Strengthening Capacity Through Quality Improvement (QI)

2026 All-In Administrators Session

MISSOURI PUBLIC HEALTH INSTITUTE

Who We Are

- Dedicated to transforming Missouri's public health system.
- Collaborates with stakeholders and communities to create the conditions for improved health outcomes statewide.
- Administrative home of the Missouri Center for Public Health Excellence (MOCPHE) membership association

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About Me – Liz House

- MPH – Epi & Behavioral Science
- Over 10 years of Public Health Experience
- Previous
  - Health Educator
  - Regional Grant Coordinator
  - Health Department Director
- Currently Program Director at Missouri Public Health Institute

lhouse@mophi.org

2026 Governmental Public Health Summit

December 7-9th at the Lodge of the Four Seasons at the Lake of the Ozarks

Why attend?

- Explore practical strategies for today's public health strategies
- Exchange ideas through peer learning and shared innovation
- Gain policy, systems, and operational insights.

Early bird registration $125, ends September 30th.

People Powered Public Health

Governmental Public Health Summit 2026

lrobinson@mophi.org

Gauging the Room – Raise Your Hand If:

- You've identified a problem or frustration at work.
- You've suggested an improvement.
- You've made a change to a process.
- You've used data to make a decision.
- You've measured whether a change worked.
- You've participated in a formal QI project.
- You've used a QI tool like 5 Whys, Fishbone, or PDSA.
- You feel confident leading a QI effort today.

Agenda

- Why QI Matters
- Quality Improvement & Performance Management Basics
- Connecting QI to Your Work
- Core Process of QI
- QI Tools
- Activity
- Wrap Up & Moving Forward

Level-Set & Why QI Matters

Common QI Myths

- QI is Just More Work
- QI Means We're Doing Something Wrong
- QI is a Leadership Responsibility
- We Don't Have the Resources
- We've Tried this Before

The Reality

- LPHA Staff Wear A Lot of Hats
- Administrators Stretched Thin
- Balance Between Leaving Alone What Works & Improvement for the Better
- Decreased Funding
- High Turn Over

Why it Matters

- Improves Decision-making
- Strengthens Accountability & Transparency
- Reduces Duplicative Efforts
- Improves Service Delivery
- Aligns Daily Operations with Long-term Public Health Goals
- Decreases Admin Burden
- Sets Your Organization Apart

Recent Application Opportunities

- Accreditation
- Management & Compliance
- Strategic Resource Sharing
- Meeting Community Needs
- Last Week's Fires

You already do this!

The terms and processes I present today may be new or packaged differently, but you do QI all the time.

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Culture is **Everything!**

- Problems are an Opportunity
- Create Space for Open Conversation
- Ensures Sustainability
- Leadership Sets the Tone & Provides the Example

Definitions & Basics

	Performance Management	Quality Improvement
Basic definition	A structured way to set goals, track progress, and use data to understand how the organization is performing.	A structured way to improve a process, service, or outcome when something is not working as well as it could.
Simple question	“How are we doing?”	“How can we make this better?”
Primary focus	Monitoring results, identifying gaps, and tracking progress over time.	Understanding root causes, testing changes, and improving how work gets done.
What it uses	Goals, measures, metrics, KPIs, dashboards, reports, and regular review.	Tools like 5 Whys, Fishbone, process mapping, PDSA, standard work, and small tests of change.
Why it matters	Helps leaders see where attention is needed and whether progress is being made.	Helps teams take action, reduce frustration, improve services, and sustain better practices.

How PM/QI Work Together?

- PM sets the direction – QI improves the process.
- PM provides the data – QI uses data to solve problems.
- PM identifies gaps – QI closes the gaps.
- PM monitors results – QI adjusts according to results.

Together they create a continuous improvement culture.

Example of PM & QI in Public Health

Performance Management (PM)

- Set a goal: Increase childhood vaccination rates to 90%
- Monitor performance data
- Identify performance gaps (78% vaccinated vs. 90% goal)

Quality Improvement (QI)

- Investigate root causes
- Identify barriers:
  - Missed appointment reminders
  - Long clinic wait times
  - Inconsistent data entry
- Test solutions using PDSA cycles

Results

- Reminder system increased rates to 82%
- Standardized data entry increased rates to 91%
- Successful changes became standard practice

QI Approaches

The Basics

1. Identify Problems and Root Causes
2. Spark Improvements and Innovations
3. Measure and Sustain the Impact

It’s about improvement in any workplace, with any employees, with any customers, with any processes.

