

PROCESS OF REORGANIZATION AND TOOLS TO IMPROVE THE PROCESS

Special thanks for their contributions to this chapter to Robert Sutter, RN, MBA, MHA, Six Sigma Master Black Belt, of Six Sigma Academy, Arizona, and Michael Troncone, MPH, FACHE, administrator, Calvary Hospital, New York, and principal, Michael T. Troncone & Associates, New Jersey.

Chapter Objectives

After you have studied this chapter, you should be able to do the following:

1. Discuss why organizations must reorganize.
2. Define reorganization and reengineering.
3. Review the various approaches available for organizing and reorganizing.
4. Distinguish between job design, job redesign, job rotation, job enrichment, and job enlargement.
5. Discuss approaches to quality and process improvement.

Previous chapters have discussed the fundamentals of organizing and how one departmentalizes within an entire healthcare organization as well as subdividing within a department. However, once organized, one should not assume that the structure will remain static. External and internal events may trigger the need to make modifications to the organization, a function known as *reorganization*. An example of an external event affecting an organization would be staff layoffs compelled by a decrease in hospital volume caused by the departure of a major employer near the hospital. Similarly, internal initiatives to improve processes and services may cause management to realign staff, positions, and authority. These internal initiatives often are driven by quality improvement activities, which will be discussed in this chapter.

Alfred Chandler (1962) did the original work on the strategy-structure relationship. His finding that *structure followed strategy* demonstrated that as organizations change their strategies, they must change their structure to support that strategy. Throughout Part IV of the book we discuss the executive's and the supervisor's roles in organizing staff, equipment, supplies, and other resources to achieve the goals of the entity. One must keep in mind that organizational structure is not static; its shape and needs change. For this reason,

the manager's organizing function is constant; checking, questioning, and appraising the soundness and feasibility of the departmental structure are ongoing processes. The process improvement approaches discussed in this chapter will assist you in these endeavors. After all, organization is not an end in itself, but rather a means to an end—the accomplishment of the objectives of the department. A manager must be on the lookout for new developments, practices, and thinking in the field of organizing. The supervisor must be willing to reorganize the department if developments warrant it, if it is indicated that the existing structure does not permit effective and efficient functioning, or if it is apparent that the services or products being produced are defective.

The term reorganization has many connotations. In this discussion, the term refers to changes in the organizational structure, departmentalization, the assignment of activities, or authority relationships. From time to time, a manager makes such changes because of scientific and technological advances, the dynamic and changing nature of the department's activities, financial needs, or a change in supervisors. As noted previously, reorganization also may be necessary to overcome existing deficiencies. When supervisors study those deficiencies, they use a variety of tools to improve the processes of the department and organization. Often reorganization is closely aligned with reengineering and process improvement activities such as Six Sigma. Occasionally, it is confused with downsizing and rightsizing, driven by cost reduction.

In an effort to prepare for the future, improve patient care, meet regulatory demands, and reduce operating costs, healthcare organizations have concluded that they must replace labor-intensive manual efforts with technology-assisted alternatives such as implementing electronic health records (EHR) and computerized physician order entry (CPOE) applications. This trend toward more computerization will require a change in staff skills. With technology that permits clinical services to be performed, interpreted, documented, and monitored remotely, such as Picture Archiving and Communications System (PACS), robotics for diagnostic and surgical services, smart toilets,¹ and remote heart monitoring, there will be more healthcare workers and physicians working remotely or telecommuting, and using less space onsite at the healthcare entity. Healthcare organizations will need to reorganize or restructure to accommodate the advanced and modified services, establish opportunities for existing staff to gain new skills, and acclimate to the nontraditional staffing patterns that will result from having some staff that remain onsite at the bedside of the patient and some who serve the organization and patients from a distance. In addition, these technologies will affect the levels of staffing and skills required. EHRs will eliminate the need for clerical staff who now file or courier the record; laboratory staff who process samples may find their jobs changing as more technology, such as smart toilets and glucose monitoring units, are managed by the patient; and specialists will use robots to visit their patients so that they can “see” more patients in a given day. There

are many tools available to organizations and their management teams to orchestrate the restructuring caused by these changes.

Reorganization Concepts and Tools

Two closely associated terms are **reengineering** and **Six Sigma**. Historically, reengineering has had a negative connotation as a harsh cost-cutting organizing approach. Yet when used properly, reengineering will reduce waste and improve services. Reengineering was introduced in the 1990s. According to Michael Hammer, “the simplest way to define reengineering is to say it means taking a ‘clean sheet’ approach to forget how you’ve done things in the past and to ask what’s the very best way to get your work done. It’s about rethinking how you do your work, working backwards from what customers need and then determining what’s required to deliver it.” Hammer contends that the concept has nothing to do with profit and loss, and it is not about buying and selling, merging, or divesting: “It’s about serving customers’ needs” (Deloitte & Touche 1996a).

With today’s spotlight on implementing and expanding the use of EHRs to improve patient care, many healthcare organizations are to some degree performing reengineering endeavors. Using information technology to improve performance, cut costs, and deliver better patient care is a worthy project for any organization. EHRs will reinvent the way many processes in healthcare get done.

The increased focus on patient safety has caused healthcare organizations to examine their services, structure, and processes with a single goal in mind—to eliminate errors. Six Sigma is a combination of reengineering principles and quality improvement approaches that focus on delivering defect-free services and products. Six Sigma was developed by Motorola in the 1980s and subsequently has been used at many healthcare systems. “Six Sigma is a management method that addresses error prevention, problem solving, problem detection, and managed change. Six Sigma uses a collection of management practices to achieve its specified goal to achieve defect-free processes and decrease variation in services offered” (Barry, Murcko, and Brubaker 2002, 7; Woodard 2005).

Thus far we have identified the wave of transition to greater computerization of clinical documentation and processes, the need for different skills, and an approach to eliminate defects or reduce waste. These three initiatives are consistent with the Institute for Healthcare Improvement’s charge to healthcare leaders to focus on the basics: “At the heart of sustaining better healthcare are three inextricably linked aims: a) reducing the burden of illness for individuals and populations; b) improving system quality, safety and value; and c) developing and maintaining a lifetime of professional competence,

reengineering

A reorganization process in which leadership determines the best way to accomplish its tasks, regardless of how those tasks were accomplished in the past.

Six Sigma

A combination of reengineering principles and quality improvement approaches that focuses on delivering defect-free services and products.

HOSPITAL LAND



pride and joy in daily work” (Bataldan, Leach, and Ogrine 2009). Using these principles during troubling economic times and during times of dramatic change—such as that resulting from the pervasive and significant technology changes we have discussed—requires healthcare executives to think clearly and decisively to focus on the basics, reduce waste, add value in clinical care, and enable continual change (Bataldan, Leach, and Ogrine 2009). Doing so will result in reorganization.

In Chapter 2, we discussed the early theorists who focused on production improvement techniques during the scientific management era from 1890 through 1940. Additionally, we have said that supervisors should seek the input of their staffs for ideas to improve processes and the environment in which they work. Supervisors were encouraged to involve their staffs as early as the 1950s with the human resources school of management. Process or quality improvement approaches have attempted to merge the scientific management school with the human resources school.

Quality improvement programs are also known as total quality management, total quality control (Feigenbaum’s term) (Nielsen et al. 2004).

IM, I TOLD YOU
TO TRY IMPROVING
YOUR DEPARTMENT'S
PERFORMANCE
BY USING SIX SIGMA,
NOT YOUR
SIXTH SENSE!



