

Performance Improvement: A Change for the Better



Presented by:

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**This course has been approved for two (2.0) contact hours.
This course expires June 15, 2007**

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First Published: April 10, 2003

Revised: June 15, 2005

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ACKNOWLEDGEMENTS

RN.com acknowledges the valuable contributions of...

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PURPOSE & OBJECTIVES

The purpose of the course is to provide healthcare professionals with the basic theory and tools of Performance Improvement in healthcare.

After successful completion of this continuing education course, participants will be able to:

1. Increase knowledge of Performance Improvement including:
 - a. Definitions
 - b. Theory
 - c. Strategy
 - d. Tools
2. Discuss the Performance Improvement culture and initiatives in your workplace.
3. Demonstrate understanding of the connection between Performance Improvement and Medical Error Reduction.

INTRODUCTION

Performance measurement and improvement have become an integral part of today's healthcare environment. As a provider of healthcare related services you should be familiar with and involved in defining and improving how we care for patients.

The concepts of quality and performance improvement are not new, they are actually found in the nursing process. Don't let the language of quality scare you off. The concepts are simple to understand and apply. In the past, many hospitals and providers created cumbersome and often ineffective performance improvement programs. They are now realizing that improvement projects don't have to radically change processes of care. Small incremental improvements amount to continuously improving performance and a culture that embraces performance improvement.

DEFINITIONS

Performance Improvement has developed a language of its own. There are many terms that have overlapping meanings, which has given rise to confusion as improvement activities have evolved. As you will see, the terms of improvement are ever evolving.

Quality:

Quality is the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge.

Quality Assurance (QA) or Quality Management (QM):

An internal review process that **audits** the quality of care delivered and implements **corrective actions to remedy any deficiencies identified** in the quality of direct patient care, administrative services or support services. The process can employ peer review, outcomes measurement, and utilization management techniques to assess and improve the quality of care. The level of care may be measured against pre-established standards.

Quality Improvement (QI) or Continuous Quality Improvement (CQI):

A management technique to assess and improve internal operations. QI focuses on organizational systems rather than individual performance and seeks to **improve quality rather than correcting errors when safety thresholds are crossed**. The process involves setting goals, implementing systematic changes, measuring outcomes, and making subsequent appropriate improvements.

Performance Improvement:

An approach to the continuous study and improvement of the processes of providing healthcare services to meet the needs of patients and others.

Source:

(Tufts Health Care Institute, 2002; Raef, 2004)

Quality Reports:

A publicly accessible JCAHO rating of hospitals that allows consumers to compare facilities for how well they meet national quality goals for performance and safety. Available @ <http://www.qualitycheck.org>.

WHAT DOES IT ALL MEAN?

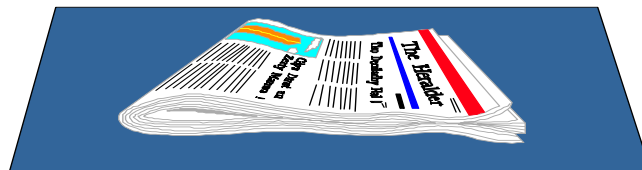
The purpose of providing the definitions for common terms of performance or quality improvement is to familiarize you with them and demystify them. Improving performance and quality has always taken place in healthcare. We have been and continue to be in the process of defining how we should go about improving processes in a systematic and structured way. We are trying to create a common language for these activities. Performance improvement is an evolving practice, as is the language, so don't get hung up on it. The important thing is to grasp the basic principles of improvement.



WHAT IS DRIVING PERFORMANCE IMPROVEMENT?

There are several factors that are driving performance improvement:

- Consumers are more aware of quality and performance issues in healthcare and they are demanding higher quality and accountability while containing costs.
- Accrediting bodies such as the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), the National Committee for Quality Assurance (NCQA), as well as state agencies are requiring demonstrated performance improvement activities.
- Those with purchasing power such as HMOs and insurance companies want to work with healthcare organizations committed to improved outcomes.
- Cost and reimbursement issues in healthcare are forcing healthcare providers to look for more cost effective ways to provide care while maintaining quality.
- Media coverage of quality issues such as the Institute of Medicine report on medical errors bring to light how critical performance improvement is.



Today's News

Wrong Site Surgery

The Joint Commission of Accreditation of Healthcare Organizations (JCAHO) has studied wrong site surgery as one of its key “sentinel events”. Through data provided by accredited facilities, key “root causes” were identified. They found that the majority of wrong site surgery cases were related to a breakdown in communication between staff or between staff and family. Based on this work, the New York State Department of Health is recommending 3 independent verifications of surgical site, and a specific discussion between the physician and patient in the preoperative area.

(JCAHO, 2003)

WHAT ARE THE BARRIERS FOR PERFORMANCE IMPROVEMENT?

There are many barriers to performance improvement. It is beneficial to be aware of them so you can recognize them and find ways to overcome them.

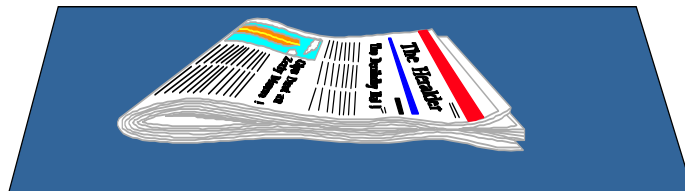
- Resistance to change is the most pervasive and most common barrier to performance improvement. It is human nature to resist change and it is a difficult barrier to overcome.
- Lack of commitment to performance improvement from leadership and/or employees. Many hospital administrators, managers, physicians and staff view performance improvement as a necessary task that they must perform in order to meet accreditation requirements and do not really believe that the process of improvement works.
- Needs for professional autonomy such as physicians' history of self-governance and peer review can be a barrier. Many professionals in healthcare do not want to participate in 'team' performance improvement activities as they feel that others are not qualified to 'judge' their performance.
- Healthcare organizations have limited resources and many view performance improvement activities as merely a cost center and not adding value to the organization (lack of commitment).
- There exists in healthcare a culture of shame, blame and fear associated with medical errors and undesirable performance.
- Turf issues among professionals (such as physicians and administrators) and departments (such as admitting and nursing) are common problems.
- Time constraints are often cited as a reason for not being able to participate in performance improvement activities. Historically, administrators/management have not made giving staff time to participate in improvement activities a priority.
- Team members and others come to the project with their own agendas and work to achieve their own goals that may or may not be in the best interest of the project.
- Large improvement projects that drag on for long periods of time and lose focus or have little success may suffer from loss of momentum.
- The performance improvement process is too complex and unwieldy.
- Teams get bogged down in minutia instead of rapid cycles of improvement that obtain results and reinforce that the process does work.