Quality Improvement Approaches

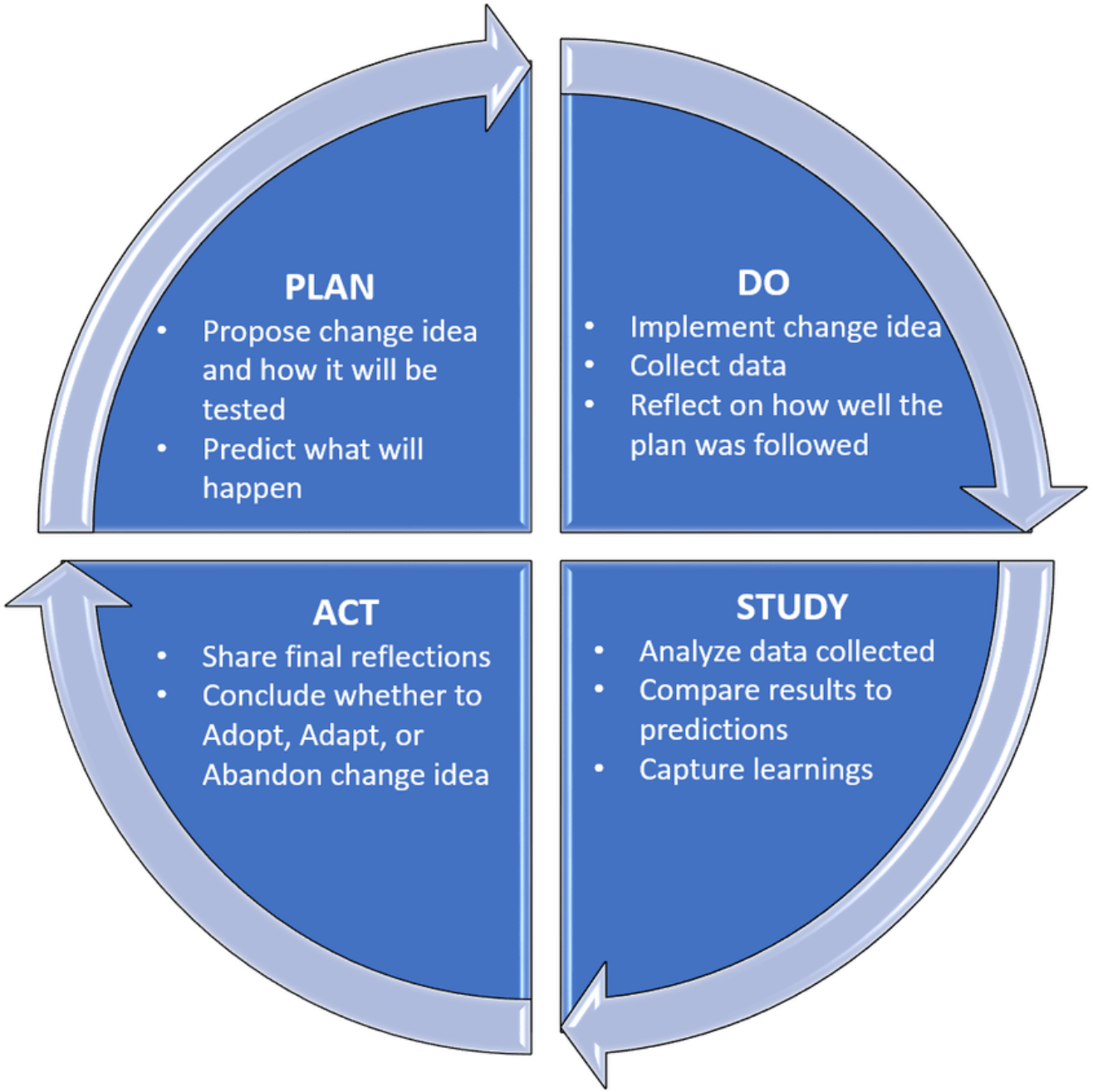
- Many Approaches
- Various Focuses
- Some Very Technical
- Examples
  - Kaizen
  - Lean
  - Six Sigma
  - Lean Six Sigma
  - PDSA

PDSA Cycle

The process of most quality improvement projects, can be used on large or small scales.

