician reimbursement: Fee-for-service, accountable care, and the future of bundled payments. *Hand Clinics*, 36(2), 189–195.
- Pagano, M. (2020). *Understanding Health Care in America: Culture, Capitalism, and Communication*. Routledge.
- Sarkodie, A. O. (2021). Effect of the National Health Insurance Scheme on healthcare utilization and out-of-pocket payment: Evidence from GLSS 7. *Humanities and Social Sciences Communications*, 8(1), 1–10.
- Smith, J. G., & Brown, K. K. (2024). Rural hospital and obstetric unit closures as social determinants of racial and ethnic maternal health disparities: A scoping review. *Journal of Advanced Nursing*, 80(8), 3059–3071.
- Torrey, T. (2022). *How healthcare capitation payment systems work*.

Welay, T., Gebreslassie, M., Mesele, M., Gebretinsae, H., Ayele, B., Tewelde, A., & Zewedie, Y. (2018). Demand for health care service and associated factors among patients in the community of Tsegedie District, Northern Ethiopia. *BMC Health Services Research*, 18, 1–9.