

# Quality Improvement Basics: Foundational Concepts Transcript

## Slide 1:

Welcome to the Stratis Health Quality Improvement Basics course. We're glad you're taking time to learn about what Quality Improvement is and how it can benefit patients and your organization. This first module will provide a high-level overview of quality improvement and introduce the foundational concepts that we'll build on as you complete each of the modules.

## Slide 2:

Our first topic in this introductory module is to define what Quality Improvement is in the context of healthcare. We'll then look at how it applies to your work and processes (sets of tasks strung together) that you carry out on a daily basis.

Also, before we start, please open the related documents for this module (tools, templates and any samples) which are available on the web page where you found this module link. It will help you to have those ready for quick reference as screenshots of the documents may not be legible on your screen.

## Slide 3:

What is Quality Improvement?

## Slide 4:

While there are many definitions for Quality Improvement as applied to healthcare, here is one perspective that is broad enough to encompass QI at a very high level:

...Quality Improvement is a structured organizational process for involving personnel in planning and executing a continuous flow of improvements to provide quality health care that meets or exceeds expectations

Quality improvement consists of systematic and continuous actions that lead to measurable improvement in health care services and the health status or outcomes of the patient.

## Slide 5:

In general, Quality Improvement helps us achieve the goal of doing the right thing 'well' ...making sure that the right care is provided to patients every time ...which is a concept that was underscored in the 1999 'To Err is Human Report' from the Institute of Medicine. This report provided a clarion call for the need to improve quality given the high number of avoidable errors that occur in our health care system. Determining what that 'right thing' is includes basing our practice on evidenced based practices, adhering to necessary regulatory guidelines as well as standards of practice. QI is a method to help us incorporate these 'right things' into our practice and create consistent, repeatable and dependable processes and, furthermore, help us determine what 'doing well' is by benchmarking our performance against standards and prior performance through the use of data, measurement and data-driven decision making.



### **Slide 6:**

Here you can see a representation of what we are trying to accomplish with Quality Improvement. We are trying to identify opportunities for improvement where there is a gap between what we know from research and identified best practices, and how we actually deliver care. In healthcare we are continually learning new and better ways to improve the health of the population and delivery of care to individuals. However, there is almost always a gap or delay in translating that knowledge into practice. Closing that gap is the role of quality improvement.

The diagram also conveys the fact that the gap will be less or narrower (at the bottom) where rapid, simple changes to our processes and practice lead to the needed change. Conversely, toward the top, we discover large differences in how we practice and improve patient health and the need for change and application of Quality Improvement is much greater. For example, only 50% of hospital patients currently receive appropriate care for severe sepsis and septic shock, representing a wide gap between what we know and how we practice.

### **Slide 7:**

So why is making quality improvements so challenging? Generally, it is because we are busy with our daily routine and don't have time to step back, analyze how we do our work and identify gaps and thoughtfully make improvements. We find ourselves frequently in a "just do it" or "get it done" culture. Taking time to identify and thoughtfully define our problems, then plan solutions can also be seen as wasteful. The problem is, the "just do it" approach often results in unsatisfying results or re-work because we did not fully understand what we wanted to accomplish and did not have a way to determine if we achieved the intended result. In other words, the 'just do it' or 'just fix it' approach is the band-aid approach without getting to the root cause of our care delivery ailments.

The two columns presented here compare the ideal approach to quality improvement with what tends to happen often when we attempt to improve quality without a systematic approach and set of QI tools.

Ideally, we start any quality improvement work by prioritizing the areas we need to improve on followed by analyzing the problem. We should measure our current performance against goals that we have set to determine what the current gap may be. Your QI team will select the best options to implement among those that have been discussed and then plan out how to test the changes. As we implement and test our selected options, we keep an eye on our performance measures and further analyze how our desired changes have impacted our target process through an evaluation or 'study' step as we'll learn about in the Model for Improvement module.

That's quite a bit, but don't worry, we'll break this out step by step in the following slides and modules.

### **Slide 8:**

Let's now take the definition and concepts of what QI is and what it can help you achieve and to break that down into these four foundational elements. Quality Improvement is: customer focused, process oriented, a team effort and data driven.

In the next few slides we'll take a look at each of these four core concepts individually.

