

Quality Improvement Learning Collaborative

Session 2:

Model for Improvement, Process Improvement Methods, Tools, and Measurement

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Stratis Health

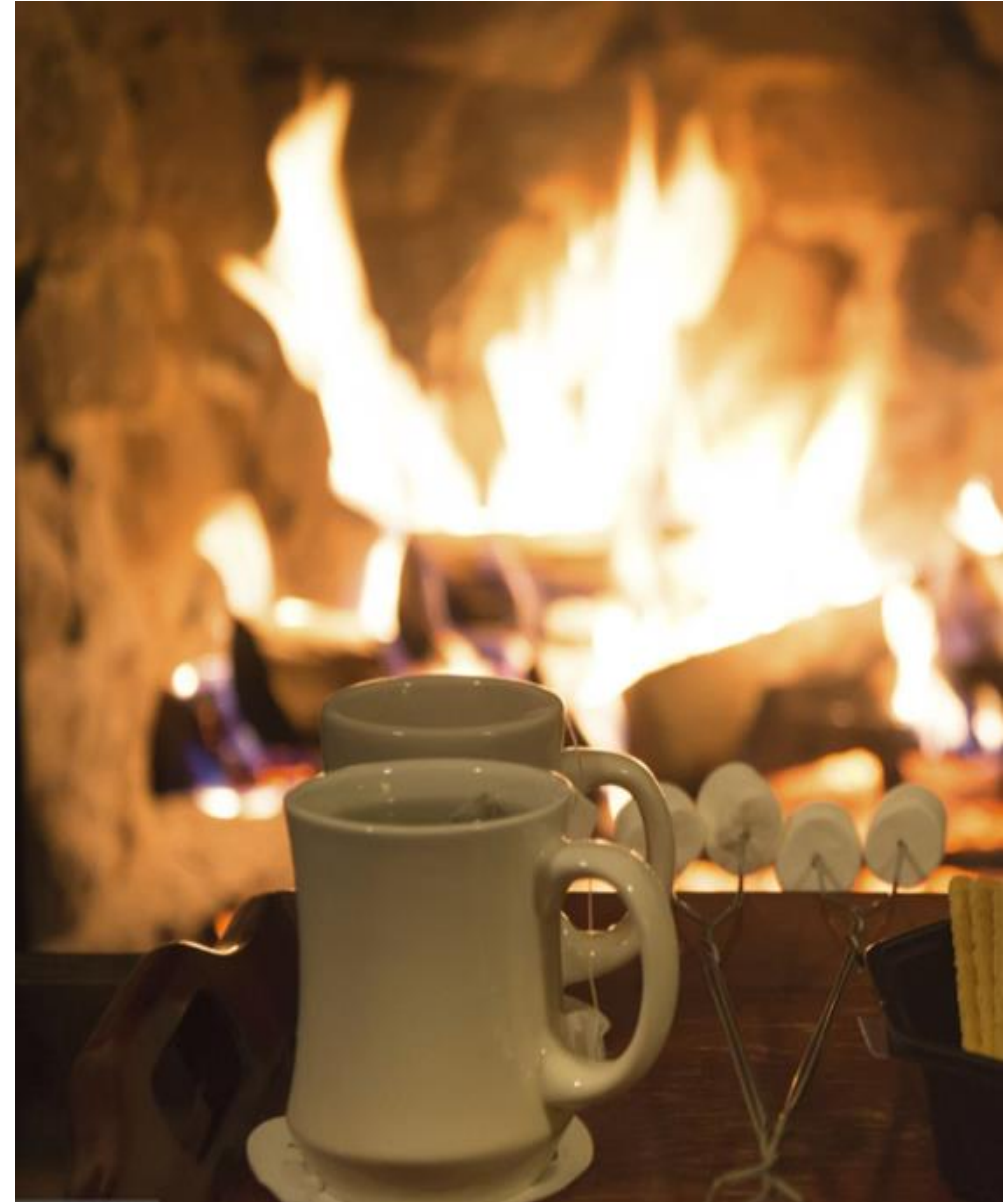
Stratis Health is a nonprofit organization that leads collaboration and innovation in health care quality and safety and serves as a trusted expert in facilitating improvement for people and communities.

