RESEARCH PAPER

BUSINESS PROCESS RE-ENGINEERING AT LOCAL HOSPITALS IN KARACHI

INTRODUCTION

Business Process Reengineering (BPR) is a proposition to redesigning business processes, generating better cost profitability and reorienting the business at whole using engineering methods. This approach was first introduced in “Reengineering the Corporation” – a book by Michael Hammer, which has gain a good audience since then. The methodology is focused in optimizing productivity along with improved quality where the teams apply engineering on the basis of general analysis of concerned field.

In the near past, it is observed that a gigantic competition has arisen in every aspect of business. The health care institutes have been in this race for a long time which has created an air of continuous betterment in quality and performance. On other hand, the growing number of locally situated private and public hospitals and clinics is a reason for any institute to grow in this competition.

Over the last decade, hospitals in Karachi have been forced to reengineer their business processes to stay in the game because visitors and patients are demanding better and quality services which is available in any other institute. With the surging healthcare costs, the department services are also regularly seeking ways to provide quality performance to their customers. Institutes have realized the sheer importance of BPR initiatives that could result as a better solution in achieving an upper hand in the vast field of competition.

It is a regular observation that Emergency Dept. of Hospitals are the red carpet for patients that act as decision maker in selecting the thorough and detailed processes of surgery in Healthcare i.e. an admittance for patients which may later advise to settle in for surgical and other treatments. Hence, the importance of emergency departments and its presentation, performance and quality deliverance is critical segment of any healthcare organization. BPR enables healthcare service providers to take a careful look at the processes of the institute, identify ill-factors and inefficient parts that may be removed or modified to outperform. This research engages BPR and its concept to refine the effectiveness and productivity with optimizing certain processes involved in the emergency medical services and factors related.

BUSINESS PROCESS REENGINEERING

Reshaping the fundamentals and redesigning radically & rationally a business process can create remarkable improvements in the system. Even though the radicalism has been swapped with contextual realism, centers find it unavoidable to apply BPR under the basic key drivers which are as; Cost, Time and Quality. The BPR is responsible for enhancement of figures and refinement of value of the company’s production and demands a broader view about technology and business approach in relation as a necessity.

It expresses that the orthodox and conventional needs of the system be replaced with evolutionary progression and an organizational change that results in transforming the basic strategy of the system. BPR produces variable levels of impact within the system which are carried out in a sequence of activities delivering quality value to its customers.

EMERGENCY MEDICAL SERVICES

With more than 70 percent of the expenses connected to patient care activities, hospitals can accumulate savings and profits to improve clinical practices by refined management of their facilities, supplies, equipment, environment and labor. The reengineering and reinventing in hospitals holds a robust promise of radically lessening cost whereas definitely increasing the quality of presentation and performance.

The Emergency department of a hospital mainly consists of a building with a mobile EMS dispatch that responds to emergency services at large. With a reception desk, the department welcomes patients straight to the service beds where if a patient is injured or bloodied given quick first aid, whereas a patient of diseases like flu, fever, cold etc. is served to bed with health vitals noted right away. An ER consumes multiple resources in terms of its functionalities and provides services at first, where in the meanwhile the patient’s family or friend or a companion fills out information and makes an advance payment which is adjusted afterwards.

INTRODUCING AN INNOVATION

The existing system includes no categories of patient factorized by health severity ­i.e. beds for severe disease or injury and relaxed sitting area for minor aid. This suggestion clarifies that the department may get rid of its bottleneck places and provides rapid response to the patients. There is no centralized Emergency Ambulance System that is connected to a central server or database. The welfare associations and individuals created under NGO’s have their charity based service which lies under no molds of quality and even do not contain a responsive medical officer stationed. The vehicles provided by said NGO’s are ridiculously underqualified whereas some of these if quality conscious charge a heck of an amount from the patients.

Smart technology is an unavoidable necessity for today and has become a component in daily life of a person. IoT is one of the phenomenon behind the 4th Industrial Revolution (4IR) that provides instant accessibility and ease of use for every person on the network. Using this tech can bring remarkable improvements in an individual’s life as well as for public in general.

Fitbit is a smart wrist watch that when connected via a network gives real time measure of health vitals. The initials include noting of Blood Pressure, Diabetes, Cholesterol level, Heart attack etc. It works on the concept of Internet of Things (IoT) which is defined as communication of devices and electronic appliances over an internet network. Fitbits have smart sensors which calculate the vitals of a person and channel the collected data to a central database which is monitored at Medical Offices 24/7.

The usage of this tech is currently applied in developing countries at large and people are definitely attracted with its features. It transmits health vitals to medical offices in an instant of time, for if the person may not be able to reach or call for EMS, the system can still acknowledge and dispatch mobile services following the severity of need. The flowchart explains the flow of usage of technology in correspondence to EMS mobile services as well as on premise.

For better understanding, let us follow a simulation. A person while at home, asleep, has health vitals start falling down, he has Fitbit on, which notes the vitals on the go. The measurements noted are transmitted to the medical office and it is found that the person is having a heart attack. The RMO’s find the severity of the case and it is suggested that a mobile dispatch must be sent to the home for first aid. As the service is being provided a health care message is sent back to Fitbit which vibrates and shows a message to the person informing them for possible heart attack and to perform basic first aid for the case. As the dispatch reaches the needy, RMO’s on the mobile service provide first aid and even provide necessary supplemental drugs or injections to the patient. If recovered, the person is relieved on their doorstep while in another case the Fitbit informs the hospital to prepare a bed for the said person in emergency.

Using Fitbit, the Emergency department can have categories based on the type of patients i.e. a relaxing area with comfortable seats for patients needing only supplemental drugs and injections and a room with beds and health-vital counters for admittance and better care needed patients. In this case the system can have pro-active measures always ready for application and in any case will have an intuitive sense for handling cases in the future. Fitbit will ultimately reduce the bottle neck condition of ERs in the hospitals and provide quality service with extreme optimization.

The mobile EMS i.e. the ambulance system in this way will have a more important and lifesaving role better than ever, for the fact that these on the go vehicles will have an active network of communication as well as internet to stay connected and updated with respect to the area of their services. They usually will be controlled under a centralized system and will have an RMO with necessary first aid drugs and supplements. These facilities will be enabled with every vehicle of ambulance service that will connect to a well-consistent database of inventory of equipment and supplies. This will ensure the ambulance’s performance and promise of upgradation with the environment.