Ogrine 2009). Using these during times of dramatic and significant technology executives to think clearly add value in clinical care, Ogrine 2009). Doing so

s who focused on produc- c management era from at supervisors should seek es and the environment in nvolve their staffs as early management. Process or merge the scientific man-

own as total quality man-) (Nielsen et al. 2004),

continuous quality improvement, companywide quality control (Ishikawa's term), Little Q and Big Q (Juran's terms), performance or process improvement, zero defects (Crosby's term) (Nielsen et al. 2004), quality circles, and multiple variations of these terms. Quality improvement is the practice of monitoring activities, identifying variations from expected outcomes, establishing corrective actions, and assessing whether the actions have corrected the variation. There is interdependence and overlap in the three reorganizing concepts of reengineering, Six Sigma, and quality improvement. Regardless of the trigger for reorganization, be it driven by the economy, regulation, technology, growth, or otherwise, the supervisor needs to understand the fundamentals for reorganizing the department or function. The quality and reengineering tools discussed above are instrumental to that task.

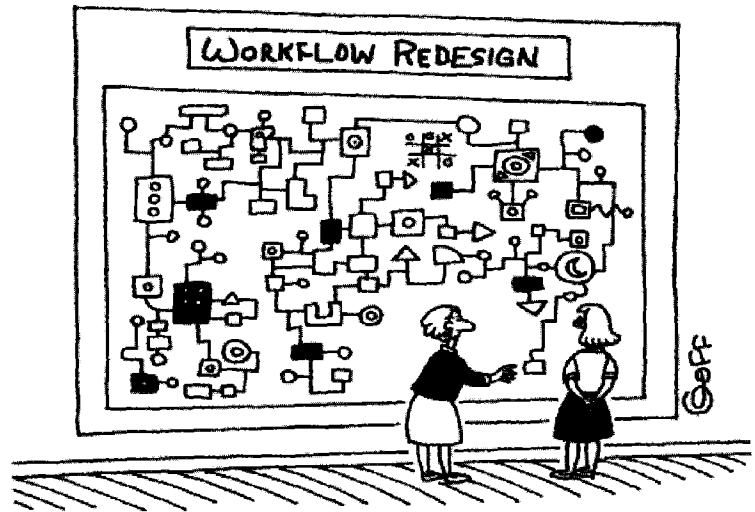
Reorganization Vocabulary

To help you through the reorganization effort, the following are some terms that describe activities and components of the reorganization process.

- *Job design* is the process managers complete to define the specific tasks, methods, and relationship of a given job or position to others in the organization. When a supervisor is first setting up a department or planning for a new function, job design is essential.
- *Job redesign* is the process by which the manager reviews the various tasks assigned to a job or position and alters the assignments to improve productivity, enhance quality, or enrich the employee's work experience. This is one reorganizing approach.
- *Job rotation* is an enlargement technique whereby employees periodically move from one job to another, thus expanding their skills and comprehension of the entire process.
- *Job enlargement* is a method used in redesigning the job by adding variety to it through more tasks of a similar nature.
- *Job enrichment* is similar to job enlargement in that it is a method used to redesign jobs. However, in the process of doing so, the employee is allowed more participation in decision making by increasing the depth of the employee's authority and adding a variety of tasks to the job.
- *Work redesign* focuses on the work itself—what is being done and how it is being done. The idea is to identify and eliminate duplication, waste, and process steps that do not add value. Organizations may be able to combine functions, merge units, redesign jobs, streamline processes, and/or eliminate organizational layers (bureaucracy) as a result of such efforts (Thomas 2002).

Each of the above tools evaluates jobs. Do not allow the redesign activity to become too complex or it will overwhelm you (Exhibit 14.1).

EXHIBIT 14.1



"And this is where our ED workflow redesign team went insane."

SOURCE: Reprinted with permission from *Hospitals & Health Networks*, September 2004, © 2004, by Health Forum, Inc.

However, recognize that every job does contribute to a process. For the reorganization process to effectively and efficiently use the resources (manpower, money, equipment, and materials) allocated, the supervisor must monitor the process changes to ensure that services and products being produced are at a quality level acceptable to the organization and the customer and, when necessary, to tweak the processes or organizational structure to achieve the goals of the organization. This tweaking may require reorganizing resources. When doing so, the supervisor reviews and possibly adjusts the authority he or she has granted to subordinates to ensure they have sufficient freedom to act to achieve the department's objectives.

The Supervisor's Role in Quality Management²

All managers are responsible for ensuring the quality of the product or service they oversee. The manager must continuously assess the performance of the operation within his span of control and maintain or improve its outcome. This is accomplished through others. The manager must monitor, motivate, and communicate with subordinates, peers, and superiors—team members who participate in the quality management process.

The customers, persons, or departments dependent on the manager's unit for their own satisfaction help the manager set the performance expectations necessary to achieve satisfactory results. Customers may be internal—other units of the organization—or external—the patients, families, and public the organization serves.

What Is Quality?

Many experts have attempted to define *quality*. While definitions vary, there are three standard levels of quality that are accepted today. At the most basic level is **conformance quality**. For the supervisor, this means ensuring that the outcomes of the work they oversee meet the minimum standard set by the organization. For instance, the new medical records supervisor may be responsible for ensuring that a given number of charts are coded each day or that the records are filed correctly. Conformance is the act of doing the right thing.

The second level of quality is often called **requirements quality**. At this level, the supervisor is responsible for meeting customer expectations. Every supervisor has a number of customers—their employees, the departments they interact with, and so forth. When a supervisor ensures requirements quality, she is perceived as running a good department.

The highest level of quality is **quality of kind**. This means providing a service that exceeds customer expectations or that delights the customer. This is the quality that Deming (1986) alludes to when he defines quality as “pride of workmanship.”

Approaches to Quality

To achieve quality of kind, the supervisor must be familiar with and practice ongoing performance improvement techniques, both to motivate employees and to continuously improve the work product. Many of today's organizational approaches to quality are based on *DMAIR*—*Design, Measure, Assess, Improve, Redesign*. This process defines the continuous cycle of quality improvement. Its elements are as follows:

1. *Design*. The first step in improving any process is to understand its design. Questions to ask are
 - What is the purpose of the process? What is its objective?
 - Who is involved in the process?
 - What are the steps of the process? (These should be defined at the most basic level. Flowcharts are an excellent method to identify redundancies or inefficiencies in the process.)

conformance quality

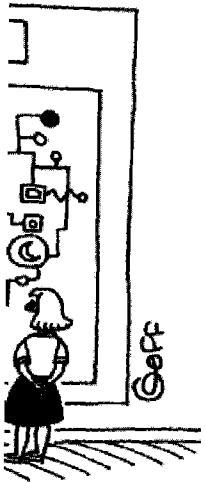
A level of work outcome that meets the minimum standard.

requirements quality

A level of work outcome that meets customer expectations.

quality of kind

A level of work outcome that exceeds customer expectations.



...went insane."

