WHAT IS QUALITY IMPROVEMENT?

Quality improvement is about understanding what’s not working in a process and fixing that – with a focus on measurable improvement. Although there are many different definitions of quality improvement in health care, all definitions refer to a continuous and ongoing effort to achieve measurable improvements in the efficiency, effectiveness, performance, accountability, outcomes, and other indicators of quality in services or processes which achieve equity and improve the health of the community. Every quality improvement roadmap depends upon these principles:

WHAT IS THE MODEL FOR IMPROVEMENT?

The Model for Improvement is a simple, yet powerful tool for accelerating improvement. The model has two parts: Three fundamental questions, which can be addressed in any order and the Plan-Do-Study-Act (PDSA) Cycle to test changes in real work settings. The PDSA cycle is a roadmap for testing the change to determine if the change results in an improvement.

Answer Three Questions

* What are we trying to accomplish? (*What is your aim?)*
* How will we know a change is an improvement? *(What can you measure to determine if your change results in an improvement?)*
* What change can we make that will result in an improvement? *(Lean is a framework that you can use to help you answer this question.)*

PDSA Checklist

**Plan**

* Develop a SMARTIE aim statement
* Develop a process map
* Identify all possible root causes
* Identify possible improvements
* Determine what to test
* Develop your hypothesis
* Develop the action plan (who, what, when, where, how)
* Develop your data collection plan and collect baseline data

**Do**

* Implement the change and observe the test
* Collect and document the data
* Document the problems, observations, and lessons learned

**Study**

* Develop run charts
* Analyze and summarize the data

**Act**

* Adopt: Standardize but monitor!
* Adapt: Change and repeat
* Abandon: Start cycle process over again

WHAT IS LEAN?

Lean is a continuous quality improvement methodology used to streamline a process. Lean focuses on improving value from the customer’s point of view, by eliminating waste. This guide will help your quality improvement team understand Lean principles so that you can identify waste in your process maps, discuss their root causes, and implement quality improvement projects to eliminate that waste.

Lean Principles

* **Value-added:** Any step in the process that improves the product for the customer
* **Business Necessary:** Activities ensuring that the value-added steps have been properly completed. These are steps required by law, regulation and/or policy. If they’re wasteful, you may consider changing the law, regulation or policy
* **Non-Value Added:** Activities that do not contribute to the product or the process and should therefore be eliminated; Non-value-added steps are waste

Classic Forms of Waste: DOWNTIME

* **D**efects/Rework: Unclear directions, mistakes, errors, re-work
* **O**verproduction: Unneeded reports, duplication, leftover
* **W**aiting: Waiting for others to complete work, test results
* **N**ot Used Talent: Unused creativity
* **T**ransportation: Moving things (rather than pre-position)
* **I**nventory: Over/under stock, expired supplies
* **M**otion: Excess searching, gathering, walking
* **E**xcess Processing: Over-using more supplies or information

Root Causes of Waste

* No method to prevent/catch errors
* Ineffective design/layout of facilities
* Fragmented, poorly designed processes
* Equipment failures
* Unorganized workspace
* No standards or non-compliance with standards
* Unbalanced workloads
* Lack flexible workforce
* Inadequate or no training
* Poor communication
* No visibility to performance
* Lack of integrated systems & poor systems functionality

OTHER QUALITY IMPROVEMENT RESOURCES

Refer to the other quality improvement tools: PDSA cycle, developing a process map, and developing and interpreting run charts.