

**CURRENT QUALITY MANAGEMENT PRACTICES
IN U.S. HOSPITALS: A SURVEY**

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ABSTRACT:

For decades the U.S. health care industry has been operating on its own ignoring emerging factors such as competition, patient safety, skyrocketing health care cost, liability, malpractice insurance cost and DRG for Medicare payment. However, as these factors became more prevalent and competition within the industry intensified, many U.S. hospitals have been becoming increasingly aware of the critical needs of controlling the operating costs and attempting to meet the needs and expectations of patient care quality. This paper presents the findings of a questionnaire survey unveiling the current quality management policies and practices in U.S.hospitals. for achieving excellence in patient care quality.

INTRODUCTION

The health care industry in the U.S has been operating on its own traditional economic domain ignoring current emerging factors such as competition, patient safety, skyrocketing health care cost, liability from malpractice lawsuits and government control on Medicare payment.(Hansson, 2000). As these factors became more prevalent and competition within the industry has been intensified in recent years, many U.S. hospitals has been becoming increasingly aware of the critical needs of controlling their operating costs and meet the expectations of patient care quality (Chow-Chua et.al., 2000). In current competitive environment, many health care organizations are taking steps to ensure that they are providing the "absolute best care at the lowest possible costs". However, many hospital administrators still have to learn how to lower operating costs without compromising on providing consistent good quality patient care (Griffith, 2000).

In 1993, Chaufournier et al. reported that 44% of 1,083 hospitals surveyed in the U.S. were embracing some kind of quality management approach such as CQI (Continuous quality improvement), Kaizen, and TQM (Total Quality Management) to improve health care quality (2). Also, in 1994, Hertz, et. al suggested that Malcolm Baldrige National Quality Award (MBNQA) concepts could help stimulate health care quality improvement (11). In 2001, Leggit, and Anderson reported that the Malcolm Baldrige National Quality Award (MBNQA) assessment criteria for Performance Excellence developed by National Institute of Standards and Technology has been successfully applied for organizational-wide performance improvement at Hartford Hospital at Hartford, Connecticut (13).

Cho-Chua et.al, 2002 affirms that the health care delivery systems has been undergoing formidable challenges since early 1990s due to many formidable forces such as increased customer expectations, steeper competition, and government agency pressures (4). Therefore, in order to meet the challenge of the current environment. some of the U.S hospitals have already started using a number of quality and productivity management tools and techniques which have been proven successfully in many organizations in manufacturing and service industry

QUALITY AND PRODUCTIVITY MANAGEMENT TOOLS AND TECHNIQUES

The following quality and productivity management tools and techniques are widely and successfully used by many organizations in manufacturing as well as in service industries, and are currently being tried in healthcare industries.

- Statistical Quality Control (SQC)
- Total Quality Management (TQM)
- ISO-9000 Series of quality standards
- Malcom Baldrige National Quality Award Criteria
- Six Sigma Quality improvement approach

Statistical Quality Control (SQC)

Statistical quality control chart was first introduced by Walter Shewart and Harold Dodge in the U.S. in early 1950s. Edward W. Deming, who is considered as father of quality management, was the one to first introduce the SQC techniques using SQC charts to manufacturing industry in early 1960s as the most effective and efficient way to control manufacturing quality. Since then SQC has been extensively used in manufacturing industry for effectively and efficiently controlling quality of manufactured products. SQC has also been used successfully for controlling quality in a number of service industries such as fast food industry, restaurant industry, banking and telephone industries. However, irrespective of its potential use, there are very few evidences of successful use of SQC in health care industry.

Total Quality Management (TQM)

A.V. Feigenbaum first recognized the importance of a comprehensive approach to quality and coined the term total quality control. Feigenbaum emphasized that the quality of a product or service is directly influenced by what he termed the 9Ms: markets, money, management, men and women, motivation, materials, machines and mechanization, modern information technology, and mounting product/service requirements (7). The core principles of TQM are : focus on customers, employees participation and team work, continuous improvement and learning. TQM has been widely introduced and accepted in manufacturing and service industries including health care. In fact the foundation of ISO-9000 core requirements, and MBNQA criteria are developed upon TQM principles. (7).

ISO-9000 Series of quality standards:

ISO-900 Series of quality standards were developed by International Standard Organization in 1990s by harmonizing all kinds of quality standards developed all over the world. It uses a TQM approach to a production/service system proposing that only a good quality production/service system can produce good quality products or offer good quality services, ISO-9000 series of standard involve twenty core requirements for determining a good quality system. ISO-9000 series of standard has been extensively adopted in manufacturing industry all over the world, particularly for supplier's certification (. ISO-9000 certification has also been adopted by many service oriented companies for receiving recognition a "high quality" service companies. But very few hospitals or health care providers are currently ISO-9000 certified or sought such certification.