The organization has a long history of working with rural providers, Critical Access Hospitals (CAH), and the Flex Program.

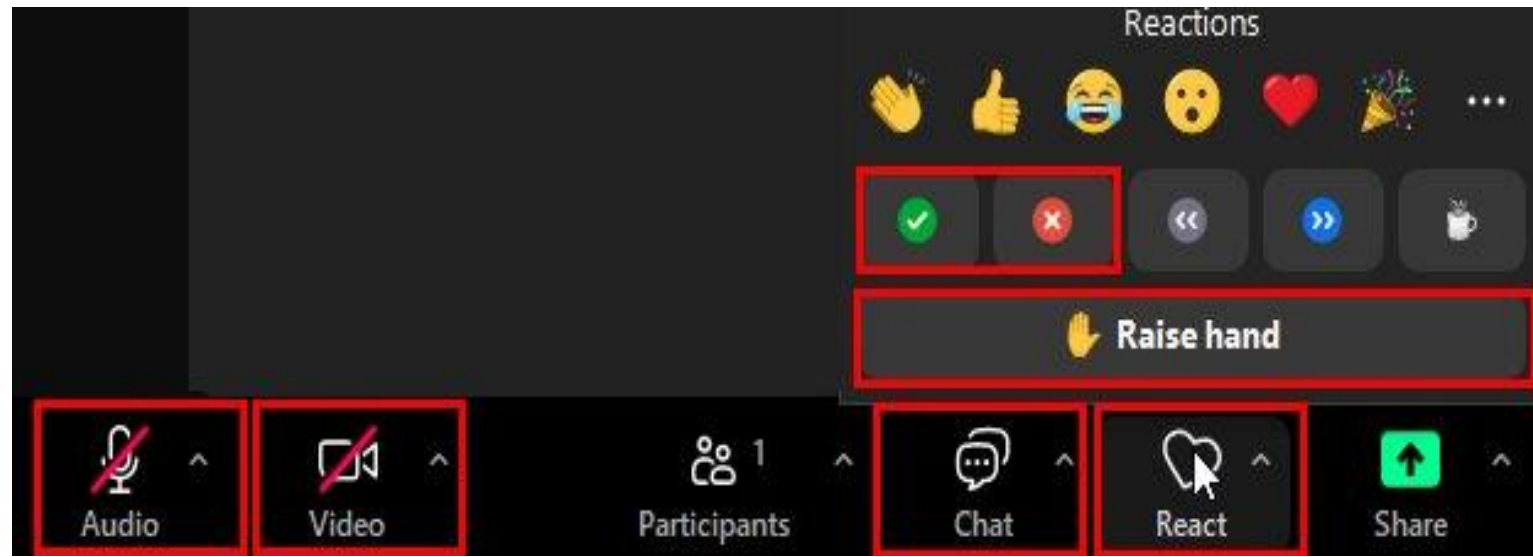


Chat Introductions and Check In

- Name | Title/Role
- Organization
- Favorite winter activity



Housekeeping



- Video On requested
- Use the chat
- Raise your hand
- Unmute and talk
- Complete polls
- Participate in breakout groups

Timeline and Content

Sessions will be held every other Wednesday from 1– 2 p.m. MT on the following dates:



Learning Collaborative Objectives:

- Apply systems thinking and support quality improvement through organizational culture.
- Plan and manage quality improvement projects.
- Select and practice quality improvement methods and tools.
- Collect, analyze, and illustrate data for quality improvement.



Session 1 Reflection

- Try reframing a conversation using a systems thinking approach
 - Reference slide 25 (reframing our approach)
- Use a prioritization tool to help support team discussion about project opportunities
- Be prepared to share the topic of your hospital's QI project at the next session (today!)
 - Project Declaration – in chat

Session 2 Overview

Session 2 Learning Objectives:

- Describe the Model for Improvement framework.
- Identify tools that support using the Model for Improvement framework.
- Recognize what data can be used to evaluate improvement efforts and the key components of a data plan.

