

# NewSTEPs Continuous Quality Improvement Program

## So You Want to Start a Quality Improvement Project

*Presented by the Association of Public Health Laboratories*  
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**The objective for today's webinar:**  
is to provide an introduction  
to quality improvement and  
layout a simple roadmap for  
identifying and beginning a  
quality improvement initiative.



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## Quality Improvement or QI is defined as:

“ A series of activities designed to improve processes and systems in order to achieve better outcomes. A key principle of QI is the use of data to assess the need for change and the effectiveness of interventions. ”

- Office of Mental Health, [New York State](#)

# Continuous Quality Improvement or CQI is defined as:

“ The systematic process of identifying, describing, and analyzing strengths and problems and then testing, implementing, learning from, and revising solutions. More simply, one can describe CQI as an ongoing cycle of collecting data and using it to make decisions to gradually improve program processes. ”

- Office of Adolescent Health, [Health and Human Resources](#)



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There several methods for approaching quality improvement activities. The most common include:

- Lean
- Six Sigma
- Model for Improvement

No matter what method or framework used the fundamental steps for successfully beginning a quality improvement initiative remain the same.

-Clin J Am Soc Nephrol. [2016 May 6; 11\(5\): 893-900](#)



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# 01

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## Identifying a Quality Improvement Project



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# A Good Quality Improvement Project...

- addresses quality issues of high magnitude and impact.
- has a champion.
- fits with the organization's state of readiness for change.
- has organizational support and aligns with organizational priorities.
- has a scope that matches the experience and expertise of the QI team.



## Other Things to Consider

- Where are the gaps between what you desire and your actual performance? Tools like Gemba walks, surveys, root cause analysis and process maps can further help identify gaps.
- Is data readily available and/or fairly easy to obtain?
- What processes do patients, families and staff think needs improving?
- Can the project be done on a small scale and quickly produce tangible results?
- Will showing improvements in this area gain buy-in from staff to do future QI projects?
- What is the resistance level from staff, managers and leaders?

- [Association of Maternal and Child Health Programs](#)



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# 02

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## Building a Quality Improvement Team



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# Strong Quality Improvement Teams have...

- a shared goal or vision.
- regular and frequent meetings with agendas and minutes.
- team members with clearly defined roles and responsibilities that align with interests and expertise.
- representation from across programs and departments.
- a strong team culture:
  - Team building activities (i.e. icebreakers, etc.)
  - Team norms



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# Norms of Collaboration

	Always Do	Never Do
How will we discuss ideas and options?		
How will we make decisions?		
How will we respect each other's time with respect to deadlines?		
How will we schedule and run our meetings?		
How will we assign responsibilities for tasks and follow through on our commitments?		
What are our expectations for meeting preparation and attendance?		
How will we communicate with each other?		
How will we transfer information?		
How will the team foster and manage constructive conflict?		

- Cambridge Health Alliance  
[Practice Improvement Team \(PIT\) Development Toolkit](#)





# How would you help strengthen this team?



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# 03

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## Developing a Strong Aim Statement



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# The Importance of Strong Aim Statements

- Provides clarity and definition to a project which improves the likelihood of achieving goals and objectives.
- Maintains the project focus and reduces likelihood of scope creep.
- Can serve as an “elevator pitch” to gain further buy-in from staff and leadership.



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# The “SMART” Aim Statement

S M A R T

*Specific*

*Measurable*

*Achievable*

*Relevant*

*Time Bound*



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## Examples of a SMART Aim

**Example 1:** By June 30, 2016, we will create sustainable strategies to improve asthma prevention across our community. Within our target of 10 public elementary schools in the local county, 30 percent will have staff trained in asthma prevention, 40 percent will have at least one professional who is trained to provide education to students with asthma and their families, and 40 percent will have programs to outreach to parents to increase awareness of the impact of second-hand smoke. - [NICHQ](#)

**Example 2:** By the end of 2016, by improving the use of CPAP in the delivery room and initial stabilization, we will reduce the percentage of preterm infants under 30 weeks requiring any mechanical ventilation in our NICU from 50% to 30%. - [Munish Gupta, MD MMSc](#)



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## How would you improve this aim statement?

