

*Design Thinking for Public  
Good*

# Quality Improvement Webinar



NORTH CAROLINA  
Local Health Department  
Accreditation



GILLINGS SCHOOL OF  
GLOBAL PUBLIC HEALTH  
North Carolina  
Institute for  
Public Health



# Today's Presenters



Amy Belflower Thomas,  
MHA, MSPH, CPH  
Accreditation Administrator

Margaret Benson Nemitz, MPH,  
Strategic Approaches  
Coordinator



Maggie Cremin,  
Accreditation Graduate  
Assistant

Meredith Mastromauro, MPH,  
Program Coordinator,  
Population Health Improvement  
Partners



# Today's Agenda



Framing Quality  
Improvement



Sampling of QI Tools



Next Steps

**Coming  
Soon**



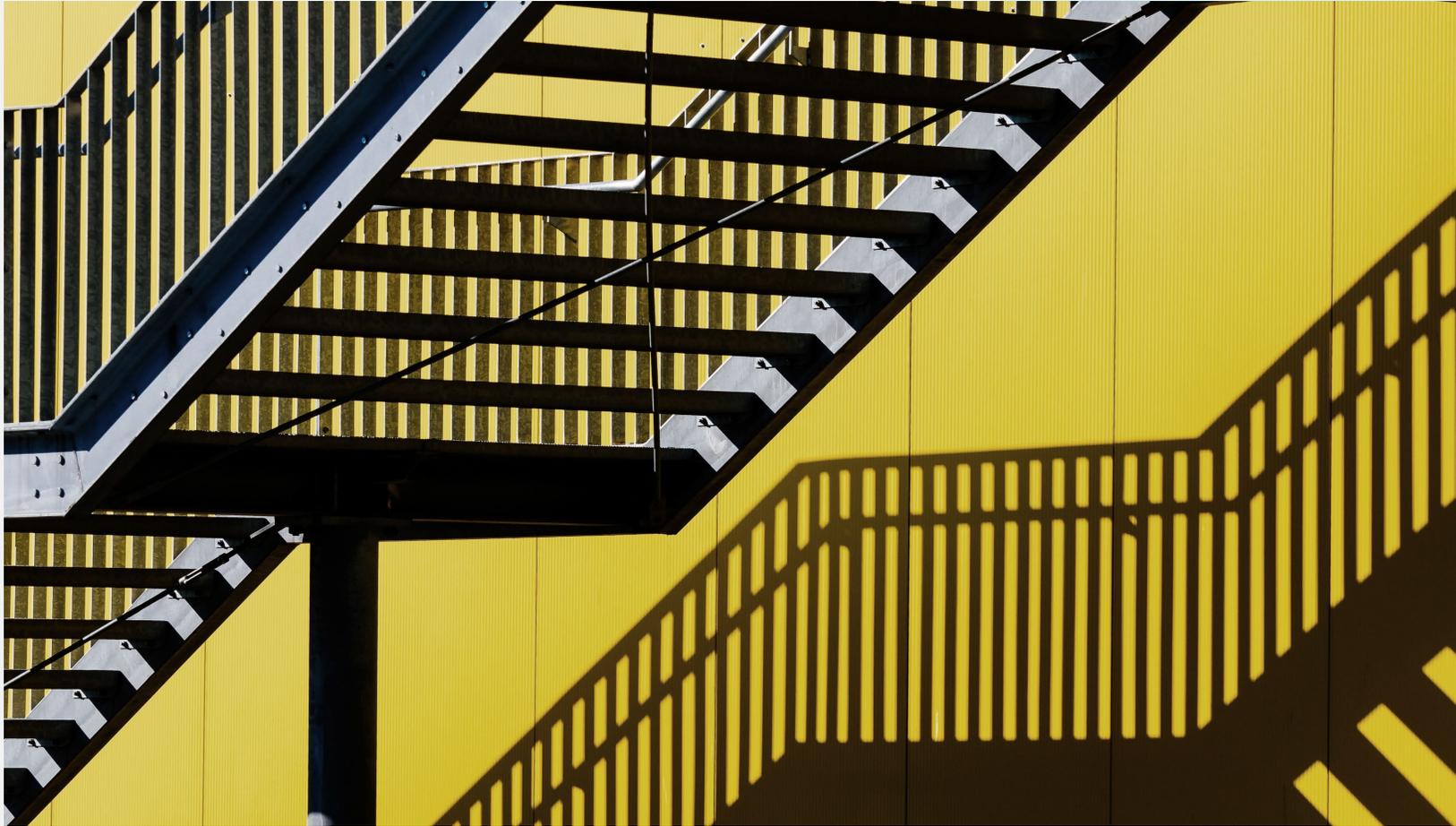
Office Hours



Dashboard  
Webinar



AAC 101  
Training



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# FRAMING QUALITY IMPROVEMENT

# Which photo best represents how you feel about Quality Improvement?



I got this! I am leading my team!



