Summer Training Report on

"The quality of Patient care Services and Cost of Healthcare"

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Abbreviations Used-

AIIMS – All India Institute of Medical Science

CHC's – Community Health Centers

GDP – Gross Domestic Product

INR – Indian Rupees

NH – Narayana Health

NHM- National Health Mission

NSS - National Sample Survey

OOPE – Out Of Pocket Expenditure

PHC's – Primary Health Centers

PMJAY – Pradhan Mantri Jan Arogya Yojana

RAJ – Rajasthan

TN - Tamil Nadu

WB – West Bengal

Govt. - Government

1. Executive Summary

I Tanushka Goyal, student of IIHMR University have prepared a report on “The Quality of Patient services and Cost of Healthcare” as Research project to understand the relation among quality of Healthcare services delivered to patients and the cost of those services. This report also covers how quality of healthcare services influence out of pocket expenditure to the patients.

Rapid rising cost in healthcare has become the major cause of concern across the world. Indian healthcare is also experiencing a change, with increasing focus on affordable and better quality of medical care services. A large section of the healthcare practitioners are in the private sector, the government has now realized the need of improvement of medical care services and has already started taking steps to regulate the quality of medical care services by introduction of various accreditation norms like- NABH and NABL. This step is taken to keep regular check on the proper functioning of services of healthcare sector, but with recent advances in the healthcare, quality has become a major issue. Demand of healthcare is rising rapidly with the increase in the population and also increasing levels of affordability among people results in in the demand of good quality of healthcare services. Superior quality of healthcare services is often associated with higher cost of hospitalization. This report attempts to explore the relationship between quality of medical care services and the cost of hospitalization across hospitals of India.

Increase in demand of medical care quality, emerges the issue of affordability across India. This results in market segmentation where on one side there is increasing demand for quality medical care services and on the other side there is a demand for affordable medical care services. The demand for the latter has inevitably resulted in poor medical care services quality with poor health outcomes. In this report services provided by Government and Private sector is discussed. Also some states of India have been compared to understand different strategies implemented by them to conduct analysis of out of pocket expenditure of the respective states and to enhance equality in the healthcare system.

2. Introduction

2.1 Background-

In the world, where evolution of technology is on its peak, medical science is also seeing innumerable advances. But, when it comes to address patient needs and quality improvement, healthcare system performs far below acceptable levels. Quality improvement is meant for enhancing safety, effectiveness, and efficiency. So, redesigning healthcare system requires indulgence in specialized methods and tools known to assist not only improvement but along with this cost of Healthcare is also need to be regulated so that it can become accessible for all the citizens of our country.

"A healthy population, characterized by balanced birth and death rates, and a low incidence of disease, is fundamental to the growth and prosperity of a nation. This can be achieved if the quality of health care provided to the people is successful in appropriate management of the disease, and is available to the large majority of the population at an affordable cost. Thus, quality patient-care should be an underlying principle of a nation's health system. Public and Private Healthcare sectors are two major components of Indian Healthcare system." Earlier there was not much direct pressure to improve quality in India, but now public healthcare services face increased competition from private sector, along with rising expectations from patients who are more aware of what they needed and what is not available in terms of medical care.

2.2 Objective-

Prior objective of this project is- To study the impact of increased quality of patient care services on the cost of Healthcare. This report determines that without increasing the cost, the better quality of healthcare services can be provided to the patients which can fulfill their expectations. Also some states of India has been compared to learn different strategies adopted by different states to regulate quality and cost of Healthcare.

Further healthcare delivery of Public and Private sector is studied to analyze their role in delivering quality of services. This report gives many insights about the role of different people, hospitals and government in making healthcare affordable with better outcome of services provided to the patients. Examples of some Hospitals are also discussed to give better picture about how to maintain balance between Quality and the Cost.

2.3 Methodology-

This report is about Secondary research. In secondary research, the data which already collected and analyzed by someone else is utilized to find the answers of research questions.

