



Continuous Quality Improvement



Hello!



Quality Improvement
Trainer

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JD, MSW

Director,
Quality Improvement

Christa

- Director of Quality Improvement
- JD, MSW
- Over 20 years experience in health and human services comprised of both micro and macro level practice, including QI development, facilitation, coaching, systems improvement, and program administration

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What we do

Support health and human service agencies to seamlessly integrate measurement, evaluation and quality improvement strategies into their organizations to develop programs and services that result in positive outcomes for their clients and the community.

The CCNY Value

We help organizations evolve to serve the needs of the community without having to “scale up” infrastructure and increase stress on the organization...working with CCNY allows health and human service organizations to focus on what they do best...enhance the quality of life for their community members through high quality services.



OUR SERVICES



EVALUATION

A systematic method for collecting, analyzing, and using data to examine the effectiveness and efficiency of programs and to contribute to continuous program improvement



ANALYTICS

The discovery and communication of meaningful patterns in your data to inform improvement and development



QUALITY IMPROVEMENT

A systematic, formal approach to the analysis of practice performance and efforts to improve performance



TRAINING

Our trainings are designed to meet the learning style, needs and preferences of our individual clients. Topics include but are not limited to data management and analytics, quality improvement tools and strategies, and various clinical topics related to service delivery

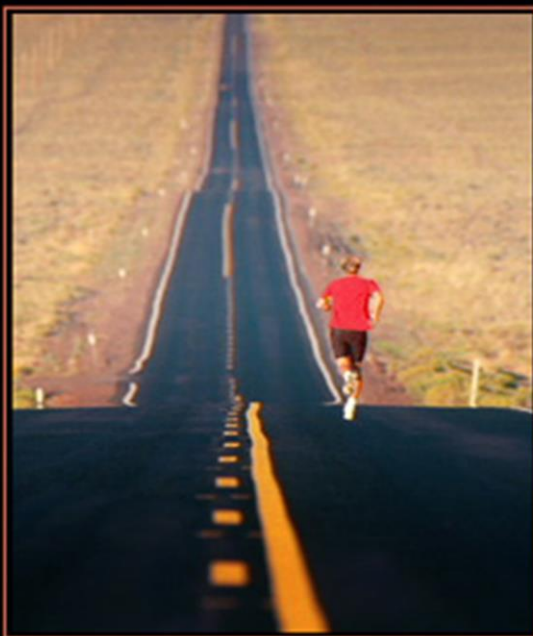


GRANT MANAGEMENT

Fiscal and administrative support for grant development and submissions, core operational requirements and program implementation of supported and hosted grant programs.

Session Objectives:

- Why Quality Improvement
- Distinguish between quality assurance and quality improvement
- Define the importance of QI and key theories
- Review organizational infrastructure needed to support QI and establish effective CQI program and process
- Importance of identifying and monitoring relevant and meaningful outcome measures
- Provide examples of how to use specific QI tools and templates in order to develop and execute a PDSA quality improvement plan.



QUALITY

THE RACE FOR QUALITY HAS NO FINISH LINE-
SO TECHNICALLY IT'S MORE LIKE A DEATH MARCH.

www.despair.com



Why QI and why now



- ACCOUNTABILITY
- All federal, state and local regulatory & accreditation bodies require data and QI activities
- Competition for limited funds so you better be your best!
 - Value based payment
 - Managed care contracts
 - Marketing and value propositions

So what does this mean?

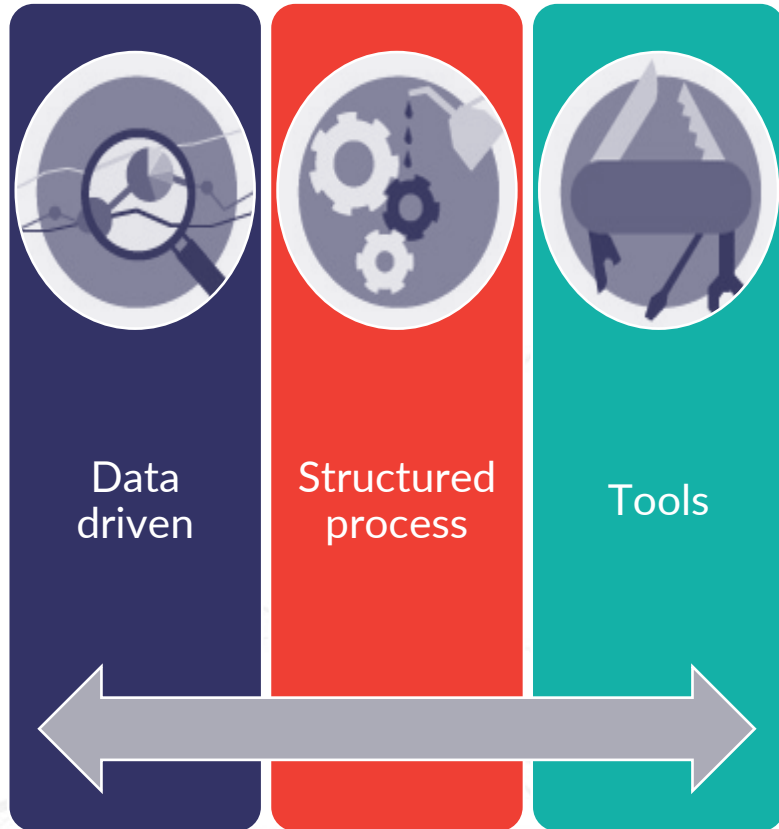
- Programs need to supply evidence of effective programs and process
 - They need data!
 -and they need to manage by it
 - Leadership
 - Organizational Culture of Improvement

In order to be effective, you need all parts working together



.....so what do you do if your program data shows the program is not getting expected outcomes?
Or if your service delivery system is not effective?

What is Quality Improvement? (Aka...CQI or PQI)



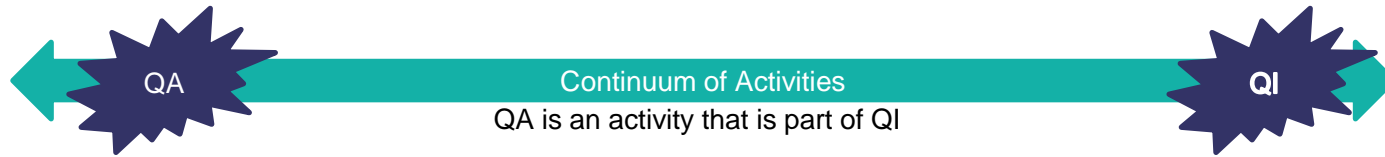
- Continuous quality improvement, or CQI, is a **management philosophy** that organizations use to reduce errors/problems, increase efficiency and outcomes, and increase internal (meaning, employees) and external (meaning, customer) satisfaction
- It is an ongoing, structured process that evaluates how an organization works and ways to improve its processes and outcomes
- The underlying philosophy of continuous quality improvement is that when problems arise it is generally a result of poor work process design, unclear instructions, or the failure of leadership, **not the people performing the processes**
- The philosophy behind CQI **stresses the need for teamwork among all levels of employees and maintains that all employees are valuable members of the team**

Objectives of Quality Improvement



- To facilitate the Agency's mission
- To ensure appropriateness of services
- To improve efficiency of services/processes
- To improve effectiveness and program outcomes
- To foster a culture of learning and teamwork
- To ensure compliance with funding and regulatory standards

QI and QA are NOT the same thing



CQI and QA: What's the difference?

○ Quality Assurance

- Focus is on human error and identifying and eliminating outliers (poor performers). Making sure you (individual) are doing the right things in the right way.
- Involves retrospective policing and may be punitive.
- Monitors compliance through periodic audits and inspections.
- Relies on following the rules and policies of the organization to meet the standards required by regulatory and accrediting bodies.

○ Quality Improvement

- Focus is on systems first and individual performers second. Measures what your current processes are and creating systems to make things better. Not focused on blame.
- Involves both prospective and retrospective review.
- Monitors improvements in quality of care through continuous review.
- Relies on teamwork between different groups in the system, as those closest to the problem usually have the best ideas about the solution.



QA vs. QI

From the following statements, which do you think have a QA focus and which have a QI focus?

	QA?	QI?
Which staff member failed to transfer the call to the correct extension?		
Are we creating an environment encouraging clinicians to report errors?		
How do we reduce data entry errors at intake (I.e. Incomplete forms)?		
Client had a bad outcome; what are the clinicians or case managers doing wrong?		
What could we do to increase the efficiency of chart filing?		

Look at the QA statements and see if you could reword them to have a QI focus.

Alternately re-word the QI statements to QA

The main difference between QI and QA is that QI's focus is on Improvement. The focus makes all the difference in how people respond to a quality project.

Comments, Thoughts, Questions

- Does your organization do QA, QI, both?
- Do you have a preference?
- Is one easier than the other to implement
- Are there pros or cons to QA vs. QI?

