

ACTIVE MANAGEMENT OF HEALTHCARE OPERATIONS: STRATEGIC PLANNING OF HEALTHCARE

Information Technology and Management

Vol. VI, Issue No. II, May-2014, ISSN 2249-4510

International Journal of

AN INTERNATIONALLY INDEXED PEER REVIEWED & REFEREED JOURNAL

www.ignited.in

Active Management of Healthcare Operations: Strategic Planning Of Healthcare

Rashmi Kanta Tripathy

Research Scholar, Bundelkhand University, Jhansi, UP

Abstract – The migration to modern information systems and advancement in noninvasive health monitoring devices enable highly mobile users to support increased efficiencies and improvements in delivery of healthcare. Users of these systems are likely to have different needs or views of information either because of organizational role or because of geographic location. In this distributed architecture, available resources must dynamically be able to be reassigned to respond to external factors such as changes in the environment, changes in short-term objectives, reallocation of responsibilities, and changes in resource consumption patterns. This paper describes a framework for healthcare decision making and management of healthcare operations through the application of dynamic resource management using information technology for what we call active management of healthcare operations.

Keywords: Healthcare, Approach, Planning, Operational, Management

INTRODUCTION

With healthcare costs rising faster than general inflation, cost containment is a theme that resonates throughout the healthcare field today and receives increasing attention of policy makers, academia and industry. The healthcare sector all over the world is experiencing tremendous pressure to not only control the escalating costs but also improve the quality of care it provides to its consumers.

The four major areas where principles of operations management are deployed are facility design and layout, cost analysis, process analysis and information systems development and implementation.

Every day, one uses a multitude of physical objects and a variety of services. Most of the physical objects are manufactured and most of the services have been provided by people in organizations. Just as fish are said to be unaware of the water that surrounds them, most of us give little thought to the organizational processes that produce these goods and services for our use.

The study of operations deals with how the goods and services that one buys and consumes daily are produced. Operations management is concerned with the design, management, and improvement of the systems that create the organization's goods or services.

The significance of OM principles to organizations outside the manufacturing sector is a conviction shared by OM researchers and practitioners.

Generally, hospitals face challenges in healthcare operations management in the absence of a mechanism to capture, analyze and present real-time performance about clinical and financial processes. It is a challenge to improve and integrate the quality of healthcare, for optimal clinical and financial outcomes and real-time performance optimization. From the view point of operations management (OM) academics, it is evident that there is a strong resonance between the need to deal with the issue of sustainability in hospitals.

Quality Concerns:

A useful framework for analysis is clinical quality and process quality (Groonroos 1990). Clinical quality is defined as the ability of hospitals to achieve high standards of patient healthcare through medical diagnosis, procedures and treatment, and ultimately creating physical or physiological effects on patients; it is determined by medical outcomes and "what" is delivered. Process quality results from patients' perception of "how" the service was created and delivered (Marley et al. 2004). It includes making the patient's experience in the hospital proceed efficiently and effectively. Examples of process quality include the level of personalization and patient-service provider interaction, the delivery of medication and food to the patient, the efficiency of admission and checkout, and the timeliness and accuracy of hospital bills (Marley etal. 2004).

Medical Errors:

Healthcare organizations are challenged to reduce medical errors that range between 44,000 and 98,000 deaths each year (Revere, 2003). Healthcare provider organizations deal with different kinds of medical errors and opportunities that can be classified into three categories: prescription errors, dispensing errors, and administering errors. Prescription errors include several opportunities for error: drug-knowledge deficit, miscalculation of dosage, poor oral communication, and poor written communication.

Dispensing errors include other opportunities for error: misinterpretation of order, name confusion, poor packaging labeling. and poor and design. Administering errors include more opportunities for error: wrong time, inappropriate dosage (including omission), incorrect drug, improper route of administration, and wrong patient (Phillips et al. 2001, Mullins 2002).

Operation management

Operation management is diffusing in healthcare in the following areas:-

Process reengineering

The knowledge of Process design could be greatly used while deploying better process technologies or to use process technologies more accurately. In healthcare, this is directly proportional to Patient Safety.

"Patients should experience healthcare processes that are more reliable than manufacturing processes. Regrettably, that is not yet the case"

Process design is fundamental rethinking and radical redesign of business processes to bring about dramatic improvements in performance. Fundamental and radical change is not a concept that appeals in the healthcare environment. It emphasizes small and measurable refinements to an organization's current processes and systems have been more widely adopted. Process analysis has been a useful technique for pulling apart the relationships between clinical and managerial tasks. Hospitals could learn how to solve systemic problems systematically, and that to do so will require not the wish lists of strategic planning and structural reorganizing, but tangible changes in their collective behavior. This perhaps explains why less formal methods of process mapping that engage a full range of process participants are more successful, as they create a mandate for change.

