

HEALTH INFORMATION MANAGEMENT PROFESSIONALS' QUALITY SERVICE DELIVERY AS STRATEGY FOR COMPETITIVE ADVANTAGE

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Abstract

The use of information technology in a strategic and innovative manner as part of health information services to support health related decision making, has brought about comprehensive change in business structure and organization present serious challenges for health care organization management. The application concentrate on given an organization IT based strategy for meeting competitive challenges (such as using web technologies to integrate health care organization internally and externally. To achieve competitive advantage over other hospitals, there is the need to improve the quality of services delivered to patients provide ICT facilities to enable quick access and sharing of patient's health information among the health care professionals in the hospitals and motivate professionals either in kind or cash so as to increase their level of commitment to the organizational goals. Competitive advantage over other hospitals, there is the need to improve the quality of services delivered to patients, provide ICT facilities to enable quick access and sharing of patient's health information among the health care professionals in the hospitals, therefore every organization striving to survive and remain in business must concentrate on areas of its strength as competitive advantage over other similar organization, hence, competitiveness is a major factor for the continued life of organizations.

Introduction

Management is defined as getting things done through other people, therefore to execute the managerial function of planning, organizing, staffing, directing, coordinating, reporting and budgeting, there is need for availability of accurate high quality health information, at the right place and at the right time.

Quality health information as described by the Federal Quality Institute (1989) is meeting the customers' (patients) requirements the first time and every time. It is also the conformance to a set of customer requirements that if met, results in a product that is fit for its intended use. The five perspective of quality that explained the understanding of TQM are;

Transcendent (I know it when I see it), Product (Possesses desired features), User based (Fitness for use), Manufacturing based (Conforms to requirements), Value – based (at an acceptable cost). All these must be considered as important to the customer /patients.

However, 'Scholes' (1988) introduces the contrast between effectiveness (doing the right things) and efficiency (doing things right), whereas Patrick Townsend (1986) examines quality as the suppliers point of view, while quality perception is that of the customers. Any difference between the former and the latter can cause problem between the two, quality in fact means doing the right thing, doing it the right way, doing it right the first time, doing it on time, while quality in perception means deliver the right product, satisfying our customer's needs meeting the customer's needs, meeting the customers' expectations, treating every customer with integrity, courtesy and respect.

Similarly, Lon- Roberts (1994) Efficiency and Effectiveness can both improve speed, on time delivery and various other process baselines. It is often considered synonymous, but they mean different things when applied to process management. Oxford advancement dictionary (1984) defined effectiveness as the ability or power to have a notable or described effect producing a successful result that is wanted or intended. While efficiency is the state of quality of being efficacious, working well without waste, doing something well and truly with no waste of time, money and energy.

Quality requires controlled process improvement allowing us to exceed our customers' expectations it will allow us to recreate pride and loyalty in our organizations, quality can only be achieved by the continuous improvement of not only the production of product and services but also the design, development, services purchasing, administration and indeed all aspects of the transaction with the customer, all must work together towards the same goals.

Quality can only be seen through the eyes of the customers/patients. An understanding of the customers expectation (effectiveness) is the first step; then exceeding those expectations (efficiency) is required, ability to communicate will be the key thing, that will help exceeding customer expectations assures meeting all the definitions of quality .

The use of information technology in a strategic and innovative manner as part of health information services to support health related decision making, represent a serious challenge for health care organization management. The application concentrate on given an organization IT based strategy for meeting competitive challenges such as using web technologies to integrate health care organization internally and externally. Management and Integration of Digital Dictation, Voice Recognition and Electronic Documentation which involves:

Digital Dictation is one of the common methods to capture medical dictation. The Physician dictates a medical report of patient's treatment, the transcriptionist transcribes the dictation into structured medical report. The transcribed reports are electronically transmitted to the electronic health records. The electronic document management system attaches an auto-signature deficiency and the transcribed reports are then electronically routed to a physician work queue for signature.

Voice Recognition is another method used to capture dictated reports in electronic health records, with voice recognition, the computer software captures the medical dictation and converts it to text. Voice recognition software is most commonly used at the point of transcription, for routine transcription of medical reports. The continued use of medical transcription and voice recognition software requires that emphasis must be placed on medical language editing, data quality control, text and document management and the regulatory board standards.