The Littletoes newborn screening program would like to improve timeliness from receipt of specimen to reporting out results. It is critical that the Littletoes newborn screening program improve and become more efficient as it relates to these processes and workflows in order to ensure that every baby born is screened in a timely manner. Through education, the development of NBS resources, engaging with couriers and hospital stakeholders, along with the support of NBS staff and leadership we aim to achieve this goal by next year.



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# 04

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## Defining Measures



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# Family of Measures

**Outcome Measure:** these are the measures directly impacted by an intervention or by a change in the process or workflow. (ex: unsatisfactory rates or timeliness)

**Process Measures:** these measures track to what extent a step (or process) in the system is happening. The processes you track or report on should directly correlate to the outcome. (ex: % nurses receiving NBS education)

**Balance Measures:** these are measures that are not directly related to the project but may be unintentionally impacted. (ex: staff satisfaction)



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# Name that Measure

**Aim:** Reduce the time it takes to receive specimens from Mercy Hospital from 72 hours to 48 hours by December 2020.

Measure Description	Measure Type
% Couriers receiving NBS education pamphlet	Process measure
Quarterly staff turnover rates	Balance measure
% Missed babies	Balance measure
Number of days to receipt of specimen to the lab	Outcome measure
Number of site visits completed	Process measure



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# 05

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## Testing Change



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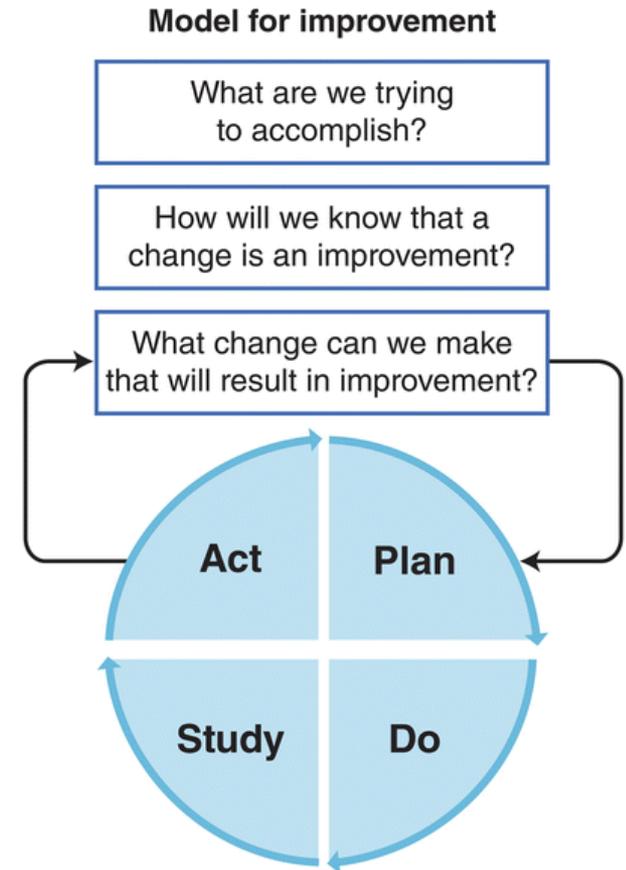
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# Plan, Do, Study, Act

**What are we trying to accomplish?:** Revisit the project aim statement.

**How will we know a change is an improvement?:** Revisit your family of measures. What measures are you trying to improve?

**What change can we make that will result in an improvement?:** Begin brainstorming with your team what changes or interventions will help the team achieve the aim.



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# Plan, Do, Study, Act Example

Phase	Description	Action
PLAN	Outline objective questions and predictions, who will do what?	<b>Objective:</b> Watch the Bachelor finale. <b>Question:</b> Where is the remote? Need to locate it.
DO	Carry out the plan. Document observations and any problems. Collect data.	Search the living room, bedroom and dining room for the remote.
STUDY	Compare data to predictions, summarize what was learned.	Found the remote on the dining room table but the battery is dead.
ACT	What changes are to be made? Will there be a next cycle? Rather than act should we adopt or abandon instead?	Find working batteries. Use the remote app on my phone. Change the channel using buttons on the television. Decide to miss the finale.