***Not all change is improvement ...
but all improvement is change.***

(Donald Berwick)

WHAT CONTRIBUTES TO SUCCESSFUL PERFORMANCE IMPROVEMENT?

- A committed and involved leadership group is a key ingredient to a successful performance improvement culture and initiatives.
- The entire organization must be trained and educated about performance improvement methods and tools.
- Teamwork is an absolute must in order to succeed in improving performance. The teams should be multifunctional, multidisciplinary and made up of the appropriate members. Team members should be knowledgeable of the process and be enthusiastic about participating.
- Communication among leadership, team members and the organization must be effective. Communication is vital at all steps of the improvement process.
- Data that is measurable, meaningful and reliable must be available to teams to facilitate decision-making and evaluating the performance improvement project.
- Another key element for success is “Project Champions”. They are leadership and/or staff that are credible and can influence participation and change.
- Adequate and appropriate resources are also required for a team to be successful. These might include adequate human resources, money, time, and materials to get the job done.
- A knowledgeable and effective facilitator is extremely helpful in keeping the team on track, educating team members and those affected by changes. Facilitators can also motivate teams as well as drive and monitor the project.
- An organization wide culture that continuously seeks opportunities for improvement and embeds this in the mission and values of the organization.



Today's News

Reducing Failed Extubations in the SICU

Johns Hopkins University used PI methods to decrease the number of failed extubations in the ICU. They chose this topic because it was high risk- associated with high morbidity and potential mortality. Their study showed that patients who were suctioned at least every 4 hours, were not agitated and had an oxygen saturation of greater than 95% were less likely to be re-intubated. Based on these findings John Hopkins was able to reduce the number of failed intubations from 8/1000 extubations to 1.5/ 1000 extubations (Pronovost, et al., 2002).

PERFORMANCE IMPROVEMENT – THEORY

Quality improvement (QI) and Performance Improvement (PI) both take a *SYSTEMS* view of improvement versus focusing on individual performance or lack thereof. Both are data driven in that they rely on measurement to shape decisions and evaluate the effectiveness of the changes that are made in the name of improvement. Both QI and PI emphasize standards and protocols. They both seek to understand how a process works and create improvements by making changes to processes that are understood. Documenting and implementing new standards and policies are always a part of successful improvement projects.

QI and PI both view poor performance as a reflection of problems inherent in the systems involved in delivering care. Individuals are seldom the root cause of poor performance. QI is a derivative of Quality Assurance (QA) that focuses on systems theory and statistical process control. The use of QA and QI began in engineering and manufacturing. PI in healthcare has evolved from QA and QI.

The main theoretical difference between QI and PI is that PI may place more emphasis on human performance and QI on systems performance. You may find QI and PI terms used interchangeably in healthcare. Most likely the quality and performance initiatives at your hospital are a blend of the two theories.

A PERFORMANCE IMPROVEMENT STRATEGY

The most common model used in performance improvement is the **FOCUS-PDCA** model. Some use just the PDCA model alone. Dr. Walter Shewhart introduced the PDCA model in the 1930's. The FOCUS-PDCA model was created by the Hospital Corporation of America as a method for process improvement. The model helps improvement teams focus on processes rather than individuals. It encourages teamwork and shared ownership of the improvement opportunity.

Two newer models used in PI that you may be exposed to are:

***Crew Resource Management (CRM)**, one used primarily in the airline industry that focuses on decreasing human error by concentrating on team roles. The CRM approach has been applied to emergency, anesthesiology and neonatal department teams. Observable behavioral markers are correlated with errors to evaluate effectiveness of this approach (Pizzi, et al., 2001; Thomas, et al., 2003).

***Six Sigma**, a corporate approach that expands earlier PI models. This approach uses statistical data and provides tools, templates and roadmaps to facilitate implementation. Expert Six Sigma managers are called "black belts". Six Sigma has a wide range of applicability in healthcare, from reducing coding errors to effectively stocking emergency carts to improving caregiver assignments (Seecof, 2005; Jacks, 2005).

FOCUS-PDCA

- F** – Find a process that needs improvement
- O** – Organize a team that knows the process
- C** – Clarify the current knowledge of the process
- U** – Understand the process and learn the causes of variation
- S** – Select the improvement opportunities

- P** – Plan the change
- D** – Do
- C** – Check the results
- A** – Act by implementing the change and holding the gains

PERFORMANCE IMPROVEMENT TEAMS

The key to success of any performance improvement initiative is a highly effective performance improvement team. The composition and leadership of performance teams are very important to success. Performance improvement is a process and teams must have the necessary knowledge, facilitation and leadership.

What should you expect if you're chosen to participate on a performance improvement team? The team members should be educated on the process of improvement. They need to understand what is expected of the team, in other words, have clear goals. Team members should be appropriate for the task at hand. They should have knowledge of the process that is to be improved.