Therefore, the health information management professionals should establish a monitoring system and implement productivity standards to access the accurate capture of dictation and transmission to the electronic health records. The implementation of quality and productivity standards reduces turnaround time and improves the quality of information for workflow processes and regional health data exchange.

Other Electronic Documentation

Modern information Technologies nowadays are producing patient health information and documentation that was unknown a decade ago. For instance electronic mail, voice mail records, audio and video data could as well be part of an electronic health record. However policies and processes should be put in place for the management of all electronic I information that is generated about patients in healthcare organizations, regardless of the record type and medium (AHIMA 2004).

E- Mail

This device has formed the main basis of communication, even in the healthcare setting it is specifically used to communicate patient specific information. Therefore for effective use of e-mail for communicating health information in a healthcare setting, the healthcare provider/organization should put in place policies and procedures that address the creation, storage, and maintenance of e-mail messages. For instance when patient-identifying

information is communicated via e mail, an email management system should be used for inclusion of the data in the electronic health records.

An e-mail management system consists of a centralized archive capable of enforcing, archiving policies and allow e-mail messages to be classified by type (e.g. patient e-mail) and therefore apply rules for archiving, retention, and integration of e-mail medical information into the electronic health records. Management system could be set up to automatically encrypt patient e-mails to ensure the security of the document (AHIMA 2004).

Voice Mail

Patients' information through voice mail regarding patient condition and /or treatment should be included in the electronic health record. Information handled in paper based systems, transcribed notes are placed in the medical record, but in the electronic health record domain, voice mail messages and telephone conversations should be documented.

The messages should include provider/source/initiator, patient identification, date and time of actual conversation or message, date and time of entry into electronic health record. The messages should be indexed for the purpose of being searched, retrieved, routed, or purged.

Health Care Innovation

The health care industry has experiences a proliferation of innovations aimed at enhancing life expectancy, quality of life diagnostic and treatment options as well as efficiency and cost effectiveness of the health care system, innovation in health care continues to be a driving force in the quest to balance cost containment and health care quality it is considered to be a critical component of business productivity and competitive survival (Zaltman et al, 1973).

Also, Varkey et al. (2008) explained that health care innovation is the introduction of a new concept, idea, services, process or product aimed at improving treatment, diagnosis, education outreach, prevention and research and with the long term goals of improving quality: safety outcomes, efficiency and costs, whereas Gupta (2008) opined that while hospitals and other care provider have long been quick to adopt breakthrough technology in medical devices, procedures and treatment, far less attention has been focused on innovation in networking and communication because of the breaches in security and patient privacy. Therefore the improvement in network security and the ability to transmit images and data globally, imaging such as x-rays and consultation by specialists. Telemedicine has been used by doctors in the US and other countries to provide care to patients in hard to reach and understand locations. In addition, technological innovation presents vast opportunities for;

Product innovation – the introduction of new types of goods and services for the external market and also Process innovation – improves enhancement of internal production processes for goods and services (Peeri, 1993). Product innovations are essential to the life of any organization since they provide the most obvious means for generating incremental references. Similarly process innovation is concerned with improving internal capabilities, safeguarding and improving quality of health care (Johne 1999).

However, Deming (1982) assert that quality improves productivity which leads to improved competitive position and insures that the organization will stay in business in essence to improved quality means more jobs and job security. Experience with government agencies indicates that they are also in competitive with other organization and with private industry for workload. Poor quality, costs any organization many of its scarce dollars, one of the effective actions management can take to improve productivity in any organization is to improve the quality of its process as quality increases profit and patient /client patronage.