**Slide 9:**

Quality Improvement should be customer focused and that frequently means our patients, but the customer might also be another person or group of people who are either internal or external to your organization.

Think about what it takes to 'delight' your customers. Delight in the sense of providing the highest possible value that your process can deliver. Recall the Quality Improvement definition, which, in part, is to provide quality health care that meets or exceeds expectations.

It's also helpful to think about how we can assist our co-workers to see how their work affects others as a result of work accomplished in their processes. The output or result of their process may be the start or input to the next process in a longer chain of work before the final outcome is achieved. The team approach to Quality Improvement is one of the ingredients to help in this effort and, in the end, will directly impact the customer or patient.

**Slide 10:**

Our work is ultimately a series of tasks and when strung all together, results in a process or a series of steps or actions designed to yield a desired result or an outcome.

One of the fathers of quality improvement, Dr. William Deming, stated that 85% of quality problems can be traced back to a process or system problem. QI helps us to step back and determine where those missteps are occurring and correct them.

When we have well-defined processes and understand how each step of our work impacts quality, the result is a reduction in process variation. The idea is that through quality improvement we can then count on predictable, consistent and accurate processes that deliver the intended, high quality results and outcomes.

**Slide 11:**

By including measurement techniques in our quality improvement work, we realize that there is indeed some amount of variation that exists in most processes. By creating and using measurement techniques that yield data, we can start to monitor processes and see any variation over time. Using this approach, we can determine what our expected outcomes are and then watch and measure them to see if and how the process is being followed, and if it is delivering the desired result.

For example, we can define a process for following up with patients after a colonoscopy screening and provide recommendations. We can measure if and how we follow up and if we provide appropriate recommendations, and measure whether the recommendations were followed.

Measuring our processes also enables us to set a baseline or reference point for our process and further helps us to make predictions about our processes based on historical data.

**Slide 12:**

Quality improvement is truly a team effort that requires participation from all process stakeholders. In the 'Teams and Facilitation' module you'll learn about particular roles that contribute to QI efforts and are needed to fulfill certain activities of the QI team. Not only are strong leadership roles critical to

guiding and managing our team efforts, we also need subject matter experts who understand the step by step details of the process we are trying to improve... along with data analysts who can help optimize measures and interpret data you'll be collecting.

Everyone that is involved or affected by steps in the process needs to be involved or represented in evaluating and planning for changes to that process. Their individual knowledge, wisdom, and experience is incredibly valuable and can lead to better team decision making – they know what is happening, how their processes really works and where the problems lie and where opportunities for improvement exist.

**Slide 13:**

Quality Improvement is also based on reliable and accurate data...which is essential for decision making. We need an accurate, data-driven picture of how things are working in our organization. The data helps us to focus our actions and helps us determine if changes are working as intended.

Reliance on data doesn't require that we add complexity or volume to the data we collect. Take an initial approach of 'start where you are and use what you have' when it comes to data collection. Determine what you may already have stored and documented in your existing systems or look beyond your departmental walls to see if others may have collected data you'll need.

Don't rely on your 'gut feeling' to understand the process. Take a 'trust but verify' approach and let the data you collect and measures you utilize tell the truth about the process you're seeking to improve.

**Slide 14:**

As the definitions, concepts and high-level approaches to Quality Improvement covered in the prior slides start to stir some thinking about how you and your team might begin to implement QI... here are some tips to avoid a few common pitfalls:

If you can't measure it, you can't improve it (this underscores the need for data in our decision making and recommendations for process improvements)

Manage the processes, not the healthcare providers. The idea here is to look at all the ingredients of a process...not focusing on WHO you may think is at fault or needs to be corrected. Again, let the data driven measurement approach guide your team's analysis and recommendations for improvement.

Put the right data at the right time in the right hands. The maxim here is that when your team and process owners are properly equipped with high quality data, they will be more likely to determine what the needed process changes are...rather than using the 'just do it' or gut feel approach.

Engage the people who do and understand the work. We've touched on this several times as it is very important to engage those who know the process intimately and carry out the work.