**ANY QUESTIONS,
COMMENTS, OR
THOUGHTS?**

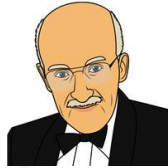
A brief CQI History lesson

William Shewhart



- Father of Statistical Quality Control
- Engineer at Western Electric and Bell Labs
- **Invented Control Charts and PDSA Cycle**
- Emphasis on reducing variation to enhance quality
 - Special cause vs. common cause variation
 - **Reducing common-case variation will improve quality and reduce errors**

Joseph Juran



- “It is most important that top management be quality-minded. In the absence of sincere manifestation of interest at the top, little will happen below.”
- Focus on management involvement
- **Pareto Principle**
 - **80/20 rule: 20% of those processes that will get us 80% of the impact.**
 - **Identify that 20% and begin the work of addressing those challenges**
- **The quality trilogy**
 - Quality Planning (P cycle)
 - Quality Improvement (D cycle)
 - Quality Control (S and A cycle)

W. Edwards Deming



- Brought PDSA into widespread usage
- System of Profound Knowledge
 - **Systems approach to management of an organization**
 - Understanding variation
 - Theory of knowledge (how do we know what we know, confirmation bias)
 - Psychology of human behavior (how people interact, how people respond to change)
- **Chain reaction of quality**
 - **Improve quality**
 - **Decrease costs**
 - **Improve productivity**
 - **Capture market share with lower costs and better quality**
 - **Stay in business**
 - **Provide jobs**



Whole System Quality (Juran Trilogy)

- WSQ management practices include the roles, responsibilities, and activities **across the organization, from clients and direct staff to the board of directors.**
- A framework to inform the necessary management practices and leadership principles to embed quality at the center of the organization.
- WSQ integrates **quality planning, quality control, and quality improvement** activities for key social care system stakeholder groups.



Quality Planning	Quality Control	Quality Improvement	
Offer input to inform organizational strategy as primary customer group	Offer feedback on quality experience to inform understanding of performance	Engage as co-producer in relevant QI activities	Patients, Families, and Communities
P O I N T O F C A R E			
Inform plans and requirements to execute on the strategy locally	Identify and solve problems as they arise (gaps with standard), escalate as necessary	Lead and engage in local QI activities and identify potential QI projects	Clinicians
Translate strategy into a plan for unit setting and outline requirements for execution	Monitor performance and direct solutions, escalate problems as necessary	Lead QI projects and capture ideas for potential QI work	Unit-Level Leaders
Facilitate strategic planning process, support research and analysis activities	Support development of QC standard work and infrastructure	Support local QI activities and inform project prioritization efforts	Quality Department Staff
Work with executives and unit leaders to articulate how to execute on strategy	Identify cross-cutting problems and trends close feedback loops	Sponsor QI projects, lead cross-cutting QI efforts	Departmental Leaders
Identify customers, prioritize needs, and develop strategy	Mobilize resources to address emergent and cross-cutting problems	Sponsor and commission prioritized QI projects	Executive Leaders
Ensure organizational strategy is quality-centric	Review quality performance on a regular basis	Review performance of major QI projects on a regular basis	Board of Directors

Sampath B, Rakover J, Baldoza K, Mate K, Lenoci-Edwards J, Barker P. *Whole System Quality: A Unified Approach to Building Responsive, Resilient Health Care Systems*. IHI White Paper. Boston: Institute for Healthcare Improvement; 2021. (Available at www.ihl.org)



Leadership activities that foster WSQ Framework

- ❖ **Build a shared sense of purpose:** A cohesive and unified vision for a future state of the organization
 - I.e. Design a process for all staff to express what really matters to them and be heard
- ❖ **Practice systems thinking:** The ability to see the interconnected elements of the system, and to distinguish patterns instead of conceptualizing change as isolated events
 - I.e. Regularly review data from a concise, balanced set of measures that represent the work of the organization



Leadership activities that foster WSQ contd.

- ❖ **Engage in collective learning and dialogue:** Foster a culture of learning, demonstrating inquiry, reflection, and dialogue
 - I.e. Acknowledge the dynamics within the executive team, including the functional and dysfunctional aspects, and points of consensus and controversy.
- ❖ **Practice personal inquiry and reflection:** Continually reflect on the gap between the current state and the organizational potential future state, and publicly demonstrate commitment to learning
 - I.e. Listen deeply by asking questions and respecting individual expertise • Understand problems before pursuing solutions



Quality Improvement

ACTIVATES
EMOTIONAL
THE INDIVIDUAL
& SYSTEMS ARE
TO CHANGE



AGILITY &
ONE INCREMENTAL
STEPS



BUILDS ON
THE IDEAS
OF OTHERS

EMERGE OUR
OWN SOLUTIONS

Multiple Models for Quality Improvement

- Many different models
 - Six Sigma, PDSA, FOCUS-PDCA, Model for Improvement, etc.....
- All have similar stages
- Many have similar tools
- Main difference is in the branding and author of the model
 - Toyota SUV vs. Honda SUV
 - Fish fry at McPartlands vs. Fish Fry at Parkers
 - Both are fish and are yummy
 - Difference is in the process and some of the ingredients
- Use the model that works for your organization....but **PICK ONE and STICK WITH IT**



Models

FADE	PDSA	DMAIC	FOCUS-PDCA
Focus		Define	Find a Process that needs improvement
			Organize a team
Analyze		Measure, Analyze	Clarify Knowledge Uncover causes of poor performance
Develop	Plan		Plan the pilot
Execute	Do	Improve	Do - implement
Evaluate	Study	Control	Check -did improvement work
	Act		Act-adopt, adjust, abandon

Common Thread Across All Models

- Identify the issue to improve
- Analysis
- Implementation
- Review



ORGANIZATIONAL INFRASTRUCTURE

WHAT IS NEEDED TO BECOME A HIGH PERFORMING QUALITY
ORGANIZATION?

