Implementing Continuous Quality Improvement at the Healthcare Provider Level
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1. An overview of Continuous Quality Improvement

In the quest for Service Excellence (sE!), an effective Continuous Quality Improvement (CQI) program is the single most important requirement. The only way to transition the provider from where it is now, to where it needs to be is to improve the pertinent clinical, operational, business and customer processes as advocated by the President’s New Freedom Commission on Mental Health report and the Institute of Medicine’s “Crossing the Quality Chasm”.

However, many organizations implement sE! programs and not all are successful. Many are unsure about the scope and level of effort needed to implement a CQI initiative. So, how does it really work and how can we assure its effectiveness?

Figure 1 describes the hierarchical series of steps that culminate in Best in Class performance. Each step in the sE! process signifies a different level of maturity. No organization can go from the bottom to the top without its systems maturing along the way. Also, as the organization matures, its approach to CQI should also mature. An organization starting the journey cannot possibly institute CQI in the same way as one which has reached truly best in class performance.

A Continuous Quality Improvement program has three components:

- **Corrective Action** where problems that occur are resolved in a manner that prevents recurrence. This is a component of a Basic Quality System and is the first step out of Managed Chaos. An organization can greatly improve its performance if corrective actions are effective. This is the first step in a CQI process.

- **Preventive Action** where potential problems are identified and resolved before they have occurred. This requires formal documentation of the key processes so they can be really understood and elements of risk can be identified. This should be considered the second step in a CQI process.

- **Continuous Improvement** is the final step. After recurring problems have been resolved and areas of high risk have been identified and mitigated, the “fire fighting” stops and the provider can concentrate on real continuous improvement. Continuous Improvement is a continual “lifting of the bar” of quality. It is an automatic and institutionalized quest for ever higher performance.

While the tools and methodologies needed to implement these three components are not dissimilar, the cultural requirements within the provider organization are very different. The institutionalization of continuous improvement requires a company wide culture shift that must develop over time by building success on success. To achieve this a progressive approach is needed. Initially an organization must concentrate on problem solving and rapid improvement. After experiencing success in implementing and measuring effective corrective action, providers can incorporate risk analysis and aim for continual improvement.

In the early stages of CQI there are typically many problems to resolve —“low hanging fruit”. Business performance increases rapidly at first as we have shown in figure 2. When recurring problems have been corrected, a consolidation phase is entered where the emphasis switches to the mitigation of risks or potential problems, bringing little performance increase but safeguarding the business and its stakeholders. The final phase –
continuous improvement can be regarded as “making good processes better”. Such processes have typically already achieved their targets and are operating without regular faults or failures. True continuous improvement tends to start slowly, but as skills are developed and the culture changes within the business performance can increase dramatically.

So, how does a provider implement an effective Corrective Action process and then mature to Continuous Improvement?

2. Implementing an Effective Corrective Action System

An effective corrective action process has three components:

- A process for identifying problems and initiating corrective action
- A process for managing a corrective action project to resolution
- A process for validating the effectiveness of the corrective action to ensure that the problem does not recur

One method of identifying problems and initiating corrective action that works well in a systemically immature organization is making the leadership of the organization responsible for this activity. At a minimum weekly, a meeting is held to discuss problems identified and formally initiate corrective action. This meeting can also be used to monitor the progress of ongoing projects. For each problem requiring resolution, a CQI team is established with the team leader being given formal responsibility for the project. Even simple problems should be managed in this manner, creating a consistency of approach and developing the necessary skills amongst the widest possible employee base.

The first priority of the CQI team is to establish the root cause or causes of the problem. For complex problems, this can be a lengthy process and often requires the use of specific investigative techniques including surveys, research, process analysis and other methods. Once the root cause has been established, a resolution is proposed. Again, for a complex problem this may require investigation and possible testing of alternative approaches. The root cause and proposed resolution should be documented and submitted to the leadership for approval.

The project to resolve the problem should be managed along traditional Plan – Do – Study – Act (PDSA) guidelines (see figure 3). The CQI teams must be trained and familiar with this technique and should report progress weekly. Leadership should remain engaged and be prepared to expeditiously provide assistance and remove roadblocks as necessary. As clinical or operational processes are revised staff should be trained appropriately and data collected.

When the project is completed, the results should be monitored for a defined period and hard evidence collected to demonstrate the successful conclusion. Only then should the project be considered complete.

3. Implementing an Effective Preventive Action System

Where the focus of corrective action is root cause analysis, the focus of preventive action becomes risk analysis:

- What is the likelihood of a problem occurring?
- What would be the impact or result if the problem did occur?
- How likely is it that the problem would be detected in time to prevent the impact?

A prerequisite of risk analysis is well defined (preferably documented) business, operational and clinical processes. Unless the processes are well understood, risk analysis is impossible. For this reason alone Preventive Action is higher on the maturity model. However, once the risks have been evaluated and a potential problem identified, resolution follows a similar PDSA process as corrective action and requires same leadership and team involvement. The evaluation
of risk can require the use of specific tools and techniques. One effective example that JCAHO recommends is HCFMEA (Healthcare Failure Mode and Effect Analysis).

4. Continuous Improvement

Continuous improvement resides at the higher levels of maturity in an organization as it demands a cultural commitment to ever higher performance. The quest for continuous improvement begins when a process has achieved and maintained its planned performance levels. It is driven by ever increasing performance targets demanded by the business or its stakeholders. At this level, there is little or no “low hanging fruit”, merely a mission to make good processes better. A robust continuous quality improvement program may consist of:

- The use of performance data to monitor the effectiveness of processes and provide timely feedback
- The setting of ever higher targets
- The creation of a quality culture at all levels of the business in which anything less than excellence is unacceptable
- An understanding of the needs of the business and its stakeholders
- An ability to benchmark best practices
- The understanding and application of “cutting edge” CQI tools and techniques

Initially, continuous improvement projects are managed individually. Teams are formed by the leadership and progress and results closely monitored. Eventually, however, continuous quality improvement becomes naturally institutionalized within the business. Problems are automatically resolved. Processes are automatically improved. Improvement becomes culturally driven rather than leadership driven. At this level, an organization can, truly, call itself “best in class”.

5. Conclusion

To achieve Service Excellence (sE!), providers of healthcare services must understand the Continuous Quality Improvement hierarchy and the cultural maturity required to effectively implement each level. By progressing through the hierarchy organizations will develop the necessary skills at all levels to manage and implement the program. Starting with the low hanging “correction” fruit enables a business to improve its performance rapidly by doing no more than identifying issues and ensuring that they do not recur. How many times have we all seen the same problems month after month? The successes realized also go far in creating the quality culture required. By the time the initial corrective actions are completed (they will never really end – there will always be problems to solve), the skills should be available to begin identifying and mitigating risks. Leadership should focus (where possible) on rapid cycle projects that bring quick successes. In terms of cultural maturity, many small successes that bring together a broad cross-section of staff are worth more than a single larger one that involves only a few (figure 4).

Pure institutionalized continuous improvement is a worthy goal and the ultimate objective for all businesses wishing to ensure their success. However, we must all realize that this is a long journey. It can be learned and facilitated. It cannot be forced. The required culture must be progressively nurtured by the leadership within the organization. The journey itself brings many of the expected benefits – robust processes, satisfied customers and compliant operations. For some organizations, that is enough. For others, the desire to be truly best in class will mean that the quest for Service Excellence demands a continual and ongoing effort.