Research Question-

How the quality of patient care services influence cost of the Healthcare for the patients (out-of-pocket expenditure of patients)?

Study Design-

In this research project Descriptive study design has been adopted to conduct Qualitative analysis of the project.

Sample Size-

To accomplish this study some states of India has been taken to compare their strategies to make Healthcare better. As well as 2 hospitals – Narayana Health and Arvind Eye care Hospital are also been taken as an example to explain the situation in a better way.

Data Collection-

To accomplish this study I did the extensive review of the following things to collect all the required data-

- Published articles and scientific journals
- Health data from Government sources
- Newspaper articles
- Reports of Government survey

3. Discussion

Findings-

The findings from the materials used for this study is discussed here.

3.1 Understanding the quality in Healthcare-

In Healthcare quality is comprised of newer technology and effective medication, higher staff to patient ratios, affordability, efficiency and effectiveness of healthcare delivery system. According to the Institute of Medicines, Quality is termed as "The degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge." Quality can be understood based on their overall implication on health outcomes of the patients. The various components that impact the health outcomes and influence quality are-

1. Comprehensive and integrated services, based on the demand, with adequate infrastructure and logistics plays a crucial role and influence quality of medical care.
2. Manpower skills, knowledge, qualification, technical training and their availability is also critical for improving the healthcare outcomes and to enhance quality.
3. Quality is affected by the nature and comprehensiveness of the information system, which helps identify exiting lacunae and take corrective action.

4. Availability of safe and effective drugs, technology and medications directly impacts the health outcome and should be considered as an integral part of quality
5. Accountability improves health outcomes and hence enhances quality. Effective and efficient governance is a cornerstone to ensure quality medical care services
6. Cost effectiveness also plays a crucial role. Quality can be acceptable only if it affordable for the general population.

3.2 Correlation between Quality of Patient Services and Cost of Healthcare-

In India, government health care services are organized into several levels. Primary health care is provided through a network of 146,036 health sub-centers, 23,458 primary health centers (PHCs), and 4,276 community health centers (CHCs). The sub-centers are the most peripheral health units and the first contact point between the health care system and the community. They provide basic drugs for minor ailments and meet people's essential health needs.

Around the world every healthcare system is fighting with the increasing cost and uneven quality medical care services. Today's citizens are more informed and knowledgeable and they demand good quality of care. Though paying ability has been increased in past few years but in India majority of population is poor, they cannot afford to pay high. So to make healthcare system fair, cost needs to be regulated to cover everyone under one roof.

To make correlation of quality and cost **Positive** we must shift the focus from the volume and profitability of services provided—physician visits, hospitalizations, procedures, and tests to the patient outcomes achieved. And we must replace today's fragmented system, in which every local provider offers a full range of services, with a system in which services for particular medical conditions are concentrated in health-delivery organizations and in the right locations to deliver high-value care.

3.3 Influence of the quality of patient care services on the cost of Healthcare-

In today's advancing era the demand for better quality of medical care services are increasing which in turn leads to the increase in the cost of Healthcare. But to make healthcare accessible to every citizen of India we need to make it affordable or need to regulate its cost with increased standard of quality of services. In India large number of people are below the poverty line who cannot afford high costs of medical care. In today's age of innovation and advancement, there is wide variety and quality of equipment's, devices and drugs that is available globally. If India is continue to attract top-end products and technologies, the price have to ensure economic viability for such premium product. With continuously reducing prices, there is risk of such products and services disappearing from Indian market. There is threshold below which the quality vs. cost equation can be dangerously tilted in favor of low quality, especially in the case of healthcare products and services. Therefore, it is critical that the government draws the balance between these and find the measures to mitigate the risk of lowering the prices leading to corresponding reduction in quality to sustain the margins. An increased focus on, and the well-implemented plan for quality control is critical at this juncture.

