Quality Improvement: Process Mapping

Topics

- Learn what process mapping is
- How process maps supports quality improvement (QI)
- The basics to create a process map
- Review a sample process map
What Is Process Mapping?

Key Concepts and Definitions

- **Process**: A complete set of activities or steps designed to produce a result that helps to accomplish a particular organizational goal.

- **Workflow**: Study of “Who/Does/What/When?” a combination of steps, tasks, or events and/or decision points that support the process which results in the process outcome.
What is Process Mapping?

- Creating a visual diagram of the steps involved in your work
- End-to-end mapping of a process
- Determining what the scope of the process is (beginning and end)
- Process mapping is part of understanding your “system”

Process Mapping Supports the Model for Improvement

- Process Mapping is a tool that supports the Model for Improvement
- Helps answer the final of the Model for Improvement 3 key questions:
  1. What are we trying to accomplish?
  2. How will we know the change is an improvement?
  3. What change can we make that will result in improvement?
- Mapping precedes using the PDSA tool
**5 Steps of Process Mapping**

1. Current state – document and review existing process
2. Determine changes needed
3. Future state – map out desired process
4. Test future state process
5. Decide and act on results of process modifications

**Why Do Process Mapping?**

- The power of visual representation
- There are always “Ah-ha!” moments
- Identifies and documents how work is done
- Helps demonstrate how people, processes, and technology are integrated
- Opportunity to correct broken processes and analyze how we do our work
Process Mapping is a Team Activity

- Engage stakeholders and create buy-in
- Prepares us for change
- Process “owners” know what changes may work best
- Helps contrast:
  - Perceived process
  - Actual process
  - Ideal or “future-state” process

Mapping Out Your Process

- Framing the process: what is “in” and what is “out” of scope?
- Identify process input/trigger and outputs (start and end of the process)
- Document major steps in the process, from trigger event to the end result
- Who are the stakeholders and customers?
- What are the process inputs (reports, data, equipment, etc.)?
- Keep thinking “Who / Does / What / When?” as you visually build your process
- Consider interdepartmental handoffs
Identify Opportunities to Improve the Process

- Bottlenecks
- Rework due to errors
- Role ambiguity
- Unnecessary duplications
- Long cycle time

- Lack of adherence to standards
- Lack of information
- Lack of quality controls

Mapping the Process
**Mapping the Current State Process**

- Map the current process using progressive levels of detail until the process is understood
- Use the 80/20 rule when diagraming and documenting your process (you can spend 80% of your time documenting only 20% of the process - try to do it the other way around!)
- Capture low hanging fruit and “ah-ha!” moments

**Process Shapes**

- Generally run top to bottom, left to right
- Each step needs to say clearly:
  - Who - Subject
  - Does - Verb
  - What – Object
- Decision diamonds represent key choices or decisions.
  - Label the process path
  - Yes or No (most frequently)
Process Map Example

An oval shows the input to start the process or the output at the end of the process.

A box or rectangle shows a task or activity being performed.

There is only one arrow out of each activity box—if more arrows are needed then you may need a decision diamond.

A diamond shows a yes/no question or a decision.

This shape is used to represent a document or report.

An oval shows the input to start the process or the output at the end of the process.

Source: HealthInsight, Workflow Demystified; 9SOW-UT-2010-00-112

Example: Medication Refill Current State

Refill request received by PA

Provider documents the prescription renewal on the chart

Chart is returned to MA by PA

MA reviews chart, lists refill required and creates

Is the information complete?

Provider documents the prescription renewal on the chart

MA reviews prescription renewal

Chart is returned to PA by MA

Refill request received by PA

MA contacts patient and explains reason for denial

Provider documents the prescription renewal on the chart

Chart is returned to MA by PA

MA reviews chart, lists refill required and creates

Is the information complete?

Provider documents the prescription renewal on the chart

MA reviews prescription renewal

Chart is returned to PA by MA

Refill request received by PA

Source: HealthInsight, Workflow Demystified; 9SOW-UT-2010-00-112
Example: Medication Refill
Future State

Process Mapping with Sticky Notes

- Assemble your team
- Use sticky notes and bold pens
- Start by documenting beginning and end of the process

Source: HealthInsight, Workflow Demystified; 9SOW-UT-2010-00-112
Process Mapping (cont.)

- Turn sticky notes sideways for decision diamonds
- Don’t start drawing lines to connect steps yet!

Process Mapping (cont.)

- Add steps as you identify them
Process Mapping (cont.)

- Move notes around as needed
- Continue to review
- Look harder, ask “Why do we do that” and “Do we all agree this is the right way?”
Process Mapping (cont.)

When steps are complete:

- Review for accuracy and detail
- What jumps out at you?
- Reorder and modify as needed

CAUTION:
Photos or paper don’t lend themselves to updates
Electronic Process Map

Process Mapping Considerations

- What event triggers or starts the process?
- What information needs to be delivered to the next step? Or what decision needs to be made?
- What is a process step (task) for this process?
- What is a work instruction?
Process Mapping
Example: Clinic Hypertension Process

Swim Lane Process Maps
**Process Mapping Summary**

- The power of process mapping lies in the visual representation of the process.
- Process mapping is a vital step in understanding how your organization really carries out its work.
- Process mapping is a catalyst for QI team discussions.
- Engaging people who do the work is essential to success.
- Understanding and communicating “Who/Does/What/When?” is key!