- **Plan** – Identify the problem, brainstorm ideas on how to resolve the problem or improve the process.
- **Do** – Do the thing! Implement the idea, collect data and feedback.
- **Study** – Analyze the data, capture insights, compare to original state.
- **Act** – Decide whether to keep the change, change the change, or revert to previous state.

PDSA Cycle


PLAN
Propose change idea and how it will be tested
Predict what will happen
DO
Implement change idea
Collect data
Reflect on how well the plan was followed
STUDY
Analyze data collected
Compare results to predictions
Capture learnings
ACT
Share final reflections
Conclude whether to Adopt, Adapt, or Abandon change idea

PLAN:
Identify Problems & Root Causes

The QI Process

1. **Identify Problems & Root Causes**
2. Make & Implement a Plan
3. Measure, Monitor & Reflect

1. Identify Wastes - DOWNTIME

- Defects & Rework
- Overproduction
- Waiting
- Non-Utilized Talent
- Transportation
- Inventory
- Motion
- Extra-Processing

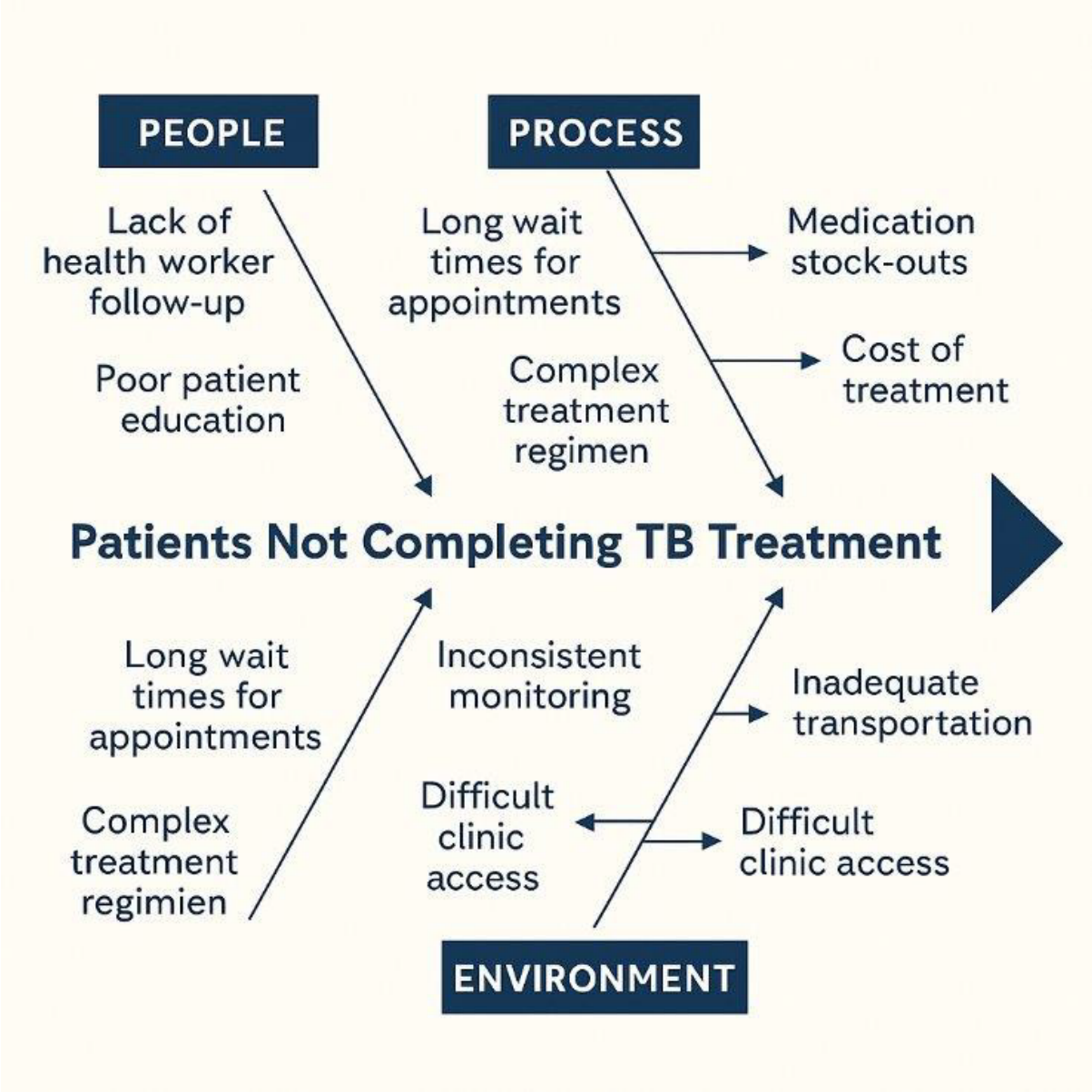
2. Identify Root Cause

- Fishbone Diagram
- 5 Whys
- Spaghetti Diagram
- Gemba Walk
- Process Mapping

Fishbone Diagram (Cause and Effect)

