

USE OF VALUE CHAIN ANALYSIS TO IMPROVE THE QUALITY OF HEALTH SERVICE

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ABSTRACT

Quality is currently one of the most important strategies adopted by WHO in to gain time to please and deal with the client for the greatest possible benefit to auditors, In health service, quality and value have become convergent ideas, and the importance of patients as clients has grown as a result of a focus on quality management and value delivery. The supply chain idea also aids marketing by showcasing the ties that make up a network of firms that manufacture products for customers, as well as shifting the attention away from individual transactions and toward a more holistic view of the entire system. The value chain idea in marketing broadens the perception of the supply chain in a significant way. It describes the value created at each level of the chain and, for marketers, is a critical tool in satisfying customers for a portion of the value chain. This research looks at numerous value approaches that are critical for the value chain's success, then identifies key aspects of the value chain and follows them as they relate to services. Finally, it looks at one of the most complicated services, the health services system. Finally, the research reveals some crucial implications for health-service marketers by evaluating the critical aspects determining the performance of the health-service process.

KEYWORDS

Value Chain, Analysis, Quality Enhancement, Health Service

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1. INTRODUCTION

Measuring beneficiary satisfaction with health service has become one of the most significant indicators of service quality. These organizations now operate in a world that is unquestionably marked by numerous challenges as a result of significant developments associated with increased domestic, regional, and international competitiveness, as well as the significant effects of modern technologies, which have altered many of the issues associated with the management and functioning of institutions in comparison to previous times.

In light of this, these institutions' management should be concerned about long-term competitive strategy. In the area of strategic management of institutions, in particular, the development and expansion of their use were initiated by Porter's contributions as one of the leading researchers in this field, which were accompanied by contemporary developments in the management sciences and business management of enterprises in general.

Value chain analysis is an economic development strategy aimed at reducing poverty by improving SMEs' integration into competitive markets. It provides a basis for understanding the linkages between enterprises in a certain sector by looking at the chain's performance or rationale and determining the circumstances under which it might perform better. The series of transactions that move a product from the point of origin to the end consumer is determined by the same value chain. The value chain framework aids in the identification of services and solutions vital to an industry's productivity and competitiveness, as well as helping micro, small, and medium businesses to enhance the quality of their services, products, and overall productivity (Kula & Farmer, 2004) As a result, the value chain analysis considers both macro and micro issues, addressing policy restrictions to economic development, trade, and competitiveness as well as domestic restraints encountered by businesses and people.

The value chain for the manufacturing process is theoretically easier to define than the value chain for the service process (Evans & Berman, 2001). The level of customization supplied by the service, the degree of engagement of a partner or consumer, and the uncertainty underlying the underlying process are all essential elements to consider from a value chain viewpoint. Many of these aspects are backed by formulae and metrics that allow for a degree of precision in the field of industrialization. Because measurements are less precise in services, the value chain of services might be more complicated.

This paper examines the critical factors affecting the success of the health service process and focuses on one of the most complex services, the health service delivery system. It describes the value chain of health services and describes the critical factors affecting the success of the health service process. Finally, some major implications for health service marketers are suggested.

2. INVESTIGATE THE VALUE CHAIN

2.1. THE CONCEPT "VALUE CHAIN ANALYSIS" HAS A LONG HISTORY

One of the terminologies used in business management to convey the chain of actions that might help improve the value of final goods is the value chain.

Lawrence Mill coined the phrase Value Chain in the 1950s, and Porter expanded on it in his publications, which focused on the search for sources of competitive advantage and their origins by focusing on the performance of diverse operations at the company level.

2.2. THE VALUE ANALYSIS CHAIN'S IDEA, GOALS, AND SIGNIFICANCE

2.2.1. VALUE CHAIN ANALYSIS AS A CONCEPT

The value chain is a chain of activities that runs from the use of raw materials to the delivery of the product to the final consumer (Porter & Millar, 1985).