What does it take to be a High Quality Social Care Organization

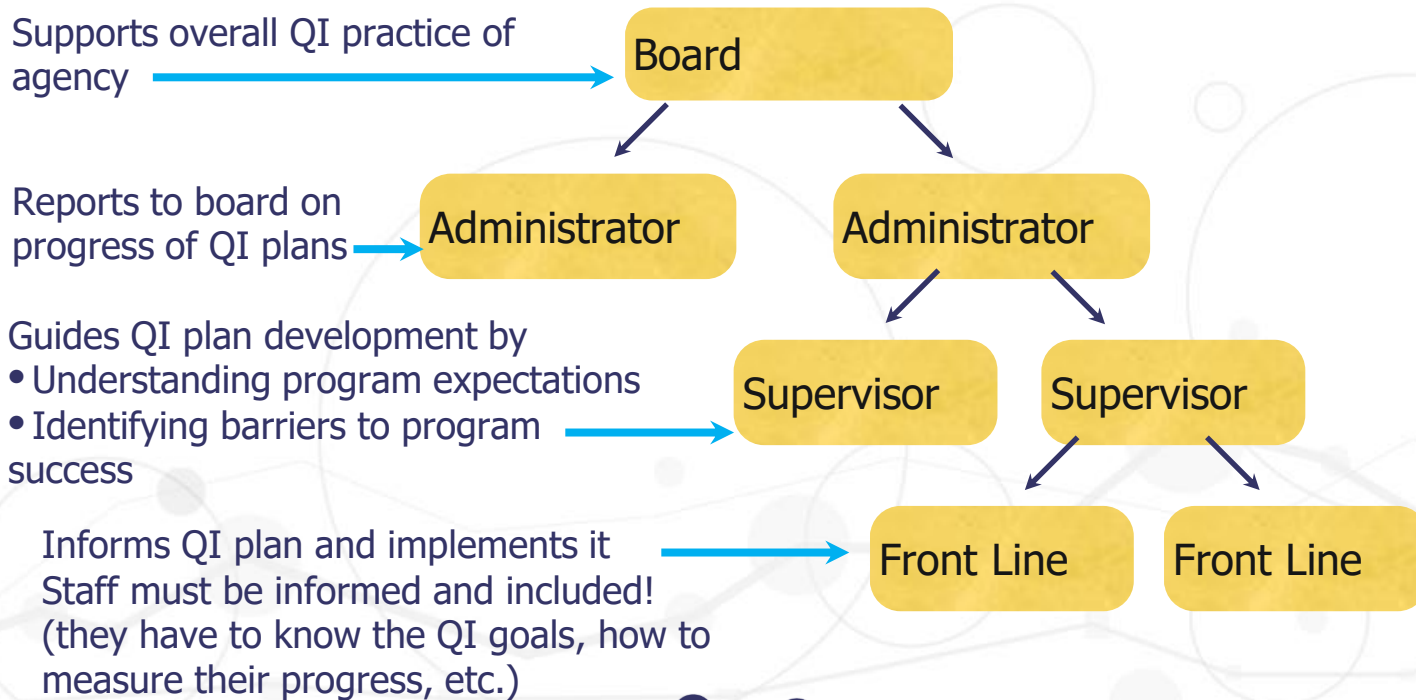


What is needed for QI

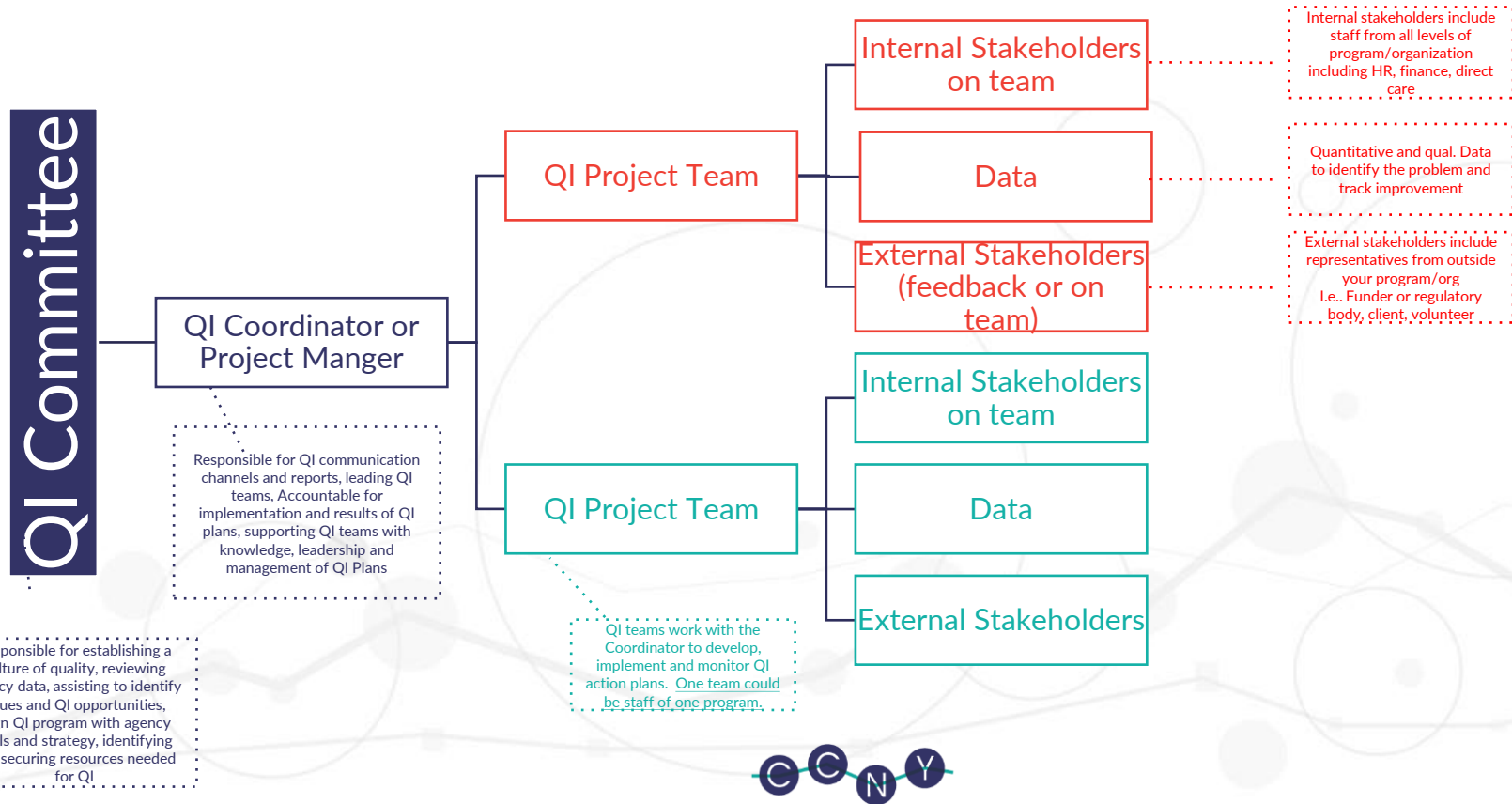


- ⋮ Positioning within an organization
 - ⋮ Connection to the strategic plan
 - ⋮ Inclusion in on-boarding of new staff
- ⋮ Written CQI plan
 - ⋮ Designated process requirements
 - ⋮ Forms, templates, timelines, data sources, documented process, communication structure
- ⋮ Dedicated position is best
 - ⋮ **Minimally**, clear expectations and description of role/responsibility for management of QI process
- Availability of data and information
- Agency Culture
 - ⋮ Supportive and open to change
 - ⋮ Strength based, not punitive
 - ⋮ Committed to quality
- Use of committees and stakeholders
 - ⋮ One size does not fit all
 - ⋮ Committees need to represent workers and stakeholders of what is being improved upon

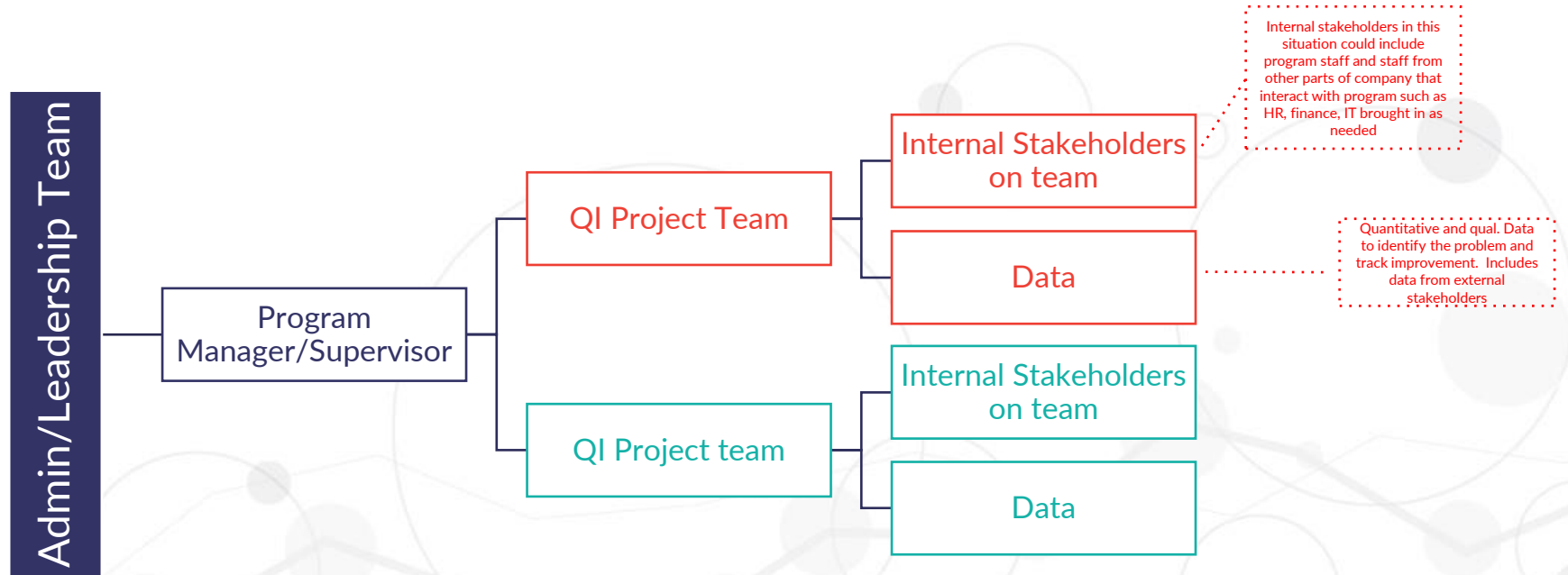
Best Practice QI process includes internal stakeholders from every level of management



Sample Structure of A QI Program within an Organization

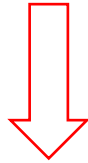


What if you don't have a dedicated QI Person or separate committee?

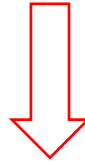


The agency/departmental QI program guides the selection and implementation of QI projects

Agency or Department QI Program
(documents the QI philosophy and practice for the organization)



QI
Project



QI
Project



QI
Project



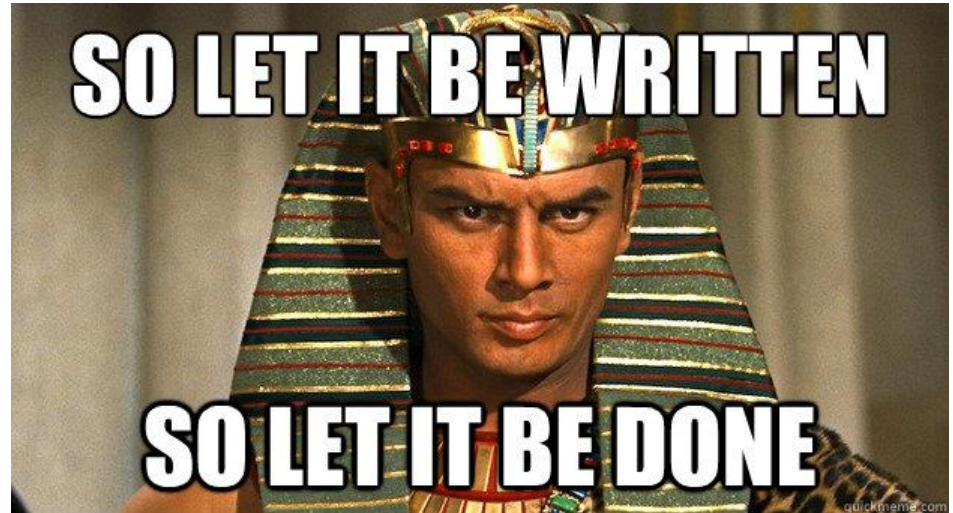
Comments, Thoughts, Questions

- Does your organization have a QI model?
- Are you aware of what it means to your role?
- Have you participated in a QI project team?