Team Roles

Team members should understand the various team roles:

- **Team Leader (TL)** – Team leaders are responsible for providing the team with guidelines to achieve the goals of the team. They provide the team with a clear mission and goals, define the boundaries for decision-making, and establish ground rules and guidelines for accountability. Team leaders assure that the team has access to information that it may need. They prepare agendas for team meetings and send them out prior to the meetings. They also assign roles in the team – such as a scribe (records information on a flip chart), timekeeper (manages the time allotted for each agenda item), and minute taker (documents action items and decisions). Team leaders also clarify the purpose and desired outcomes of the meetings. They act as an advocate for the team and ensure that the team has the resources it needs to get the job done. They are ultimately responsible for how the team performs.
- **Facilitator** – All teams need a facilitator, who can be internal or external to the organization. They are unbiased and are responsible for team process. They assist teams by influencing how team members participate, discuss, exert influence, solve problems, make decisions, and manage conflict. They should observe the team and ask questions that help the teamwork through issues in a productive manner. Facilitators should keep teams from becoming dysfunctional by encouraging participation of all team members and discouraging dominance by individuals. They may be called upon to counsel individuals (privately) who are disruptive to the team process. They should provide the team with creative ways to problem solve and make decisions.
- **Members** – Members should be knowledgeable about the process. They need to be educated on performance improvement methods and tools. They need to be open to new ideas. They need to participate and believe in what they are trying to do.



Forming, Storming, Norming, and Performing

Most teams go through four phases of development: forming, storming, norming, and performing – a model developed by Bruce Tuckman in 1965.

- **Forming** – During this stage team members are getting to know one another as well as clarifying the team’s mission, defining goals, roles, and responsibilities as well as establishing processes for getting the job done.
- **Storming** – This stage may not always occur, but when it does, it involves the team members working through issues and group dynamics. In essence bringing together all the various backgrounds, personalities, and issues to create a team with a common mission and goals.
- **Norming** – In this stage the team has formed and is able to work effectively toward its goal. Team members know what to expect from one another and how to work together.
- **Performing** – The team members know what they need to do and take action. Much of the work of the team takes place outside of team meetings as members are assigned responsibilities and tasks and are held accountable to complete them.

Examples of Meeting Norms

- Meetings start and end on time
- Each agenda item has a time limit
- Attendance is required
- Actively listen to others
- Don’t interrupt other team members
- No pagers, cell phones
- Respect others and their opinions and ideas
- Action items are assigned and completed as scheduled

The team decides upon the norms for the group. These are just a few examples. Norms establish expectations among team members.

Once norms are developed, everyone must live by them!

BREAKING IT DOWN - FOCUS

F – Find a process that needs improvement

This is the vital first step to improvement. The processes don't have to be large and complex to have an impact on patient care quality. Smaller, simpler processes that may be part of a larger process are actually a better choice.

Some criteria that may be helpful in selection are:

- ✓ High volume
- ✓ High cost
- ✓ Problem prone

It must be **measurable**! Some examples are processes that concern medication errors, patient falls, and uncompleted patient care assignments.



O – Organize a team that knows the process

The Performance Improvement team should be comprised of individuals that are very familiar with the process selected. The team should be multidisciplinary e.g. nurses, physicians, administrators, and appropriate ancillary staff such as pharmacists or dieticians.

C – Clarify the current knowledge of the process

Some questions to ask might be:

- ✓ How does the process work?
- ✓ Who are the customers?
- ✓ What are the customers' needs?
- ✓ What is the actual flow of the process?
- ✓ Is there needless complexity/redundancy in the process?

U – Understand the process and learn the causes of variation

Important questions include:

- ✓ What are the major causes of variation or poor quality?
- ✓ Can you measure key elements of the process?
- ✓ What, who, when, where, and how will the data be collected?
- ✓ What causes of variation can be changed to improve the process?

Data should be collected on the process as it exists now in order to gain understanding of the current process and provide an opportunity to begin defining measures of success. The data will be used later for comparison once a change is made to the process.

What types of variation exist in the data? There are two types of variation, common cause variation and special cause variation. They are identified by using a control chart – which will be described later in the course.

Common Cause Variation:

Variation in a process that is due to the process itself and is produced by interactions of variables in that process. Common cause variation is inherent in all processes; it can be removed only by making fundamental changes to a process. (JCAHO, 2002)

For example, slight variations in O.R. start times, either starting several minutes ahead or behind of the scheduled start time, are examples of common cause variation.

Special Cause Variation:

The variation in performance and data that results from variables that are not a part of the original process or system. Special cause variation is intermittent, unpredictable, and unstable (JCAHO, 2002).

For example, a delay in the O.R. start time that is outside of the normal or expected variation, such as a two-hour delay from the scheduled start time on the day of a major snowstorm.

S – Select the improvement opportunities

Most processes have several opportunities for improvement within them. Select a portion of the process to improve. It is important to select an improvement opportunity that will have the best likelihood of succeeding and greatest feasibility.

The Nursing Process and Performance Improvement

As a strategy for performance improvement is described in more detail you will recognize elements of the nursing process in it. It's important to keep the nursing process in mind because it will help you understand the strategy for performance improvement; there are many similarities between the two.

To refresh your memory – The Nursing Process

- Assessment
- Analysis (Nursing Diagnosis)
- Planning
- Implementation
- Evaluation

BREAKING IT DOWN - PDCA

P – Plan the change

Define what you expect to happen if you make the change. After studying the process and selecting an improvement opportunity you should be able to identify what you expect the results to be. You need to identify what is to be measured and clearly define it. You should also determine how large the pilot study of the improvement should be. How will you know that a change is an improvement?

It is best to work on a small scale so improvements can be rapidly tested and analyzed. Many organizations spend an inordinate amount of time trying to have perfect measurements. Measurements don't have to be perfect, but they must be useful and accurate. Don't fall into 'analysis paralysis' by spending too much time/effort on measurement and analysis and miss opportunities to actually affect change that leads to improvement. Use sampling, you don't need to measure everything on every instance; just a representative sample will work well.

D – Do

Do the improvement. Implement the changes that you've decided upon. Document problems or unexpected observations during the implementation. Take the time to discover what you are learning as you do the pilot.

C – Check the results

Compare the data to your predictions. Compare the data to the measures that you took before you made the change(s). Are the results what you expected? How did they differ from what you expected? Identify the lessons learned from the process of improvement.