They were defined by (Miles, 2015; Fard et al., 2013) as a comprehensive approach for identifying and addressing variables that do not contribute effort or expense to goods, processes, or services. This approach makes use of all available technology, information, and abilities to quickly discover any expenditures and efforts that aren't contributing to the client's needs and desires.

He said (K. L. Smith, 2000) that a giant organization that seeks likeness or excellence in its work must guarantee the principle of doing too much (Doing more with less), so it is a tool that helps us achieve that.

Describes (Ranjbaran & Moselhi, 2014) as a comprehensive mission to manage problems: take alternative design objectives, cost estimation, and draft and organization inappropriate selection criteria. Quantity methods are used and know-based decisions to improve job satisfaction for owners with help reduce unnecessary costs.

They are (the talents and resources necessary to carry out each of the Organization's actions to supply products or offer services through marketing outlets), according to (Day, 1999).

According to (Ansari et al., 1997), a value chain is the interaction of numerous parties, including the processor, the organization's sections, the distributor, and all those parties who offer value at various stages to the value chain's activities.

It can be said that according to the above definition, the value chain is a method or analysis that entails examining all of an institution's internal and external activities, as

well as organizing them by the organizational structure and the selection of effective human resources.

2.2.2. VALUE CHAIN ANALYSIS OBJECTIVES

One of the objectives of the organizations' adoption of the value chain analysis concept is:

1. Improve quality by increasing the function of the product (the level of performance the client receives from the product) while making resources stable (which are considered raw materials, human resources, price, and time) or by lowering resources while stabilizing the function, or by both enhancing the function and reducing resources.
2. They may be used to increase efficiency and find the optimal balance between the cost, functionality, quality, dependability, and performance of a product or service, as well as to finish processes as soon as possible without increasing costs or lowering quality (Taghipour et al., 2015).
3. Besides using them efficiently and logically with collective wisdom and experience, they can reduce the potential risks involved in implementing a project (Kalluri & Kodali, 2017).
4. Identify the function of the product or service by determining the equivalent of this function, find alternatives through creative thinking, provide required functions to achieve the project's original objective, reliability, and at the lowest cost of life cycle without compromising the project's quality, maintenance, conservation, or environmental requirements.
5. Use all available technologies, information, and abilities to determine expenses and efforts that aren't in line with the client's objectives and needs. "Their influence makes it easier for perform better"(Carter & Price, 2017).

2.2.3. IMPORTANCE OF VALUE CHAIN ANALYSIS:

The following is a summary of the importance of value chain analysis (Bogale, 2013):

- a) Reducing operational costs is aided by solving the value chain.
- b) The analysis aids in the organization's performance planning.
- c) Assists the organization in identifying chances to expand its work.
- d) Assists the organization in determining performance metrics for management information systems.
- e) Assists you in making better decisions.

2.3. VALUE CHAIN ANALYSIS ACTIVITIES

2.3.1. THE MAIN ACTIVITIES ARE:

- a) Input: This includes the processing of raw materials, inspecting and storing raw materials as well as receiving and storing materials, inventory control, and distribution of inputs used in the manufacture of goods or the provision of services.
- b) Production Operations: Are concerned with quality, cost, consumable services, delivery, and reaction time. Production processes encompass the acquisition, design, and operation of machinery, as well as the control of production (Foss & Robertson, 2007).
- c) Output: Many operations entail distribution, companies rely on brokers to dispose of their goods or sell them to consumers. Distribution systems are a critical component of an organization's resources. that must be handled, and a distribution strategy connected with the selection and determination of distribution channels is required (Hitt et al., 2016).
- d) Marketing and selling: Marketing is a significant activity that contributes to understanding consumer wants or uncovering new marketing possibilities, as well as aiming to establish a balance between market needs and the organization's capabilities and hence the organization's competitive advantage (Mohamad & Bakar, 2018).
- e) Service: It includes after-sales services such as maintenance and client delivery. According to the researcher, distribution is intended to be a component of marketing and selling.