**ANY QUESTIONS,
COMMENTS, OR
THOUGHTS?**

The Agency or Departmental QI Model

written down



Sections to consider in your written QI Model

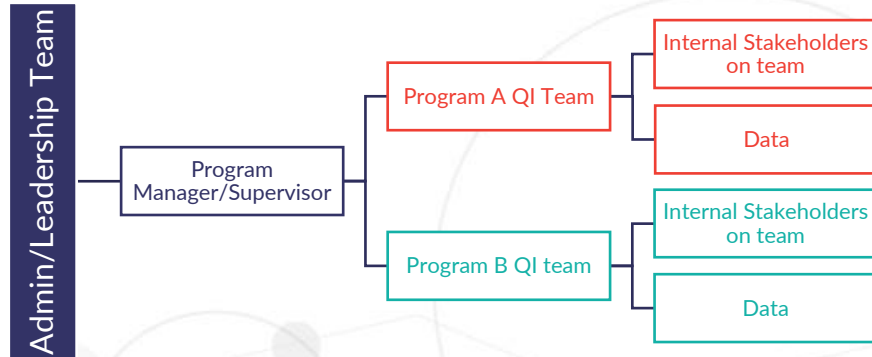
1. Structure of the QI program
 - Leadership, Managers, teams
 - Roles and responsibilities of each
 - Resources
 - Communication channels
 - Stakeholders
2. **Measures and Outcomes**
3. Operations/Procedures



Section 1 of a QI Model: Structure

- Visual or narrative description
 - (doing both is most helpful)
- Details of structure
- Establishes the leadership and communication flow
- Defines roles
 - Accountability – who reports what to who about what
 - Responsibility – who is doing what by when and for what purpose
- Identifies the internal and external stakeholders

Visual example -



- Define each box
 - Who is in it
 - What is the role of the people in the box
- Describe the communication flow between the boxes (and draw arrows)
 - What, how often, what format
- Identify the internal and external stakeholders
- How, when and by who is the data reviewed? Who determines when a QI plan is needed?

Section 2 of QI Model: Measures & Outcomes

- Your plan must define what measurable data will be collected and monitored regularly (by who)
 - Should align with agency strategic plan and mission
 - Functioning of operations that influence org. capacity to do business and provide service
 - Fiscal
 - HR
 - Maintenance or IT
 - Quality of Service Delivery
 - Customer and Worker Satisfaction
 - Meaningful outcomes
 - Clinical improvement
 - functional status improvement
 - Health, welfare, safety
 - Quality of life
- Define how the data is collected and how often
- What is benchmark
 - Actual result, desired result - allows the committee to know when a QI plan needs to be established



Example of Operations Measures

- Staff retention
 - Turnover rates for all employees
 - Turnover rates for Youth Counselors
 - Comparison of turnover rates to other, similar agencies
- Staff injuries
 - Number of injuries that did not lead to workers compensation claims
 - Number of injuries that did lead to workers compensation claims
- Employee survey responses
 - Employees' satisfaction with benefits and compensation
 - Employees' satisfaction with workplace
 - Employees' satisfaction with management/leadership
 - Employees' satisfaction with co-workers
- Financial performance
 - Net revenues by department and for the entire agency
 - Comparison of budgeted revenues and actual revenues, by department and for the entire agency
 - Total development revenue by source
 - Comparison of budgeted development revenue and actual development revenue
 - Ratio of expense to revenue for fundraising activities
 - Indirect expenses by department and for the entire agency
 - Audit results



Example of Quality-of-Service Delivery Measures

- Risk management data
 - Number of critical incidents (including medication errors)
 - Rate of critical incidents per 100 days of service
 - Number of client grievances
 - Number of CPS investigations involving staff
- Client record review data
 - Completion of essential documentation
 - Quality of essential documentation
 - Timeliness of essential documentation
- Program output data
 - Wait list and time to first appt.
 - Number of clients served
 - Number of clients discharged
 - Duration of services
 - Planned and unplanned discharges
- Client survey responses
 - Clients' perceptions of quality
 - Clients' perceptions of safety
 - Clients' perceptions of effectiveness
 - Clients' suggestions
- Stakeholder survey responses
 - Stakeholders' perceptions of quality
 - Stakeholders' perceptions of effectiveness
 - Stakeholders' suggestions
- Results of facility and physical plant inspections
 - Ongoing facility and physical plant
 - Emerging facility and physical plant
 - Results of emergency drills



Examples of Client Outcome Measures



- Clients discharged to appropriate, less restrictive settings
- Number of adoptions
- Progress towards treatment goals
- Frequency of school disruptions
- Frequency of legal entanglements
- Improvement in life skills
- Number of clients securing employment
 - Number of clients maintaining employment for 6 months
- School grade progression/graduation
- Change in result on standardized scale
 - CANS NY
 - CBCL
 - PHQ-9
- Abstinence from drugs and alcohol
- HEDIS and QARR measures

Section 3 of your QI Model: Defining Operations & Procedures

- Describe how improvement goals/targets and QI projects are identified, implemented and monitored
- **Describe model being used by the agency (Six Sigma, PDSA, Focus-PDCA, etc.)**
 - **Describe how staff are trained in the model and agency expectations**
- Describe the data collection tools used:
 - standardized instruments (which ones, description of how they are used)
 - case record review (describe procedures and how often)
 - surveys (of who, how often and measuring what)
 - incident reports/audits
- Describe expectations for data collection (who does it, how, how often)
 - data reports from EHR and fiscal software
 - Data from Case Record Review
 - Surveys or interviews
 - Audits
 - Incident reports
- Describe communication flow from QI workgroups and QI staff to agency QI Committee



What your Agency QI Program should include:

- Structure of the QI program
- Measures and Outcomes
- Operations/Procedures

summary

Comments, Thoughts, Questions

- Does your organization collect routine data?
- Is it reviewed in a structured/consistent format?
- How do you know when to take proactive QI action?