September 2004, © 2004, by Health

contribute to a process. For
ciently use the resources
cated, the supervisor must
s and products being pro-
ization and the customer
rganizational structure to
g may require reorganiz-
vs and possibly adjusts the
nsure they have sufficient
es.

gement²

of the product or service
s the performance of the
or improve its outcome.
must monitor, motivate,
superiors—team members

2. *Measure*. “You can’t manage what you don’t measure” is an oft-quoted phrase. To obtain baseline measurement, questions to ask are
 - What parts of the process are being measured?
 - What parts of the process should be measured based on its design and the desired outcome?
 - Are the results satisfactory, or is there a need for improvement?
3. *Assess*. When the design of the process is understood and measurement results have been obtained, it is necessary to ask
 - Is the process efficient? Are there redundancies, extra or duplicate steps, inefficiencies, or unnecessary steps?
 - Can the results be improved?
4. *Improve*. Based on the assessment, changes to the process can be identified to improve the end result.
5. *Redesign*. As the improvements are implemented, two important steps must be taken:
 - Define the redesigned process and communicate it to all parties involved.
 - Establish measures to ensure that the improvements accomplish what was intended.

The Six Sigma approach to quality is quite similar to the DMAIR approach. Its steps are *DMAIC*—*Define, Measure, Analyze, Improve, and Control*. While the methodology calls for a rigorous, scientific approach to statistical analysis, the fundamental cycle of quality is quite similar. (Read more discussion of Six Sigma later in this chapter.)

However, an approach without a commitment from the workforce to achieve a quality-striving environment will not be successful. At Bronson Methodist Hospital in Kalamazoo, Michigan, employee understanding of and commitment to the strategic plan for clinical excellence, customer service excellence, and corporate effectiveness are the bases of individual and departmental goals (AHA-McKesson 2009).

Quality Improvement Teams

In the Word Web Online dictionary (2006), the primary definition of a *team* is a “cooperative unit.” Each member of the quality improvement team (QIT) has a defined role in the performance improvement process. The manager may be called on to serve in any one of these roles:

- *Team leader*. The team leader is the owner of the performance improvement project under study and leads the team through the DMAIR or DMAIC process. The leader works closely with the facilitator to plan the work of the team. He must start meetings on time, assign roles and responsibilities, ensure that work is evenly distributed, ensure that everyone has an opportunity to participate,

ensure accurate record keeping, and ensure that all tasks are accomplished.

- *Facilitator.* The facilitator is responsible for keeping the team on track by keeping time and ensuring that each topic is covered as laid out in the work plan.
- *Team member.* Team members are chosen because they are associated with the process under study, either as participants or customers, or because of their knowledge of the process. They must support the work of the team and support its recommendations throughout the organization.
- *Recorder.* The recorder is often a rotating role and is responsible for keeping an accurate record of the team's proceedings.
- *Consultant.* A consultant is an invited guest. She does not need to attend every meeting of the team but may be called on when her particular expertise is needed.
- *Team champion.* The team champion is a senior leader who has the authority to support the work of the team and ensure that the team receives resources and support needed.

In addition to utilizing the formally structured quality improvement team as suggested by the contributing author, Michael Troncone, there are other methods to gain employee participation at any level of the organization.

The *quality circle*, sometimes called the quality control circle (QCC) or do-it group (DIG) (see Exhibit 14.2), is a method of increasing employee participation in the daily work routine. The underlying ideas of this approach are derived from the work of McGregor, Maslow, Herzberg, Deming, Drucker, Sherman,³ and others; the first practical applications of the quality circle were made in Japanese industries. The resulting Japanese management technique claims much credit for high levels of productivity, quality, and worker satisfaction. As performance and process improvement activities are part of the mainstream in healthcare institutions, both formal and informal process improvement techniques are being used to raise awareness at all levels of the organizations. Recognizing that healthcare delivery “takes a village,” few healthcare professionals can do their jobs without relying on support from other individuals or teams (Scott 2009) to meet the organization's goals and maintain a safe environment for patients and staff.

In some settings, employees may recommend the establishment of a quality improvement task force. These members volunteer to meet regularly to discuss work, work processes, and quantity- and quality-related problems and to stimulate innovation. The task force is either assigned a project to assess or is asked to identify problems, isolate the causes, and develop practical solutions or more effective methods to ensure that the work is accomplished error free the first time. The supervisor may act as the facilitator of this group,

EXHIBIT 14.2
Do-It-Group
Establishment
Form

This DIG is __ intradepartmental (within 1 department) or __ interdepartmental (more than 1 department).

Employee's Name _____ Department _____ Extension _____

We are looking for ways to improve what we do. We do that by offering suggestions and establishing DIGs to make our ideas work. A DIG idea may be started by anyone. If you have an idea or have identified a problem and would like to have a DIG created, complete this form. Discuss the idea or problem with your supervisor. Drop this completed form in the DIG Box next to the ATM machine.

Is this an idea? ____, or is this a problem ____?

(1) If this is an idea, please tell us more about it: _____

If this is a problem, tell us more: What is the problem? _____

(2) Where is it located? _____

(3) When does it occur? _____

(4) Whom does it affect? _____

(5) How big is the problem? _____

(6) What do you think causes the problem? _____

Have you had DIG training? ____ Have you participated in a DIG before? ____ Have you ever been a DIG Chairman? ____ Will you join this DIG committee? ____ Will you chair this DIG? ____

If this problem is fixed or idea is implemented it will improve:

Customer satisfaction ____ Quality ____ Productivity ____ Organization ____

Finances ____ People skills ____ Other: _____

Supervisor's initials: _____ Date: _____

SOURCE: Adapted with permission from DIG Creation Form from Fayette Memorial Hospital, Connersville, IN.

but often a worker or individual from outside the work team serves in this capacity or in the role of team leader.

Usually the improvement team leader is first exposed to some basic training course in group dynamics, problem solving, and similar techniques.

The members are often given some training in problem-solving techniques, establishing priorities, brainstorming, and so forth. Because there are improvement opportunities or ideas to explore in any organization, the team may apply the Pareto Principle to determine which problems to solve and in what order (Spath 2001). The **Pareto Principle**, also known as the 80/20 rule, states that 80 percent of the results are caused by 20 percent of the causes. For example, the principle could be any of the following:

- 80 percent of the ICU days are consumed by 20 percent of the patients treated in the hospital.
- 80 percent of the tardiness in a department is caused by 20 percent of the department employees.
- 80 percent of the needle sticks occur in 20 percent of the areas.

Pareto Principle

The principle that states that 80 percent of results are caused by 20 percent of causes.

The thought underlying the use of an improvement team is to tap the minds of an organization's own workforce, realizing that the employees doing the job often know best why productivity may be hindered, why patient satisfaction is lower than desired, and why product quality is poor. Often they have excellent ideas and answers. These ideas may surface through the use of formal or informal team sessions coupled with an approach called brainstorming. Successful *brainstorming* sessions follow certain ground rules: (1) ignore the hierarchy (rank does not count); (2) suspend judgment (make it clear that ideas are being gathered); (3) encourage quantity, not quality (get as many ideas on the table as possible); (4) nurture a no-limits session (ask questions such as, "what would our competitor do in this case?"); and (5) don't rush (do not set a fixed time, serve refreshments, and so on) (*Journal of Accountancy* 2000). These brainstorming ideas and solutions are then presented to management or a performance improvement (PI) steering committee.

The QIT, QCC, or DIG fits into the existing organizational structures, following the existing channels of communication and authority. Because improvement teams are an application of participative management, the concept can be introduced with success into any organization in which administration's philosophy has been democratic, open, and participative. It is unlikely that these teams would produce results in an environment that practices autocratic and highly centralized management. The success of these teams is dependent on the recognition and support given by executive leadership. Winners of the prestigious Malcolm Baldrige Award and other similar awards attribute their success to an enveloping culture communicated and modeled by top management that stresses a belief that the organization can continuously improve the quality of its services through teamwork (NIST 2009).