2.3.2. SUPPORT ACTIVITIES

- a) The buying department is in charge of supplying raw materials and equipment to the company required for the manufacturing process, and the Purchasing Department must have a high capacity in order to achieve maximum benefit from cost reduction while maintaining the quality components of the good or service.
- b) Technology development: Refers to all actions aimed at improving production techniques and complying to total quality standards and new ISO systems that need the use of computers in the job to be done (Forcht, 1996).
- c) Human Resource Management: Active employees are the human resources that the organization's management has to pay great attention to because they are largely reflected in its activities.
- d) The organizational fundamental structure is made up of all organizational levels that are responsible for carrying out the organization's numerous duties, such as public administration, strategic planning, accounting, legal affairs, public relations, and industrial security. As a result, all of the organizational structure's contents are

compatible with the organization's core thinking qualities, which may be updated and altered in response to developments and changes.

2.4. VALUE CHAIN AND APPLICATION

The value chain framework attempts to overcome limitations by identifying the many entry points and links in the production or supply chain, allowing SMEs to take advantage of the full range of activities needed to change a product or service from concept to end use, including design. While production, marketing, distribution and delivery to the final consumer can be contained within one large firm in an economy with few cross-border transactions and dispersed production inputs and assets, they are more likely to be shared by specialized firms of different sizes and cost structures operating in different locations.

The competitiveness and growth of a company, as well as the strength of the whole industry chain, are determined by how it participates in the industry's production process. This strength is defined by two types of corporate ties, vertical and horizontal, according to the literature on value chains. Vertical linkages are at the heart of every manufacturing process, connecting providers of inputs, producers, retailers and distributors of a certain service or product. The value chain's fundamental skills are defined by these linkages. Collateral linkages are frequently associated, lowering overall efficiency and transaction costs. Individual organizations can be included in the network, and commercial service providers can be partnered with to obtain economies of scale.

3. THE VALUE CHAIN FOR HEALTH SERVICES

Health services are a market with many similarities to traditional markets, such as market segments that can be identified by common characteristics, they also have clients and patients, and similar problems, such as increased customer identification and governance structures that are revenue and cost conscious, implying that the health service does not differ and should not differ in its interest in customer satisfaction.

By mapping and responding to the restrictions and possibilities presented by health care institutions in specific markets, value chain analysis may be used to improve health sector efficiency. In developing nations, the size and complexity of the health sector is expanding, and health sector reforms and cuts to the government's health budget have resulted in a greater role for private health in the delivery of health services (E. Smith et al., 2001). In this setting, public health practitioners and the donor community must work to improve access and quality of services.

The interactions between diverse service providers, product suppliers, manufacturers, policymakers, government agencies, and customers show the intricacies of the health industry. The formulation of plans to improve sector growth and raise demand for health services and goods requires sector-wide analyses of health care delivery and product distribution. The value chain framework might be

used for this purpose, serving as a tool for identifying supply chain bottlenecks in the health sector and leveraging synergies among service providers, professional organizations, manufacturers, distributors, and other stakeholders. Figure 1 depicts the health value chain scheme.

