
Quality improvement techniques to improve patient satisfaction

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Abstract

This paper describes several approaches for implementing quality improvement initiatives to improve patient satisfaction, which enables health-care organizations to position themselves for success in today's global and increasingly competitive environment. Specifically, measuring the views of patients, improving patient satisfaction through a community-wide effort, and using a Six Sigma program are discussed. Each of these programs can be an effective mechanism for quality improvement. A key component to quality improvement techniques involves collaborative efforts by all health-care professionals and managers as they seek to increase patient satisfaction.

Introduction

Health care is unique from any other type of industry in that health care professionals are highly dependent on each other to provide and coordinate services of high value for human beings. This is especially challenging for health care managers who are responsible for managing health care organizations (Shortell and Kaluzny, 2000). Since one of the main goals of any health care organization is not only to meet, but also to exceed the expectations of patients, improving levels of patient satisfaction is very critical to their long-term success. Quality improvement initiatives can be instrumental in attaining this goal. Indeed, one important focus of quality improvement in health care organizations involves patients. Specifically, using quality improvement techniques, managers strive to improve performance in key processes so that high levels of patient satisfaction are achieved. The intent of this paper is to discuss quality improvement techniques used by managers to enhance patient satisfaction.

Background

Quality improvement is now a perpetual objective of many organizations including those involved in the delivery of medical care. Quality improvement is essentially an organization's attempts at improving its products and processes in terms of meeting the expectations of its customers. One facet of quality improvement initiatives involves customer satisfaction. In the case of health care organizations, customer satisfaction extends to patients as well as various medical staff such as physicians, nurses and medical technicians. The views and perceptions of these customers have an impact on the overall success of health care organizations, and have recently come more into prominence, since it is used as an indicator recognized by managers for making organizational changes and improvements in performance. Gathering the views of service users is a key feature of recent developments in society and the health care sector has identified methods for assessing the views of patients, especially in the last decade (Wensing and Elwyn, 2002).

Milosevic and Bayyigit (1999) further stress the value of assessing patient satisfaction to health care organizations, where the organization must attempt to respond to reasonable expectations of patients. If health care organizations are in the business to provide service for their customers, then they must strongly consider the needs and expectations of their most important customers: patients. Furthermore, health care organizations

are in the business of caring for human beings. Patients entrust their lives and wellbeing to providers. Thus, monitoring patient satisfaction is a crucial element of an organization's effectiveness and should be part of the quality improvement initiative.

Efforts at quality improvement in health care organizations present their own unique set of challenges. As with all types of services, health care is an intangible product (Ford *et al.*, 1997). The services that patients receive cannot physically be viewed or touched like manufactured products such as televisions and cars. It is easier for managers dealing with manufactured products to develop and implement quality improvement measures than it is for health care organizations (Ford *et al.*, 1997). Another challenge concerns the manner in which health care organizations have traditionally been operated. For instance, many patients are not well informed about issues related to their health. They trust that physicians and other health care professionals are making decisions with their best interests at heart (Feldstein, 2003). However, physicians may not always act in the best interest of patients, as physicians are constrained by a lack of resources to do so (Feldstein, 2003). Nevertheless, many patients accept, without question, the decisions of their caregivers and accordingly receive medical services as specified by their providers. With this type of arrangement, there is little incentive for service providers to make efforts proactively to seek out dissatisfied patients. After all, patients will come regardless of whether or not such efforts are made. However, with the increasing popularity of the Internet and information from popular media, patients have access to more information and are now becoming more informed than they were before. They are learning that they have choices when it comes to their medical care, and they are demanding more choices as evidenced by the proliferation of preferred provider organizations and point of service organizations (Feldstein, 2003). With this shift in decision-making ability, health care organizations and management will find it necessary to place more emphasis on the views expressed by their patients, so that problem areas are addressed promptly and standardized procedures are put in place to prevent future conflicts.

Measuring the patient's perspective

Wensing and Elwyn (2002) emphasize three components of patients' views on health care: preferences, evaluations and reports. Preferences are essentially a patient's desires and expectations

about what should occur in the health care setting. There are both qualitative and quantitative methods for measuring preferences. Among the qualitative methods are individual interviews and focus groups. Quantitative measures include surveys, nominal group techniques, and consensus methods. Some examples of qualitative methods include evaluations and patient reports. Evaluation refers to the patient's reaction to the service he/she received from a health care organization. Evaluations from the patients most often come in the form of questionnaires. Finally, patient reports are objective observations that patients make about an organization or processes. For example, a patient can usually indicate the number of times he/she was seen by a physician during a hospital stay regardless of whether or not he/she thinks it was a sufficient amount with an appropriate level of care.