Session 2 Pre-Work



Review Modules

- [The Model for Improvement](#) (14-minute video)
- [Introduction to Process Mapping](#) (8-minute video)
- [Data Basics](#) (11-minute video)



Review Tools and Resources

- [Model for Improvement and PDSA Worksheet](#)
- [Cause and Effect Tool/Fishbone Diagram](#)

Modules and Resources Available Here:
[Quality Improvement Basics - Stratis Health](#)



Pre-Knowledge Gain Poll

Rate the following statements:

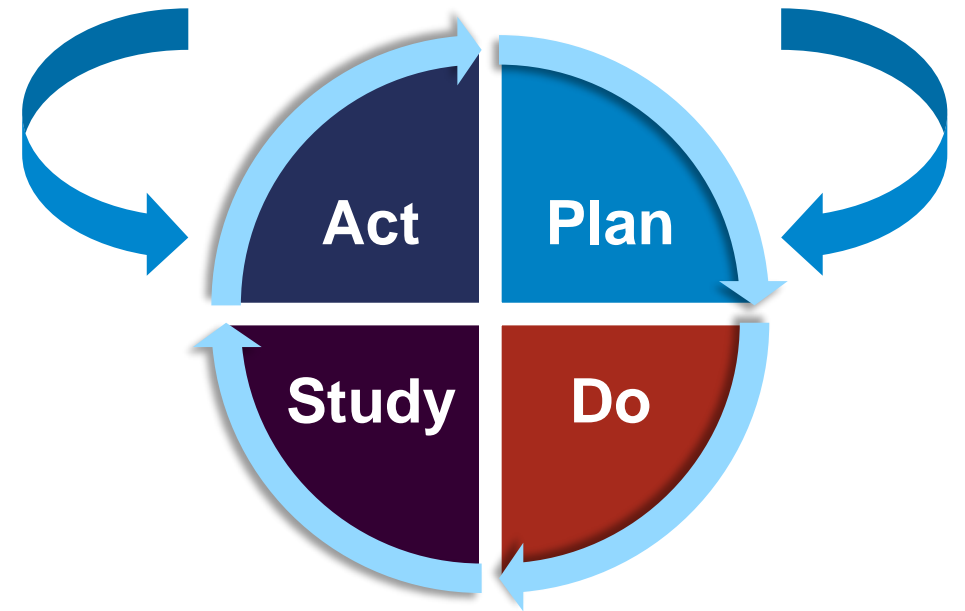
- I can describe the Model for Improvement and identify tools that support implementation.
- I can recognize what types of data can be used in QI and how to create a data plan.



Model for Improvement

The Model for Improvement

- Model for Improvement three key questions:
 - What are we trying to accomplish?
 - How will we know the change is an improvement?
 - What change can we make that will result in improvement?



Repeated Use of PDSA Cycle



Discussion

- What examples do you have where this process worked well?
- What challenges have you encountered while using the PDSA?



Process Improvement Methods & Tools

The Model For Improvement: Three Questions



What are we trying to accomplish?



How will we know that change is an improvement?



What change can we make that will result in an improvement?



What are we trying to accomplish?

Specific

What exactly do you want to achieve?

Measurable

How will you know you have achieved it? What is the measure you will use, what is the current data for that measure, how do you want it to change?

Attainable

Is it possible to achieve? Based on best practice, average or benchmark? Too low (not challenging)? Too high (unreasonable)?

Relevant

Addresses an important business problem, aligned with strategic plans

Time-Bound

Includes a target date for achieving the goal

Inclusive

Who is impacted and involved?

Equitable

How will it address inequities?

Example

- AIM: By December 31, 2025, reduce the 30-day hospital readmission rate for high-risk patients by 20% (rate will go from 15% to 12%).

Discussion

- Have you developed an aim statement for your QI project?
- Do your teams set SMARTIE goals?





How will we know that change is an improvement?