- Steps:
  1. Draw the fish bone.
  2. Write down problem.
  3. Brainstorm all possible causes for each category.
  4. Go through each item and discuss whether they are a cause or root cause.
  5. Brainstorm improvements per each cause.

Fishbone Diagram Example



The 5 Whys

Simple, easy to use tool to identify the root cause of a problem. It's a simple 5 (or more) step process

1. Why?
2. Why?
3. Why?
4. Why?
5. Why?

The 5 Whys Example

- Why is my car not starting?
  - The battery is dead.
- Why is the battery dead?
  - The alternator belt isn't working.
- Why isn't the alternator working?
  - The alternator belt is broken.
- Why is the alternator broken?
  - The belt was beyond its service life and hadn't been replaced.
- Why?
  - Because I am lazy and never keep up with my car maintenance.

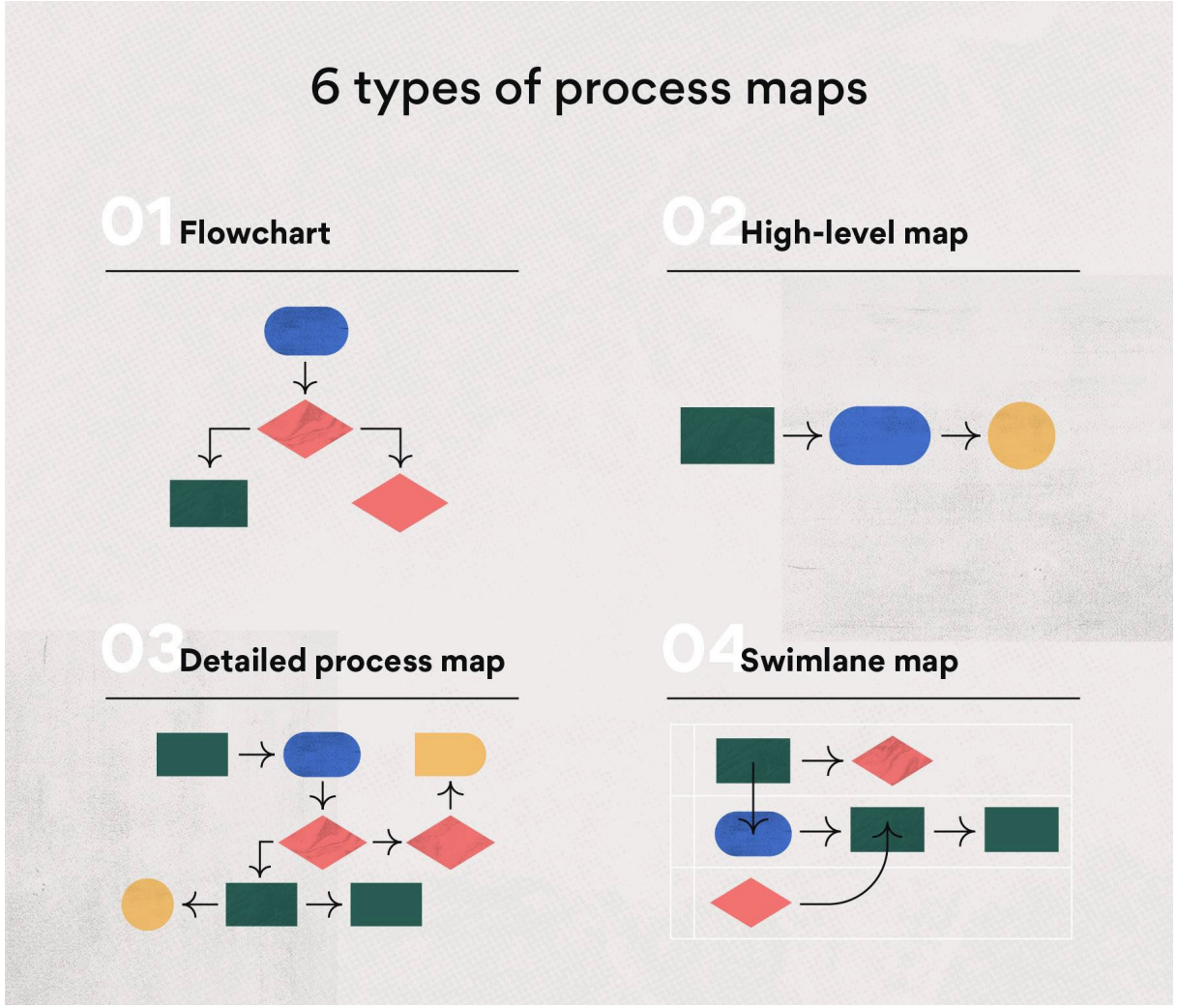
Spaghetti Diagram

- Diagram / layout of the work area that shows the motion of a team member (or customer) to identify unnecessary movement