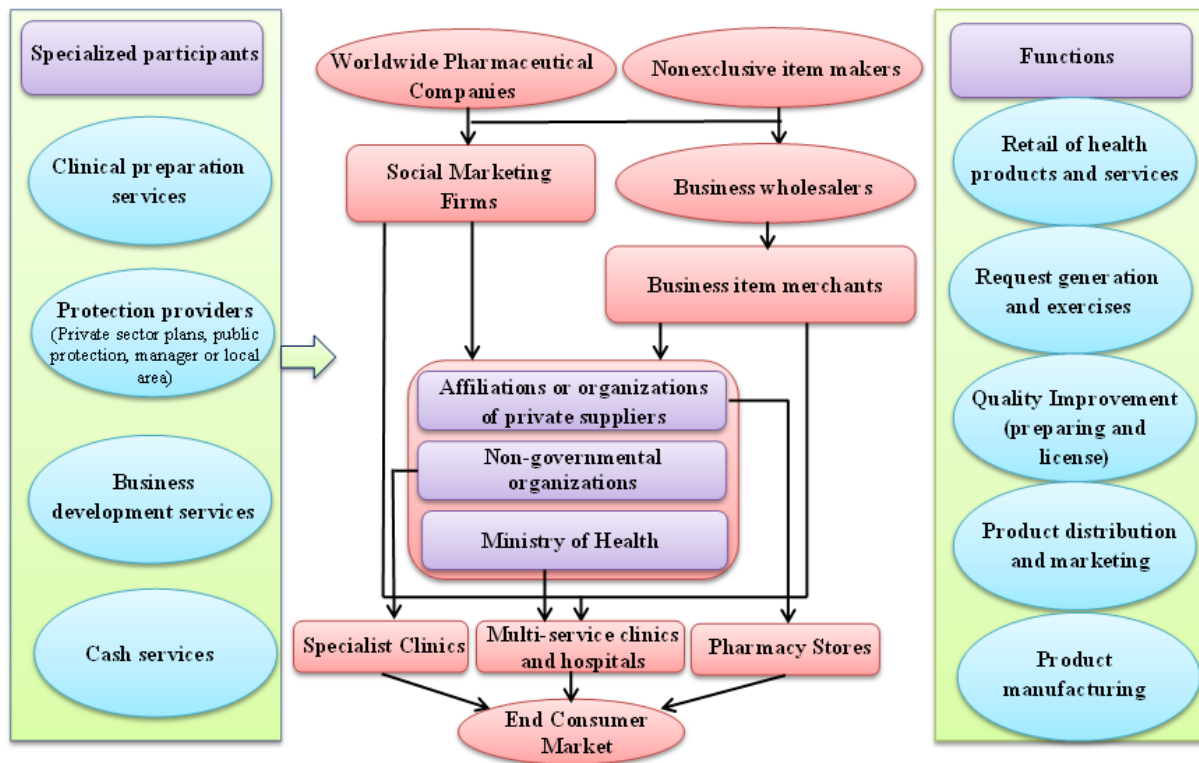


Figure 1. Health services value chain for products and services

Figure 2 depicts some of the players in the health services value chain who link the many stakeholders in the health services system as a model of the health services value chain. These value chains must be understood to be non-linear, non-continuous, periodic, and recurring. The flow of information is usually governed by a specialized communication network among many parties. The value chain will be damaged or interrupted if communication is stopped, information sent is delayed, or worse, fraudulent information is sent, placing one or more players at risk. Patients (and their health) are the most vulnerable, but other parties may suffer reputational harm or face litigation directly.

The shortest value chain of patients and their interactions with health professionals or physicians is formed by the initial participants. Patients often begin the exchange procedure and obtain the anticipated health advantages at the conclusion. They prefer to share essential information with their doctor, especially if they believe it will help the doctor make the best diagnosis possible. Sharing information entails confidence that the doctor will protect the information's integrity and that the exposed patient will utilize it for the intended purpose. Another crucial part of this information sharing is the patient's trust in the accuracy and relevance of the information presented. Patients may provide information and describe symptoms that are unrelated to the patient's

current problem, which can cause confusion rather than help a doctor. Assuming that they have the correct information from their patients, health providers must first make the correct diagnosis and then develop the treatment plan, thus contributing to the value chain. Figure 2 shows the first and second numbers in the series.