I have some ideas!

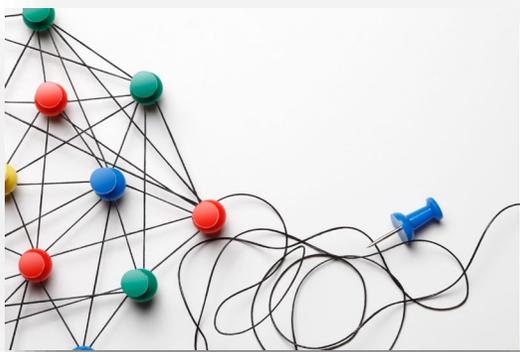


The sticky note thing, right?



I don't know where to start.

# QI doesn't need to be big and formal



Start where  
you are

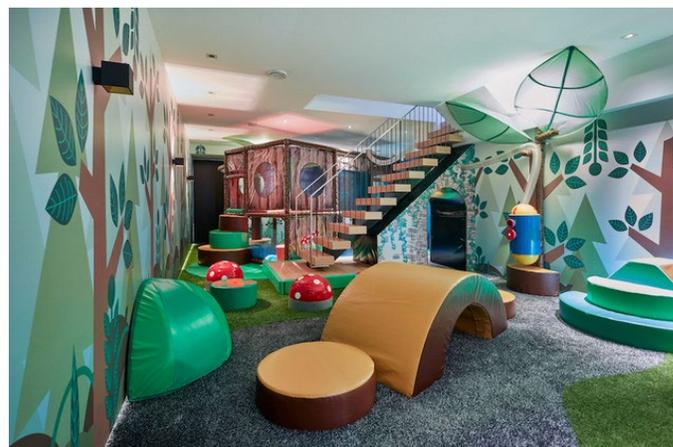


Incremental  
change



QI is a  
culture

# Quality Improvement Design Team



# Human Centered Design

## INSPIRATION

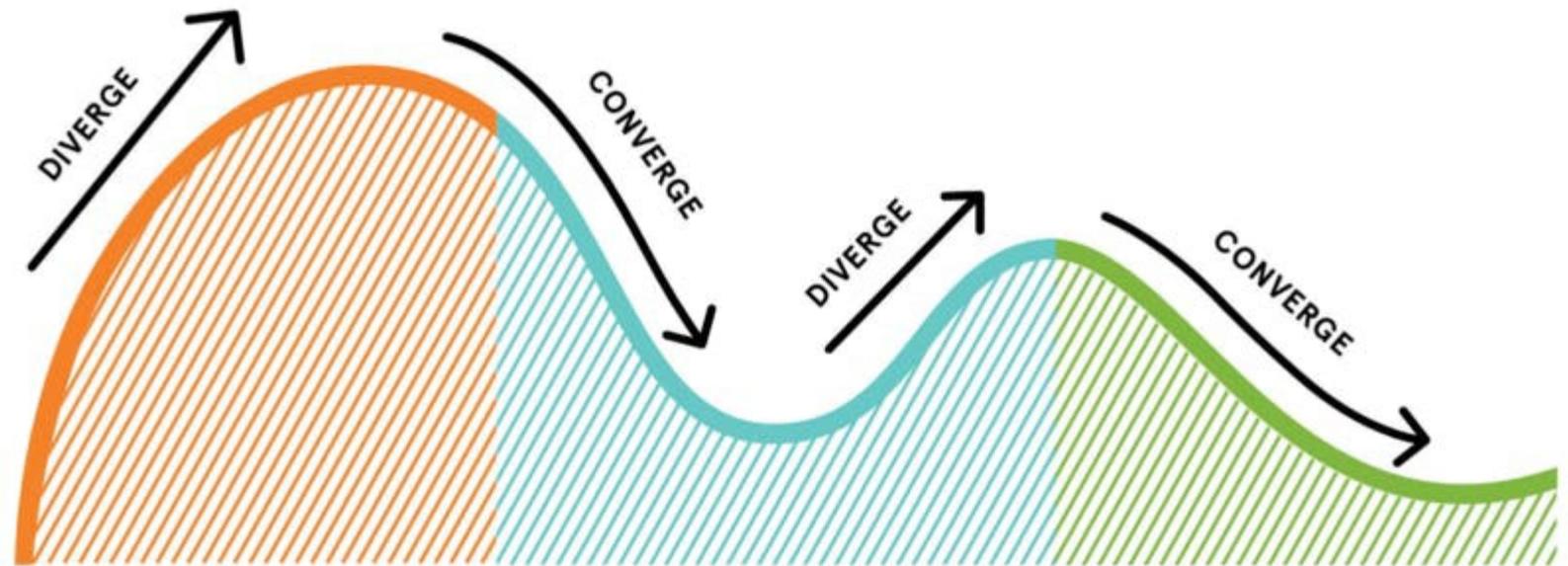
I have a design challenge.  
How do I get started?  
How do I conduct an interview?  
How do I stay human-centered?