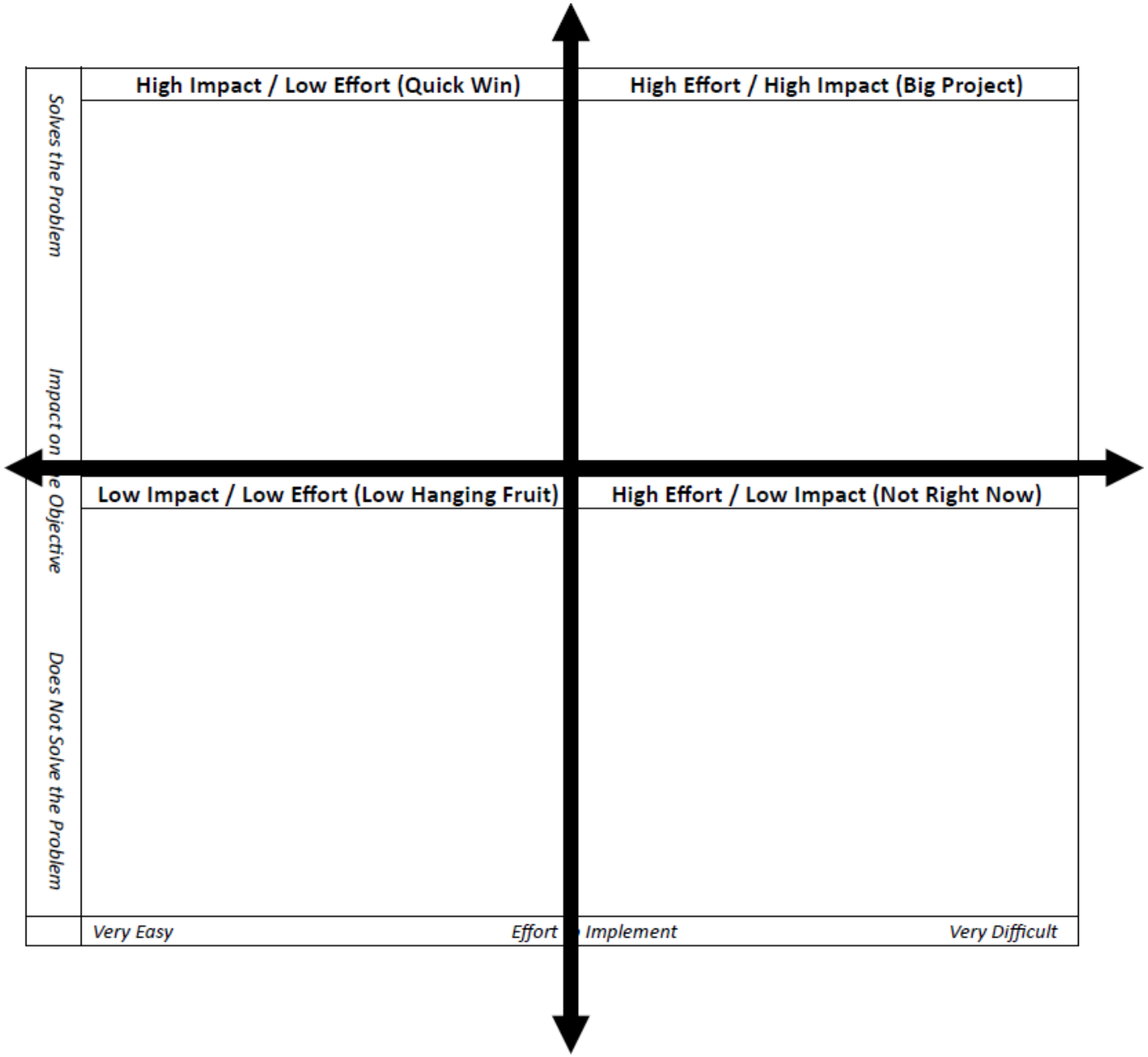
The GEMBA Walk

- Gemba – Japanese for “actual place”.
- Go to where the work is being done or where the problem is.
- Ask:
  - Who are the customers?
  - What do they value?
  - What are the steps in the process?
  - What are the wastes?
  - How long does it take?

Process Mapping Examples



Impact/Effort Matrix (optional)



DO:
Spark Improvements & Innovations

The QI Process

1. Identify Problems & Root Causes
2. **Make & Implement a Plan**
3. Measure, Monitor & Reflect

3. Select the Tools for the Problem

What change can we may that may result in improvement and what tool helps us do that best?

- 5S
- Standard Work
- JDI
- PDSA

5S

Applies to workspace organization.

1. **Sort**: Clearly distinguish needed items from unneeded and eliminate the latter.
2. **Set in order / straighten**: Keep needed items in the correct place to allow easy and immediate retrieval.
3. **Shine**: Keep the workspace neat and clean.