**ANY QUESTIONS,
COMMENTS, OR
THOUGHTS?**

Break: 5 minutes

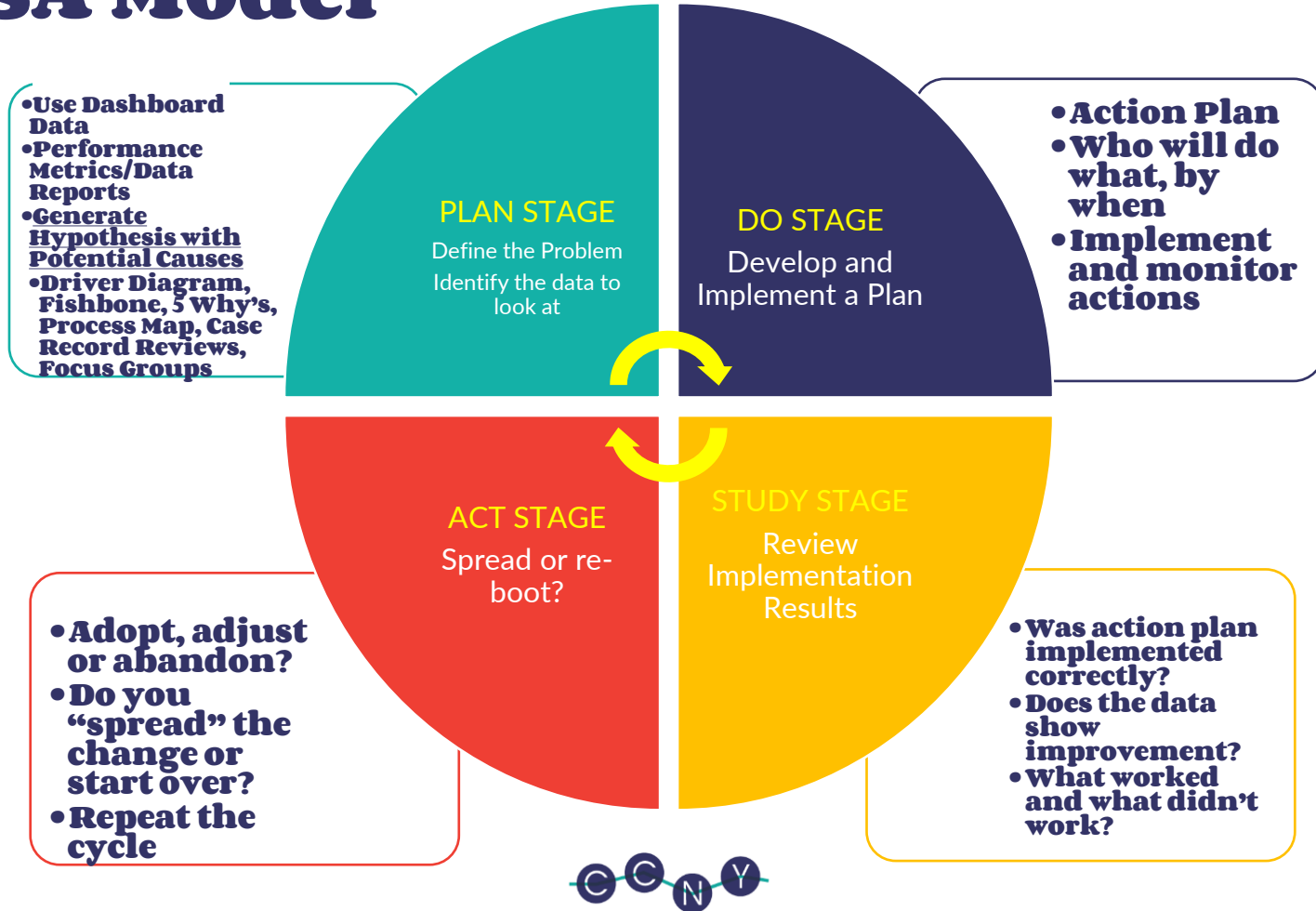


Executing a QI Plan using PDSA Model

The background features a light gray line graph with several data points connected by thin lines. Overlaid on this are several overlapping circles of varying sizes, some solid and some hollow, creating a network-like or molecular structure. The overall aesthetic is clean and technical.

Tools & Templates

PDSA Model



PDSA: 4 Steps

○ P – Plan

- Recognize an opportunity and plan a change

○ D – Do

- Test the change. Carry out a small-scale study

○ S – Study

- Review the test, analyze the results and identify what you've learned

○ A – Act

- Take action based on what you learned in the study step
- If the change did not work, go through the cycle again with a different plan. If you were successful, incorporate what you learned from the test into wider changes. Use what you learned to plan new improvements, beginning the cycle again.



P: Plan (with your team!!!)

- Including the right people on a process improvement team is critical to a successful improvement effort. Teams vary in size and composition. Each organization builds teams to suit its own needs.
- Be sure that the team includes members familiar with all the different parts of the process — managers and administrators as well as those who work in the process, including front-line workers.
- **Identify a Champion who will lead the project, promote by in and coordinate deliverables.**



P: Plan (with your team!)

- **We plan to:** Write a concise statement of what you plan to do in this testing – also known as your AIM
- **We hope this produces (predict):** Identify a measurement or an outcome that you hope to achieve.
- **Steps to execute:** Write the steps that you are going to take in this cycle. Include the following:
 - The population you are working with.
 - The time limit that you are going to do this study—**remember, it does not have to be long, just long enough to get your results. And, you may set a time limit of 1 month but find out after 2 weeks that it doesn't work. You can terminate the cycle at that point because you got your results.**



What? What's the problem or opportunity? Make sure it relates to a fundamental customer need.

E.g. Increase the percent of children who receive a Health Needs Assessment

How much? By how much will you improve? Or "how good" do you want to get?

E.g. 95% of children who should receive a Health Needs Assessment will receive one

By when? What is the date by which you will achieve the level of improvement you've set out to accomplish?

E.g. January 31, 2020

For whom? Who is the customer or population who will benefit from the improvement?

E.g. Children under the age of 12 who have an initial referral to Child Protective Services

Where? What are the boundaries of the process or system you're trying to improve? Where does it begin and end?

E.g. In Middlesex County

Complete aim statement:

E.g. By January 31, 2020, of children under the age of 12 for whom a Health Needs Assessment is recommended, 95% will receive the assessment in Middlesex County.

Develop Your Aim Statement

1. **The** (name of team)

2. **intends to accomplish:** (This is a general overarching statement describing what you intend to accomplish during the time you work on this process. The process is identified in the statement and words like improve, reduce, and increase are often used). In healthcare, aims describe how care for patients will be better (reduced suffering or improved outcomes).

3. **by** (time frame, i.e., month/year by which you intend to accomplish improvement)

4. **for** (what group are you doing this for – who is the customer?)

5. **because** (the reasons to work on this improvement project)

6. (Optional) Please include any additional **guidance:** (This may include any constraints, changes that are off limits, or other goals you have for the project (e.g., building relationships, engaging partners, building improvement capability).)



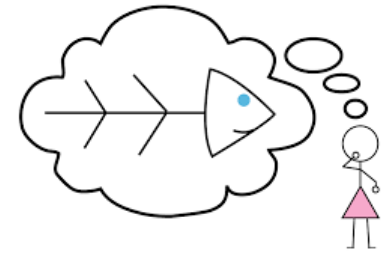
You have your AIM statement: UNDERSTANDING THE PROBLEM



- **Logic Models** - A systematic and visual way to present and share your understanding of the relationships among the resources you have to operate your program, the activities you plan, and the changes or results you hope to achieve
- **SWOT** - Provides programs and organizations with a clear, easy-to-read map of internal and external factors that may help or harm a project, by listing and organizing a project's strengths, weaknesses, opportunities, and threats.
- **Journey Map** - An illustration that details all of the touchpoints at your organization that a customer comes into contact with as he/she attempt to achieve a goal, and the emotions they experience during that journey
- **5 Whys** - The primary goal of the technique is to determine the root cause of a defect or problem by repeating the question "Why?"
- **Process Map** - Process mapping is used to visually demonstrate all the steps and decisions in a particular process. A process map or flowchart describes the flow of materials and information, displays the tasks associated with a process and shows the essential relationships between the process steps.
- **Fishbone** - A diagram that identifies many possible causes for an effect or problem. It can be used to structure a brainstorming session. It immediately sorts ideas into useful categories.
- **Driver Diagram** - Organizes information on proposed activities so the relationships between the aim of the improvement project and the changes to be tested and implemented are made clear.



Fishbone (Cause and Effect)



- When utilizing a team approach to problem solving, there are often many opinions as to the **problem's root cause**. The Fishbone diagram helps to visually display the many potential causes for a problem or effect.

- Captures many different ideas
- Stimulates team brainstorming on root causes (5 whys)
 - Brainstorm ideas, group similar causes, and identify categories
 - Or, pre-determine likely categories, and place ideas under each category
- Useful in a group setting and in situations where there is little quantitative data
- Allows for exploration of the issues behind the problem

Construct a Fishbone

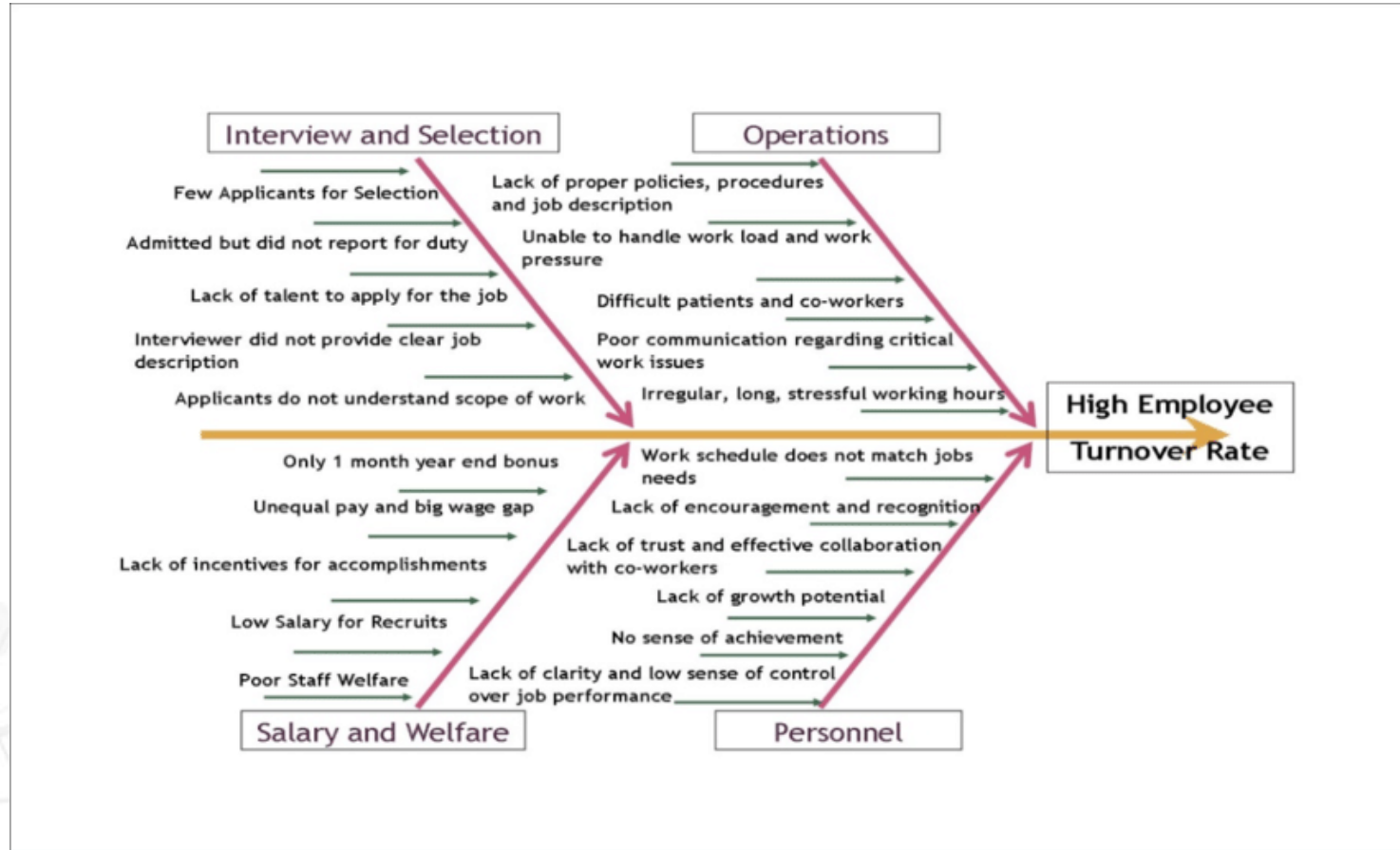
- ❑ State the problem in the form of a question. Framing the problem as a 'why' question will help in brainstorming.
 - ❑ I.e. Why do we have higher rates of employee turnover?
 - ❑ I.e. Why are we missing opportunities to improve employee engagement/joy at work?
- ❑ The team should agree on the statement of the problem
- ❑ The rest of the fishbone then consists of one line drawn from the problem statement across the page. There are several lines, or 'bones,' coming out vertically from the main line.
- ❑ These lines are labeled with different categories. The categories used are up to you. There are a few standard choices.