## IDEATION

I have an opportunity for design.  
How do I interpret what I've learned?  
How do I turn my insights into tangible ideas?  
How do I make a prototype?

## IMPLEMENTATION

I have an innovative solution.  
How do I make my concept real?  
How do I assess if it's working?  
How do I plan for sustainability?



Source: IDEO.org, [www.designkit.org](http://www.designkit.org)

# Prototyping

## QI Playroom Instructions

### FEEDBACK ON BOARD + MAKING TOOLS USER FRIENDLY

- add instructions on where to start
- maybe add language from facilitator guide here as well
- Perhaps add "next steps" to each of the tools so that participants know where or what to do next.
- Instructions on how to export completed tool to pdf or another shareable format
- Step-by-step case study to lead participants through an entire QI process (within a scenario - companion to facilitator guide)

## Case Study Examples

### Scenario 1

This is a textbox...

### Scenario 4

This is a textbox...

### Scenario 2

This is a textbox...

### Scenario 5

This is a textbox...

## QI Stations

The QI Stations section displays a grid of 24 tool cards, organized into 4 rows and 3 columns. Each card represents a different QI tool and includes a preview of its interface. The tools shown are:

- Fishbone (5 Ps):** A 3x3 grid of cards showing fishbone diagrams with various annotations.
- Process Mapping:** A 3x3 grid of cards showing process flowcharts with colored nodes and arrows.
- Process Matrix:** A 3x3 grid of cards showing matrices with text and checkboxes.
- PDCA Cycle:** A 3x3 grid of cards showing PDCA cycle diagrams and associated text.
- 5 Whys:** A 3x3 grid of cards showing 5 Whys diagrams with text boxes.
- Standard Work:** A 3x3 grid of cards showing standard work sheets with text and checkboxes.
- QI Tool Title:** A 3x3 grid of cards showing the title and header sections of various QI tools.

# QI is all around us



WHY

Asking "Why" helps us to understand the problem and find the root cause!



Discussing handoffs with your team can be strung together to create a process map!



Writing down daily tasks in detail create standard work for sustainable practices!

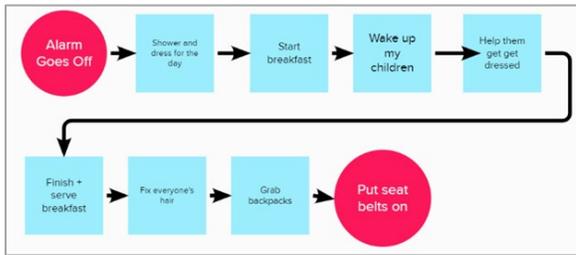


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# **SAMPLING OF QI TOOLS**

# Many Tools!

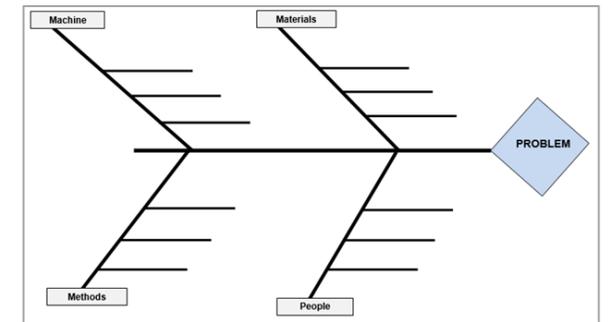
## Process Mapping



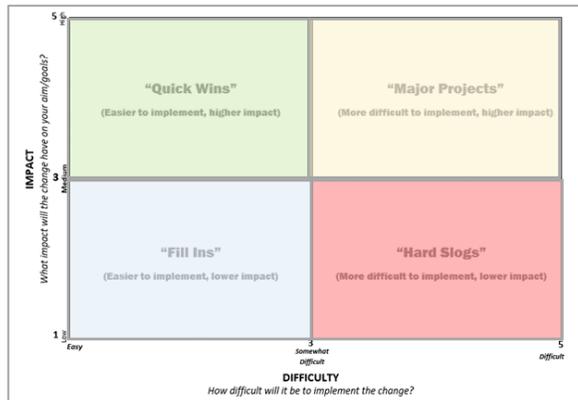
## 5 Whys

1. I get tied up in traffic.	Why
2. I am driving on the interstate at the peak of rush hour.	Why
3. I leave my house late.	Why
4. It takes me too long to pack lunches and get out the door.	Why
5. My pantry is disorganized and I can't find all the things I need to pack.	Why