The influence of quality on cost can be understand through the example given below-

For example- Asset value of hospitals, implying the infrastructure, medical equipment technology, basic amenities and additional services provided assures quality improvement also it play a crucial role in cost of hospitalization. This study observes that with higher asset value the average cost of hospitalization increases. Nurse to patient ratios and staff to bed ratios also influence quality of care. Though it may appear that higher staff would increase the cost of medical care borne by the common man but, the rational for higher staff to bed ratio, results in provision of better quality of care, which in turn reduces the average length of stay and hence average hospitalization cost. Higher staff to bed ratio reduce the need for intensive care services and medical equipment support, which in turn reduce the cost of hospitalization.

Accreditations and quality assurance systems have also been observed to reduce the average cost of medical care services. This indicates that accreditations and quality assurance systems help hospitals to streamline their functions and processes, minimize wastage and hence aid in enhancing quality and reducing cost of care.
This implies that if a nation utilizes its resources optimally and maximizes the outcome they can get better health outcomes and overall quality of patient care.

3.4 Role of Public and Private Healthcare system-

The Indian Healthcare system is growing at brisk pace due to its coverage strengthening services and increasing expenditure by public as well as private players. There is considerable ideological debate around whether countries should strengthen public or private healthcare services, but in reality most countries use both of them.

- Public healthcare system-

The government i.e., public healthcare system comprised limited secondary and tertiary care institutions in key cities and focused on providing basic healthcare facilities in form of primary healthcare systems (PHCs) in rural areas. It is usually provided by the government through the national healthcare systems. This sector experienced limited availability of equipment, medication and trained healthcare workers. Public sector is accessible to even poor people but it provides low quality of services. Several state govt. are undertaking quality improvement initiatives combined with independent evaluation of the performance and impact of these initiatives. Like the UP govt. is also conducting a large scale randomized implementation and evaluation of social accountability interventions to monitor and improve the healthcare delivery services at village level.

Initiatives by Government-

- The Government has introduced Mission Indradhanush with the aim of improving coverage of immunization in the country. It aims to achieve at least 90 per cent immunization coverage by December 2018 which will cover unvaccinated and partially vaccinated children in rural and urban areas of India.
- The government has announced Rs 69,000 crore (US$ 9.87 billion) outlay for the health sector that is inclusive of Rs 6,400 crore (US$ 915.72 million) for PMJAY in Union Budget 2020-21.
- The Government of India is planning to increase the spending to three percent of GDP by 2020.

- Private healthcare system-

The private sector provides majority of secondary, tertiary and quaternary care institutions with major concentration in the metro cities. Private health care can be provided through “for profit” hospitals and self-employed practitioners, and “not for profit” non-government providers, including faith-based organizations. This sector more frequently violated medical standards of practice, but reported greater timeliness and hospitality to the patients. Private sector provides good quality of services but it leads to lot of out-of-pocket expenditure that everyone is not capable of affording it. The experience of innovators such as the Aravind Eye Care System has several lessons for the management of health systems in the public and private sector.

There is considerable ideological debate around whether countries should strengthen public or private healthcare services, but in reality, most of the countries use both types of healthcare provision. Recently, as the global economic recession has put major constraints on government budgets, the major funding source for healthcare expenditures in most countries which escalates disputes between the proponents of private and public systems have escalated. However, critics of the private health sector believe that public healthcare provision is of most benefit to poor people and is the only way to achieve universal and equitable access to health care. Healthcare system of India cannot function effectively without a supervisory framework to deal from fraud to denial of services. It needs a robust regulatory structure to assure basic standards of care and adequate institutional and technical capacity to handle large financing programs and should with issues of cost effectiveness and pricing.

3.5 Comparison of health financing strategies-

States who tried to reduce out-of-pocket expenditure were considered for comparison of financing strategies in this project are- **Rajasthan, Tamil Nadu and West Bengal**.

