Alsaqri FS and Chenoweth A.
Error Management: Turning a Negative Situation into a Positive One
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Chapter 1

An Overview of Process Improvement

NO BUSINESS BECOMES excellent overnight, and exceptional performance is not considered an accidental occurrence. Indeed, it is not possible for any organization to reach excellent performance without implementation of an effective process/quality improvement program. This program allows any laboratory to achieve, maintain, and improve accuracy, timelines, and reliability of their provided services and products. A quality improvement program will ensure the organization sustains a high standard of quality. As simple as the concept may be, illustrated in Fig 1-1, it cannot be implemented without some understanding, learning, and effort. This book demonstrates how and provides tools for assistance.

Figure 1-1. Exceptional performance is not attainable without an effective quality/process improvement program.

A Quality Improvement Program

Definition of Quality Improvement

Quality improvement can be defined in several ways. In this book, a quality improvement program is defined as an essential continual approach that aims to

turn any negative situation into a positive one—thereby improving the current process and achieving best practice.

Quality Improvement and Leadership

The best way to transform an organization is to inspire behavioral change. Leadership plays an important role in the development of a culture of continual quality improvement through staff interaction, recognition, support, appreciation, celebrating results, communication, and decision-making.

Characteristics of a Quality Improvement Program

Because most quality improvement programs are multi-faceted, it may be easier to manage all the related activities if the program is delegated to a few key members of the staff. Effectively developing, implementing, and managing a quality improvement program takes focus, commitment, and (most important) time. A continual quality improvement program should have the following characteristics:

- It should be linked to the organization's objectives and strategic plan.
- It should have a clearly defined process with leadership, communication, responsibilities, and accountability identified.
- It should adhere to the six domains of health-care quality of the Institute of Medicine (IOM).

Those domains of health-care quality are as follows[1]:

1. **Safety**. Avoid injury to patients.
2. **Timeliness.** Reduce waiting and harmful delays.
3. **Effectiveness.** Provide services based on scientific knowledge to all who could benefit and refrain from providing services to those not likely to benefit (avoiding overuse and underuse, respectively).
4. **Efficiency**. Avoid wasted time and resources.
5. **Equitability.** Provide care that does not vary in quality because of personal characteristics such as gender, ethnicity, geographic location, and socioeconomic status.
6. **Patient Centeredness**. Provide care that is respectful of, and responsive to, individual patient preferences, needs, and values.

Sources of Quality Improvement

It is essential for every laboratory to address any area that needs improvement immediately. If a laboratory delays, ignores, or for any reason fails to do this, the quality of services may begin to decline, and it is likely that costly interventions

will be needed later to restore the quality of the services. In the laboratory many data sources can be used for process improvement. Errors that are tracked in the laboratory are considered to be a primary source of continual quality improvement. Most errors in laboratory medicine do not have a direct impact on patient care but will provide multiple touch points for improvement.

Many laboratories shy away from tracking errors because they are considered to be negative occurrences. Why are they negative? It is important to acknowledge that laboratories are run by humans and humans commit errors. How those errors are used is the important point for quality improvement. The first step in continual quality improvement is the active acknowledgment of errors.

Many errors are the product of system errors. Some errors are the result of human behavior. Some errors may lead directly to adverse events or might cause harm to a patient in slightly different circumstances. Actually, any error might indicate weaknesses or a defect in policies, procedures, staff, equipment, or supplies. The 10 most common sources of improvement opportunities in any laboratory are shown in Fig 1-2 and detailed in the text below.

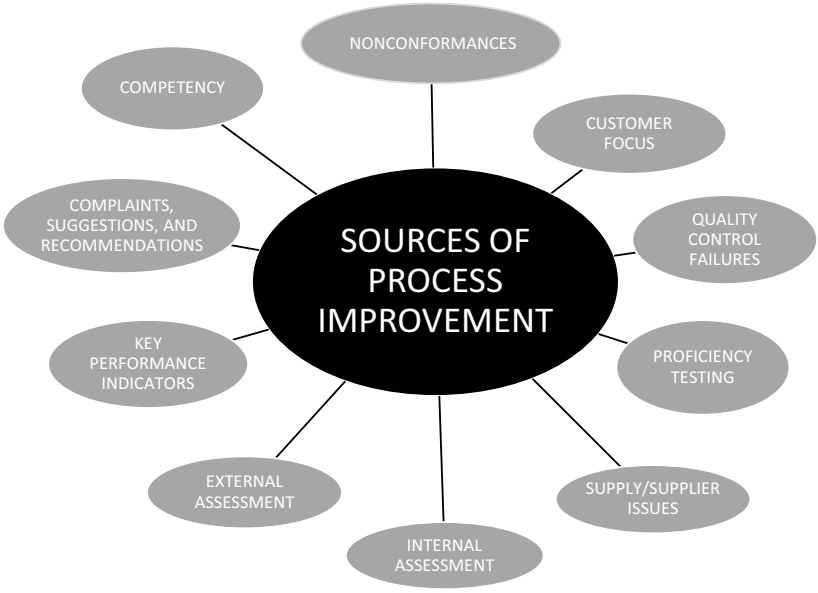

Figure 1-2. The 10 most common sources of opportunities for improvement.