

The overlooked value of quality cost programmes implementation in healthcare

By Dr. Nashat Nafouri, Chairman, Healthcare Group & Executive Officer, Saudi Quality Council



Dr. Nashat Nafouri

A dilemma comes to end

In the last decade, senior management in healthcare (voluntary or mandatory) implemented quality concepts in their facilities due to many reasons including globalisation, industry competitiveness, customers brain drain, and regulations became more robust, in order to achieve better health care outcomes.

On their strategic radar, the use of different accreditation or certification models as an approach to improve healthcare services, operations and outcomes was the catalyst that would solve all problems and gain the blessing of the stockholder. Therefore, one can notice a tenfold increase in the number of healthcare facilities obtaining different types of accreditation and/or certification over the last 15 years such as different ISO certifications, Joint Commission International (JCI) accreditation, Canadian accreditation, Australian accreditation, College of American Pathologist (CAP) accreditation, American

Association of Blood Bank accreditation and recently local Central Board for Accrediting Healthcare Institutions (CBAHI) etc. To some extent it became an accreditation marathon where you may find a healthcare facility that has a boutique of different types of accreditations.

This approach put the executive management in a very difficult situation to balance between the pressure coming from the stakeholder to deliver high strategic outcomes and the extra burden on the operational budget. Executives assumed many unnecessary and exhausting additional expenses of quality deployment due to accreditation such as creating new quality positions, extra labour works, overtime, extra supplies, facility upgrades, renovation, processes redesign, acquiring new equipment, third party testing, mock inspections and the list goes on and on in order to meet accrediting bodies' requirements. This created a negative impression among executives and doctors claiming that quality deployment is draining the budget, is labour intensive, and hence accreditation is a redundant practice and impractical in advancing medical treatments and services. In addition, chief financial officers and financial department did not buy-in into quality and were totally under the impression that quality is a draining cost centre with zero profit when compared to the return on investment (ROI).

On the other hand, many studies and surveys showed that patients and their families did not express the utmost satisfaction in accredited hospitals aside from knowing their rights in these hospitals and hence the complaints increased over the years. Despite the extensive training on quality improvement methodologies such as quality tools, root-cause-analysis (RCA), risk management, six-sigma, balance score cards (BSC), change management, key performance indicators (KPI) to different disciplines and levels of healthcare workforce, the buy-in in deploying quality tools as routine practice is very marginal if not only detained in the quality department and among



those who want to work in quality improvement projects for the sake of publication.

No one can doubt the importance of quality concept implantation in healthcare nor argue about the value of accreditations in discovering the gaps in healthcare services and improving processes but the only attribute that led to this situation, in my opinion, is the lack of understanding and implementing of quality cost programmes to reduce operating expenses and/or increase productivity, efficiency and revenue in healthcare services. Even though quality directors and managers view quality as the prime goal for services improvement in healthcare, in my opinion, they failed in highlighting the importance of using quality cost system to organisation leadership to gain their buy-in and produce a tangible outcome of the routine quality practice.

Upon personally reviewing many quality programmes across healthcare facilities in the last 15 years, I could not find a link between the quality implementation programme and quality cost programme nor a single quality manager working closely with a functional manager and coordinating with the finance department to report quality costs to executive management in order to measure the level of improvement and make informative decisions.

The main focus of quality units is about proactive or reactive assumptions on how to meet accrediting bodies' requirements and standards without taking into consideration the quality cost programme but accreditation expenditures. In my opinion, the lack of knowledge and expertise among quality, functional and finance professionals in deploying quality costing system in healthcare services have negatively impacted the development of quality concept over the last decade. This scenario will come to an end with the management style transformation, which is taking place today due to the new certainty of economic diversion and in moving towards project management style in healthcare in the region. There is a need for new set of skills to be learned by quality professionals by looking in-depth into the healthcare operations and fully understanding the iceberg of measured and hidden quality costs.

What are quality costs and categories?

Understanding the cost of quality is one of the oldest quality business methods. The root goes back to 1951, when Dr. Joseph M. Juran's first *Quality Control Handbook* made the analogy of "gold in the mine" That is, there are often hidden costs we cannot see but which can be recovered. Other publications adding to an understanding of

quality costs included

Dr. Armand V. Feigenbaum's book, *Total Quality Control*. Quality costs are the costs connected with both attaining and missing the desired level of quality in a service or product. They may be seen as the costs of preventing quality problems, measuring quality levels, monitoring and/or inspecting quality level or failing to accomplish the desired quality levels.