## Fishbone



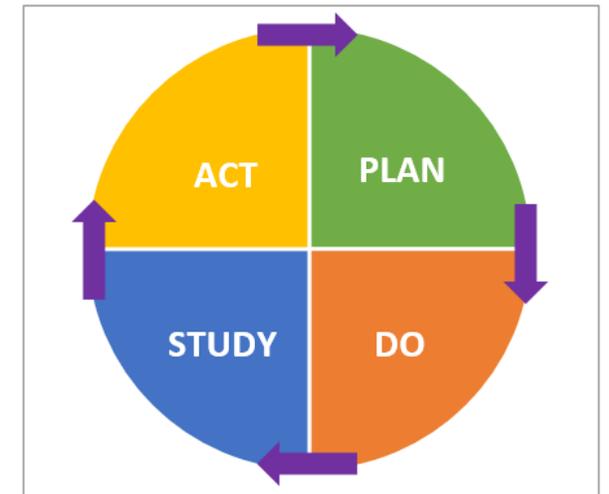
## Impact Matrix



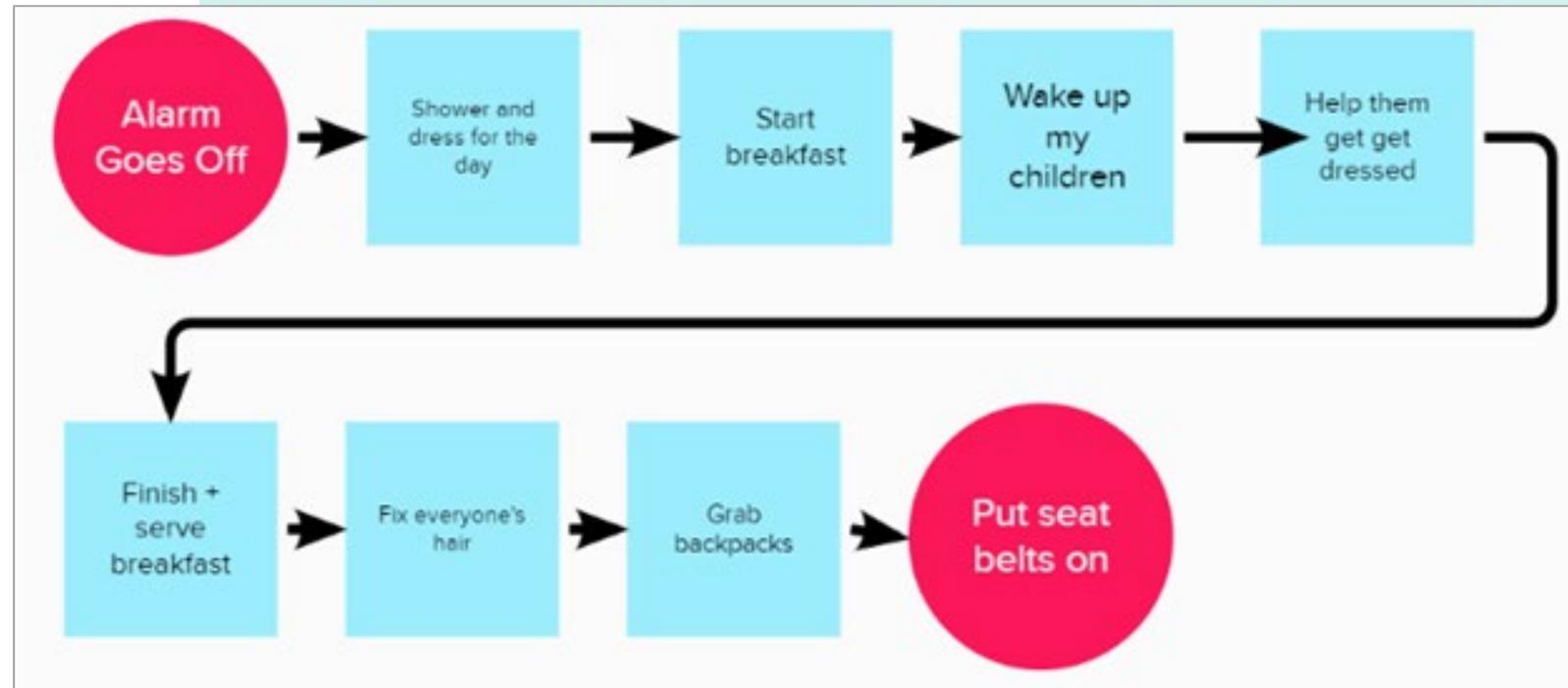
## Standard Work

Standard Work TEMPLATE				
Problem: _____		Total Process Time: _____		
Process Name: _____				
Supplies and Materials Required: _____				
Major Steps	Details (Includes who what and how)	Time to Complete Step	Notes (Optional: may include pictures, screens, etc.)	
Trigger: 1.				
Trigger: 2.				
Trigger: 3.				
Trigger: 4.				