4. **Standardize**: Make changes habitual.
5. **Sustain**: Maintain established procedures.

5S Example

Standard Work

- Establishes the best and most reliable methods for each process and each worker – aka setting the standard.
- Becomes the only way to complete the task or process.
- Should be continually improved.
- Reduces variation and focuses on creating success for employees in process.

Standard Work Examples

- Standard definitions.
- Checklists.
- Visual examples.

JDIs – aka Just Do It (not Nike sponsored)

- Quick and simple fixes or improvements.
- Simple solution to a known problem, usually within one department.
- Small scope.
- Involves 1-3 people.

What are some things that come to mind?

PDCA/PDSA

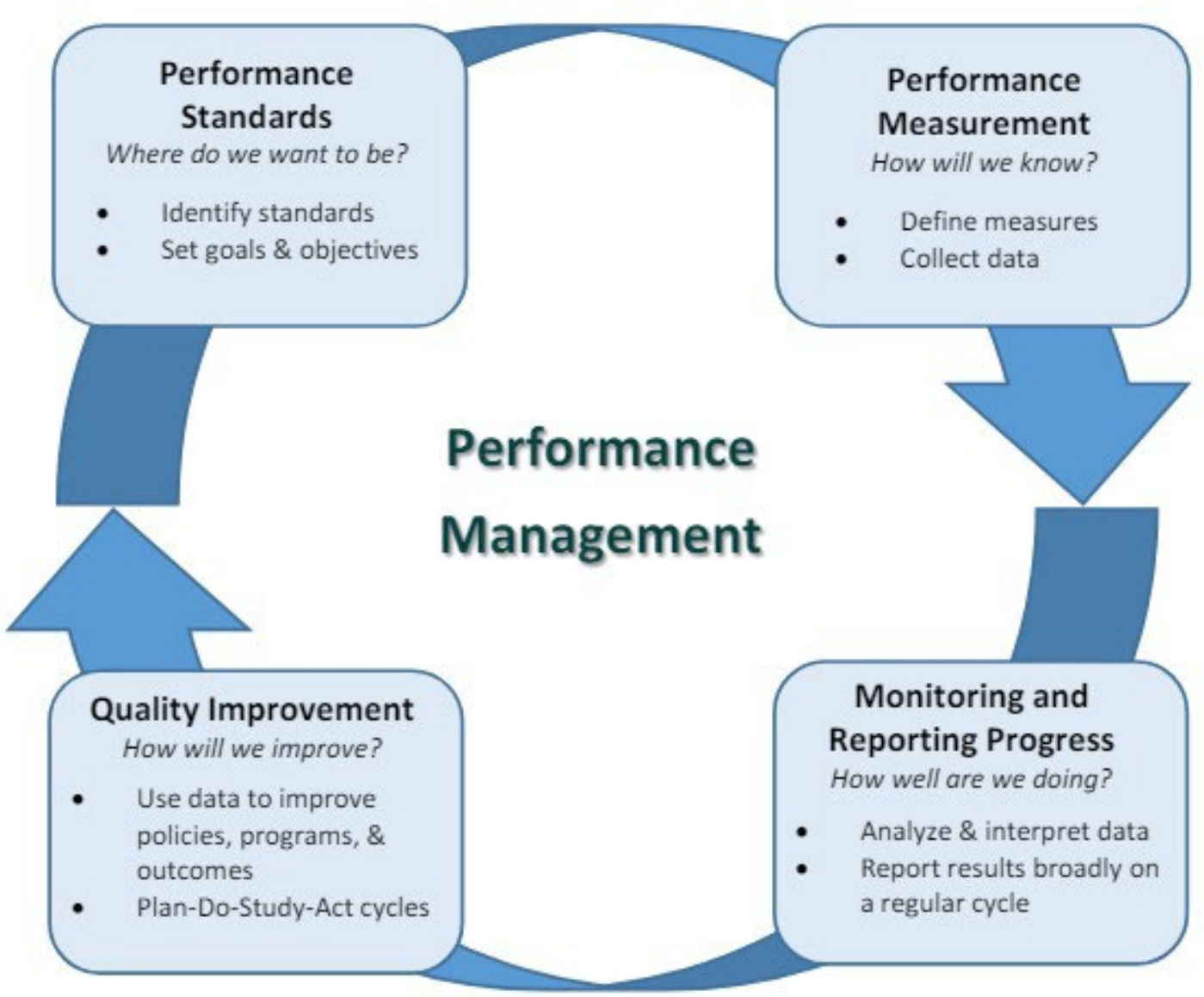
- "Plan, Do, Check, Act" or "Plan, Do, Study, Act".
- Best for testing small changes before implementing on a broader scale as a standard practice.
- Apart of every QI philosophy and approach.