Over the last several decades, quality costs have been divided into several categories but the most commonly accepted and comprehensive classification have categorised them as 1) prevention, 2) appraisal 3) internal failure and 4) external failure. The detailed definition of each category is:

Prevention costs – Costs of all activities specifically designed to prevent poor quality in products or services. Examples are the costs of new service review, quality planning, supplier capability surveys, process capability evaluations, quality improvement team meetings, quality improvement projects, quality education and training.

Appraisal costs – Costs associated with measuring, evaluation, or auditing product or service to assure conformance to quality standards and performance requirements. These include the costs of incoming and inspection/test of purchased materials, accreditation, services audits, commissioning tests, verification and validation, and calibration of measuring and test equipment, and cost of associated supplies and materials.

Internal failure costs – Failure costs occurring prior to delivery or shipment of the product, or the furnishing of service, to the customer. Examples are the costs of scrap, rework, rescheduling, reinspection, retesting, material review, snag list, and downgrading.

External failure costs – Failure costs occurring after delivery or shipment of the product, and



Quality costs are the costs connected with both attaining and missing the desired level of quality in a service or product.



during or after furnishing of a service, to the customer. Examples are costs of processing customer complaints, warranty claims, product recalls, medical errors, fines, readmission, compensations, and hospital acquired infections.

The total of these costs defines quality costs in the broadest sense. There are 75 elements of these categories and the total list of potential quality costs can be exhaustive and create its own financial exercise. It is recommended that when establishing a quality cost tracking system, the implementer use the Pareto chart to identify the highest loss contributors to improve them and as the improvement diminishes, add the secondary quality costs and repeat the improvement process.

The aim of a quality cost system

The principal idea behind cost of quality systems is the largest and highest quality costs occur after a service has been performed, that is, external failure costs. Altering activities and focusing efforts so that quality issues are identified in progressively earlier stages of internal failure, appraisal and prevention will reduce overall organisational costs. Reducing quality costs is also considered an effective way to regain margin. A second idea is that while external failure costs are often larger than costs created earlier in the flow, they can be also be harder to measure or link to casual events.

Medications returns complaints, for example, are usually easy to measure, but it may be difficult to identify how the problem found by a patient and paid for in a compensation claim was caused in the drugs' preparation and dispensing process. In addition, costs due to lost trust are very difficult to quantify. One approach is to start with those internal failure costs which can be identified and tie to specific work activities because in most

cases, the roots that underlie these internal failure cost-generating activities are tied to those much larger external failure costs. So, by eliminating the root cause internally, all quality costs are reduced. Installing and using a quality cost programme will allow leadership to make a guided transition from an organisation's current operational costs to a state of minimal quality costs. The cost of quality for a given issue grows larger as the services moved toward the customer. From service design, setup, delivery, completion, and finally to possible litigation, each step can result in a tenfold increase in quality costs. Not all issues make it to the last stage, but all increase in cost as they move forward.

Improving the bottom line is the goal. A properly understood and managed quality cost programme will aid organisations in realising cost savings while avoiding some of the serious pitfalls that can accompany cost cutting: decrease in service quality, increased patient dissatisfaction, added rework costs, or complaints handling.

The role of accounting and the management of quality costs – focus on the positive

Establishing a quality cost system usually does not require extensive accounting system changes. Access to detailed data currently available may provide enough information to set up a quality cost programme. The key to an effective system is to strike a balance between practicality and comprehensiveness. However, if the larger elements of quality cost are not identified by the existing accounting system, some form of estimation may be needed at first. The critical need is to make sure that the quality cost data makes sense to management, that is, it covers all the known and/or expected sources of quality cost.

During the setup of a quality cost system there may be a need to do some trials to establish the key sources. However, a successful cost of quality programme should be comprehensive and not just cover those portions of the business or cost centres that are simple or obvious. Leaving out portions that are significant but difficult to obtain will skew the decisions and approaches taken to reduce costs. The cost of quality approach and its measurements should be viewed as behaviour modification tools. The goal is to change the behaviour of the organisation's employees as a group. What senior management expects from an accounting team are reports that measure the totality of costs within a particular area that can have significant impact on operational decisions but not a comprehensive accounting measure. It is important to emphasise

Installing and using a quality cost programme will allow leadership to make a guided transition from an organisation's current operational costs to a state of minimal quality costs.