The improvement team or task force may be empowered to implement their recommendations without a presentation to management (recall our discussion of decentralized authority in Chapter 13). In a quality-driven environment, much like that found in the culture of Japanese industries, total trust

exists between management and employees. Employees are encouraged to make changes and test their hypotheses of improving processes and output without fear of management repercussion. The employees are empowered to make decisions about their work environments and are rewarded for taking the initiative. Management serves as coach and facilitator of the brainstorming effort. This type of managerial attitude develops over time and creates a culture of mutual trust and freedom of communication in a facility. This cultural style is more closely identified with the Theory Z philosophy. *Theory Z* is fairly new in healthcare, and the management culture it requires is different from that in most businesses in the United States; because of our litigious and rule-based environment, the likelihood that administrative oversight—even at the department level—will lessen to allow a Z-type environment to fully flourish in healthcare is unlikely in the near future.

One approach to help staff deal with redesigning a process is demonstrated in the chart developed by SSM HealthCare System (see Exhibit 14.3). This approach is used when a process or procedure for doing something, such as registering a patient for treatment, becomes so cumbersome or error prone that it needs streamlining.

Preparation of staff to participate in performance improvement teams may consume some productive time, but it must occur to make the process successful. All team members, whether they serve on the steering committee or the team assessing an opportunity to improve, must have a common vocabulary and use tools to transform data into meaningful information. Some of the tools used are shown in exhibits 14.4 and 14.5.

The success of any process that places subordinates and supervisors together requires communication. Duke University Hospital credits communication of priorities, tactics, and results as the basis for improving quality. At Duke, performance metrics, safety events, and examination of near-misses establish a culture of open communication in which all employees understand how their behavior affects quality and safety (AHA-McKesson 2009).

When individuals are initially convened to participate in a small quality improvement team there may be hesitance to openly share organizational concerns. To encourage communication without fear of reprisal, the **nominal group technique** is practiced. This technique tries to provide a way to give everyone in the group an equal voice in problem or process identification and is discussed in greater detail in Chapter 15.

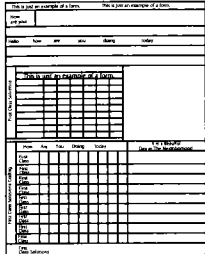
According to Witt (1996), the key questions that should guide the team or group are as follows:

- Who is the customer in the process?
- What is the desired outcome?
- What would the process look like under ideal conditions?
- What are key points where problems have been observed in the past?

nominal group technique

A method to allow all members of a group to have equal voice in discussions.

EXHIBIT 14.3 Performance Improvement Model: Process (Re)Design Approach

Team Information A PLACE TO: • Post Team Project Planning Work Sheet. • Display team meeting minutes. • Solicit comments using self-stick notes. • Recognize individuals who provided support to team. 	① Identify Opportunity OBJECTIVE: Identify an opportunity for improvement and the reason for working on it. KEY ACTIVITIES: • Research the opportunity: — Review indicators. — Survey patients and other customers and suppliers. — Interview individuals involved in the process. • Consider patient and other customers' and suppliers' needs to help select the opportunity. • Schedule the CQI Model activities. CHECKPOINTS: 1. The criteria for selection were customer oriented. 2. A schedule for completing the CQI Model steps was developed. OUTPUTS: • Mission Statement Form. • Team Project Planning Work Sheet.
② Conceptual Design OBJECTIVE: Develop ideal process flows. KEY ACTIVITIES: • Design the ideal process flows. • Perform customer needs analysis to define requirements at the hand-off and interfaces in the process. • Write a clear outcome statement. • Document mutually agreed upon requirements between customers and suppliers. CHECKPOINTS: 3. The sequence of activities in the new process was documented. 4. The potential benefits of the new process were clearly identified. 5. Customers' valid requirements were identified. OUTPUTS: • Clear outcome statement of the process. • Flowchart of the ideal process. • Valid requirements of each customer/supplier relationship in the process.	③ Analysis OBJECTIVE: Design the control system for the process to prevent problems from occurring. KEY ACTIVITIES: • Consider potential problems. • Consider potential causes. • Develop methods for preventing potential problems. • Design a measurement system. CHECKPOINTS: 6. Potential causes of problems were identified and prioritized. 7. Appropriate actions were taken on major potential causes. 8. The measurement and control system is specific enough to pinpoint future problems. OUTPUTS: • Control system with measurable indicators.

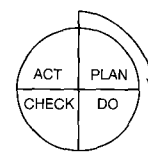
Continued

- How can we design quality into the process, rather than inspect for it after the fact?

For the healthcare supervisor, the most challenging part of any quality improvement process is the implementation of the improvement. Six Sigma has gained momentum as an approach that speaks to each of Witt's questions.

EXHIBIT 14.3 Continued

④ Implement New Process OBJECTIVE: Put the new process in place. KEY ACTIVITIES: • Develop an action plan that: —Identifies who, what, when, where, and how. —Reflects the barriers and aids needed for success. • Obtain cooperation and approvals. • Implement the process. • Develop performance targets for the process. CHECKPOINTS: 9. Action plan addressed who, what, when, where, and how. 10. Action plan reflected the barriers and aids necessary for successful implementation. 11. Cooperation of relevant managers in impacted organizations was obtained. 12. Performance goals/targets were identified. OUTPUTS: • Action Plan. • Targets for measurable indicators. • Implementation of new process.	⑤ Measure Results OBJECTIVE: Confirm that the process is working well and that the performance targets for the process have been met. KEY ACTIVITIES: • Compare results obtained to the target. • Change the process, as necessary, if results are not satisfactory. CHECKPOINTS: 13. Data was collected to measure performance relative to targets. 14. Results met or exceeded targets. (If not, specific follow-up as planned.) OUTPUTS: • Compare the results obtained to the target. • Change the process, as necessary, if results are not satisfactory.
⑥ Standardization OBJECTIVE: Ensure that the process is still working and is incorporated into daily work. KEY ACTIVITIES: • Ensure that solutions become part of daily work: —Create/revise standards. • Educate employees/medical staff on the process and/or standards and explain need. • Establish periodic checks with assigned responsibilities to monitor the new process. CHECKPOINTS: 15. Method to ensure process becomes part of daily work was developed. 16. All impacted personnel were trained (include explanation of need). 17. Periodic checks were put in place with assigned responsibility to monitor the proposed solutions. 18. Specific areas for replication were considered. OUTPUTS: • Education of people. • Incorporation into standard operating procedures. • Replication.	⑦ Future Plans OBJECTIVE: Plan what to do about any remaining problems and evaluate the team's effectiveness. KEY ACTIVITIES: • Analyze and evaluate any remaining problems. • Plan further actions if necessary. • Review lessons learned related to problem-solving skills and group dynamics: —What was done well. —What could be improved. —What could be done differently. CHECKPOINTS: 19. Plan for any remaining problems was developed. 20. Applied P-D-C-A to lessons learned. OUTPUTS: • Plan for the future of the team. • Evaluation of the team and its work.



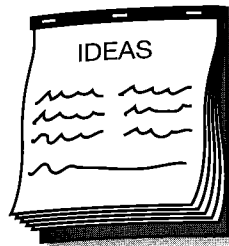
SOURCE: © SSM Health Care CQI Manual, St. Louis, MO, SSM Health Care System 1990 (pp. 279–80). Reprinted with permission.