## PDSA



# Process Mapping





# Mapping the Process

## WHY

- Clearly outline a process
- Create a visual
- Identify gaps and problem areas
- Share data with team

## WHEN

- Want to improve efficiency
- Want to improve effectiveness
- Explain process to new hires
- Identify where gaps exist

## HOW

- Multi-level team
- Create an open environment
- Explain the why (not punitive)
- Use sticky notes or virtual platform

## WHAT NEXT

- Keep the map in a common area
- Invite review and new ideas
- Brainstorm & prioritize change Ideas
- Continue meeting as a team

# Five Whys

1. I get tied up in traffic.

Why



2. I am driving on the interstate at the peak of rush hour.

Why



3. I leave my house late.

Why



4. It takes me too long to pack lunches and get out the door.

Why



5. My pantry is disorganized and I can't find all the things I need to pack.

Why



# Getting to the Root Cause: 5 Whys

## WHY

- Uncover the root cause of a problem
- Simple structure; no tool needed
- Easy concept for team to grasp
- Removes layers of assumptions

## HOW

- Write down your problem
- Ask "why" that problem happens
- Repeat until you get to the root cause
- Work backwards using "therefore"

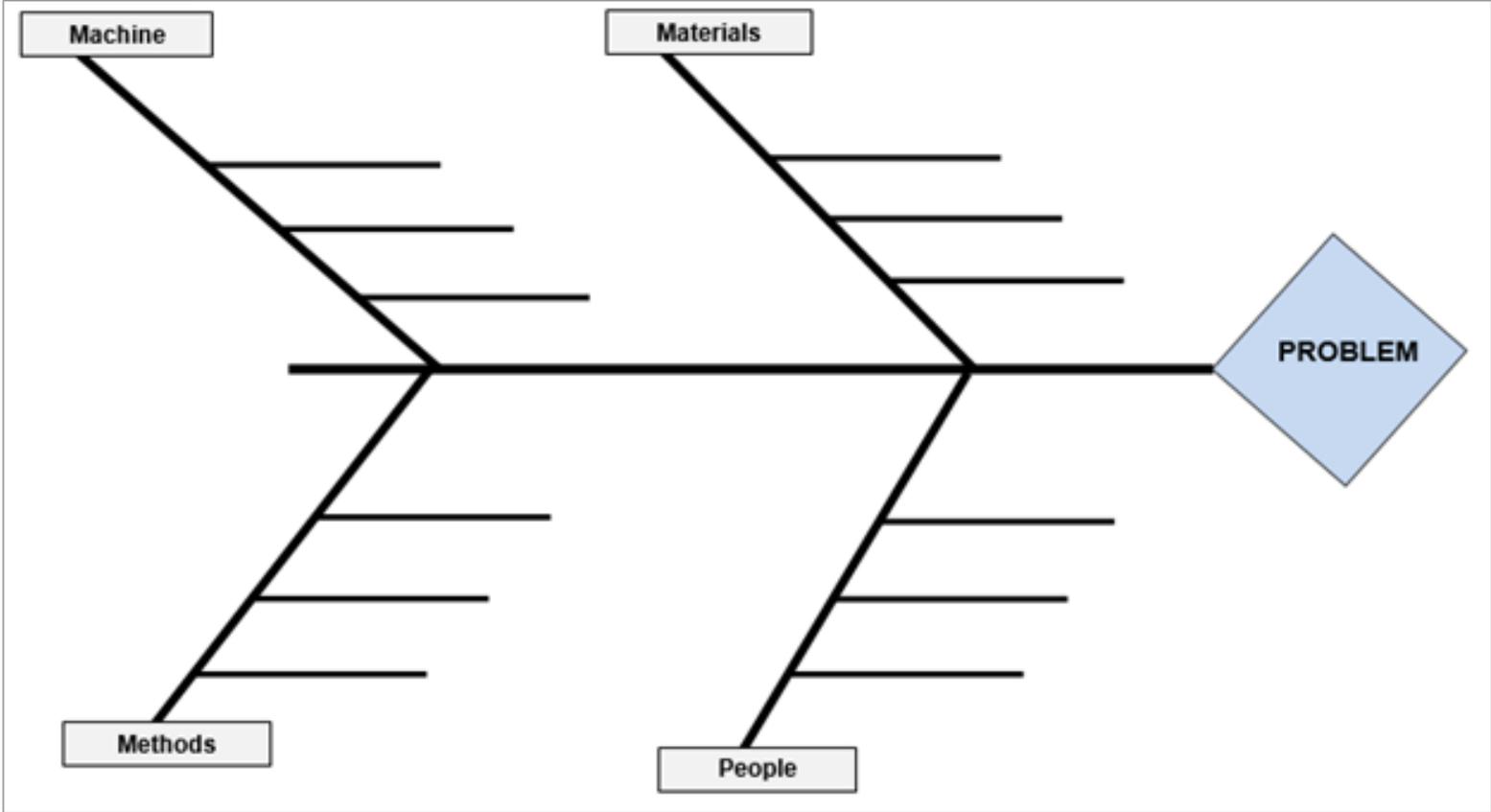
## WHEN

- After aim & mapping process
- A problem statement is uncovered
- Unsure why problem is occurring
- Need a quick "solution"