Indian states have implemented different strategies to arrest out-of-pocket expenditure (OOPE) and to increase equity in healthcare system to achieve the Sustainable Development Goals. Tamil Nadu (TN) and Rajasthan (RAJ) have implemented free medicine scheme in all public hospitals and West Bengal (WB) has devised Fair Price Medicine Shop (FPMS) scheme, a public-private-partnership model in the state. Comparison among three states is discussed below-

- Out-of-pocket Expenditure (OOPE) -

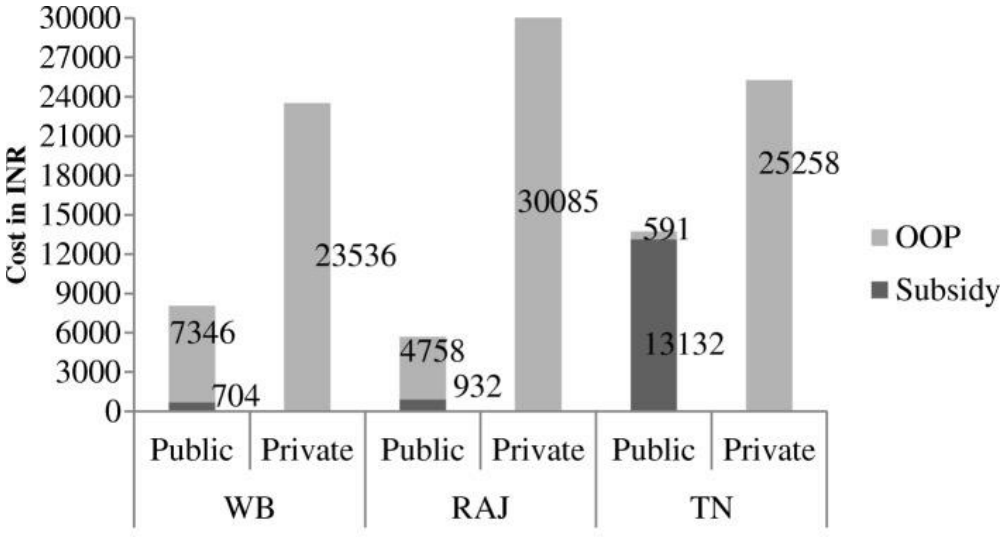
Almost all the public policies in healthcare system aim to reduce OOP expenditure. Therefore, it is worthy to study OOPE scenario of the states in the two time periods. In table the OOPE for medicine and for total medicine and treatment is presented separately.

Per-episode Out-of-pocket Expenditure during Hospitalization (in INR)

State	Expenditure on Medicine				Medical Expenditure			
	2004		2014		2004		2014	
	Public	Private	Public	Private	Public	Private	Public	Private
TN	102.41	1125.90	150.16	*3920.06*	1391.69	11766.71	450.85	*19264.71*
RAJ	*1725.07*	*2228.25*	1516.13	3451.26	*6212.58*	10691.45	3628.62	22946.43
WB	1326.12	1934.32	*1916.52*	2816.03	3222.24	*13715.03*	*5602.78*	17951.06

In 2004, it has been observed that, OOPE on medicine during hospitalization in public hospitals was the maximum in Rajasthan followed by West Bengal. Tamil Nadu recorded a far lower OOPE, in the tune of less than 10% of the corresponding figures in other two states. However, in 2014, the OOPE recorded the maximum level for West Bengal followed by Rajasthan. The OOPE on medicine during public sector hospitalization is the lowest in Tamil Nadu during 2014 also. It has to be noted that, the OOPE on medicine during private sector hospitalization is the lowest in West Bengal among three states in 2014.

- Cost of providing In-patient Healthcare facility in Public and Private Facilities -



Note: Estimate from NSS 71st round, State budget documents & NHM PIPs.

The analysis of the table shows that, treatment cost of a patient in public facility is lowest in Rajasthan and highest in Tamil Nadu followed by West Bengal. However, more than 95% of the total cost of hospitalization is subsidized in Tamil Nadu, while the corresponding shares for

Rajasthan and West Bengal are 16% and 9% respectively. It has to be noted that West Bengal enjoys a comparative advantage over other two states in private sector hospitalization. The OOP expenditure for private sector hospitalization is the minimum in West Bengal followed by Tamil Nadu and Rajasthan.