EXHIBIT 14.4
Performance
Improvement
Model:
Problem-
Solving
Approach

CQI DATA TOOLS

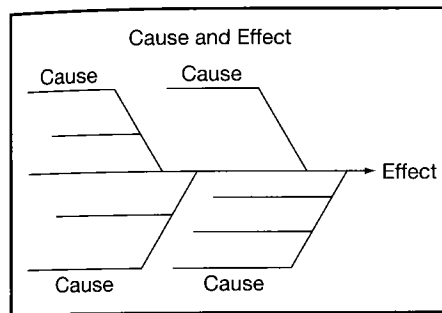
PURPOSE/DESCRIPTION OF TOOL

Brainstorming



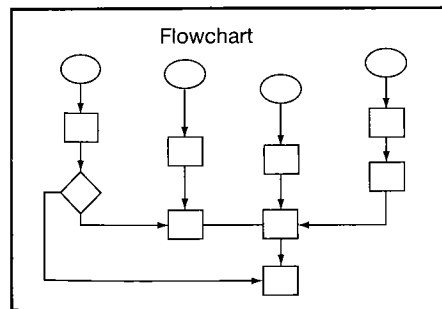
A discussion forum used to get a group of people to quickly generate, clarify, and evaluate a number of ideas that are listed regardless of their viability to support a solution to the problem.

Cause-and-Effect Diagram (also known as the "fishbone" and Ishikawa Diagram)



A diagram that depicts causes of a problem and attempts to narrow the problem down to the most likely, or root, cause. Contributing issues to the problem are grouped together, such as people, materials, machinery (equipment), and methods.

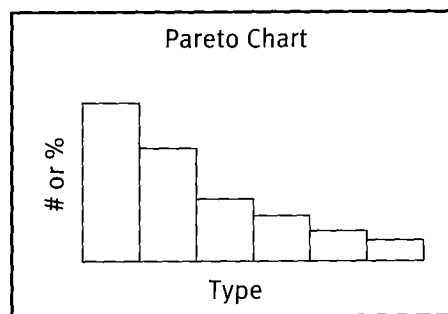
Flowchart or Process Diagram



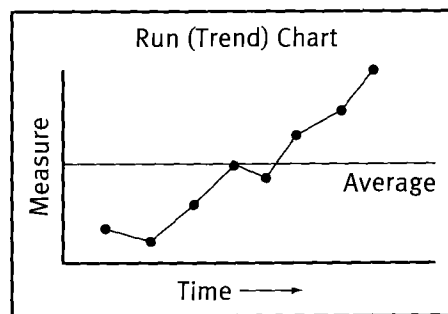
Pictorial description of the flow or steps in a process to allow visualization of the tasks. Flow charts are used to "document" a process or procedure.

- — Start and stop symbol
- — Process step symbol
- ◇ — Decision symbol

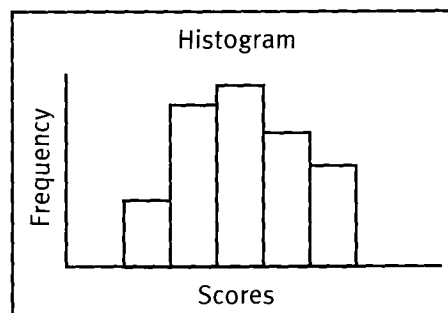
Continued

EXHIBIT 14.4*Continued***CQI DATA TOOLS****PURPOSE/DESCRIPTION OF TOOL***Pareto Chart (also known as 80/20 rule)*

These charts are used to display data in the order of its relative importance or weight. It identifies the "few major causes" of variation from the "trivial" to many. It comes from the 80/20 theory that 80% of the results is directly related to 20% of the causes. For example, 80% of the delinquent medical records are for 20% of the physicians on the medical staff.

Run Chart (trend or line graph)

This graph shows with a single line data or results occurring at different times for a time period.

Histogram

This graph, usually in bar format, displays the frequency with which something occurs. It shows a distribution that may or may not be bell shaped. It may illustrate the stability of a process.

EXHIBIT 14.4

Continued

USE/DESCRIPTION OF TOOL

charts are used to display the order of its relative importance or weight. It identifies the "few major causes" of variation from the "many" to many. It comes from the Pareto theory that 80% of the results is directly related to 20% of the causes. For example, 80% of the delinquent medical claims are for 20% of the physicians on the medical staff.

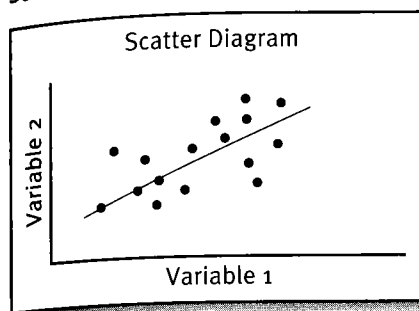
graph shows with a single data point or results occurring at different times for a time period.

graph, usually in bar chart form, displays the frequency of which something occurs. It shows a distribution that may or may not be bell shaped. It may indicate the stability of a process.

CQI DATA TOOLS

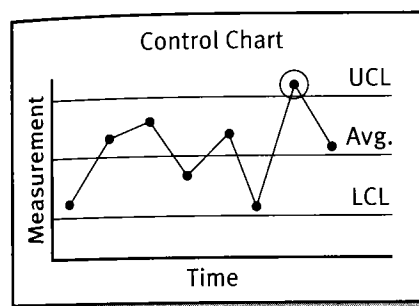
PURPOSE/DESCRIPTION OF TOOL

Scatter Diagram



This diagram is used to demonstrate the relationship between two variables such as processing time and volume of specimens received.

Control Chart

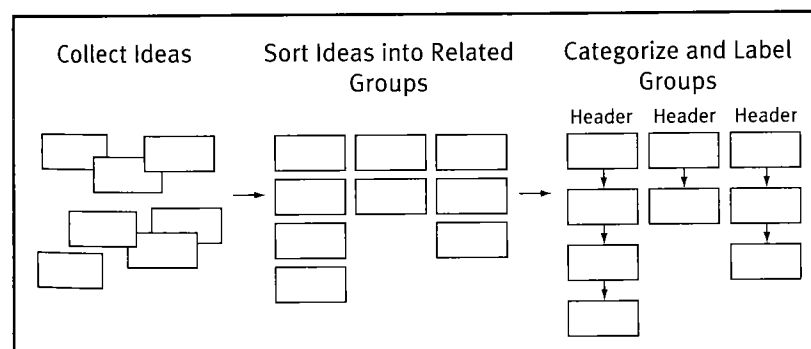


This chart reflects the tolerances of something happening within limits. Normal limits are established and concern should arise when the number of occurrences outside of the limits increases.

UCL — Upper Control Limit

LCL — Lower Control Limit

Affinity Diagram (also known as KJ Diagram and named for its founder, Kawakita Jiro)



A tool used to sort large amounts of ideas or opinions gathered through brainstorming into groupings of similar ideas and then relationally into categories.

SOURCE: Adapted from *The Memory Jogger II*™ © 1994, GOAL/QPC, Methuen, MA. www.goal/qpc.com. Used with permission.