## WHAT NEXT

- Brainstorm & Prioritize change ideas
- Plan out PDSAs to test
- Keep repeating 5 Whys as needed

# Fishbone





# Getting to the Root Cause: Fishbone

## WHY

- Uncover the root cause of a problem
- A visual display to show the team
- Look at all parts of the system
- Provides structure to brainstorming

## WHEN

- After aim & mapping process
- A problem statement is uncovered
- Unsure why problem is occurring
- Need to take a more detailed look

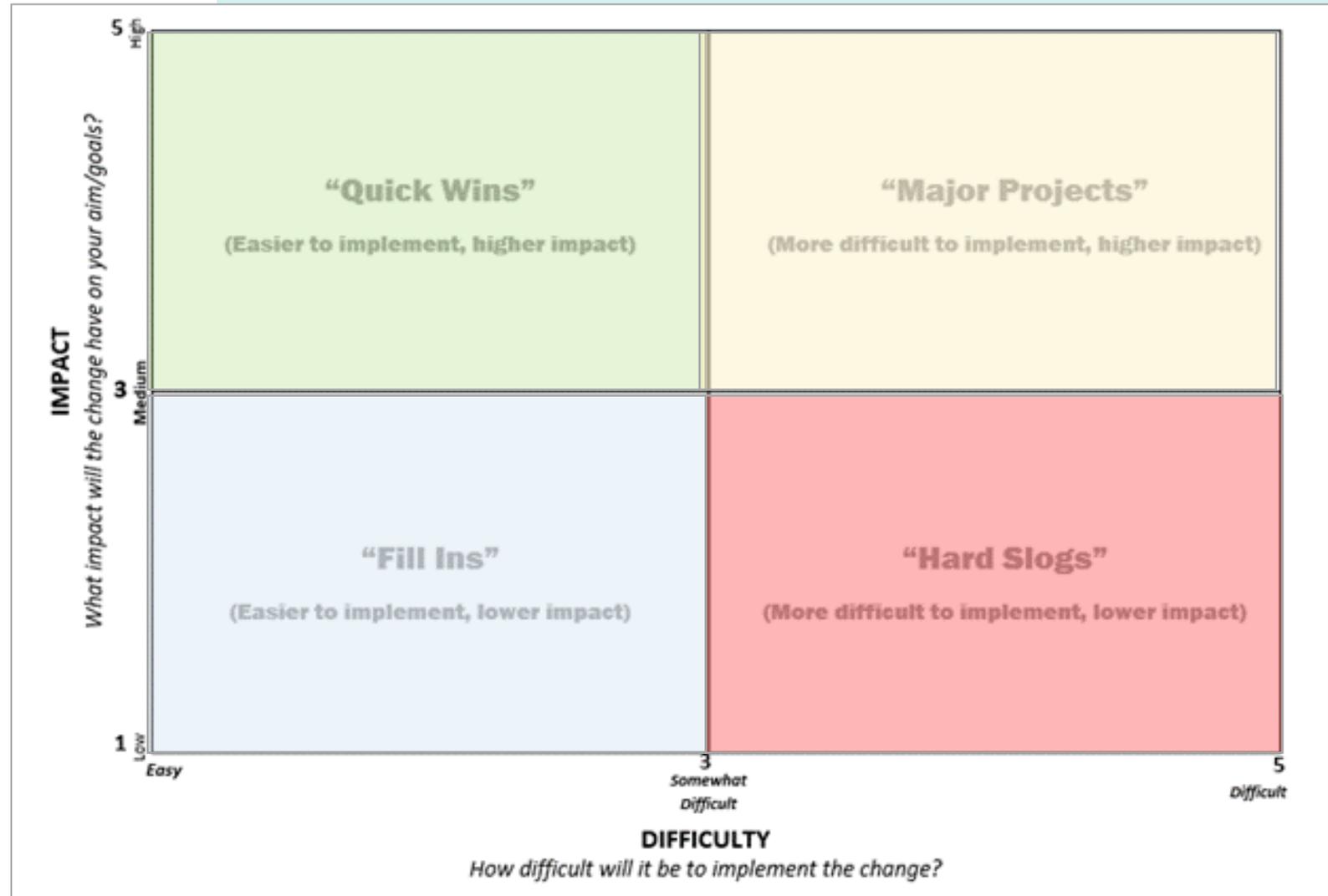
## HOW

- Write problem at "head" of the fish
- Determine categories (e.g., 4 P's)
- Think through causes of the problem
- Put each cause under its category