- Can't improve what you can't measure!
 - Qualitative Data vs Quantitative Data
 - Process vs Outcome Measures
 - Collecting and Displaying Data



Quantitative Data vs Qualitative Data

Quantitative

- Uses numbers and measurable units
- Objective
- Produced through processes that are verifiable, replicable, and not subject to interpretation

Qualitative

- Data with descriptive characteristics
- Can be categorical
- Observable, but *not* measurable

Source: <https://www.hrsa.gov/sites/default/files/quality/toolbox/508pdfs/qualityimprovement.pdf>

Process Measures vs Outcome Measures

Process Measures

- Track if processes are executed correctly and consistently
- Ensure the steps we've put in place are being followed.

- Example: tracking how often patients receive diabetes screenings during visits

Outcome Measures

- Assess the impact of processes on patients or communities
- Determine if changes lead to improved health outcomes

- Example: Measuring a reduction in undiagnosed diabetes cases

Process measures focus on **what we do**; outcome measures show the **results**.

Data Collection Methods



- Tally sheets
- Checklists
- Questionnaires
- Feedback interviews
- Observation
- Daily reviews
- Chart audit
- Data obtained from existing databases and systems

Data Display and Stratification

Important questions to consider:

- How will you track and display data findings?
- What, if any, stratification will be applied when analyzing performance?

Creating a Data Plan

Problem Identification
Evaluation Metrics
Partners

Data Collection
Monitoring
Sustainability
Data Sharing

Discussion

- What data sources will you use for your quality improvement project?
- Who does your organization share QI data with and how is it displayed?
 - Internal audiences
 - Externally





What change can we make that will result in an improvement?

Understand current processes

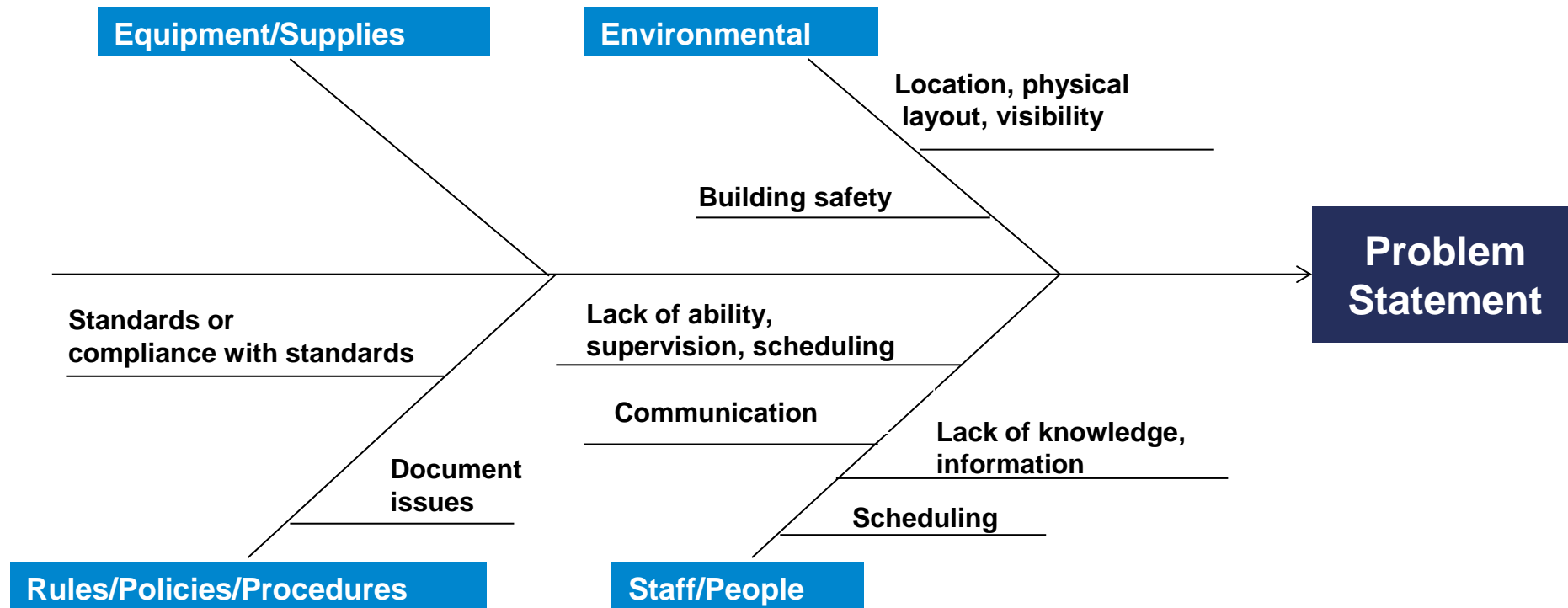
Review updated research

Learn from other organizations

Tools:

- Cause and Effect Diagram
- Process Mapping

Cause and Effect Diagram



Causes of (use example from hospital's QI projects)

**Equipment
/Supplies**

Environmental

**Rules/Procedures
Policies**

Staff/People

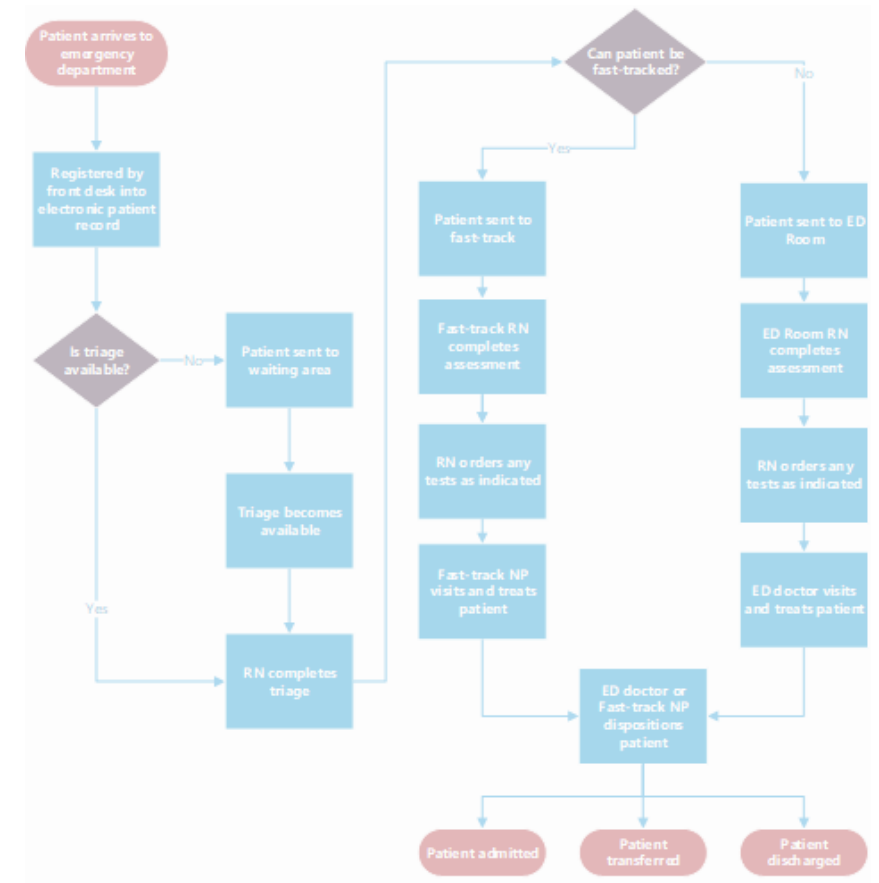
Common Questions

- How do you know if you have identified a root cause?
 - If you can confidently say that fixing this cause would make the problem much less likely to occur
 - If you fix the cause but feel the problem could happen to someone else, you have not identified a root cause

Process Mapping

What and Why of Process Mapping

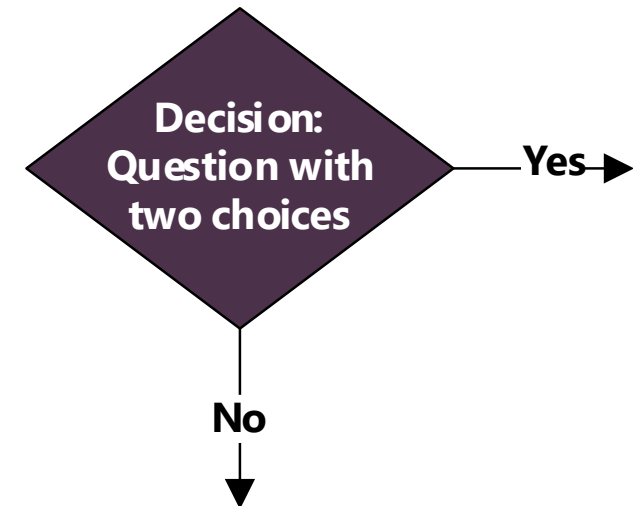
- Method of visually displaying how we carry out our work
- Allows teams to identify differences between what happens vs. what policies, procedures, or protocols say should happen
- Propose modifications to drive improvements and better outcomes