If the change was not successful, or did not achieve the expected or desired results, skip the Act stage and go back to the Plan stage to come up with some new ideas for solving the problem and go through the cycle again. This is a normal part of the improvement process! This is also why it is best to select improvement opportunities that can rapidly proceed through the cycle. You can imagine how disheartening it could be if you have spent a year on an improvement process only to learn that the change that was made is not working and you need to start again in the Plan stage.

A – Act

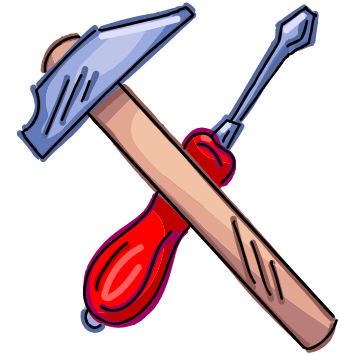
Act by implementing the change full scale (after successful completion of a pilot). Document the change that was made to the process and redefine the policies, procedures, guidelines, and/or protocols that the change affects. Communicate the change throughout the organization. Design measures and continue to assess the effectiveness of the change over time, in other words, hold the gain. Identify what needs to be done to *continuously* improve the process.

PDCA is a
repetitive
cycle....



TOOLS

It's important for you to be familiar with performance improvement tools so you can interpret data correctly. These tools are designed to assist you in understanding the questions you have asked about the process. Tools are also used to determine if the change/improvement has achieved the desired result. This is accomplished by comparing pre- and post-change data and/or using outside data for comparison. Bad data and/or misinterpreted data can lead to ineffective and frustrating improvement efforts.



Your organization should have a training program for Performance Improvement (PI) teams and personnel (such as a PI or QA department) that can educate teams on the use of PI tools and how to present data with them.

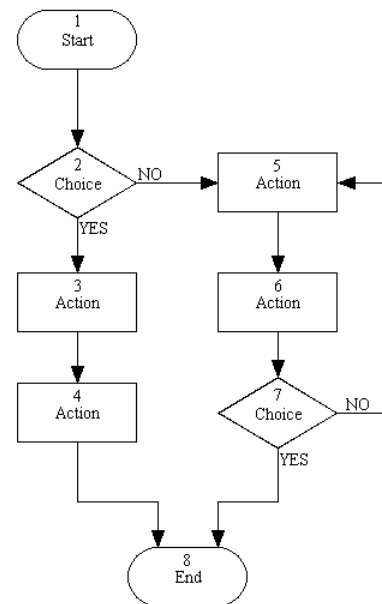
There are several tools that are helpful in translating data into useful information:

- ❖ Flowchart
- ❖ Run Chart
- ❖ Control Chart
- ❖ Pareto Chart
- ❖ Fishbone Diagram or Cause and Effect Diagram
- ❖ Scatter Diagrams
- ❖ Histograms

Flowchart

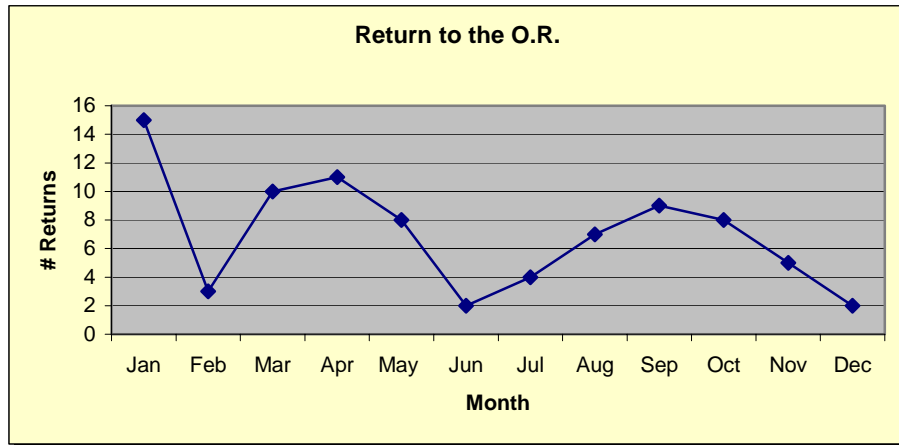
Flowcharts are used to visually represent or map a process. They are very helpful in understanding the process steps. They also aid in identifying areas in the process that may be problem prone. They can also be useful in identifying internal and external customers.

Symbols are used in these diagrams to represent steps or actions in the process. In this example an oval represents the starting and ending points of the process, a diamond represents a choice to be made and a rectangle represents an action that is taken. A choice (i.e. yes or no) will always result in another branch on the flowchart.