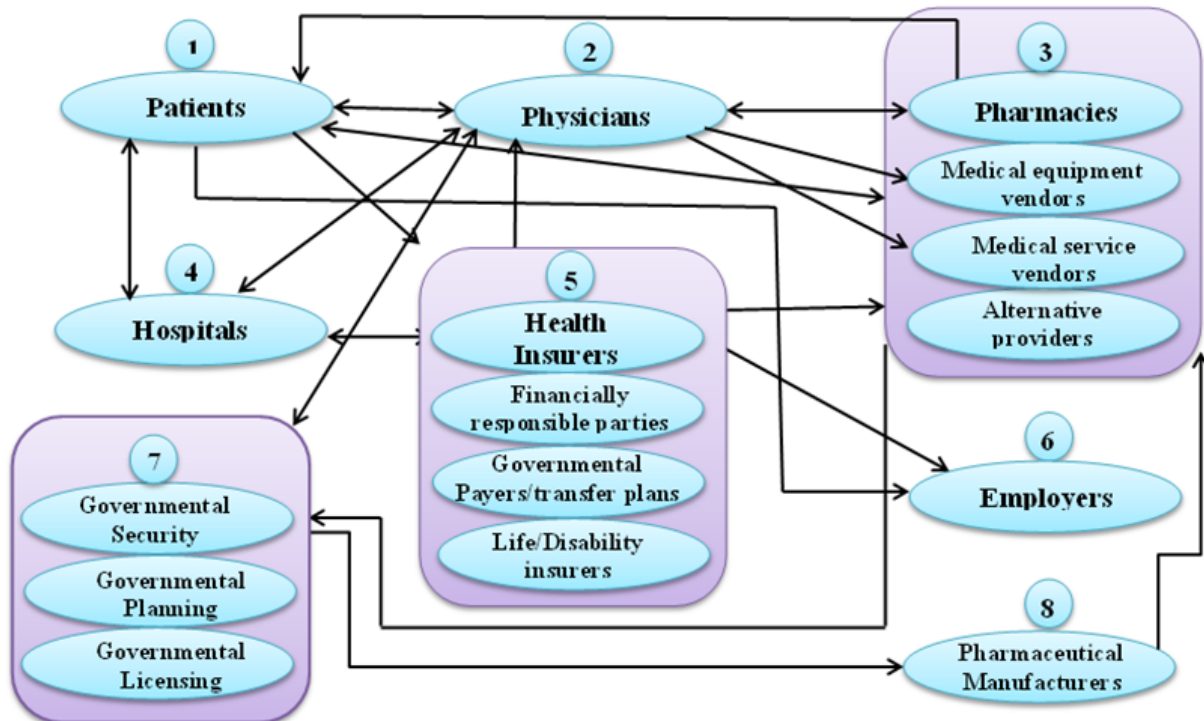


Figure 2. The health service value chain's relationships

In many cases, a diagnosis includes a treatment plan, which includes a prescription, as well as the pharmacist's dose schedule, which includes doses and other pertinent information; the pharmacist may or may not be aware of the patient's other medications, and it is possible that the last prescription will be filled. Pharmacies are an obvious entry point within the value chain and introduce a new variable. Figure 2 shows the expanded value chain in figures 1, 2, and 3.

By asking patients for extra information or offering a mechanism for patients to contribute further information, a third value chain is created, even if the patient offers a correct description of their symptoms. Additional material may include a description of a diagnostic test. Once this diagnostic test is detailed, more participants enter the process. Naturally, they should be aware of the expectations placed on them and aware of the need of obtaining accurate information about their role in the value chain. Medical laboratories, equipment makers, and diagnostic providers are now part of the value chain.

Suppliers of inclusivity are another possible value chain, as described above. An increasing number of alternative health services professionals, such as acupuncturists and herbalists, have recently entered the value chain. There may be four to seven actors in the new value chain, and information is passed back and forth frequently in

sequence. One or more actors, such as those depicted in figure 2a, 2b, or 2c, have now been added to the value chain (2).

In addition to serving as major repository of medical records, hospitals have a considerable impact on the value chain because of the involvement of patients. Fourth-generation health service delivery chains revolve around patients, just way products do as they travel up and down value chains. Patients' health and responsiveness to therapy are heavily influenced by the value chain, which currently includes numbers 1 to 4 in figure 2 A new categories of health care services is created as a result of this value chain.