Process Shapes

**Terminator:
Start and Finish**

**Task/Step:
Who
Does
What**

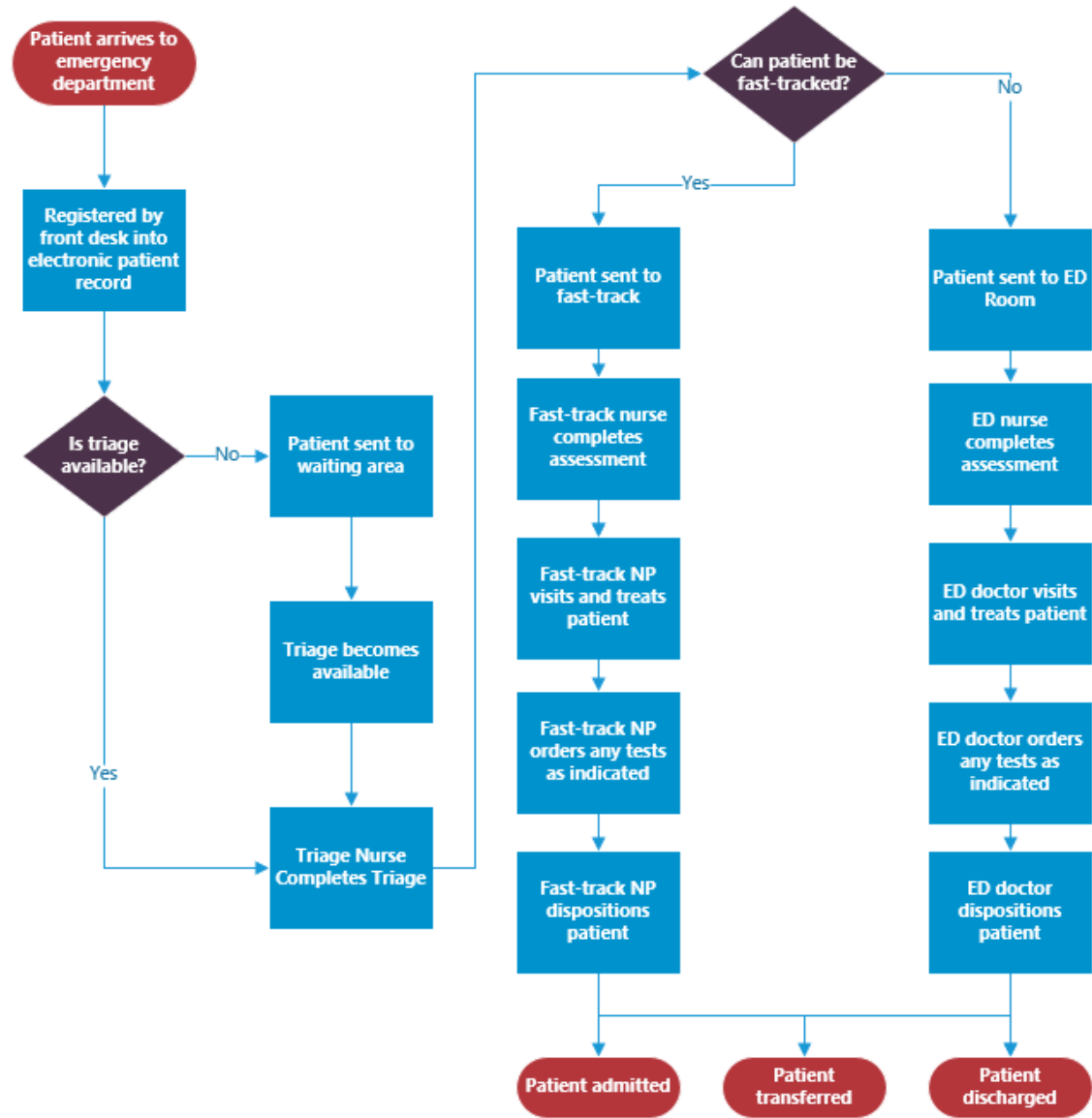


Generally, run top to bottom and left to right.