EXHIBIT 14.5
When to Use
Which Tool

STEP	Who	QI TOOL
1. List and Prioritize Opportunities	Steering Committee	Data Collection, Pareto Analysis, Brainstorming, Affinity Diagrams, Flowcharts, Graphs and Charts
2. Identify Customer(s) and Expectations	Steering Committee and Team	Brainstorming, Affinity Diagrams, Flowcharts, and Data Collection
3. Define Project and Team	Steering Committee	Flowcharts, Graphs and Charts
4. Formulate Theories	Steering Committee and Team	Brainstorming, Affinity Diagrams, Cause-and-Effect Diagrams, and Flowcharts
5. Test Theories	Team	Flowcharts, Data Collection, Graphs and Charts, Pareto Analysis, Histograms
6. Identify Root Cause	Team	Flowcharts, Data Collection, Graphs and Charts, Pareto Analysis, Histograms, Cause-and-Effect Diagrams
7. Identify Solutions and Control Systems	Team	Brainstorming, Affinity Diagrams, Flowcharts, Data Collection, Graphs and Charts, Cause-and-Effect Diagrams
8. Address Resistance to Change	Team	Brainstorming, Affinity Diagrams, Flowcharts, Cause-and-Effect Diagrams
9. Implement Solutions and Control Systems	Steering Committee, Team, and Others	Flowcharts, Graphs and Charts, Pareto Analysis, Histograms
10. Evaluate Performance	Steering Committee and Team	Data Collection, Graphs and Charts, Pareto Analysis, Histograms, Flowcharts
11. Standardize Process	Team, Steering Committee and Senior Management	Data Collection, Graphs and Charts, Pareto Analysis, and Histograms
12. Monitor Control Systems	Steering Committee and Senior Management	Data Collection, Graphs and Charts, Flowcharts, Pareto Analysis, Histograms

An Example of Six Sigma⁴

Six Sigma is permeating healthcare at an increasing rate. This is a favorable trend because it is a perfect fit for healthcare organizations: the methodology follows the medical model, and the healthcare industry is wrought with defects and process variation. Defects such as billing errors, postoperative infections, and unplanned readmissions are quite common in healthcare today. Also contributing to the adoption of Six Sigma is evidence that healthcare organizations have realized substantial improvements by deploying Six Sigma (Dlugaz 2004; Frankel et al. 2005; Lenaz 2004; Torres and Guo 2004; Young 2004).

Six Sigma is a systematic process improvement method that is focused on reducing process defects and variation. There are five phases associated with Six Sigma: define, measure, analyze, improve, control (DMAIC). These phases are collectively referred to as DMAIC, and as Exhibit 14.6 depicts, these five phases correspond to the medical model of diagnosis, treatment, and follow-up. In other words, dysfunctional processes are treated methodologically just like physicians treat sick patients.

Diagnosis: Define, Measure, Analyze

In the diagnosis phase, physicians conduct a history and physical as well as various diagnostic tests to determine the root cause of an illness. The define, measure, and analyze phases of Six Sigma are focused on diagnosing

MEDICAL MODEL	SIX SIGMA
• Diagnosis — H&P — Laboratory — Imaging — Stress Testing — Microbiology • Treatment — Medication — Surgery — Rehabilitation • Follow-Up — Laboratory — Imaging	• Define — Project Charter • Measure — Process Maps • Analyze — Regression • Improve — Reengineer — Design of Experiments • Control — Control Plan

SOURCE: Robert Sutter, RN, MBA, MHA, Six Sigma Master Black Belt.

EXHIBIT 14.6
Five Phases of
Six Sigma
Imaging

the root cause of process defects and variation. The define phase establishes what process is to be treated and the process boundaries. Subsequently, the measure phase involves collecting data and establishing baseline performance measurements. The analyze phase identifies the root causes of dysfunctional processes through the use of various statistical methods. This rigorous use of data and statistical analysis is the hallmark of Six Sigma.

Treatment: Improve

Once a diagnosis of a patient's illness is confirmed, a physician prescribes a treatment to eradicate the cause of illness. During the improve phase of Six Sigma, methods such as reengineering and experimenting are employed to remove or fix the root causes identified in the analyze phase.

Follow Up: Control

Once a physician institutes treatment, a comparison of the patient's condition after treatment to before treatment is made to ensure that the treatment is effective and remains effective. The control phase of Six Sigma is designed to accomplish the same goal: to ensure that the process has improved and that the improvement is sustained. Six Sigma uses the control plan to achieve this objective. The control plan is a document that specifies what components of the process are measured, how they are measured, what constitutes acceptable measurements, and who is responsible for monitoring the measurements and taking action if the measurements are unacceptable.

The DMAIC methodology can be used to improve many processes in a healthcare organization just as the medical model—diagnose, treat, and followup—is used to treat virtually any illness.

Six Sigma Case Study: Thrombolytic Administration

The following is a brief description of a Six Sigma project to improve the timeliness of thrombolytic administration in patients with acute myocardial infarction in a community hospital. At the time of this project, the American College of Cardiology practice guidelines called for a thrombolytic to be administered within 30 minutes of a patient's arrival.

Define An initial meeting with the hospital's CEO, COO, and chief of the emergency department (ED) was held to garner the support of senior management and medical staff to the project. Subsequently, the problem was defined as excessive cycle time and variability associated with thrombolytic administration in the ED. The boundaries of the process were established as beginning with patient arrival to the ED and ending with thrombolytic administration in the ED. Project objectives and a multidisciplinary team of ED personnel were established.

the define phase establishes boundaries. Subsequently, the measuring phase establishes baseline performance. The analyze phase identifies the root causes of dysfunction. The improve phase uses statistical methods. This is the hallmark of Six Sigma.

... a physician prescribes a
the improve phase of Six
nting are employed to re-
phase.

n of the patient's condition
ensured that the treatment
of Six Sigma is designed
ness has improved and that
control plan to achieve this
ifies what components of
that constitutes acceptable
g the measurements and

improve many processes in
el—diagnose, treat, and

ration

ject to improve the time-
acute myocardial infarction.
project, the American
thrombolytic to be ad-

1 chief of the emergency
senior management and
was defined as excessive
administration in the ED.
nning with patient arrival
n in the ED. Project ob-
ere established.

Baseline data were collected to establish baseline performance measurements of door-to-needle time: **Measure**

- Average (minutes): 44.3
- Standard deviation (minutes): 33.9
- Defect rate (proportion of patients with door-to-needle time = > 30 minutes): 68.75 percent

The data were then analyzed with a control chart, which revealed the process to be fairly stable. Subsequently, process mapping documented the process steps and flow as the current process is executed. Finally, a cause-and-effect diagram and a failure mode and effects analysis were conducted to identify factors that affected door-to-needle time.

The process map, cause-and-effect diagram, and failure mode and effects analysis were reviewed to determine what data elements to include in the data collection plan. A data collection form and definitions were derived, and personnel from the medical records department were trained to collect the data. Variables, including age, EKG results, and the presence of chest pain, were analyzed using linear regression to ascertain which factors were statistically significant with respect to door-to-needle time.

The analysis revealed the time associated with acquiring the initial EKG was the only factor that affected door-to-needle time in a statistically significant manner. The quicker this occurred, the faster a thrombolytic was administered. None of the clinical characteristics—day of week or shift—statistically affected door-to-needle time.

Based on the results of the analyze phase, the team streamlined the process of acquiring the initial EKG, eliminated redundant and non-value-added process steps identified on the process map, and fixed problems ranked high on the failure modes and effects analysis. After the ED staff were trained on the new process and the process improvements were implemented, data were collected to ascertain if an improvement was realized. The results verified that the process changes were effective:

- Average (minutes): 24.8
- Standard deviation (minutes): 2.8
- Defect rate (proportion of patients with door-to-needle time = > 30 minutes): 5.0 percent

A control plan was formulated and implemented to ensure that the process was continually monitored and that unacceptable performance was addressed immediately.