A new link was added to the value chain with the development of health insurance in the late 1800s. The availability of resources, affordability, and insurance theoretically adds a lot to the value chain. They also need access to formerly confidential information. Before paying for a test ordered by a medical professional, the insurance company, for example, could ask for diagnostic information. Procedures that are too complicated may be denied by insurers who prefer to utilize simpler methods to examine a problem. Figure 2 shows that the value chain now includes numbers 1 to 5.

Employees and their families in the United States have access to health insurance through their workplace and a collective bargaining agreement, which is generally the product of talks between the employee's firm and the insurance carrier. In this way, huge corporations may be able to get better terms for themselves, such as reduced premiums or greater coverage for their employees. When it comes to employee benefits, it's all part of an overall strategy of equalizing the risks. Refusing to cover employees who are qualified for benefits is almost never an option. Numbers 1 to 6 have been added to the sixth value series of health services shown in figure 2.

The capacity to pay out of pocket for health services promotes the idea of everlasting value for health service providers as a result of insurance interference in health care transactions. All insured people who do not register health service providers in their insurance schemes fall under this group, regardless of whether or not they are uninsured. Consumption is considered as a way for customers to make their own choices, which might possibly shorten the value chain while also altering its overall structure.

Affordability may have a role in a variety of factors, including health service demands and the appropriateness of different providers. Figure 2 shows the impact on the value chain of a patient's inability to pay for or need to find a lower-cost medication prescribed by their doctor, which we classify as a third variable in the value chain.

4. APPLICATION OF THE VALUE CHAIN FRAMEWORK FOR HEALTH SERVICES

With this value chain method, it is possible to discover various aspects of the health service market and identify prospective areas where public health care services and products might be strengthened.

1. One of the best ways for small businesses to achieve a competitive edge is by improving their overall efficiency and quality of service. There have been technological advances as well as advancements in the clinical capabilities of medical facilities.

Health service providers can boost their competitiveness and productivity by boosting service quality and stock or decreasing operational expenses. Smaller healthcare providers can boost productivity by offering a wider range of services, such as specialized therapeutic or diagnostic care. Large health service providers can instead create expensive laboratories in order to continue internalization services.

2. Horizontal links guarantee that small businesses collaborate to cut transaction costs and benefit from economies of scale.

Individual service providers can benefit from economies of scale and easier access to training and supplementary services, such as loans, business development, or marketing, when structured into subsidiaries or networks. It is possible for the network to have a variety of service providers, depending on the situation. Small businesses can benefit from referrals between professional service providers, such as retail pharmacies and midwifery clinics, in order to guarantee that consumers are aware of respected service providers and have easy access to a high-quality package of health service. A unified procurement agreement might be used to recruit high-quality manufacturers into the supply chain through the network.

3. The use of vertical connections is critical in fostering growth by increasing efficiency and enhancing a company's ability to compete. A direct link between input supply and ultimate consumer markets is shown by these links, which may be restricted to domestic boundaries or linked to global markets

Connections between various sorts of health care institutions. Relationships between various professional service providers, such as laboratory or diagnostic services, which are directly integrated into the supply chain, should be reinforced to increase overall supply chain efficiency.

4. In many developing nations, the existing market for support services will have a significant impact on the strength of the value chain of health service.

Small and medium-sized enterprises (SMEs) must have access to financial services, cutting-edge technology, and information on clinical and other health training in order to keep up with the times and remain competitive.

An major element in increasing the usage of preventative service is the health insurance market. Consumers who are unwilling to pay for preventative treatments up front may be reluctant to pay service providers to deliver those services as part of ad hoc programs. The employer or the business sector contributes to private patient funds. Some of the strategies to stimulate the use and supply of health service include national insurance schemes and community risk-sharing partnerships with providers.

5. The engagement of governments and donors in policy formation and formulation is essential to establish an enabling climate for the supply of health service.