According to Wensing and Elwyn (2002), there are four approaches for utilizing the views of patients in the process of quality improvement. The following is a description of these components. First, health care organizations can provide data/information to seekers of health care. Better-informed patients can make decisions on whether or not to pursue care at a given organization. Thus, service providers who are considered better by patients receive a larger proportion of the patient population and competition ensues. As a result of competition, other health care organizations are forced to take actions to improve their programs in an effort to attract more patients. Second, Wensing and Elwyn (2002) emphasize patient involvement. For example, shared decision-making strategies or patient-held records identify patient preferences. They ensure care providers give adequate information on relevant options, assess patient preferences regarding these options, and make decisions with or seek approval from the patient. Thus, by respecting a patient's desire and right for self-determination, health care organizations contribute to the flow of information that patients gain and actively involve them in the communication chain so that they are better informed to make decisions. A third approach involves using devices such as surveys, written complaints and questionnaires to obtain patient feedback. This way, the views of the patients can be analyzed and appropriate actions can be taken to improve on weak areas. Here, health care organizations can implement processes to meet their patients' needs more reliably and efficiently. Furthermore, this approach can provide indication of the direction and intensity of staff training and education to improve specific areas. The final approach concerns eliciting the help of

customers/patients in planning and design of systems of health care. Involving customers and patients in this process would allow them to incorporate processes and designs according to their own expectations and result in preferred patient features that gain higher levels of satisfaction.

Improving patient satisfaction

To improve patient satisfaction, health care providers must focus on quality improvement strategies. That is, health care professionals must demonstrate attributes consistent with organizational culture. Since patients entrust their lives to the competence of hospitals and its medical staff, then patients expect that everything that can be done to maximize their chances of successful treatment and survival (patient outcomes) are indeed done. With such a perspective, a quality improvement initiative was conducted in Dayton, Ohio to illustrate how patient outcomes can be improved using a community-based approach (Snow *et al.*, 2003). Five competing hospitals along with local businesses and hospital associations in the area collaborated through the Greater Dayton Area Hospital Association (GDAH) to participate in the Hospital Performance Reports Project (HPRP), an effort at quality and performance improvement. HPRP identified that the county hospital along with other individual hospitals have significantly higher that predicted mortality rates associated with acute myocardial infarction (AMI). Furthermore, it was determined that there was a direct link between whether or not patients, with an ST-segment elevated myocardial infarction (STEMI) received reperfusion and hospital specific mortality rates. In response, a group of medical directors along with a steering committee then developed several expanded process of care measures appropriate for AMI (Snow *et al.*, 2003). Reperfusion is the process of restoring blood supply to an organ, in this case: the heart, or tissue that has lost blood flow (*The American Heritage Dictionary*, 2000). Also, hospital-specific performance of patients having STEMI selected for reperfusion was reviewed by a cardiology subcommittee. The results of the effects of the project and mortality associated with AMI showed a mortality decline from an average of 9.68 percent in 1999 to 6.3 percent for the first three quarters of 2002. This represents a 36 percent relative reduction in AMI mortality over this time frame (Snow *et al.*, 2003).

HPRP was successful for several reasons. First of all, the program focused on those who provide health care and not the customers (Snow *et al.*, 2003).

Many prior community-based programs have assumed that customers have adequate information to make informed decisions about the quality of care that they received. However, this notion, in general does not appear to be accurate. Thus, by taking an approach in which the physicians and other health care professionals monitor and take actions to improve the quality of care that they are giving, patient outcomes can be improved. Moreover, this project enlisted the help of the entire community in a collaborative effort versus a competitive approach in identifying the gaps in improvement of the health care. This approach has the obvious advantage of having many different people involved with different perspectives and levels of experience. Thus, in this way, many more ideas about causes and potential solutions can be evaluated. Better patient care and healthy outcomes are the preferred results. This collaborative approach also encouraged and enabled clinicians to understand the need to monitor quality in improving patient outcomes. Thus, by forming committees for peer reviews to discuss the problems and develop a model to improve the quality of patient care, physicians and other health care professionals learn from the past, and this leads to a better standard of patient care.

Improving patient satisfaction with Six Sigma

Six Sigma began in the 1980s as a quality improvement plan for Motorola. The approach has since grown into efforts adopted by companies. As a methodology and measurement, Six Sigma evaluates the capability of a process to perform defect free, where a defect is defined as anything that results in customer dissatisfaction. The innovativeness of Six Sigma is that it combines improved methods with a new management philosophy to significantly reduce defects, thereby strengthening a company's market position and improving the profit line (Harry and Schroeder, 2000).

Six Sigma is a process that can be used in meeting the needs and expectations of the customers in health care organizations along with improving profitability and cash flow (Samuels and Adomitis, 2003). Specifically, it seeks to identify, quantify and eliminate errors in business processes (Gale, 2003). Six Sigma is also identified as critical to quality (CTQ) defects using measures that indicate the effectiveness of a given process (Samuels and Adomitis, 2003). The first of these measures is defects per million opportunities (DPMOs): the quantity of defective CTQ factors per 1 million opportunities for a defect to occur. Second, error-free yield (EFY) is the percent of a

process without defects. Finally, the sigma level is similar to the concept of standard deviation: as the sigma level increases, the number of defects decreases. For a point of reference, the average industry runs at a sigma level of 4.0; whereas a perfect, defect-free process would have a sigma level of 6.0. According to Samuels and Adomitis (2003), in implementing Six Sigma, managers should execute the following process:

- (1) define the purpose and scope of the project;
- (2) create a performance baseline to compare data evidencing errors;
- (3) analyze root causes quantified by actual data;
- (4) implement procedures to abolish root causes of errors and improve performance; and
- (5) evaluate the performance of the process before and after to make attempts at improvements.