Expertise management

effective IT infrastructure supporting key An operational processes and management reporting is now seen as essential. Hospitals around the world are embracing internet and information technology to improve their client interface, as well as to reduce the overall cost of providing quality care. IT has great potential to improve primary care in many areas including medical records, communication between physicians and patients, information sharing among healthcare providers, and rapid access to reliable information for both physicians and patients.

Operations plan in healthcare

According to Zelman and Parham (1990), there are four strategies for hospitals in defining what business they are in: (i) a generalist strategy (ii) market specialist strategy where the hospital caters a wide range of services to specific markets, (iii) service specialist strategy which relates to a hospital providing specific services to a wide range of target groups, and (iv) super specialist strategy that refers to hospitals providing narrow range of services to a limited market.

Hospitals would require different operational capabilities to support their mission and positioning in the market. It is important for hospitals to procure and allocate resources for the development of those operational capabilities which are aligned with the corporate mission. The hospital operations strategy should be developed to support the hospital mission and business strategy, and help to gain competitive advantage. Operations strategy in the context of a hospital can be defined as a plan that configures and develops business processes which enable a hospital to serve and deliver quality care to their patients as specified by its business strategy.

Total quality management (TQM) and six sigma in healthcare

Implementation of any quality initiative should embrace a participatory management style; address the issue of changing attitudes and culture, employee involvement and empowerment together with investment in training, development and learning. But these characteristics have not been evident in the quality improvement programmes implemented in the healthcare environment contributing to sustaining the TQM efforts and, thus, to achieving organizational excellence. The system requires the explicit and active involvement of all stakeholders and to certain extent it forces a holistic and integrated approach.

Supply Chain Management

Tremendous opportunities exist for delivering significant improvements in the ability of hospital facilities, healthcare networks and other organizations to optimize the processes and work flows associated with materials management, and reduce the costs related to inventory and supply chain management (SCM). The healthcare value chain is plagued with many problems, including

International Journal of Information Technology and Management Vol. VI, Issue No. II, May-2014, ISSN 2249-4510

outdated and inaccurate data, laborious manual processes, and lack of visibility into important order information. Rearrangement of storage areas can generate substantial savings.

Process flow and capacity management

The type of resources required for an admission include beds, operating theatre, surgical team, nursing care and potentially an intensive care bed. However, the need to coordinate resources to manage capacity is not adequately understood in the decision making process of allocating resources to specialties. The result is peaks and troughs in the workloads of departments that are difficult to manage.

Hospitals can achieve substantial improvement in patient flow and throughput and reduction in unit costs through the application of techniques such as process mapping and simulation modelling. An important point for understanding and improving patient flow is to look at the whole system of care, rather than the individual units in isolation.

Some of the most commonly used tools used in mistake proofing, and performance enhancement in healthcare processes include operations research tools such as queuing theory, quality tools like root cause analysis, failure mode & effect analysis, sixsigma and statistical process control.

While these tools are quite adaptable to many processes, in healthcare, they are to be deployed after duly assessing the compatibility of the process with the tool. Thus, while statistical process control could be used in logistic errors, six sigma could be used to identify and quantify medication errors, both in dispensing and drug administration. Root cause, FMEA are very well used in medical audits - a specific process to understand the accuracy of patient care processes - an inseparable element of healthcare operations management.

CONCLUSION:

The field of application of Operations Management is enormous. The application is dependent on recognition of the fact, that by using the principles of operations management, the outcomes of healthcare delivery can be improved along with its quality and efficiency.

These principles need wider understanding among healthcare and hospital administrators. The models which have shown effective implementation, not only during planning stage but also in improving the day to day operations of healthcare activity and service delivery, need to be understood by all. This would enable an institution to demonstrate a greater ability of Enterprise Resource Planning that is a centralized framework for all processes in an organization, focusing on all aspects of a business. This includes planning to inventory control, finance, manufacturing, sales, marketing and human resources, and last but not the least, a level of patient care with highest level of satisfaction for the patient as well as care givers.

REFERENCES:

- http://www.asianhhm.com/healthcare manage ment/strategic-planning-healthcare-deliverycentres.htm
- www.asianhhm.com/ magazine
- Groonroos, C. 1990. A service quality model and its marketing implications. In G.
- Clark (ed.), Managing service quality, an IFS Executive Briefing. Kempston, Bedford, UK: IFS Publications: 13-18.
- Marley, K.A., Collier, D.A., Goldstein, S.M. 2004. "The Role of Clinical And Process Quality in Achieving Patient Satisfaction in Hospitals", Decision Sciences (Summer), 35(3): 349-369.
- Revere, L. 2003. "Integrating Six Sigma with Total Quality Management: A case Example for Measuring Medication Errors", Journal of Healthcare Management (November-December), 48 (6): 377-391.
- Phillips, I., Bearn, S., Brinker, A., Holuist, P., Honig, L., Lee, Y., Pamer, C. 2001.
- "Retrospective Analysis of Mortalities Associated with Medication Errors", American Journal of Health-System Pharmacy, 58 (22):2130.
- Mullins, C. 2002. Personal Interview, August 14, 2002.