Measure

Analyze

Improve

Control

If implemented correctly, the Six Sigma methodology has repeatedly demonstrated its effectiveness in fixing myriad process problems in a variety of industries, including healthcare. However, Six Sigma is not a panacea for all of an organization's process-related problems. Instead, Six Sigma should be considered as one component of a comprehensive, integrated process management system. That is, Six Sigma should be incorporated with other process-management methods such as Malcolm Baldrige guidelines, root cause analysis, Lean manufacturing, and kaizen events. Just as a physician selects the best treatment for a patient's circumstances, an organization should choose the most appropriate process improvement method to achieve effective reorganization of its structure, processes, and services.

Six Sigma Versus Lean Versus Kaizen

Six Sigma, Lean, and kaizen are distinct process improvement tools, but they complement each other. Kaizen is a tool that works well for quick fixes, Lean is often used for simple work flows, and Six Sigma is used for more complex work flows. However, all may be used to address components of a problem.

Lean involves assessing value streams. *Value streams* are processing work flows that deliver a service valued by a customer. An example of a value stream may be the admission of a patient. The various steps—including pre-registration data collection, pre-certification of the stay, collection of laboratory data required for the admission, processing of the registration paperwork, and transporting the patient to the patient care area—would be studied; all should happen in a timely, accurate, and hassle-free fashion. If one of the steps is not perceived as having value, the step is considered wasteful and eligible for redesign or elimination. Assessing a wasteful step may involve kaizen or Lean tools and often requires more than a week to resolve. For Lean or any of these process improvement tools to work, there must be a leadership mentality that supports improvement across turfs and through silos with a focus on improving the customer's experience.

Some problems can be addressed quickly by a process improvement team. These problems are sometimes called “low-lying fruit.” Organizations may choose to use **kaizen** or a **kaizen blitz** to address these. Kaizen is Japanese for “improvement.” During the blitz, teams test their solution or fix to a problem before agreeing upon a new process. But within a short time, usually less than a week, a new process commences. Anyone can kaizen. Employees at all levels are encouraged to identify problems that they individually or in a small team can fix, much like the DIG we discussed earlier in this chapter.

For example, on any given day a healthcare organization may receive many Fed Ex or overnight packages. Often these are shipped to the facility in this manner because the contents require expedited delivery. Let's assume

kaizen (or kaizen blitz)

A Lean term for rapidly trying out improvements in processes.

methodology has repeatedly process problems in a variety of ways. Six Sigma is not a panacea for all problems. Instead, Six Sigma should be used as a tool, integrated process management, and incorporated with other process improvement tools. Just as a physician sees a patient, an organization should use a method to achieve effective services.

Improvement tools, but they work well for quick fixes, Lean is used for more complex components of a problem. The *stream* is processing or a stream. An example of a value stream map—includes pre-arrival, stay, collection of all data, and the registration patient care area—would be a hassle-free fashion. If one step is considered wasteful, a wasteful step may involve a week to resolve. For Lean, there must be a leadership and through silos with a fo-

by a process improvement yielding fruit." Organizations miss these. Kaizen is Japanese for solution or fix to a problem in a short time, usually less than kaizen. Employees at all levels individually or in a small group in this chapter.

organization may receive packages shipped to the facility for delivery. Let's assume

that the receiving dock team is responsible for delivering these to the respective recipients but chooses to make a single delivery at 4 p.m. daily. In effect, packages that may have been delivered before 10 a.m. are now delivered six hours later. A possible quick fix would be to have the receiving dock personnel give these packages to the mailroom to place in the recipient mailboxes as soon as they arrive. Recipients would be advised to check their mailboxes at least twice a day. Problem solved. The issues addressed in a kaizen are often simple tactical problems, and empowering employees to solve these problems improves morale.

Business Knowledge Source (2010) defines the kaizen activity cycle:

- Standardize an operation.
- Measure the standardized operation.
- Gauge measurements against requirements.
- Innovate to meet requirements and increase productivity.
- Standardize the new, improved operations.
- Continue cycle *ad infinitum*.

This is also known as the Shewhart cycle (Business Knowledge Source 2010).

Toussaint (2009, 30) said "one thing is clear, after studying Lean journeys in many organizations, there is no one way to implement Lean. Lean is really about having the frontline workers design and improve the standard work. That should occur every day with real time measurement, not with control charts, but with simple hand-written performance measures done entirely by the frontline staff."

Reengineering

As the contributing author Robert Sutter noted in the section above, health-care organizations attempt to demonstrate the results of their performance improvement efforts by pursuing such awards as the Malcolm Baldrige National Quality Award or the American Hospital Association's Quest for Quality Award or by seeking certification by demonstrating compliance with the ISO 9000-1 series of quality management system standards.⁵

Those who have implemented a reengineering process within their institution recognize the need to continuously improve. Reengineering requires you to focus on the customer's needs. By doing so, you are always looking to the customer (patient) for indicators of process modification. Once you begin reengineering, you really cannot stop. You continuously improve and inevitably reach a point when your patient requirements change. Then guess what? You will want to reengineer again, especially in healthcare, with its changing parameters and its constant reaching for better outcomes and measures (Deloitte & Touche 1996b).

Barry, Murcko, and Brubaker (2002, 8) describe the outcomes of reengineering as error-free provision of healthcare services that include:

- An organization that never makes errors has happy and loyal clientele.
- An organization that never makes errors is easy to manage.
- An organization that never makes errors has positive uses for resources.
- An organization that never makes errors attracts the best candidates for employment.
- An organization that never makes errors has peace of mind in the executive suite.

Reengineering has the potential to recreate organizations to improve quality and customer responsiveness, reduce costs, and streamline operations. It, too, relies heavily on employee teams coordinated by management to accomplish the change.

Technological, competitive, industry, and funding changes force department managers to rethink their organizational structure and work flow. When changes in the workplace occur, the administration, managers, and supervisors are called on to initiate programs that redefine the organizational structure, reporting relationships, chain of command, and processes throughout the organization.

Reorganization may take place to overcome existing deficiencies. For example, in the past, many nurses found themselves burdened with too much clerical work that kept them away from actual patient care and bedside nursing. This was an undesirable situation because the thrust of their education and purpose was the care of patients. Eventually, it became apparent that many of these functions could just as effectively be performed by someone without a nursing degree. This led to a job redesign and enlargement of jobs held by unit assistants. The care of non-patient-related things was assigned to these unit assistants, whereas the care of people reverted back to the nurses. As nursing shortages continued to threaten healthcare facility viability, job design and work redesign occurred again and patient care technicians evolved. These multiskilled individuals performed some of the patient care duties previously performed by nurses. By employing patient care technicians, the talents of nurses were used for those patient care activities requiring nursing education.

Once this or any other type of reorganization approach has been decided on, it can be implemented in various ways. A gradual, long-term plan provides for a period of adjustment as the organization changes. This approach is less disturbing than sudden, extensive changes, sometimes referred to as the "earthquake" or "shake-up" technique of organizational change.

Learning the techniques, putting them to use, and continuously seeking input from employees all take time. Moreover, encouraging employees to

describe the outcomes of the services that include:

happy and loyal clientele.

easy to manage.

positive uses for resources.

selects the best candidates for

peace of mind in the

organizations to improve

and streamline operations.

initiated by management to ac-

funding changes force de-

al structure and work flow.

administration, managers, and

that redefine the organiza-

f command, and processes

existing deficiencies. For

es burdened with too much

ent care and bedside nurs-

e thrust of their education

, it became apparent that

be performed by someone

gn and enlargement of jobs

related things was assigned

people reverted back to the

n healthcare facility viabil-

nd patient care technicians

d some of the patient care

copying patient care techni-

cient care activities requir-

on approach has been de-

A gradual, long-term plan

ization changes. This ap-

e changes, sometimes re-

chnique of organizational

se, and continuously seek-

encouraging employees to

be open to and share constructive criticisms about processes established by their supervisors and encouraging supervisors to not react negatively to the criticisms have been major hurdles that only a few enterprises have successfully overcome. For healthcare organizations to flourish, this type of equal exchange between employees and their supervisors must occur.