Fishbone Categories (BONES)

- ❑ Policies
 - ❑ Specific policies for completing the process
- ❑ Procedures
 - ❑ Specific procedures for completing the process
- ❑ People
 - ❑ Anyone involved in the process
- ❑ Material
 - ❑ Raw materials, parts, pens, paper etc. used to produce the final product
- ❑ Method
 - ❑ How the process is performed, such as rules, regulations and laws
- ❑ Machine/Technology
 - ❑ Any equipment, computers, tools etc. required to accomplish the job
- ❑ Measurement
 - ❑ Data generated from the process that are used to evaluate its quality
- ❑ Human Factor
 - ❑ Experience, qualifications, judgment, proper training, interpretation, etc.
- ❑ Environment/Mother Nature
 - ❑ The conditions, such as location, time temperature and culture in which the process operates



FISHBONE EXAMPLE



Fishbone Analysis

Now What???

1. Can you eliminate any ideas that everyone agrees would really not cause the problem.
Everyone must agree
2. Examine each idea and determine the degree to which the idea is an actual cause of the problem.
3. Can you determine how easy it is to check or verify the cause.

Or Simply....

Consider low hanging fruit, and pick one idea(cause) that is easiest to start with...start somewhere!

Driver Diagrams

- Provides a visual representation of a system or program that you want to measure, monitor and/or improve
 - Helps plan, improve and measure QI PROJECTS
- **Identifies all the factors (“drivers”) that influence the system or program**

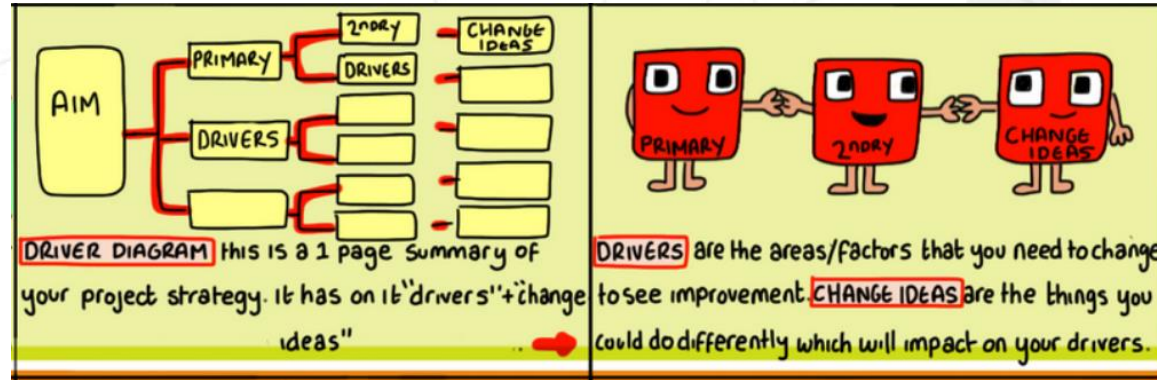
This can also facilitate identification of what data needs to be collected to be able to actively manage/supervise practice and IMPROVE the outcome



Driver Diagram Purpose

A driver diagram shows the relationship between the overall aim of the project and, the primary drivers (sometimes called “key drivers”) that contribute directly to achieving the Aim:

1. The Aim
2. Primary drivers
3. The secondary drivers that are components of the primary drivers, and
4. Specific change ideas to test for each secondary driver.



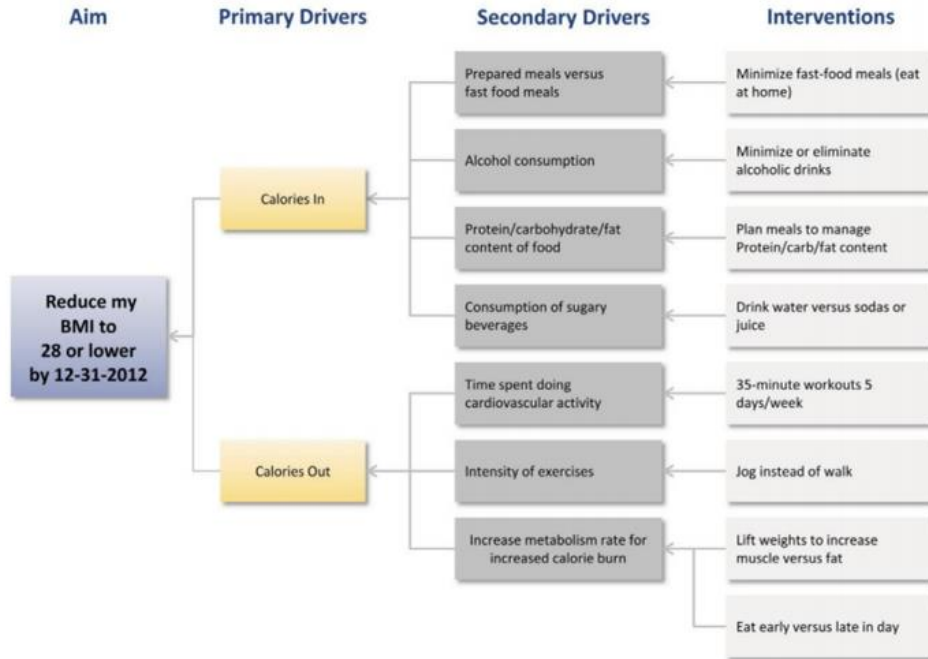
How do we use in practice?

- Keep front and center to your work
- Put in pencil – update as you learn, select regular points to review
- Tie changes and projects to drivers
- Use to generate and prioritize ideas
- Share to communicate and engage others

Driver Diagrams: How to develop

- Convene a cross sector team
- Develop your specific aim
- Review the relevant research
- Engage those who lived experience
- Visualize (draw it out, see the whole)
- Avoid perfection (driver diagrams evolve, interactive and continuous)