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# Help the Team Complete the PDSA

Phase	Description	Action
PLAN	Outline objective questions and predictions, who will do what?	<p><b>Objective:</b> Provide a half day in person training to nursing staff, at Mercy Hospital labor and deliver, focused on the importance of timely specimen collection.</p> <p><b>Who:</b> Ms. Educator from the Littletoes Newborn Screening program.</p> <p><b>Prediction:</b> Improving education will improve receipt of specimens.</p>
DO	Carry out the plan. Document observations and any problems. Collect data.	<p>Schedule in person training.</p> <p>Document any questions concerns raised by nursing staff.</p> <p>Share current baseline data with nursing team.</p>
STUDY	Compare data to predictions, summarize what was learned.	<p>Continue pulling data daily/weekly on Mercy hospital.</p> <p>Have there been improvements since the training?</p>
ACT	What changes are to be made? Will there be a next cycle? Rather than act should we adopt or abandon instead?	<p>If there were no improvements what is another intervention that can be implemented with the nursing staff? (Next cycle)</p> <p>Is the nursing staff the right group? (Abandon)</p> <p>Did data improve and are improvements being sustained? (Adopt)</p>



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# 06

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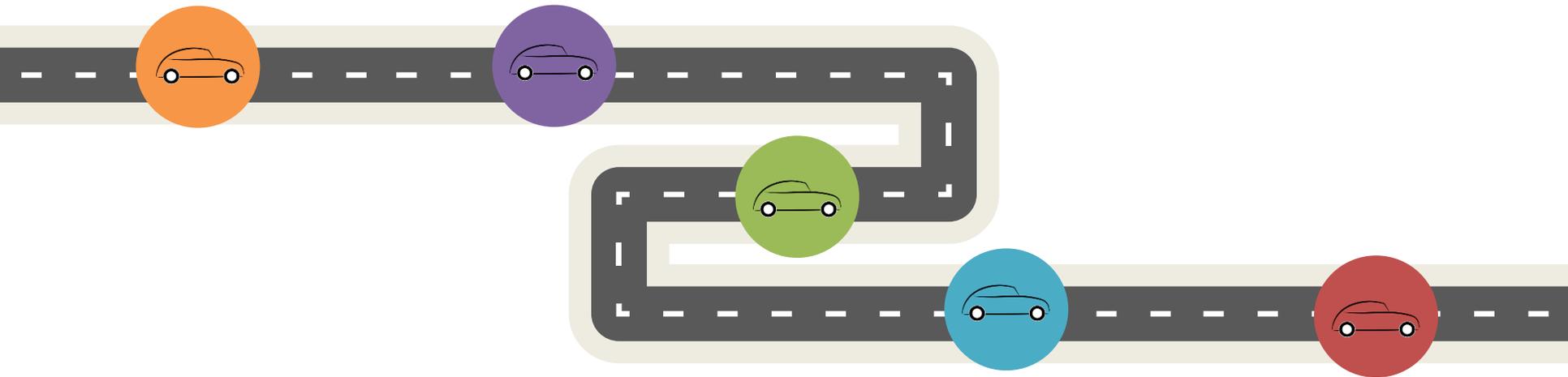
## Putting It All Together



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# Quality Improvement Roadmap



## STOP 1

Identify a Topic

## STOP 2

Build a Team

## STOP 3

Define the Aim

## STOP 4

Define Mesures

## STOP 5

Test Changes  
(PDSA)



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# Your Roadmap: The Project Charter

## QI Project Charter

**Team:**

**Project:**

### What are we trying to accomplish?

#### **Problem**

Describe in 2–3 sentences the existing condition you hope to improve (i.e., the gap in quality):

#### **Rationale**

Explain in 4–5 sentences why the current system or process needs improvement. Include baseline data and relevant benchmarks, e.g., from the literature:

#### **Aim Statement**

What outcome, in measurable terms, are you hoping to accomplish? Specify **how good, for whom, and by when** — i.e., by what exact date:

#### **Expectations**

Why have you chosen the aim you've set forth? Explain, in specific terms, what you believe will be the beneficial outcomes of this project:

- Institute for Healthcare Improvement  
[QI Project Charter](#)



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# THANK YOU

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