STUDY: Measure the Impact

The QI Process

1. Identify Problems and Root Causes
2. Spark Improvements and Innovations
3. **Measure and Sustain the Impact**

Performance Management Basics



Key Questions

- What are we measuring? Why?
- What do we do with what we measure once we have it?
- How often are we reviewing and discussing data we're collecting?
- How does it help inform our efforts?

ACT:
Sustain or Adapt

What Should We Do Next?

- Adopt
  - Changes Become Standard Practice
- Adapt
  - Showed Promise, But Needs Adjustments
- Abandon
  - Not the Change We Needed

Communicating Results

- Celebrate successes!
- Demonstrate progress
- Create visuals and narratives
- Do not hide from missed targets
- Course Corrections
  - Root Cause – Use your fun new tools!
  - Prioritizing the Issue
  - Adjusting Actions, Strategy or KPI

QI Application

Project Identification & Team Selection

Suggestion: Think of a recent situation, strategic resource sharing, or even grant management and compliance.

1. What is the overarching problem you want to address?
2. Who would be good to bring to the conversation?

Identify Wastes - DOWNTIME

- Defects & Rework
- Overproduction
- Waiting
- Non-Utilized Talent
- Transportation
- Inventory
- Motion
- Extra-Processing

Identify Root Cause

- Fishbone Diagram
- 5 Whys
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- Process Mapping

Set Up for Success

- Important Dates
  - Start
  - End
  - Milestones
- What plan to measure to assess outcome/impact/success?