“The results show that overall utilization of public facilities in Tamil Nadu and Rajasthan has increased substantially; whereas, utilization of public facility has decreased in West Bengal even among the poorest. In addition, OOPE for both medical and medicine is the highest in West Bengal among three states for public sector hospitalizations. In conclusion we could say that Tamil Nadu and Rajasthan have successfully implemented their health financing to reduce the health expenditure burden. Hence, policy level changes are required to improve the situation in West Bengal.”

3.6 Improvement of quality will accelerate performance of healthcare system, how?

Quality improvement in the healthcare means a systematic approach by a healthcare organization that asses and improves the standard of the quality of the healthcare. The organizational chain of activities is cyclic and needs continues improvement to seek a higher level of performance. Continuous upgradation in healthcare activities can pull out healthcare organizations from inefficient traditional concepts and utilize technology/tools to perform efficiently and hence generate better quality results. “That’s why our medical environment requires deliberate redesigning reliable, cost-effective and sustainable quality improvement in healthcare system.” It is necessary so that everyone can get better quality of healthcare at affordable cost. Nowadays people are more informed and they had experience about healthcare services. People took their own decision from where to seek medical care and whether to take second opinion about treatment from other doctor or not. So, now they demand high quality of services as the ability to pay also increased among people.

To better understand the benefits of quality improvement in Healthcare System is discussed below-

1. **Safe:** “Systematic and organized approach is intended towards optimizing care for the patients it serves and avoids harm. It embraces a culture of safety, quality, and transparency.”
2. **Effective:** By improving the process, an organization reduces the chances associated with failure and redundancy. The improved healthcare system is more relied on the data driven science rather than anecdote driven.
3. **Patient-centered:** Improved efficiency of managerial and clinical processes leaves transition space for both doctors and staff to provide responsive, respectful and value based care for the patients.
4. **Proactive:** improved processes and system recognize and sole the problems prior they occur.
5. **Cost-effective:** Quality improvement processes are budget neutral. It avoids the cost associated with process failure, poor outcomes, and errors. Reliable and streamlined processes are less expensive to maintain.

6. **Efficient:** Improving process makes wasteful activities associated with equipment, supplies, energy and ideas becomes more obvious and makes it easier to eliminate.

Overall improvement in the quality and performance in the healthcare environment can help providers cost-effective, more reliable and sustained healthcare systems and enable them to achieve their goal of improving healthcare delivery and enhancing patient outcomes.

3.7 Narayana Health and Aravind Eye Hospitals-

One of the striking features of India's health care sector is the range of quality in available services. India is home to global leaders in innovation in and quality of health care such as the Narayana Hospitals, known for providing high-quality cardiovascular surgery at low cost, and the Aravind Eye Care System, whose hospitals provide a high volume of cataract surgery, as well as globally renowned medical teaching institutions such as the All India Institute of Medical Sciences (AIIMS), in New Delhi.