**Slide 15:**

There are features that must be present in an organization's culture for QI methods, techniques and tools to be effective. Without these features, QI efforts are not likely to be effective, sustainable, or embedded in the organization. Let's look at the first three features on this slide and then three more on the following one:

Leadership that supports learning: Creating a culture to support QI begins with leadership. Empowering and supportive leadership is associated with greater acceptance and implementation of QI. Don't view QI as an add on, but rather how you do your work – how you use data, make decisions, explore opportunities, plan, implement and evaluate changes.

Culture of organizational change – Another key role that leadership can play is setting the tone and example that adopts and values organizational change...not top down or mandated change, but grass roots thinking and promoting generation of ideas to improve processes directly from those who do the work. We'll go deeper into the topic of change and culture in two modules in this QI Basics course.

Systems thinking – Systems are made up of interconnected components such as people, equipment, environment, and processes – and with systems thinking we recognize that everything is connected, and when a change is made, it can cause changes elsewhere. We need to think about the entire system in order to anticipate the broader impact of any change and we'll talk more about this in just a few slides.

**Slide 16:**

Fairness and accountability –

When we balance fairness and accountability, we create a fair and open environment where there is understanding that the system impacts human behavior and performance. Essentially, problems can often be traced back to how we have designed our systems and processes and their needs to be fairness and accountability when we seek to correct those problems. You'll learn about the 'just culture' concept later in this module. which incorporates ways to think about fairness and accountability.

Engaging customers (patients), including staff is a key concept in quality improvement –know who your customers are, and involve them in QI efforts in order to meet or exceed their expectations (recall the goal to 'delight' your customers!). In healthcare, the customer is most often the patient, but not always.

Lastly, Structured methods to make improvements One of the primary QI structured methods is The Model for Improvement and the Plan Do Study Act tool which we'll cover in a module that speaks directly to this need for using a structured approach. We'll also briefly touch on a few other structured methods or QI methodologies that may be familiar to you.

**Slide 17:**

Applying Quality Improvement: Processes and Systems

**Slide 18:**

In the previous section, you learned about what QI 'is', so now let's focus on how we apply QI to our work

QI opportunities are often a mix of issues where you are aware of needed improvement and other areas where the need is unknown. The 'unknown' areas are often those that may be a bit off your radar for a variety of reasons, such as they aren't currently measured, there is no current focus or accountability for needed quality improvement efforts, or, like many, your plate is full and QI work seems to be 'just one more thing' to pay attention to or demand time on your schedule.

QI opportunities become evident when we understand current evidence-based best practices (risk identification, prevention and treatment) and make comparisons to how our organization and providers are performing. You may also undertake a review to identify gaps in communication, knowledge or workflow.

Once the identification is accomplished, the QI methodology, an organized approach to process improvement, and the Model for Improvement can lend itself to create a plan to address the identified gaps. As you learn more about Quality Improvement and implement the tools, you'll discover that QI is a cycle of improvement with repeated analysis, revisions and testing of your improvements.

**Slide 19:**

Thinking about how you can improve your overall organization (your 'system') is dependent upon breaking the 'system' down into individual processes. Let's look at both of these terms individually.

A process is most easily thought of as any standard sequence of steps that are followed in order to complete a task or produce a result. In an organization, processes are often guided by a written policy or procedure which outlines the expectations for performance. For example, hospitals have a series of processes in place that guide patients and provide care from admission on through to discharge. Processes can also develop more organically. For example, each of us has likely developed a standard sequence of steps we follow each day to get us out of bed and ready to begin our day. A process is not a "to-do" list or a list of things that need to be accomplished during your work day. In a process, the steps are intended to be repeatable and predictable in order to produce the same outcome over and over. Processes vary in complexity and therefore may require training to help people learn the steps in order to follow them correctly.

A system is the environment in which processes are implemented. A system is the combination and relationship between various processes, the people involved, organizational culture, environmental factors, equipment involved (such as electronic health records) and resources available. A system is like a living entity (think of your own body) with many processes that make up the system which influence and interact with each other in order to create outcomes or produce a result.

Systems in organizations consist of people and processes that guide behavior and ultimately make the organization successful or unsuccessful, healthy or unhealthy.