## WHAT NEXT

- Balance out the diagram
- Identify potential solutions
- Use 5 Why's to drill down further
- Prioritize & test change ideas

# Impact Matrix





# Prioritizing Change Ideas

## WHY

- Encourages team discussion
- Gives specific criteria to prioritize
- Simple yet effective
- Helps gain buy-in

## WHEN

- You have brainstormed change ideas
- Need to prioritize where to begin
- Team isn't in agreement
- Some change ideas need to be let go

## HOW

- Draw a matrix or use template
- Number change idea
- Discuss idea impact and difficulty
- Map each idea on the matrix

## WHAT NEXT

- Start with "quick wins" to gain buy-in
- Pull in leadership for "major projects"
- Work on "fill-ins" in between
- Discuss letting go of "hard slogs"

# Standard Work

Standard Work TEMPLATE				
Problem: _____				
Process Name: _____		Total Process Time: _____		
Supplies and Materials Required: _____				
Major Steps	Details (Includes who what and how)	Time to Complete Step	Notes <small>(Optional: may include pictures, screen shots, etc.)</small>	
Trigger:				
1.				
Trigger:				
2.				
Trigger:				
3.				
Trigger:				
4.				



# Creating a Standard Process

## WHY

- Standardize outcomes
- Reduce process variations
- To use as a "cheat sheet" for process
- Visual of a detailed procedure

## WHEN

- "Everyone does it differently"
- Handoffs aren't going smoothly
- Use for cross-training and job prep
- Continuous – it should be flexible

## HOW

- List the high-level tasks
- Determine responsibility for each
- Write how to perform each task
- Note average time it should take

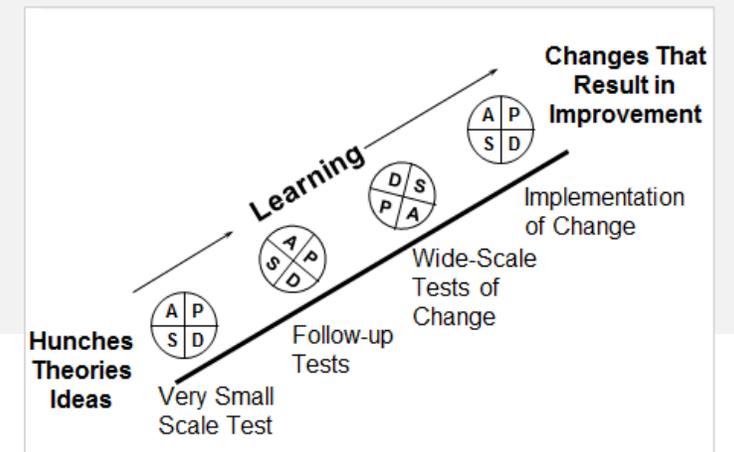
## WHAT NEXT

- Keep it simple! (under 2 pages)
- Gain staff input
- Make sure team has easy access
- Continually review & update

# PDSA



# Plan Do Study Act



## WHY

- Helps your team plan for change
- Keeps the change on a small scale
- Can make observations and adjust
- Planning to take action

## WHEN

- After brainstorming & prioritization
- Before full-scale implementation
- When leadership is on board
- Any time you want to test an idea

## HOW

- Plan how a change will be tested
- Do the change on a small scale
- Study the data collected
- Adapt, adopt, or abandon the change

## WHAT NEXT

- Continue this process as needed
- Scale up toward full implementation
- Keep track of data and observations
- Continually monitor changes

# Let's Practice!

## QI Playroom Instructions

### FEEDBACK ON BOARD + MAKING TOOLS USER FRIENDLY

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## QI Stations

The QI Stations section displays a grid of 12 tool cards. Each card is a 3x3 grid of smaller panels. The top-left panel of each card contains a title and a brief description. The other panels contain various QI tools and diagrams. The tools shown include:

- Fishbone (Ishikawa):** A 3x3 grid of fishbone diagrams with different colored boxes and arrows.
- Process Map:** A 3x3 grid of process flow diagrams with various shapes and arrows.
- 5 Whys:** A 3x3 grid of diagrams showing the 5 Whys process.
- SIPOC:** A 3x3 grid of SIPOC (Supplier-Input-Process-Output-Customer) diagrams.
- PDSA Cycle:** A 3x3 grid of diagrams showing the Plan-Do-Study-Act cycle.
- Standard Work:** A 3x3 grid of diagrams showing standard work sheets.