Weight Loss Example with Interventions

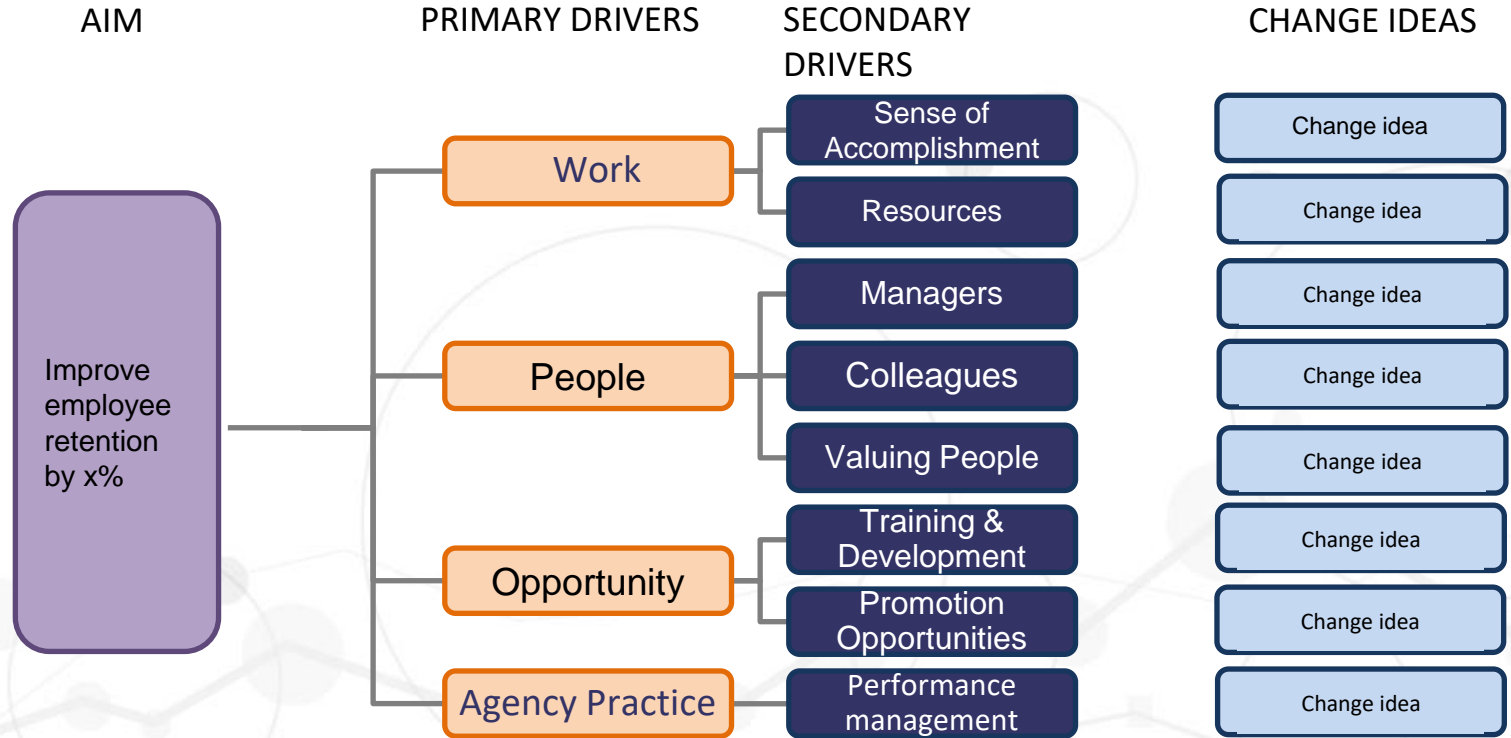


Driver Diagrams help identify the current practices and processes that impact your Aim (primary and secondary drivers) and list potential change ideas for future PDSA cycles

Interventions can be:

- best-practice approaches that have already been developed and tested by others (“change packages”)
- corrective actions to address gaps or shortfalls in approaches that you have previously tried
- ideas that leverage new technologies, such as IT systems

Driver Diagram Worksheet



“Do” Stage: What is it?

- Test out QI action plan on small scale
- Monitor data to determine if QI action plan is working
 - Only collect data you will use!
- Note observations
- Begin to analyze data
 - Measure to learn, not judge!

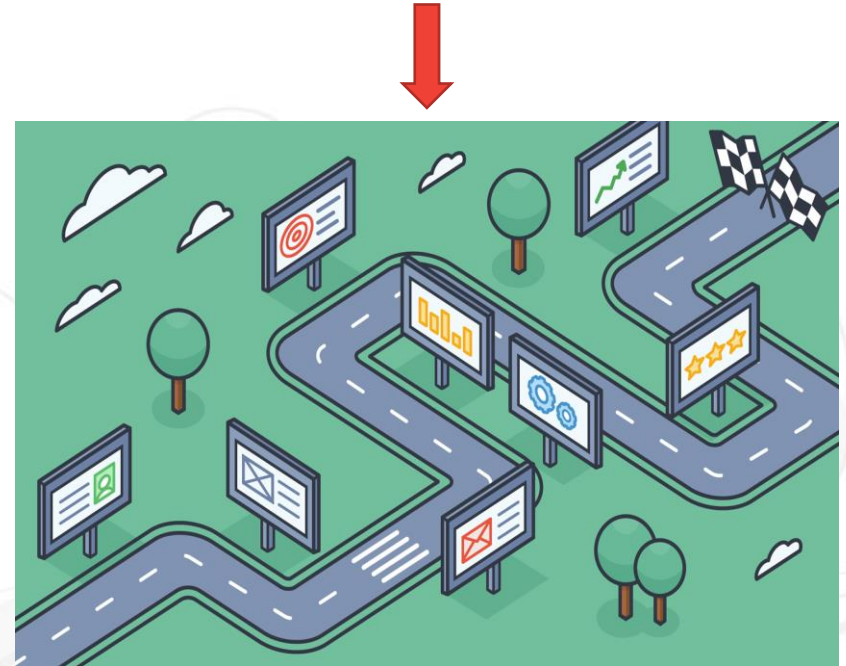


DO: Create a QI Action Plan

Think **ROADMAP**

You have your aim statement, your team, and identified/ examined potential improvement areas. NOW WHAT?

1. Project Plan – Organize all of your information into an easy, clear, concise format –
 - Do NOT draft a report (long narrative descriptions)
2. INSTEAD, Your plan should be actionable – include potential solutions to test and relevant data



Project Planning Templates

Insert: QI Area	Insert Subcommittee Name		Shade in which week you expect to accomplish the task in each Month											
			Month 1				Month 2				Month 3			
Action Plan	Responsible	Status	1	2	3	4	1	2	3	4	1	2	3	4
Action Step 1: list														
Task	Insert	Not started												
Task	Insert	Not started												
Task	Insert	Not started												
Task	Insert	Not started												
Task	Insert	Not started												
Task	Insert	Not started												
Task	Insert	Not started												
Task	Insert	Not started												
Action Step 2: list														
Task	Insert	Not started												
Task	Insert	Not started												
Task	Insert	Not started												
Task	Insert	Not started												
Task	Insert	Not started												
Task	Insert	Not started												
Task	Insert	Not started												
Action Step 3: list														
Task	Insert	Not started												
Task	Insert	Not started												
Task	Insert	Not started												
Task	Insert	Not started												
Task	Insert	Not started												
Task	Insert	Not started												
Task	Insert	Not started												
Task	Insert	Not started												
Action Step 4: list														
Task	Insert	Not started												
Task	Insert	Not started												
Task	Insert	Not started												
Task	Insert	Not started												
Task	Insert	Not started												
Task	Insert	Not started												
Task	Insert	Not started												
Task	Insert	Not started												



Quality improvement goal	Plan	Do	Study
	Gap or area of improvement	Process change to be implemented	Process/outcome measures
Increase pneumococcal immunization rates among older patients.	A consistent process for identifying appropriate patients for pneumococcal vaccine does not exist.	<ol style="list-style-type: none"> 1. Work with EHR vendor to build a flag for appropriate immunizations based on clinical guidelines. 2. Implement a pre-visit planning process to anticipate immunization and screening needs for all patients. 	<ol style="list-style-type: none"> 1. Correct vs. incorrect identification of patients in EHR. 2. Number of patients identified during pre-visit planning. 3. Increased number of pneumococcal immunizations received by older patients.
Increase depression screening for patients with chronic pain and/or substance abuse.	Patient surveys revealed that they felt uncomfortable completing a depression assessment in the waiting room.	<ol style="list-style-type: none"> 1. Conduct the screening in the exam room prior to being seen by the physician. 2. Training the rooming staff to conduct the PHQ-2 and PHQ-9 as appropriate. 	<ol style="list-style-type: none"> 1. Percent of screenings completed in the waiting room vs. exam room. 2. Improvement in patient feedback about screening process.
Decrease the amount of physician time spent on documentation after clinic hours.	Physicians are documenting many elements of the patient visit that could be completed by MAs or nurses.	<ol style="list-style-type: none"> 1. Share responsibilities during the patient rooming process. 2. Train MAs or nurses to document the patient visit. 	<ol style="list-style-type: none"> 1. Number of MA or nurses trained on documentation. 2. Decrease in after-hours documentation time by the physician.



DO: Collect Data

- Assess whether changes occurred
- Look at information over time
- Look at effect of changes
- Data provides a more accurate basis from which to make predictions.



“If it’s not measured it cannot be improved”

- Measurement is a critical part of testing and implementing changes; measures tell a team whether the changes they are making actually lead to improvement.
- What you need to know
 1. Both qualitative and quantitative data are critical for evaluating and guiding improvement
 2. A family of measures, incorporating outcome, process, and balancing measures, should be used to track improvement work
 3. Time series analysis, using small amounts of data collected and displayed frequently, is the gold standard for using data for improvement

QI Project Measures

1. When you're trying to make a change, you will collect data throughout the duration of your project to understand and study the impact of your changes.