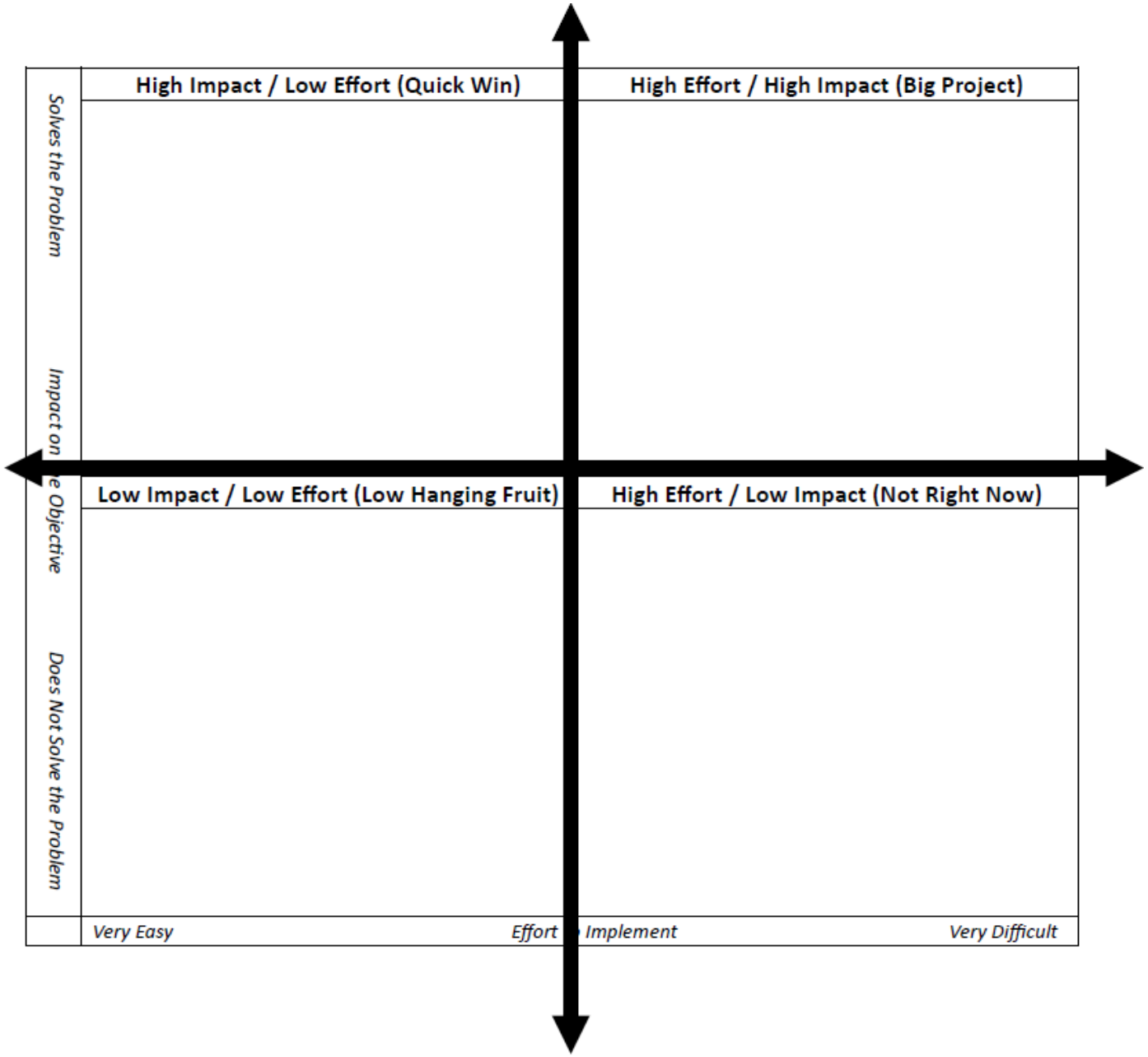
Define the Project

- Project Title
- Issue Description
- Need for Change
- Impact: Staff & Customers
- Context: Who, What, When, Where, And Why?

Brainstorm Solutions

If we...	Then we...
List brainstorming ideas here for how you could address your problem and solve the issues raised during the root cause analysis.	*Write out the expected result you would expect the corresponding solution to generate.*

Impact/Effort Matrix



Implement Solutions

- JDI
- 5S
- Standard Work
- PDSA

Monitor, Reflect, Adjust as Needed

- What are the key differences from then to now?
- What were the results?
- Lessons learned?
- Do we need to continue adapting our solution?

Wrap Up

Tips & Resources

- Start Where You Are
- Build a Positive QI Culture
- Open & Transparent Conversations
- Use Staff Experience & Data Together
- Prioritize & Delegate
- Build QI Into Routines
- Celebrate & Identify Champions
- Accreditation Resources Library

SCAN HERE

TO ACCESS

accreditation@mophi.org

Toolbox Map

If you need to...	Use...
Spot Inefficiency	8 Wastes, Gemba Walk
Understand The Current Process	Process Mapping, Spaghetti Diagram
Find the Root Cause	5 Whys, Fishbone
Pick a Practical Solution	Impact/Effort Matrix
Test or Implement Change	JDI, 5S, Standard Work, PDSA
Sustain Progress	Standard Work, performance measures, regular review

Strategies for Buy-In

- Leadership Modeling
- Create Positive QI Culture
- QI & Data Champions
- Training & Tool Sharing

Thank you!

lhouse@mophi.org

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