Another way of thinking about the relationship between process and system is:

- A process produces results through work being done in the process, whereas a system produces results through the interaction of processes
- A process produces outputs whereas a system creates outcomes
- Process owners manage activities to produce required outputs whereas system managers manage interactions to produce desired outcomes

**Slide 20:**

Becoming a process thinker requires learning how to see or find processes and identify the steps and decision points. It is helpful to diagram the steps and decision points because processes can be complex, and a diagram allows for better communication of the sequence of steps. In QI, we map processes in order to identify where the sequence of steps is not happening as intended or where

improvements can be made. We then diagram the desired or improved sequence of steps. We'll learn how to do this in the Process Mapping module.

Process thinking is essential to Quality improvement because processes are typically the focus of improvement efforts. Additionally, the focus of quality improvement is on the process and not on individual behavior because an underlying principal of Quality Improvement is that processes and systems are what guide individual behavior. If we want to change behavior, we must look to changing processes and systems.

**Slide 21:**

In contrast to process thinking which focuses on how the steps of the process link together and produce the desired output, systems thinking takes a broader view of how all the parts of the system interact and influence one another. Systems thinking looks at the big picture – the relationship between the individual part within the system – and realizes change at any point or level may have an impact throughout the system. The big picture and the individual parts cannot be separated.

In systems thinking, each part of the system is not viewed in isolation. Each part has value derived from its role in the system and the parts are best understood by looking at how they relate to the other parts of the system rather focusing only their own individual function or output.

Systems thinking requires critical thinking skills such as:

- understanding the logical connections between parts of a system
- detecting inconsistencies and common mistakes in within the system
- And the ability to solve problems systematically

Systems thinking requires situational awareness which can be thought of as being able to predict what will happen to the system as a whole in response to an action or a change in one part of the system, such as making changes to specific processes as part of your quality improvement work.

**Slide 22:**

There are great benefits of system and process thinking because systems and processes can make or break outcomes and results.

Well-designed processes decrease re-work and improve efficiency.

Quality Improvement tools alone are not sufficient to create improvements or design the most effective or efficient way to achieve a result or produce an outcome. Being able to identify and describe processes and their interactions is necessary to know how and when to apply various quality improvement tools. Being able to see the larger system is necessary to set goals and aims for improvement work.

There are potential pitfalls to process and system thinking that can hinder progress or improvements. One is the desire to turn everything into a process. Organizations can develop processes that become “the way we do things around here” and the processes are not to be questioned. It also takes practice to avoid getting bogged down in the details, such as specific tasks or steps that are part of a larger process you're attempting to change. Learning QI tools and techniques along with practice will help you determine the correct level of detail needed to understand process steps but not get overwhelmed.

Change is always occurring and should occur as we continue to look for new and better ways to do our work. Instead of saying, “this is how we do things around here,” we need to say, “this is how we do things around here until we find a better way.”

**Slide 23:**

Here are a few examples to understand what a system is vs. a process:

A clinic that meets the definition of a medical home can be considered a system that is designed to deliver person-centered care to patients. To do so, they have processes in place that are followed to guide shared decision making as well as to develop and maintain a care plan. These two processes are linked and therefore, process and system thinking are needed if changes are to be made without unintended consequences.

Likewise, with the system for medication administration in the hospital. There are a number of processes such as Patient ID verification that need to occur in sequence for the medication to be ordered from the pharmacy, received and then administered correctly to the patient.

Airlines, for example, have done a lot of work on systems and processes to achieve increasing levels of safety. With each takeoff and landing, there are very specific processes that pilots train on repeatedly in simulators to maintain error free operations which contribute to the overall safety of the of the system we depend on for routine transportation.

**Slide 24:**

Just Culture

**Slide 25:**

This section is intended to provide a very brief introduction to Just Cultural, which is much broader and deeper than we have time for here, however, it’s useful to be aware of what it is and how it fits into our thinking about the culture of the organizations we work in.

Just Culture is a model that organizations can adopt which recognizes that it is both the design of our systems and processes AND the choices and behaviors of the humans working within those systems that produce outcomes. The model recognizes and incorporates what has been learned about system design, human free-will and human fallibility.

The foundation of a Just Culture is safety. All people have the duty to avoid causing unjustifiable risk or harm to others, but all humans are also fallible and will make mistakes. In healthcare, our systems and processes are designed by and include humans, so are susceptible to failure or error. It is the duty and responsibility of the organization to consider humans factors and design systems and processes that minimize the risk of error and make it easy for staff to perform safely, effectively, and efficiently. Knowing that these types of errors can and do exist should be taken into consideration during our quality improvement work.