1. Typically, you will track 1-2 outcome measures, 3-5 process measures, and sometimes 1-2 balancing measure

Measure Name	Operational Definition	Data Collection Plan
Provide a logical name for your measure. <ul style="list-style-type: none"> • Most measures start with "number of," "percent of," or "___ rate." 	Define the measure in clear, specific terms. <ul style="list-style-type: none"> • Indicate if you are using a count, a percent, "days between," etc. • If the measure is a percentage or rate, provide the numerator and the denominator. 	Explain how the data will be collected. <ul style="list-style-type: none"> • Who is responsible for collecting the data? • How often will the data be collected (e.g., hourly, daily, weekly)? • What is to be included or excluded (e.g., include only inpatients in this measure or include inpatients and outpatients)?
Outcome measure(s):		
E.g. Percent flu vaccine compliance	E.g. The number of patients who receive a flu vaccine [numerator] out of the total number of people in the patient population who should receive the flu vaccine based on current guidelines [denominator].	E.g. All nurses will report vaccination data into the system with each patient as usual. On a weekly basis, Nurse Susie will extract the flu vaccination data. Week over week, she will add the number of newly vaccinated patients to the previous week's total, so that the measure is cumulative over time, and divide the current total numerator by the denominator. On Mondays, Nurse Susie will plot the recent data on a flip chart in the staff room before the weekly huddle.



PDSA: Study Stage

○ STUDY components

- Did your plan result in an improvement? By how much/little?
- Was the action worth the investment?
- Do you see trends?
- Were there unintended side effects?
- You can use a number of different tools to visually review and evaluate an improvement, like a Pareto chart, control chart, run chart, or histogram.



Example: New booking schedule

The team then decide to introduce a new booking schedule and continue recording patient waiting times. The median line is fixed at 42.5. These results are then plotted on a new run chart with our baseline data on Figure 6.

Figure 6

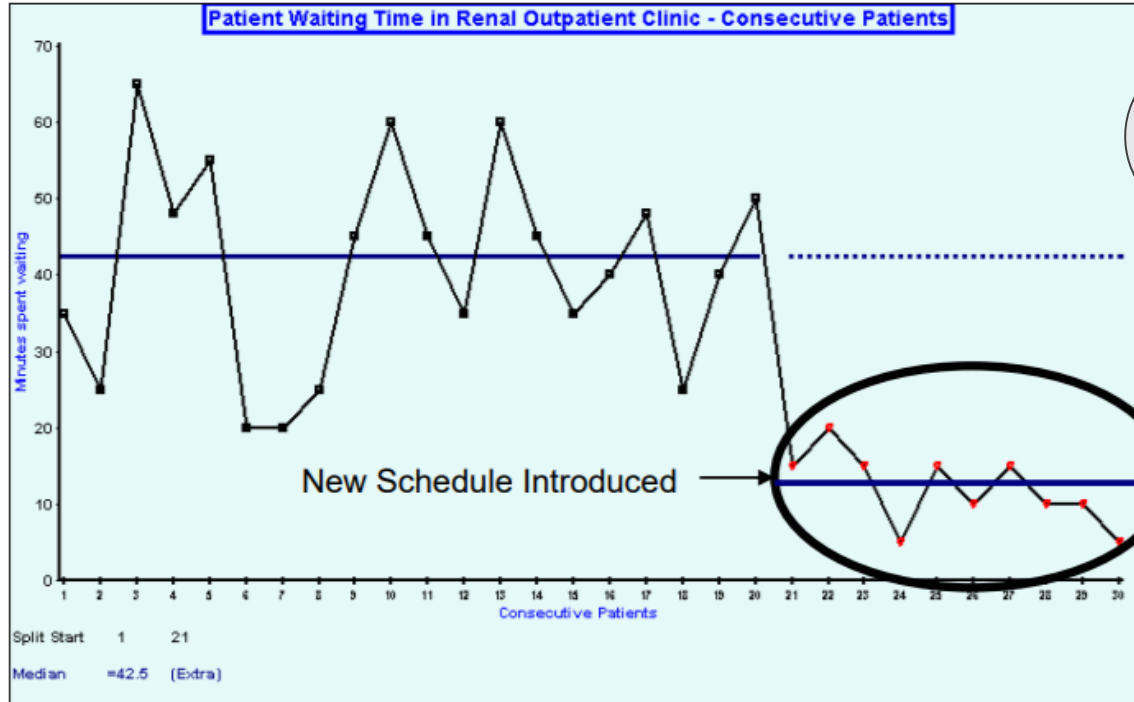


Figure 6 shows the results of their PDSA. There has been a shift shown by the oval – with a run of 10 points below the median

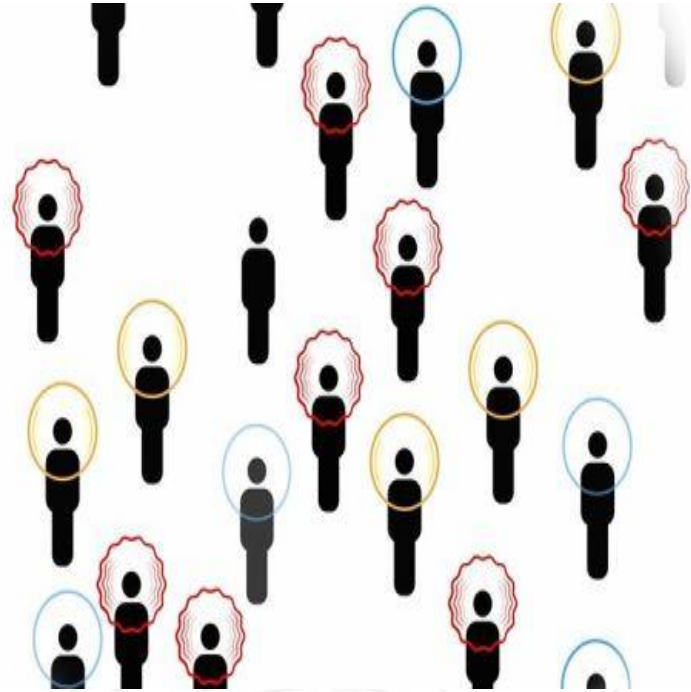
“Act” Stage: What is it?



- Tweak your approach if needed
 - Base the adjustment on discoveries during “Study” stage
- Success?
 - Standardize,
 - re-test, and
 - **spread change**
- Not successful?
 - Return to “Plan” stage

What helps spread and sustain change?

- **Organizational Process**
 - Operations, change infrastructure
 - Communication and Feedback loop
- **Culture**
 - Leadership support
 - Morale
 - Readiness to change
- **Planning**
 - Sustainability planning



Organizational process

What does this proposed change mean/
involve?

- Who?
 - Leadership
 - Staff
 - Committees of multiple stakeholders
- What changes will be spread and sustained?
- Role of finance
 - Resources needed
 - “return on investment”
- Operations
 - Documentation
 - Training



Culture: Why It Matters?

1. A system has to **make a choice to be high performing.**
2. It's a conscious **choice to improve and maintain the improved level of performance.**
 - a. **It's not an accident. It's not something that just happens to the system.**
3. It's something that **becomes part of the business strategy** of the organization.
4. That means **top level leadership in the organization has to make the choice that this is the way we're going to do our work.**



Sustainability Planning

AIM: Sustain the Change

Aim, Outcomes:
Tier 1 (unit) managers create the conditions and effectively oversee Quality Control and Quality Improvement initiatives that maintain and improve system performance

Impact:
Frontline service delivery unit provides care that is reliably safe, timely, effective, efficient, equitable, and patient-centered

Primary Drivers

P1: Drive Quality Control (QC)
Management system is organized to anticipate and detect defects, maintain stable operations, respond to abnormalities

P2: Manage Quality Improvement (QI)
Management system mounts coordinated projects to improve process capability

P3: Establish a Culture of High-Performance Management
Positive trust relationship encourages and sustains frontline staff engagement in QC and QI

Secondary Drivers

S1: Standardization: Processes to define and disseminate standard work (what to do, how to do it)

S2: Accountability: Process to review execution of standard work

S3: Visual Management: Process performance information is continuously available to synchronize staff attention and guide current activities

S4: Problem Solving: Methods for surfacing and addressing problems solvable at the front line, and for developing improvement capability

S5: Escalation: Frontline staff scope issues and escalate those that require management action to resolve (e.g., requiring cross-department coordination)

S6: Integration: Goals, standard work, and QI project aims are integrated across organizational levels and coordinated among units and departments

S7: Prioritization: Processes to help prioritize frontline improvement projects based on organizational goals

S8: Assimilation: QI projects are integrated into daily work

S9: Implementation: Frontline teams have support to move from QI back to QC, integrating results of QI efforts into standard processes

S10: Policy: HR policies support engagement, transparency, staff initiative (e.g., incentives, recognition, etc.)

S11: Feedback: Provided on patient outcomes, with details linked to process abnormalities, utilized in root cause analysis

S12: Transparency: System-focused analytical inquiry into causes of process abnormalities ("Why?", not "Who?")

S13: Trust: Through regular, consistent execution of standard work at all levels

Done?

Reminders:

1. CQI is a management philosophy
2. Standardized your QI model (written P&P)
3. Identify & monitor program outcomes
4. Execute QI plan (using PDSA) to improve outcomes



Q&A





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