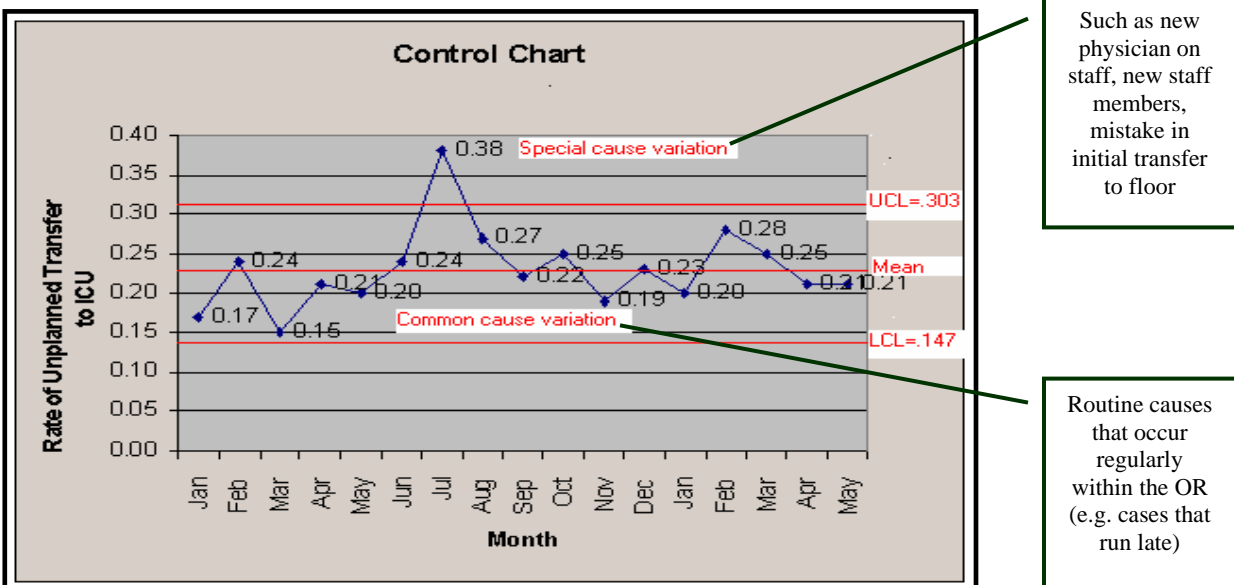
Run Chart

A Run Chart plots data over time in the order that the data occurred. This type of chart is used to identify variation in a process. When viewing a run chart, look for runs of data above or below the average. A good rule of thumb is that there should be at least six consecutive data points trending above or below the average in order to identify it as a trend.



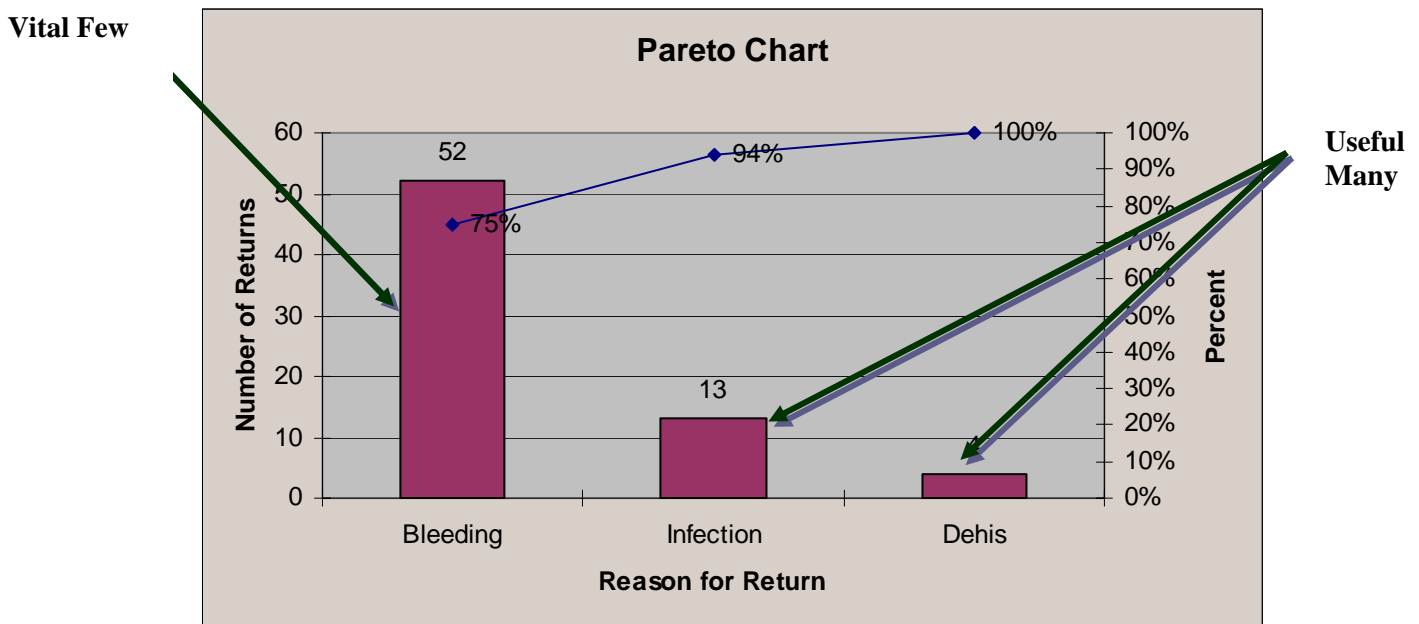
Control Chart

A Control Chart is a run chart with control limits added to it. Data points are plotted over time in the order that they occurred. Upper and lower control limits are calculated based on the data points of the process. The upper and lower control limits are usually established at 3 standard deviations from the mean (average). Control charts are used to identify common cause and special cause variation. Common cause variation will be seen between the upper and lower control limits. Special cause variation is seen as a data point that fall outside of the upper and lower control limits.