Downsizing and Rightsizing

Reengineering is often confused with downsizing and reorganizing. Reengineering is initiated to cause dramatic improvements in services, while *downsizing*—also called *reduction in force* or *rightsizing*—is meant as a means for moderate to high cost reduction. Each is a top-down approach, in contrast to performance improvement that seeks changes from the bottom up. The focus of reengineering is strategic—that is, long term with a vision of sustained improvements. However, the focus of reorganizing through downsizing is to cut costs. These approaches can be painful to the staff involved. Not only are coworkers laid off, but layers of management can be collapsed, resulting in new management structures. For example, in 2008 the SSM HealthCare system in St. Louis initiated a reorganizing effort resulting in approximately 200 positions being eliminated from its six-hospital system. Four director positions of health information management were eliminated and replaced with two regional directors overseeing three of the hospitals' health information management departments (McClellan 2008).

Additional disadvantages to reorganization include hidden costs associated with poor morale, loss of knowledgeable and experienced employees and historians, and potential loss of customers who have established rapport with certain employees.

In reengineering, the employees become members of teams to determine how to do a job better. Because the team approach is employed, reengineering may take two to four years to implement, while downsizing and rightsizing are quickly initiated, usually with the assistance of external consultants and with little input, if any, from the employees.

Alternatives to Downsizing

Through employee input, a variety of alternatives have surfaced to address the fiscal crisis that often leads to downsizing. Some of these include **timesizing**, cross-training (job rotation), lowering wages, attrition, reassignment, leaves, and buyouts. Timesizing is popular in some organizations because it can be applied across the board to all levels of the organization. This technique requires all staff to take a designated number of hours off, with or without pay. No one loses her job, but everyone contributes to the fiscal situation by either using up accrued paid time off or taking time off at no cost to the company.

timesizing

A cost-cutting technique that involves employees taking unpaid time off, or using accrued vacation time.

attrition

The practice of not replacing employees who leave.

Attrition is another favored approach, whereby a position is not filled when an individual leaves. This approach requires the supervisor and his team to reassess the work of the department and reorganize to accomplish the efforts required with the remaining staff. Doing so may involve reassignments, job enlargement, job enrichment, and job rotation.

In any reengineering endeavor, circumstances often drive the approach that an organization must take. Changes are always disturbing to those who are affected by them, regardless of how well intended the changes are. A manager who frequently changes the department's organizational structure runs the risk of damaging the morale of the subordinates. To the supervisor suggesting the reorganization, it might seem trivial, but to the subordinates it probably appears frightening because it implies changes in their working environment, status, and security. The wise supervisor knows how to strike a balance with respect to organizational change. In most instances, the supervisor probably finds that most subordinates quickly adjust to change if it is properly explained, if the employees have input or even recommend it, and if the need for change is demonstrated. A more detailed discussion of the introduction of change appears in Chapter 20.

Recentralization of Authority

As you know, from time to time it is necessary to review the degree of authority that has been delegated. The supervisor may believe that she has lost control over certain activities and that it has become necessary to tighten up or to recentralize. Another reason to tighten or recentralize is the significant reorganization of an entity, such as might result from a merger. In a merger many site-specific services are no longer needed at each location. For example, human resources, materials management, accounting, patient financial services, and even telecommunication departments are frequently centralized at one location. This centralization effort streamlines the services, reduces staff, and requires the realignment of authority held by the remaining incumbents. Often reengineering tools are used to redesign critical systems and processes to accommodate the "new" organization. Clearly, involvement of some staff is necessary when such drastic organizational changes occur.

Summary

In this chapter, we considered the organizing process from the supervisor's point of view. Drastic reorganization is called reengineering. This reorganizing approach focuses on the customer (the patient in the healthcare setting). Reengineering endorses the involvement of employees in the

position is not filled when supervisor and his team to re- accomplish the efforts re- involve reassignments, job

es often drive the approach ys disturbing to those who ed the changes are. A man- ganizational structure runs tes. To the supervisor sug- but to the subordinates it anges in their working en- r knows how to strike a bal- st instances, the supervisor st to change if it is properly commend it, and if the need sion of the introduction of

view the degree of author- lieve that she has lost con- necessary to tighten up or to lize is the significant reor- merger. In a merger many ocation. For example, hu-, patient financial services, quently centralized at one services, reduces staff, and e remaining incumbents. ical systems and processes involvement of some staff ges occur.

cess from the supervisor's engineering. This reorgan- ent in the healthcare set- of employees in the

restructuring efforts. It differs from reorganizing that uses downsizing, which primarily focuses on cutting costs and eliminating jobs.

A vast number of tools are available to assist management in assessing reorganization options for the structure of the entity, the department, a service, and even a procedure. Employee involvement is necessary to ensure that a broad range of ideas and opinions is collected about the change and to gain buy-in.

After a change in the organizational structure has been accomplished or at least planned, the supervisor can proceed to delegate or redelegate authority in accordance with the departmental structure or modified process.

Notes

1. For more information on smart toilets, see www.aahsa.org/pubs_resources/presidents_messages/2003/cow_chips_smarttoilets.asp.
2. This section is contributed by Michael T. Troncone.
3. V. Clayton Sherman has not been discussed in this book. However, Mr. Sherman authored *Creating the New American Hospital*. This book and his teachings have been embraced by many hospitals nationwide. He provides guidance for healthcare managers to balance the regulatory environment and monetary restrictions with the principal purpose of the organization—providing patient care. He encourages building an organization that is driven by customer satisfaction.
4. This section is contributed by Robert Sutter.
5. For more information on the ISO standards, see www.kvaliteta.net/N881R2_Sector_Specific_Documentation_List_2007-12.pdf.

Additional Readings

- Bandyopadhyay, J., and K. Coppens. 2005. "Six Sigma Approach to Healthcare Quality and Productivity Management." *International Journal of Quality and Productivity Management* 5 (1).
- Chilgren, A. A. 2008. "Managers and the New Definition of Quality." *Journal of Healthcare Management* 53 (4).
- Dreachslin, J. L., and P. D. Lee. 2007. "Applying Six Sigma and DMAIC to Diversity Initiatives." *Journal of Healthcare Management* 52 (6).
- Frontiers of Health Services Management*. 2009. "The Lean Advantage." *Frontiers of Health Services Management* 26 (1): (entire issue).
- van den Heuvel, J. 2006. "The Effectiveness of ISO 9001 and Six Sigma in Healthcare." (thesis) [Online thesis; retrieved 12/06.] http://publishing.eur.nl/ir/repub/asset/8465/070126_Heuvel,%20Jaap%20van%20den.pdf.
- van den Heuvel, J., A. J. Bogers, R. J. Does, S. L. van Dijk, and M. Berg. 2006. "Quality Management: Does it Pay Off?" *Quality Management in Healthcare* 15 (3).
- Yap, C., E. Siu, G. R. Baker, and A. D. Brown. 2005. "A Comparison of Systemwide and Hospital-Specific Performance Measurement Tools." *Journal of Healthcare Management* 50 (4).