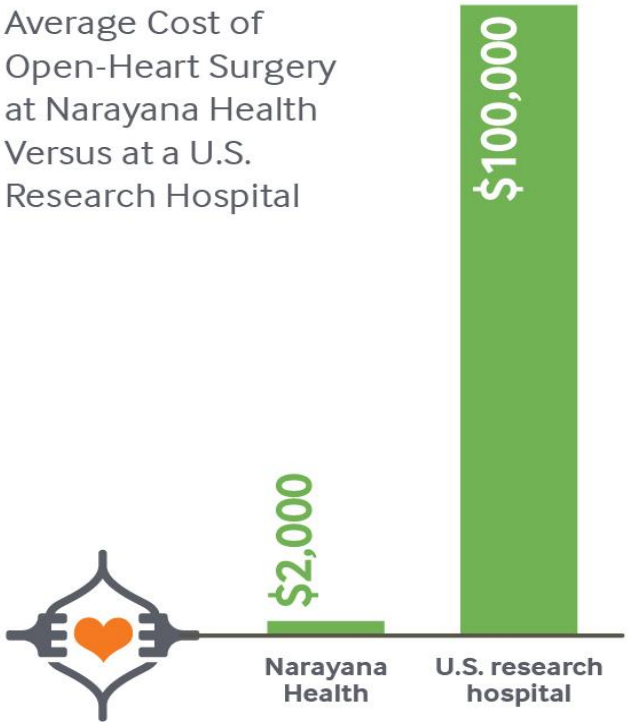
Narayana Health-

Affordability and quality do not goes hand in hand. Those seeking affordability had to be content with government hospitals, while quality seekers had to spend their way into private hospitals. Dr. Shetty began searching for a model that would marry affordability and quality. "I was certain of one thing though - charity is not scalable while a sound business model is," he says. In 2001, he founded Narayana Hrudayalaya (later renamed Narayana Health or NH) in Bangalore with a mission to take affordable health care to the people. 26-hospital network with 6,900 beds across 16 cities employing 13,000 people and 1,500 doctors. It has so far performed over 100,000 cardiac surgeries and 250,000 cath lab procedures. NH says about 12 per cent of all cardiac surgeries done in the country are performed at its hospitals and 50 per cent of its patients are from the economically-weaker sections. The lower cost has not come at the expense of quality. NH's mortality rate (1.27 per cent) and infection rate (one per cent) for a coronary artery bypass graft procedure is as good as that of US hospitals. Incidence of bedsores after a cardiac surgery is globally anywhere between eight and 40 per cent.

Key Program Feature-

"NH is designed for India, where the majority (58%) of health expenditures are paid out-of-pocket given that most people finance their own care." The success of model is achieved through complementary mechanism, which are listed below-

- Leveraging economies of the scale
- For surgery using assembly line concept.
- Reducing average length of stay
- Reengineering design, materials and the use of medical equipment's to reduce the cost of ownership.



Because of these innovations the cost of surgery is reduced in NH at good amount, depicted in the figure.

NH has acquired savings through the smart use of equipment's and telemedicine as well as staffing procedures. "The health system has built reliable and low quality supply chains in India over the past decades. Utilizing a pay per use model with suppliers for some diagnostic equipment's, it minimizes capital costs. In addition of offering its own facilities, NH has one of the world's largest telemedicine networks, connecting 800 center's globally. The system has treated more than 53,000 patients through telemedicine programs, increasing NH reach without requiring investment in physical infrastructure. Mobile outreach vans meanwhile, increases access to diagnostic consultation services in semi-urban and rural areas of India."

Aravind Eye Hospital-

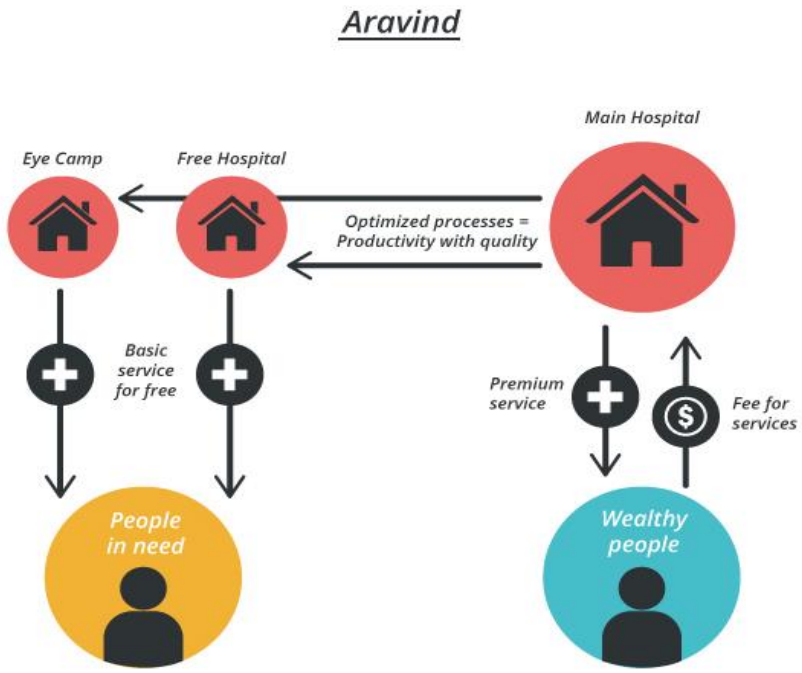
Imagine the world where you once saw a thing gets erased and have no hope of getting control of your life back. A cataract, a curable infliction of the eye, that has attacked men and women of every age and did not spare any one not even a child. However, this surgery is too costly for some to people to afford. India is a country with extremely high poverty rate, cataracts had become a major problem for the inhabitants. Cataracts have left millions to suffer with an unnecessary disability, but one man came about to challenge its hold on the people of India. Dr. Govindappa Venkataswamy revolutionized the medical field of eye care, and built a health institution that would allow everyone afflicted to get the help they needed, despite their ability to pay.