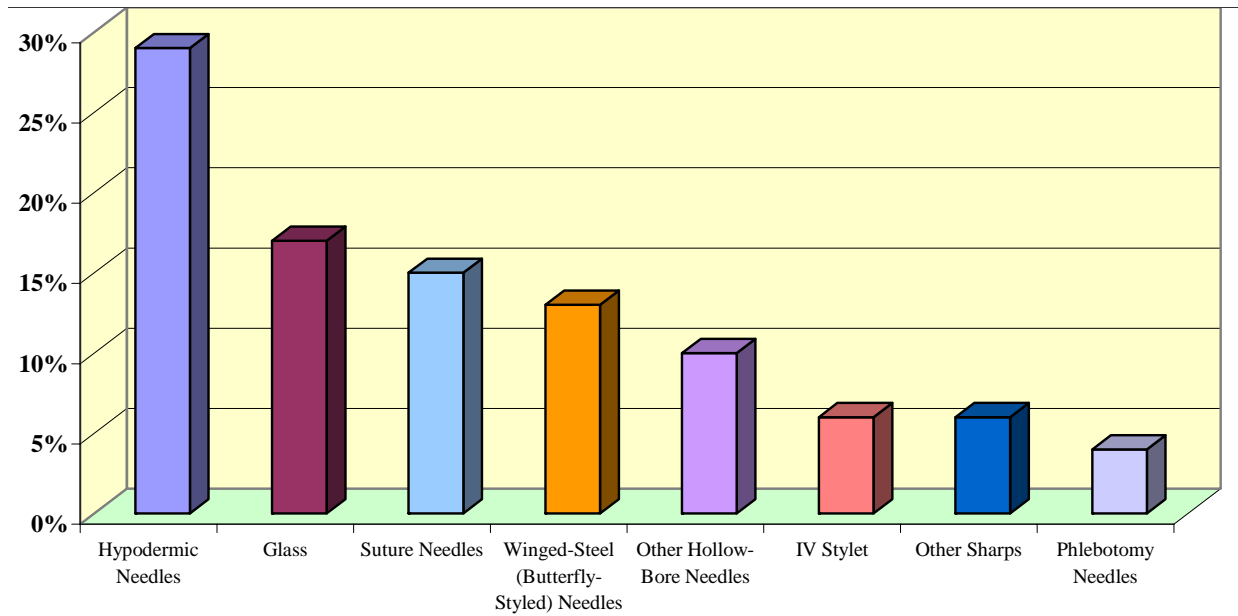
Pareto Chart

The Pareto Chart graphically represents the “Pareto Principle.” The Pareto Principle states that 80 percent of the problems come from 20 percent of the causes. The 20 percent of the causes are known as the *vital few* (Bliersbach, 1993). Focusing on the vital few (e.g. the single cause/or few causes that create at least 20% of the problem) vs. the useful many (the many different causes that may each individually take longer to change) will greatly increase the likelihood of making significant improvement. The Pareto Chart is a bar chart with the most frequent (tallest bars) on the left and the least frequent (smallest bars) on the right. This example also incorporates a line graph to demonstrate the cumulative percent that the bars account for. It easily identifies bleeding as the vital few as it accounts for 75% of all the returns to the O.R. Focusing improvement efforts on this cause (vital few) will have the most significant probability of decreasing returns to the O.R. Future improvement efforts may focus on the other causes or new causes may be identified as the vital few once a significant decrease in bleeding complications occurs.

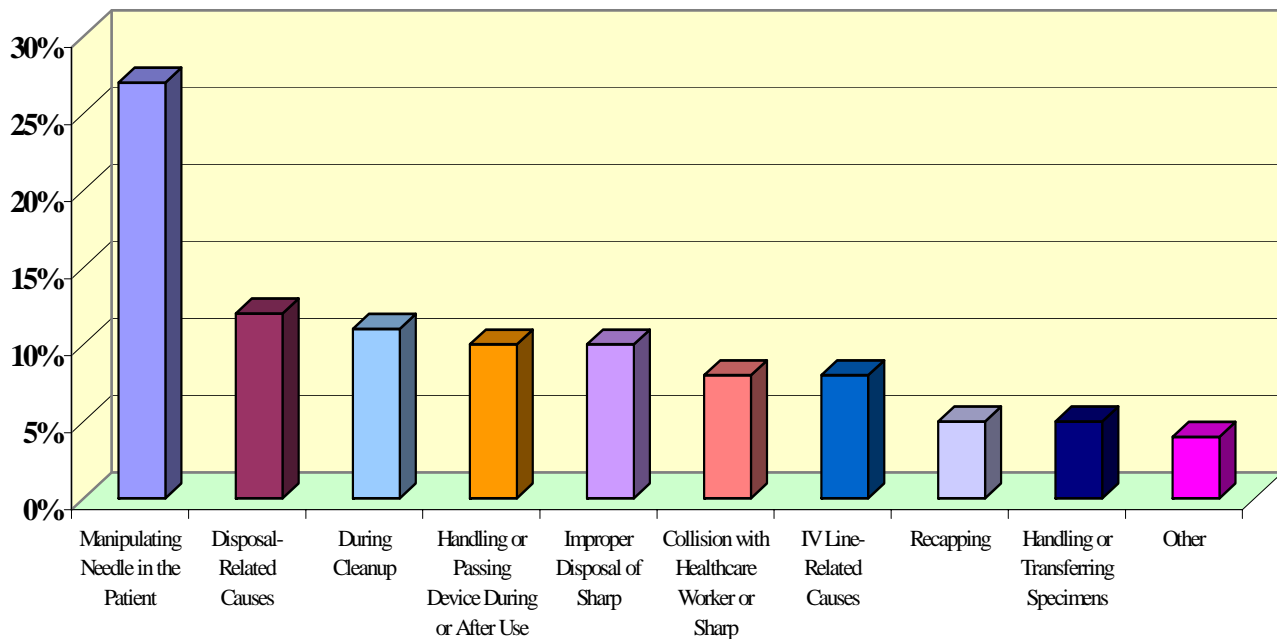


Here are two more examples of Pareto Charts. Can you identify the 'vital few' and the 'useful many' in these two charts. Where would you focus your analysis and improvement efforts to get the most significant improvement (decrease in number of needle sticks)?

An analysis of over 5,000 recent needlestick and other sharps-related injuries in hospitals found the following equipment was involved in accidents: (the percentages refer to the portion of the total number of percutaneous injuries):



The same study also examined what healthcare workers were doing when an accidental injuring resulted from using hollow-bore needles, the most common kind of injury:



Cause & Effect Diagram

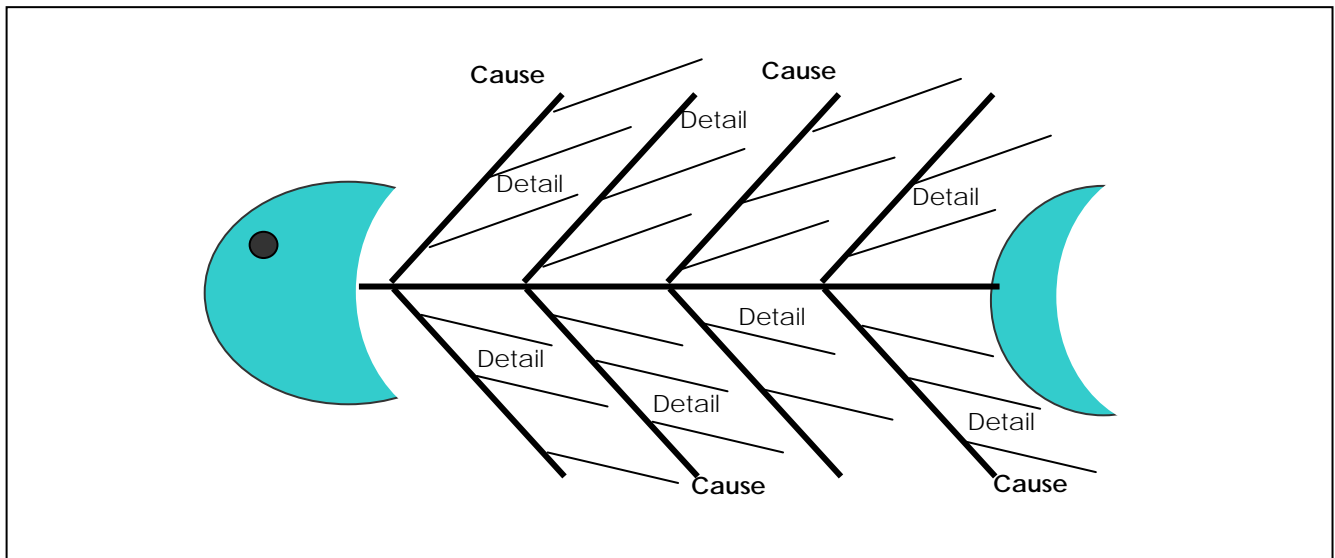
The Cause and Effect Diagram is also referred to as a Fishbone Diagram (based on its appearance) or an Ishikawa diagram (after its creator). This type of diagram helps teams identify the causes of a problem in a system. It is an effective tool for root cause analysis. Root cause analysis helps teams determine the underlying factors that contribute to an error. The team members must have a detailed knowledge of the process in order to create this type of diagram.

To construct a diagram the team members should identify categories that help organize ideas such as:

- | | |
|-------------|----------------|
| ✓ Machines | ✓ People |
| ✓ Methods | ✓ Policy |
| ✓ Materials | ✓ Surroundings |
| ✓ Manpower | ✓ Suppliers |
| ✓ Place | ✓ Systems |
| ✓ Procedure | ✓ Skills |

The categories should be mutually exclusive in order to avoid confusion.

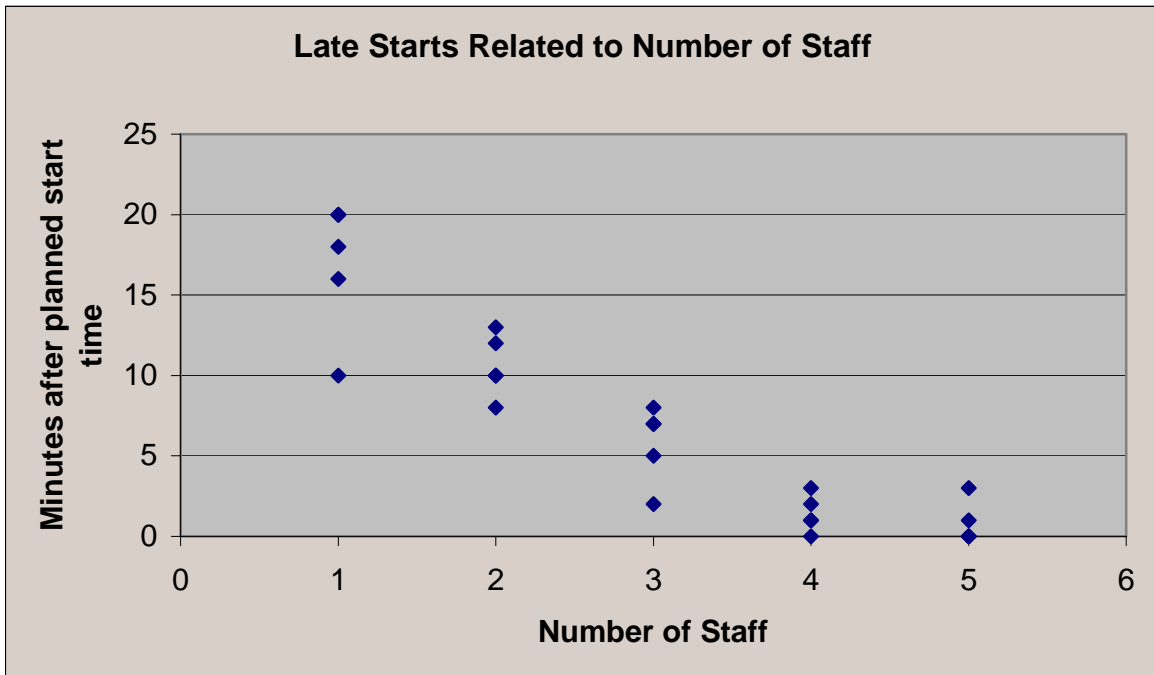
The next step, for each category the team members ask the question “why” to identify the factors that may be affecting the problem. The team keeps asking the question “why” until there is no more useful information. The results are the most likely ‘root’ cause of the problem or the essence of the error. The root causes are what are targeted for improvement.



The head of the fish represents the problem or issue to be studied. The fish's large bones are the categories that may be one or more of the causes. The small bones of the fish represent the details of the cause – in other words, the answers to all of the ‘why?’ questions.