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**NEXT STEPS**

# Design Thinking Continued

- Three-part design thinking process with a UNC “Design Thinking for Public Good” course
  - Inspiration: Wednesday, March 9
  - Ideation: Wednesday, April 13
  - Implementation: Wednesday, April 20
    - Sessions from 11:15 am -2:15 pm
- Focus on highlighting shared accreditation experiences across health departments
- [Sign up here!](#)

# Quality Improvement Office Hours

- QI Office hours 9-10am EST
  - Tuesday, March 8
  - Tuesday, June 7
- [See schedule and register](#)

# Develop Structures for Phase 3 Revisions

## Appendix 1

### Benchmarks, Standards, Activities and Documentation Requirement Revisions

#### Definitions:

None

#### Applicable Law, Rules and References:

130A-34.1(e) states that the Commission for Public Health shall, after reviewing standards developed by and consulting with the Board, adopt rules establishing accreditation standards for local health departments.

Subchapter 48b of the North Carolina Administrative Code defines the Local Health Department Accreditation standards.

#### Responsible Person(s):

The Board is charged with developing and implementing standard requirements for the accreditation of local health departments in N.C. The Commission for Public Health adopts those standards as rules.

In developing and revising Benchmarks and Activities, all partners of the NCLHD Accreditation program are substantially involved in the process. Input comes through the Board Standards and Evidence Committee, NCLHD Accreditation staff, North Carolina Association of Local Health Directors Planning and Innovation Committee, AAC Advisory Council, North Carolina Division of Public Health legal liaison, and public health attorneys at the University of North Carolina at Chapel Hill School of Government and is coordinated through the NCLHDA staff.

The process culminates in the adoption or revision of standard requirements by the NCLHD Accreditation Board and adoption as a rule by the Commission for Public Health.

Minor changes to the Activity documentation requirements and interpretation are coordinated by and implemented by the Accreditation Administrator, with approval of the Board Standards and Evidence Committee.

#### Procedures:

##### For adding or revising a Benchmark and/or Activity

1. Staff will accept comments on possible standard revisions at any time; these comments will be compiled by NCLHD Accreditation staff.
2. Comments related to revision of Activity/Benchmark language from annual review of Activity documentation and interpretation will be compiled annually.

NCLHDA Accreditation Process Operational Guidelines 1.1.22

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the Standards are reviewed by the Board Standards and Evidence Committee and by the Standards.

When necessary, the Board Standards and Evidence Committee initiates the process to the Standards.

A Standards and Evidence Committee is appointed. The Standards and Evidence Committee is composed of two NCLHD Accreditation Board members (one being the Chair of the Standards and Evidence Committee), two members of the AAC Advisory Council, one Director, and three Site Visit Team members. If this composition of members does not have the subject matter expertise for items being considered, other members may also be added.

The Standards and Evidence Committee reviews the current Benchmarks and Activities. The Committee considers revisions to the Benchmarks and Activities for content, clarity and graphics, professional impact and expected outcome for local health departments.

The Committee considers comments from any source regarding revision of current Benchmarks and Activities. A proposal of new Benchmarks and Activities, or a revised set of Benchmarks and Activities, is released for public review and input, including through the North Carolina Association of Local Health Director's Planning and Innovation Committee.

The proposal is reviewed and considered by the workgroup. Activities are released for review and forwarded to the Standards and Evidence Committee.

The Standards and Evidence Committee reviews the draft Benchmarks and Activities. The Committee may recommend to review, discuss and amend the draft Benchmarks and Activities. The draft Benchmarks and Activities are then forwarded to the Board.

The Board may forward the draft Benchmarks and Activities as deemed appropriate. The Board may forward the draft Benchmarks and Activities to the Commission for Public Health for adoption as rule.

**Documentation requirements and interpretation**

Documentation requirements and interpretation will be reviewed annually by program staff. The Standards and Evidence Committee will be presented to the Board Standards and Evidence Committee. The Committee will then make a motion to approve any changes with an effective date of Jan. 1 of the following year. The process described in numbers 5-14 above is followed.

In an emergency or extenuating circumstances to meet public health needs, the Standards and Evidence Committee may be called upon to approve any deemed changes at the next scheduled meeting. The Standards and Evidence Committee may be called specifically to approve the proposed changes.

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# Leaving today, how are you feeling about Quality Improvement?



I got this! I'm ready to lead my team!



I'm pondering some exciting tools/ideas that I'd like to try!



Hmmm I think I'm starting to see how this might be useful



Help! I still don't know where to start!

**Thank you for  
being here!**



# Thank you.

**Amy Belflower Thomas**

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**The North Carolina Local Health Department Accreditation Program is part of the North Carolina Institute for Public Health at the Gillings School of Global Public Health at the University of North Carolina at Chapel Hill.**