'Aravind Eye Hospital has risen from its humble beginnings to promote eye health not only in India, but also throughout the world. The International Institute for Community Ophthalmology, which is a part of Aravind Eye Hospital, trains eye care workers from low-income countries. There is a medical research foundation as well as an eye bank that handles about 900 corneas a year that are associated with Aravind. Aurolab is a manufacturing facility that makes lenses,

pharmaceuticals, and surgery supplies for Aravind. Aravind holds mobile 'eye camps' throughout the year to raise eye care awareness in India (Maurice, 2001). These eye camps screen villagers on a Sunday, then bus the patients into Aravind in the evening (Chang, 2004). The surgeries are then performed on Monday.'

Dr. V wanted to reach those who had not been reached before, and want to help poverty stricken people could not able to see due to eye problems. So he removed barriers and promoted community involvement, also had a growing market model for healthcare. Aravind is famous for its fee structure. "The consultations are free for poor patients while others pay 50 R's (their currency, approximately $1 US). Impoverished patients can be expected to pay as little as nothing, or up to 250 R's, which is as much as they can spare. A subsidized rate is 750 R's (approximately $15 US). The regular patient fee, which is aimed for middle income patients, is 3,500-6,000 R's. This is a need based transparent financial system, and it is this kind of trust and care Aravind has built that attracts paying patients. The lower than market cost for even the paying patients, at least 25% lower, attracts them also."

Business model of Aravind eye hospital-



Aravind Eye Hospital operates with a business model which is different from any other business in healthcare industry, bearing striking similarities to fast food industry instead Dr. V. was impressed with McDonals he, was surprised how McDonalds could offer same quality of product no matter where you went and still get it quickly. He became adamant about the fact that hospitals could also be run on the same principle and trained his employees to treat large amount of patients without sacrificing the quality of treatment. The Aravind system has a great approach to overcoming obstacles in the cataract surgery industry. The main characteristics of their model is that they provide quality care which is affordable to everyone. They are self-sustaining still able to provide healthcare services to poor and rich alike. Their business model

stresses a maximum use of all the resources optimally and this all achieved by their high volume quality and well-structures system. The Aravind model makes scalability in developing nation limitless through their fees structure, management techniques, high aspirations and quality of care.

4. Learnings

I undertook this research project to understand the quality of patient services and cost of healthcare as healthcare is the most important need of today's era. During this project I had learned the following things which are listed below-

1. With the advances in Healthcare, demand for good quality of services is increasing as now people has become more aware. But along with this affordability of healthcare cost is also demanded as large population of India is poor.

2. Quality improvement has direct relation with the service, delivery, level of patient satisfaction, efficiency and outcome.

3. The experience of innovators such as Aravind Eye hospital and Narayana Health has proposed several lessons for the management of health systems in the public and private sector. They are the examples of healthcare institution that provides better quality of medical care at affordable cost.