Few of Deming's fourteen points for management of quality and excellence are:

- Create constancy of purpose for improvement of product and excellence.
- Adopt the new philosophy
- Cease dependence on inspection to achieve quality
- End the practice of awarding business on the basis of price tag alone
- Improve constant and forever the system of production and service.
- Institute training
- Drive out fear
- Break down barriers between staff areas
- Remove barriers that rob people of pride workmanship
- Encourage education and self-improvement for everyone
- Take action to accomplish the transformation

Peters (1985) Confirmed that excellence is a measure or degree of quality. The slogan customer is king ; today's quality improvement efforts is focused on the customer and more importantly, customer satisfaction (whether that customer is located at the next station , or work centre or base)is the essence of quality product. Identifying customer's needs in the areas of what, when, why and how an essential is part of process evaluation and may only be accomplished through communication. After defining quality as exceeding customer expectations, measuring quality, involves quality expectations which include; Timeless, accuracy, clarity, thoroughness, completeness, usability, physical characteristics, performance, costs, for quality improvement.

According to the Federal Quality Institute (1988), Total Quality Management consists of continuous process improvement activities involving everyone in an organization –managers and workers in a totally integrated efforts towards improving performance at every level. This improved performance is directed towards satisfying such cross – functional goals as quality, cost, schedule, mission, needs and suitability. TQM integrates fundamental management techniques existing improvement efforts and technical tools under a disciplined approach focused on continuous process improvement and increased customer /user satisfaction.

Furthermore, Kangi (1998) stressed that TQM is the culture of an organization committed to customer's satisfaction through continuous improvement. There is universal principle that should be implemented to gain market share, reduce cost and increased profits. The culture of the company should support its business strategy. The aim of cultural change is to create a

culture that will be the force behind the actions taken to achieve the vision and goals of the critical business factors and to create commitment to the company.

There are certain necessities for implementing total quality management these are;

- The creation of commitment to companies articulated goals
- The creation of cultural change and empowerment.

Moreover, Desky (1995) agreed that commitment is a tenacious pursuit of goals regardless of obstacles and without excuses it boiled down to devotion to excellence. It requires accountability for failure or success, mistake should however not be seen as only negative in value, lessons are learned through mistake and contribute towards experience. The idea is to confront and overcome obstacles while learning how to obtain objectives. It is the evidence in a triumph of integrity over skeptics; he highlighted some obstacles, such as:

- Conflicting goals e.g. extensive capital project while the company is having cash - flow problem.
- Procrastination e.g. a lack of sense of urgency
- Lack of focus, identify by lack of priority setting and a tendency to always be putting out fire.
- In flexibility and resistance to change often called by fear or miss-understanding of change.
- Allowing excuses to be made.
- Self defeatism with the idea that one person cannot influence change.
- Lack of enthusiasm which usually occur if top management does not lead by example.
- Miss- interpreting commitment as interest and waiting to act until it is convenient.

Moreover, David (1988) stressed that conformance to specification which measures how well the product or service meet the target and tolerance determined, by its tolerance and fitness for use which focus on how well the product perform its intended function or use, value for price paid as quality that customer often use for product and services provided are often how the product of the quality is judged. Quality does not apply only to the product and services itself it also applies to the people, processes and organization environment associated with it for example the quality of a university is judge not only by the quality of staff and course offering but also by the efficiency and accuracy of processing paper work.

Development of Information System

Advance in information provision have led organization to attempt to develop information system or information technology which integrate with the business strategies which support corporate missions. Three general types of Information System IS that are developed and in general use are financial system, operational system and strategic system. Well directed financial systems and operational system may well become the strategic systems for a particular organization. (Rogerson et al. 1994). Modern Organizations are increasingly seen

as knowledge – based enterprise in which proactive knowledge management is important for competitiveness (Holsapple et al 2000).

However Rocket (1979) agreed that one of the major factor in competitive environment is knowledge management and companies for achieving the competitive advantages should concentrate in its IS, IS has a vital role in business and financial and non-financial aspect such as decision making as a big role management. IS were thought to be synonymous with corporate data processing and treated as some backroom operation in support of day-to –day mundane tasks.

Furthermore, Turban (2006) believes that any IS that change the goals , processes , or environmental relationships to help an organization gain a competitive advantage or reduce a competitive disadvantages is a strategic IS and any organization that seek competitive advantages in their industries in other word an advantage over competitors in some measure such as cost , quality or speed. Such competitive advantages are at the core of the firm's success or failure.