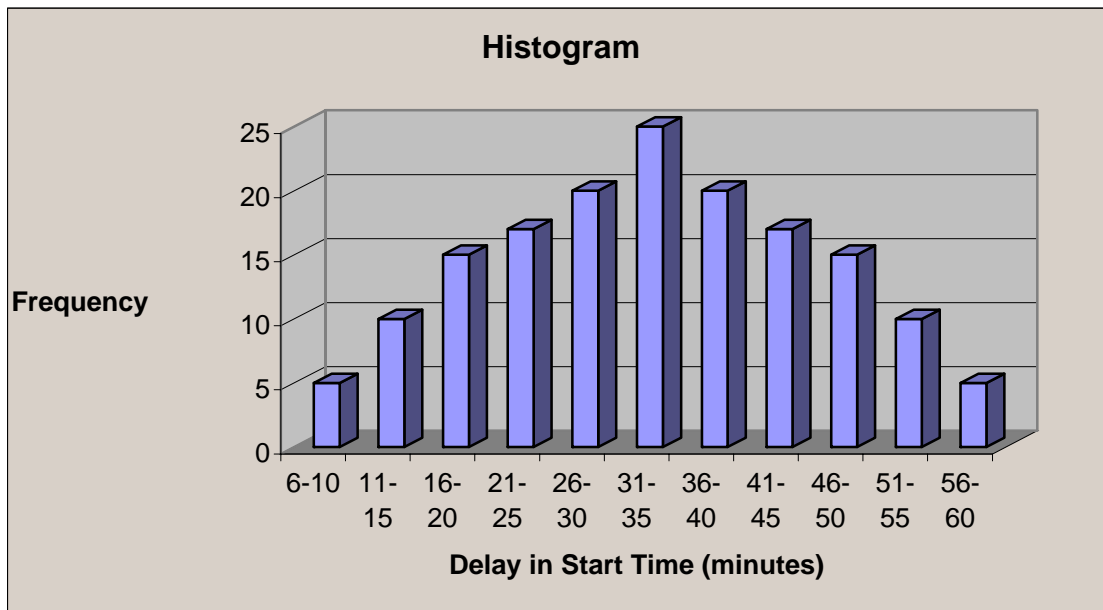
Scatter Diagrams

Scatter Diagrams depict the effects of one variable on another or the cause and effect relationship between two variables. This type of diagram is useful in combination with the cause & effect diagram and the Pareto Chart once a cause of a problem has been identified. Data on a scatter diagram are plotted in relation to one another, for example delays in O.R. start times vs. the number of O.R. staff on duty. This example demonstrates that the number of staff on duty may have an effect on the delay of O.R. start times. The lower the number of staff the greater the length of the delay in start times. A scatter diagram doesn't prove that one variable causes the other. It just illustrates that a relationship exists between variables.



Histogram

Histograms are a graphic depiction of observations. It may also be referred to as a bar graph. Histograms are useful in identifying the distribution of data and they help to visualize what data looks like. They are used to illustrate the stability of a process. The example below illustrates a stable process.



Putting it All Together

- The theory is needed to understand the importance of Performance Improvement and the steps involved in the process of performance improvement.
- The team members bring their expertise on their part of the process.
- The tools are needed to turn the raw data into information that can be used to identify areas for improvement as well as measure if a change to a process was indeed an improvement and if the improvement is maintained over time.
- Champions in the organization can smooth the path to improvement.

LINKING THE REDUCTION OF MEDICAL ERRORS AND PERFORMANCE IMPROVEMENT

There are obvious links between improving performance and decreasing the occurrence of medical errors. Currently there is an acute focus on reducing medical errors in healthcare due to recent reports such as “To Err is Human” by the Institute of Medicine. The focus of efforts in reducing medical errors is to analyze the processes and systems that are the “root cause” of the error. Performance improvement also takes a systems or process approach. Both want to move away from a “blaming” culture where individuals are identified as the reason for poor quality, poor performance and errors. Both seek to analyze and improve processes and systems.

Reducing medical errors – also identified as “Patient Safety” – has a patient focus and seeks to study processes as they affect the safety of patients. Performance improvement can be overly focused on processes and not necessarily patients. Many process improvement efforts have little or no benefit to patients. Healthcare organizations need to bring the two closer together. For example, most performance improvement initiatives should have a patient safety component to them.

Performance improvement methods and tools are also used in analysis of errors as both seek to identify process variables that lead to errors or poor performance. The current focus on medical errors and rapid root cause analysis of errors should lead to enhancements in healthcare performance improvement initiatives, not hamper them. The goal should be to proactively improve performance (vs. reactive) with a decrease in errors and improved patient safety as an outcome of the improvement.



Today's News

Chemotherapy-Related Medication Errors

The National Institute of Health Clinical Centers undertook a study to examine and reduce the number of chemotherapy-related medication errors. They examined numerous factors in the process of prescribing, preparing and administering chemotherapy. Based on their findings they identified 7 major areas that potentially related to errors. After implementing the recommended changes the number of prescribing errors was decreased by 23% and the number of serious prescribing errors was decreased by 53%. Rather than stop with this improvement the team has expanded its scope and is continuing its work to further reduce errors (Goldspiel, et al., 2000).

CONCLUSION

Performance Improvement in healthcare is ever evolving, just as the science and art of medicine is always evolving. If you haven't been involved in an improvement project, look to do so in the near future. When the methods, tools, and processes of performance improvement are working effectively, it can be a very rewarding experience. As a team leader, member, facilitator, or champion you can make a difference in how we care for patients and improve their outcomes and experiences with your organization. Don't settle for the status quo "*this is the way we have always done it*". Challenge yourself to be part of a team that looks for and creates innovative change in healthcare!

Some Helpful Web Sites

Agency for Health Care Research and Quality: <http://www.ahrq.gov>

Institute for Healthcare Improvement: <http://www.ihl.org>

Institute of Medicine: <http://www.iom.edu>

Joint Commission on the Accreditation of Healthcare Organizations: <http://www.jcaho.org>

National Association for Healthcare Quality: <http://www.nahq.org>

Quality Interagency Coordination Task Force: <http://www.quic.gov>

ISixSigma: <http://www.isixsigma.com>

If you have specific questions about information or concepts presented in this course, please send them in an email to info@rn.com, or you may send a note containing your questions to:

Education Coordinator
RN.com
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