Utilizing this process can be effective in providing better customer satisfaction, as well as reducing costs and improving profitability (Samuels and Adomitis, 2003). For example, if a hospital's goal was to improve patient satisfaction, management would want use a quantifiable indicator of patient satisfaction against which performance can be measured. Data would then be gathered to analyze the root causes of patient dissatisfaction. Then, procedures would be implemented to eliminate the identified causes of patient dissatisfaction. Finally, the impact of the procedure can be obtained evaluating the levels of patient satisfaction before and after implementation of Six Sigma.

In 2000, Mount Carmel Health System in Columbus, Ohio demonstrated that a Six Sigma program can be effective for a health care organization (Gale, 2003). Specifically, by implementing the program, Mount Carmel managed to cut costs and save several million dollars in operating expenses every year since the program began (Gale, 2003). If other health care organizations can achieve results such as these, then they can avoid negative actions such as employee layoffs and spending cuts in the customer/patient service arena. As a result, the focus of the organization can stay on where it should be: meeting and exceeding the needs and expectations of the patients.

Revere and Black (2003) examined the use of Six Sigma for the purpose of reducing medical errors and increased profitability. They suggest that Six Sigma is more effective than the traditional total quality management methods, since it offers more precise quantifiable measurements. Furthermore, they recommend that Six Sigma can be successful when used as a managerial tool for reducing medication errors because of its focus on identifying, analyzing, and monitoring errors. However, the key lies in extensive training and a

focus on an health care organizational philosophy that promotes quality improvement.

Discussion

In implementing a quality improvement initiative to meet and exceed the expectations of the patients, there are several approaches that can be used by health care organizations. The approach and success of any quality improvement program is determined by corporate philosophy, and initiation, involvement and support of senior level management. For any quality improvement effort to be effective, it is imperative to have support from all of an organization's top management personnel. With such support, it will be easier to manage employee resistance to change when efforts at quality improvement do indeed require change. There were three approaches to using quality improvement to increase levels of patient satisfaction discussed in this paper: measuring the patient's perspective, improving patient outcomes, and using a Six Sigma program.

When using the views of the patients in quality improvement efforts, there are both advantages and disadvantages. Specifically, the direct feedback provided by patients is perhaps the biggest advantage of this approach. Patients are able to inform providers of areas of satisfaction and dissatisfaction. Qualitative approaches to getting the patient's feedback such as evaluations and questionnaires have the advantage of allowing more open-ended questioning allowing managers to get a better feel for why a patient may feel a certain way. However, qualitative approaches are not as easy to apply statistical evaluations to as quantitative approaches. Thus, when managers wish to establish a standard against which future efforts can be evaluated on a more objective basis, quantitative methods, such as surveys, nominal group techniques, and consensus methods, may be better. When coupled with methods of obtaining patient feedback, the act of involving patients in decisions related to their treatment and the overall design of health care systems can serve to improve levels of patient satisfaction.

Improving patient outcomes also serves to increase levels of patient satisfaction. HPRP demonstrated that collaboration by many different organizations could be effective in improving the standard of patient care. Better patient outcomes are the main advantage of this approach. However, a community-wide effort can also result in more effective solutions being identified because more people with different backgrounds and experiences are involved. On the other hand, competition between different organizations could be a

drawback to this approach. Tension between personnel from competing organizations might inhibit all aspects of the effort from generation of ideas to implementation of a final plan. Also, this approach could be very costly and time-consuming. For example, it takes a great deal more effort to schedule meetings and form committees with personnel from different organizations. If some of these drawbacks can be overcome, then a community-wide initiative can be instrumental in improving the standard of care for patients and thus increasing levels of patient satisfaction.

Finally, use of a Six Sigma program may help an organization to achieve higher levels of patient satisfaction. Six Sigma provides a formal procedure to follow in quality improvement eliminating the need for health care organizations to expend the effort in developing a program from scratch. Six Sigma has also proven to be effective for many types of industries outside of health care (Samuels and Adomitis, 2003). However, it has not yet been heavily utilized in the health care field. Nevertheless, current studies have shown that Six Sigma has been more effective than previous quality improvement techniques, and without requiring additional resources or producing more stress to the organization. In fact, it can be incorporated into existing quality management efforts (Revere and Black, 2003).

Conclusion

Achieving high levels of patient satisfaction through quality improvement should be one of the top priorities of any health care organization. After all, without patients, these organizations would cease to exist. There are several approaches that can be utilized to meet and exceed the expectations of the patients. Of these, measuring the views of the patients, improving patient outcomes with a community-wide effort, and using a Six Sigma program were discussed. Each of these programs can be an effective mechanism for quality improvement if used properly. One of the key components of quality improvement techniques involves collaborative efforts by all health care

professionals and managers as they seek to increase patient satisfaction. Implementing quality improvement initiatives to improve patient satisfaction can enable health care organizations to position themselves for success in today's global and increasingly competitive environment.

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