Just Culture looks at how we create and communicate expectations for our organization and individuals around systems and processes. In a Just Culture, all staff are accountable for their own behavior and choices and for reporting errors, near misses, and areas of risk. The organization and its



leaders are responsible for designing safe and effective systems and processes and also for responding to staff behavior and choices fairly and justly.

**Slide 26:**

In a Just Culture, as errors or near misses occur, staff feel safe and confident to speak up and report the incident as an opportunity to improve. These opportunities can become the QI projects we work on which modify and improve processes to avoid safety issues. Staff know that they will not be unfairly punished or blamed for errors caused by systems and processes, but also know that they are accountable for their own behavior and choices. If an error or near miss occurs, it is investigated to determine contributing causes including system and process design and human choices and behaviors. Systems and processes are then improved through QI projects to prevent future error and if needed, staff are counseled, coached, or punished to help ensure safe choices are made in the future.

Just Culture categorizes human behavior into three categories and responds to each accordingly. The behavioral categories are: Human Error, At-risk Behavior, and Reckless Behavior.

- Human Error – an inadvertent slip, lapse, or mistake;
  - Example: knocking over a glass of water, dropping an open bottle of medication;
  - It is managed through counseling the individual(s) and improving system design
- At-Risk Behavior – a choice to act but risk to others is not recognized or is believed to be justified;
  - Example: not washing/foaming hands upon entry into a patient’s room because I just did it on my way out of the room next door. Another example is not performing a time-out procedure properly because we do this all day every day and we’ve never had a problem;
- At risk behavior is managed through coaching the individual(s) to recognize risk and comply with procedures/policies for safety
  - Reckless Behavior – a choice to act that is a conscious disregard of substantial and unjustifiable risk;
  - Example: medication diversion, up-coding or insurance fraud to increase revenue;
  - This is managed through remedial or disciplinary action

**Slide 27:**

Identifying Quality Improvement Projects

**Slide 28:**

As we learned in the previous section, we can’t tackle the ‘big picture’ (systems) without breaking our work down into manageable QI projects that address the processes that make up our system. For example, we know that our U.S. healthcare system delivers excellent care (on average), but there often wide disparities in access, outcomes, and cost of care that results and a different experience of care depending on a variety of underlying system factors and specific processes within our own facilities.

We can take the national health system priorities and break them down into local and facility specific QI opportunities and address them one project at a time. You likely are aware of specific improvements that can be made at your own facility or within your department that can support the needed ‘big picture’ change.

Areas for potential Quality Improvements that focus specifically on patients include:

- Systems and processes that affect patient access
- Providing care that is evidence-based (do we have processes to rapidly adopt best practices?)
- Patient safety
- Support for patient engagement
- Coordination of care with other parts of the larger health care system
- Cultural competence, including assessing health literacy of patients, patient-centered communication, and culturally appropriate care

As you think about these broader topics where QI can be applied, think further about what specific processes might align with your organizations mission and the strategies and tactics needed to break them down into manageable and achievable QI projects.

**Slide 29:**

We identified a number of patient centric topics for quality improvement opportunities in the prior slide.

A good starting point to identify a needed QI project is to consider the mission and set of strategies to fulfill that mission at your facility

- Are you confident that you know what the mission is at your organization?
- Do you know how processes support the strategies that fulfill the mission?
- In other words, confirm that your QI efforts, the processes you will seek to improve, are aligned with the mission and strategies of your organization. In this regard, QI is another tool that leadership can look to which will help move the organizations efforts in the same direction to efficiently support the mission.

Here are a few steps that you can take to further identify QI project opportunities:

- Start thinking about gaps between knowledge and practice, and how you might narrow that gap using the QI methods in this course.
- You might also want to focus on processes that impact state or nationally reported quality measures that your organized or has chosen or is required to report on.

As mentioned earlier, you don't want to just dive in and start doing a project without consider the impact and alignment of your Quality Improvement work without consideration of how it fits into the mission, strategies and public-facing measures that are top priorities at your organization.