4. Various accreditations and quality and assurance systems help organization to streamline their processes, timely services and enhance patient's outcomes.

5. Quality has been considered as one of the crucial aspects, governing the higher utilization of private sector institution. But, private Sector is often driven by profit orientation and hence, over utilization of private sector in India can be assumed to be one of the reasons for increasing cost of medical care services in India. So they need to be checked.

6. From this project I learned that private and public healthcare should work together to ensure quality of healthcare to everyone. If they work together public sector can check the price of private sector and in turn public sector can inspire from private sector to provide good quality of healthcare services to its patient.

5. Suggestions

In developing, countries financial constraints often lead to compromised quality of care which can be corrected by the introduction of management systems. Here following factors are described who can contribute to the improvement of patient care-

1. **Trained Personnel –** A well trained eye care system is important to provide high quality care with desirable outcomes. The existing training programs must be improved. Making a uniform basic curriculum available for all training institutions/programs should help bring about standardization.
2. **Quality Eye Care -** There is significant concern about the outcomes of cataract surgery, and other common surgical procedures. “For example, adherence to asepsis in the operating rooms will help reduce post-operative morbidity and proper training of ophthalmologists in diagnostic techniques will help achieve better control of sight-threatening diseases.”
3. **Use of Proper Instruments – “**Good quality instruments are now available at lower costs. With the development of proper inventory control systems for a given operation, the costs can be lowered.”
4. **Use of Appropriate Medications -** Access to low cost medicines is an absolutely necessary for appropriate care.
5. **Use of Newer Technologies -** It is important to continually employ newer technologies that improve the quality of care and this must be done with reference to cost-efficiencies.
6. **Waiting –** Waiting time for all the services need to be minimized. It has to be addressed effectively through continual review of patient responses and other data and feedback collected from various people should be used to do required changes in the healthcare system.
7. **Public- Private Sector** – “Improving the quality of health care at the system level requires a focus on governance issues, including improving public-sector management, building institutional capacity, and promoting a culture of data-driven policies. Higher cost of private sector need to be regulated.”

6. Conclusion

Around the world, every health care system is struggling with rising costs and uneven quality despite the hard work of well-intentioned, well-trained clinicians. Improvement of patient care is a dynamic process and should be uppermost in the minds of medical care personnel. To achieve that it's a time for fundamentally implementation of new strategies. At its core is maximizing value for patients: that is, achieving the best outcomes at the lowest cost. We must move away from a supply-driven health care system organized around what physicians do and toward a patient-centered system organized around what patients need. We must shift the focus from the volume and profitability of services provided—physician visits, hospitalizations, procedures, and tests—to the patient outcomes achieved. And we must replace today's fragmented system, in which every local provider offers a full range of services, with a system in which services for particular medical conditions are concentrated in health-delivery organizations and in the right locations to deliver high-value care.

The Indian government is rapidly shifting from being a provider of healthcare to being merely a financer. This presents two formidable concerns. One, reverting to an earlier set of unsuccessful and cataclysmic strategies. Two, expansion of the private sector in a manner that could be counterproductive and wasteful. In pushing though such broad private participation in public health services, the government is squandering the state's significant bargaining power. Studies have shown that a strong public health sector can nudge the private sector to keep rates reasonable. With a strong public health sector, the state is in a better position to persuade the private sector to provide fairer, more efficient and better quality care, thereby driving down prices and enforcing necessary regulations and standards.

"To conclude, Healthcare is a very complex sector and several countries and societies are struggling to get it. We in India, are fortunate to have an extremely competent pool of healthcare resources, who can boast of some of the best health outcomes. India is known as the "Pharmacy of the world" and is fast becoming hub of innovation and manufacturing. All we need is that private and public sector should work collaboratively with trust and respect for each other. Each can support the other and work towards creating a healthcare that ensures quality healthcare to the poorest as well as facilitates the availability of best in class products and services to those who can afford it."

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