Malcom Baldrige National Quality Award

Malcom Baldrige National Quality Award (MBNQA) was introduced during President Regan's administration as an act of Congress in 1985 to recognize the organizations offering highest quality products and services. There are three categories viz manufacturing, service and small business, in which an organization has been recognized each year since 1988 using a rigorous examination/quality auditing process by a panel of judges. There are seven criteria used in determining the Malcom Baldrige award winners. They are (1) leadership, (2) strategic planning, (3) customer and market focus, (4) information and analysis, (5) human resource focus, (6) process management, and (7) business results. All these seven criteria totals a maximum possible score of 1000 points, while the 7th criteria, the business results which includes customers' satisfaction results, financial and market results, human resources results, suppliers' and partners' results, and company specific results amounts to a total of 450 points. Many companies are using the award criteria to evaluate their own quality programs and implement quality initiatives (7).

Six Sigma approach to quality management

Six Sigma approach to quality management has evolved from a simple quality management framework to an overall strategy to accelerate improvements and achieve unprecedented performance levels by focusing on characteristics that are critical to customers/patients by identifying and eliminating causes of errors or defects in the care giving processes. A six sigma quality level represents a quality level at most 3.4 errors per million opportunities and corresponds to a process variation equal to half of the design tolerances while allowing the process mean to shift as much as 1.5 standard deviation from the target (10). Originally developed by Motorola Corp. for use in manufacturing in the context of tolerance based specifications, Six Sigma has been applied to product development, customers services, accounting and many other business functions in manufacturing as well as service industries. For achieving the Six sigma quality level, Six Sigma uses DMAIC(Define, Measure, Analyze, Improve and Control) problem solving methodology. Six Sigma recognizes that an error occurs due to a quality problem. Therefore, the error can be eliminated by defining the problem, finding the magnitude and the root cause of the problem by measuring and analyzing the data, and improve by removing the cause of the problem permanently and setting up a control system for preventing any such problems to occur again.

CURRENT QUALITY MANAGEMENT PRACTICES IN MICHIGAN HOSPITALS

A questionnaire survey was administered by mail to 100 hospitals in Michigan randomly selected from the Membership Directory of American Hospital Association (AHA) in order to explore their current quality management policies and practices. The respond rate was 30 percent which is very common and reasonable for a mail questionnaire survey in the U.S.. Data collected from the questionnaire survey were coded and analyzed for meaningful factual information as follows.

Current quality management practices in American hospitals

The analysis of the factual data from the questionnaire survey has revealed the following surprising factual information.

- 90 Percent of the hospitals who responded to the survey reported that they are accredited by Joint Commission on American Hospital Organization JCAHO, and or some other agency.

- 90 Percent of the hospitals who responded to the survey reported that they have a strategic plan with a focus on quality.
- 80 Percent of the hospitals who responded to the survey reported that they have a quality policy manual.
- 80 Percent of the hospitals who responded to the survey reported that they have quality procedures.
- 80 Percent of the hospitals who responded to the survey reported that they have developed some quality standards for auditing some of their critical departments
- 80 Percent of the hospitals who responded to the survey reported that they keep records of standard treatment procedures.
- 85 Percent of the hospitals who responded to the survey reported that they have a quality assurance department and that they have at least one internal quality auditor.
- 85 Percent of the hospitals who responded to the survey reported that they have at least one quality manager.
- 90 Percent of the hospitals who responded to the survey reported that they have embraced of customers safety and satisfaction.a Total Quality Management (TQM)approach which encourages continuous improvement
- 90 Percent of the hospitals who responded to the survey reported that they regularly run customers satisfaction survey, and analyze the factual information for prompt corrective actions
- Only 10 percent the hospitals who responded to the survey reported that they have applied for Malcom Baldrige National Quality Award (MBNQA) and/or ISO9002 Certification

DISCUSSION OF THE RESULTS LIMITATIONS

- This has been an exploratory research to find out factual information regarding the current quality management policies and practices in U.S. Hospitals. Because of the limitation of the resources, the mail survey was limited to 100 hospital administrators of Michigan Hospitals randomly selected from the Directory of American Hospital Association (AHA).The response rate was 30 percent which is very reasonable for a mail survey in the U.S. .
- 90 Percent of the hospitals who responded to the survey reported that they are accredited by Joint Commission on American Hospital Organization JCAHO, and or some other agency. As part of the accreditation requirements, they have a quality focus in their strategic plan, and top management commitment to quality. They also have well documented quality policy, quality procedures, and quality instructions. They maintain their treatment records, and laboratory records and equipment calibration records. They regularly run customers satisfaction survey, and analyze the factual information for prompt corrective actions. This was a broad based survey and did not attempt to find out detailed quality control activities of statistical quality control, inspection, and quality auditing within the hospitals.

CONCLUSION

Michigan hospitals are continuously upgrading their equipment through lease/purchase, and improving their nursing and other health care services through rigorous training, and upgrading

their patient billing and recording services using state of the art information technology to become one of the finest hospitals in the U.S.

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