Individual health service providers, whether small businesses or major hospitals, must enhance the quality of their health services in order to adopt and control health quality standards. By offering training and clinical assistance, national standards may be a stimulus for local market development organizations.

Private health service providers, large and small, must be encouraged to participate in the delivery of services by the larger policy environment. For example, private health insurance subsidies and contracts with private providers within the national health insurance plan can serve as methods for licensing and regulating the operations of health services.

As a result, the health sector will be constrained in its expansion and may need to enter into joint ventures with public producers in order to boost supply and lower prices for end users. The reduction of import duties or the negotiation of long-term agreements with certain pharmaceutical businesses might serve as incentives to foster collaboration between these nations and regional manufacturers in countries where drug makers do not have a local market.

6. Demand generating strategies must be institutionally connected to their provision in order to enhance the final market potential. Demand and service delivery are interdependent, and demand generation strategies must be linked to their provision.

Partnerships with a wide range of stakeholders might include: Preventive health services can be promoted by the public sector, major enterprises, schools, community organizations, and so on. For the purpose of boosting their market share, commercial pharmaceutical corporations might team up with non-governmental organizations (NGOs) to conduct educational programs targeted at certain consumer groups.

Funding strategies based on need: In order to entice clients who are less inclined or who have a tight budget, targeted vouchers or savings-based micro-

insurance products might be employed. There will be a rise in demand for other types of insurance and risk-sharing systems that are based on the private sector or employers.

Increase demand for preventative health service by offering urgently required services provided by small service providers. Providers of these diagnostic and therapeutic services make more money.

5. EFFECTS ON MARKETERS

While the value chain is built on the notion of a supply chain, this study investigates how value is produced for the final consumer at each point along the way.

Business components, such as the value delivery network, and consumer business components, which complement the value chain, are recognized as distinct in the value chain idea. That value chains will compete with others and that members of the value chain must shift away from transaction models and recognize that their well-being resides in a successful value chain.

For enterprises that want to develop a value chain for health services, each member of the service chain must be carefully selected and evaluated. The whole value delivery network and patient outcomes are impacted when a value chain component fails. As a result of an incorrect diagnosis or operation, the health care delivery system will suffer greatly.

To ensure the success of the series as a whole, each member must achieve on his or her own while also contributing to the success of the group as a whole. This, for example, will improve the efficiency of the value chain and raise the perceived value of customers.

The long-term success of the chain is more important than the short-term success of a single transaction for organizations who want to maximize their own interests. Clearly, the argument that everyone should win is a waste of time. Instead, they should put their money into things that they both care about. More efficient health-care value chains will benefit from stronger government and third-party cost management, while those that lack efficiency and efficacy will eventually perish.

Enterprises must express their efforts to avoid difficulties before they become problems in order to avoid being blamed by consumers for unforeseen issues that hamper the success of their services. Reorganization of the workplace or medical facility may be necessary in some circumstances in order to accommodate this sort of engagement. Organizational value and the perception of value can be supported by patient representative concepts in hospitals.

Value chain organizations are critical to the service's success. There are several factors to consider when deciding which organizations should be given the most attention by marketers. Previously key partners may become less significant as the value chain develops.

The first step in maximizing earnings for health providers is to estimate the worth of the patient. Following their initial treatment, some patients may be sent for more expensive options including fitness and health training, physiotherapy, or even cosmetic surgery. Patients like these must be prioritized as appointment candidates in order to safeguard and preserve the lives of the most important patients.

6. CONCLUSIONS

This case study shows how the value chain concept can be used in a health service setting. It benefits health service managers because it requires them to disaggregate their health service function and evaluate its efficacy, as well as to identify alternate strategies for obtaining present results and consider future possibilities. Value chain analysis allows for an intra- and inter-organizational examination of resource application costs, which motivates both medical staff and management to consider alternate techniques and structures for accomplishing goals. This research yielded a lot of options and opportunities. The idea of employing staff abilities to propose preventative measures to industry and the wider community was considered, as was the possibility of expanding collaboration arrangements.

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