Mapping Out Your Process

- Start with the current process
- Scope the process: what is the start and what is the end
- Document major steps in the process – Who/Does/What/When?
- Create and maintain a safe space for open sharing
- Identify the team member role responsible for each step
- Consider interdepartmental or organizational handoffs
- Test the completeness of the flowchart and review with others
- Capture your “aha” moments
- Look for redundancies and opportunities to simplify

Example: Emergency Department Patient Flow



Identify Opportunities to Improve

- Bottlenecks
- Rework due to errors
- Role ambiguity
- Unnecessary duplications
- Long cycle time
- Skipped steps
- Lack of adherence to standards
- Lack of information

Process Modifications

Small Tweaks

- Rearrange order of steps
- Simplify steps
- Add cognitive aids
- Add software enhancement
- Relocate supplies

Significant Changes

- Physical plant change
- Standardization of equipment
- Reduction of distractions
- Redesign of workflow

Remember!

- Systems are made up of processes
- A change to one process can cause changes elsewhere in the system

In Summary

The Model For Improvement:

- Provides a framework to set aims, establish measures, and test changes.
- Using PDSA for small tests of change using the PDSA Plan, allows for testing of changes on a small scale, helping spot and tackle barriers

Key Tools:

- SMARTIE Goals
- Data/Measurement Plan
- Cause & Effect Diagram
- Process Mapping

Wrap-Up

Close-Out Poll

Rate the following statements:

Strongly disagree

Disagree

Agree

Strongly agree

1. I can describe the Model for Improvement and identify tools that support implementation.
2. I can recognize what types of data can be used in QI and how to create a data plan.
3. The learning objectives for this session were achieved.
 - *Describe the Model for Improvement framework.*
 - *Identify tools that support using the Model for Improvement framework.*
 - *Recognize what data can be used to evaluate improvement efforts and the key components of a data plan.*
4. This session met or exceeded my expectations.



Application Homework

- Review the Model for improvement framework:
 - Think about the way you formulate your project goals.
 - Talk with your team about how to include **Inclusion** and **Equity** in your aim statement.
- Try a tool:
 - Identify a project you can use a Cause & Effect Diagram, Process Map, PDSA worksheet, or 5 whys to help you assess the issues.
- Create a data plan:
 - Identify if your current projects have a data plan.
 - Draft a data plan for a current or future project.

Prepare for Session 3



Review Modules

- [Building Your QI Team](#) (13-minute video)
- [Communication Basics](#) (11-minute video)
- [Meeting Facilitation](#) (8-minute video)



Review Tools & Resources

- [Project Charter](#)
- [Work Plan](#)
- [Communication Plan](#)

Bonus Content

Model for Improvement and PDSA

- [AHRQ PDSA Guide](#) (website)
- [IHI Model for Improvement](#) (website)
- [IHI PDSA Worksheet](#) (website)

Process Improvement Tools

- [SMARTIE Goals Worksheet](#) (doc)
- [Root Cause Analysis – Part 1](#) (video)
- [Root Cause Analysis – Part 2](#) (video)
- [IHI Improving Root Cause Analysis](#) (website)
- [VA Root Cause Analysis Guide](#) (website)
- [Mapping the Process](#) (video)
- [Swim Lane Process Mapping](#) (video)

Using Data

- [Data Basics Example](#) (video)
- [Data Collection and Monitoring](#) (video)
- [Data Collection and Monitoring Plan](#) (doc)
- [Data Analysis](#) (video)
- [Data Analysis Example](#) (video)
- [Data Display Methods](#) (video)

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To learn more about Stratis Health go to www.stratishealth.org.

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