Moreover, Afuah and Tucci (2003) Stressed that the impact of digital economy is revolutionary, frequent changes in technologies and markets and appearance of new business models can introduce radical changes in industry structure, internet technologies offer powerful tools, which can increase their success through their traditional source of competitive advantage -be that low cost, excellent customer service or superior supply chain management.

Turban (2006) highlighted eight strategic points, for competitive advantage which are: innovation application, competitive weapons, changes in processes, Links with business partners costs reductions. Relationship with suppliers and customers new products and competitive intelligence by collecting and analyzing, information about product, markets, competitors and environmental changes (Guimansaes and Armstrong, 1997) .

Strategy for Competitive Advantage

Peter (1985) stresses that a competitive Strategy is a broad based formula for how a business is going to complete, what its goals should be and what plans and policies will be required to carry out those goals. Some of the more common ways of thinking about gaining competitive advantages are:

- 1- Deliver a product or a service at a lower cost that will be both attractive in the market and will yield sufficient return on investment.
- 2- Deliver a product or service that is differentiated, addition of unique features to a product or services that are competitive, attractive in the market.
- 3- Focus on a specific market segment to identify and create market riches that have not been adequately filled.
- 4- Innovation – Develop products or services through the use of computers that are new and appreciably from other available offerings.

Howard et al. (1999) Stressed that if IS design and strategy development are addressed simultaneously, strategic advantages can be gained. Peter's model identifies the forces that influence Competitive advantage in the marketplace of greater interest to most managers is the development of a strategy aimed at establishing a profitable and sustainable position against these forces. Turban (2006) agreed that to establish such a position a company needs to develop a strategy of performing activities differently from a competitor: The strategies are:

- Costs Leadership Strategy – Produce Product and service at lowest cost in the industry.
- Differentiation Strategies –By offering different ‘better’ product /services companies can charge higher prices and sell more products.
- Niche Strategy – Select a narrow – Scope Market Segment and be the best in quality, speed or cost in that market.
- Growth Strategy – Increases market share acquire more customer, sell more products. It strengthens and increases profitability.
- Alliance Strategy – Work with business partners in partnerships, alliances, joint ventures, it allows opportunities for growth.
- Innovation Strategy-Introduce new products and services, new product or services that change the nature of industry.
- Operational Effectiveness Strategy- Improve the manner in which internal business processes are executed so that firms performs similar activities better than rivals.
- Customer – Orientation Strategy: Concentrate on making customer happy. Strong Competition and the realization that customer is king or (queen).
- Time Strategy: Treat time as a resource, then manage and use it to the firm's advantage. Time is money e.g. “Internet Time”.
- Lock in customer's or Supplies Strategies: Encourage Customer or suppliers to stay with you rather than going to competitors, it reduce their bargaining power.
- Increase switching costs strategy – Discourage customers or suppliers from going to competitors for economic reasons.

In the light of this, health care information research(2010) stressed that new methodologies and legislation that will be more effectively commensurate with healthcare providers, should be promulgated to provide integrated high quality care, coordination of care between physicians, hospitals, payers and provide access to essential data at the right time.

Conclusion

Non-computerization of hospital's health information has resulted to slow processing of health information services, patient's delay and poor quality of work. The hospital health information management department should justify their existence and position in the health industry by providing a well equipped standard medical records centre that will enable all health information services to be delivered on time. The management of the hospital should motivate its professional staff in order to increase the level of workers' commitment, so as to give best service and improve performance, increase productivity and guarantee quality

health information services delivery that is comparable with other hospitals in terms of costs, quality, and conformance to specification and excellence.

Recommendations

- There should be adequate provision of hospital forms and format, stationery for processing patient health information.
- Computerization and other information technology equipment should be encouraged and provided for quick processing, transfer and sharing of information.
- There should be provision of enough funds to manage the health information management department.
- The charges offered should be commensurate with the patients' ability to pay.
- The hospitals should build a standard equipped medical records centre to accommodate patients' health records generated in the hospitals with the modern preservation methods.
- Professionals should be motivated in kind or cash in order to give the best services to the hospital and guarantee patients' satisfaction.

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