

Middle East Forum on Quality & Safety in Healthcare **2023**

16-19 March, Doha

Whole System Quality:

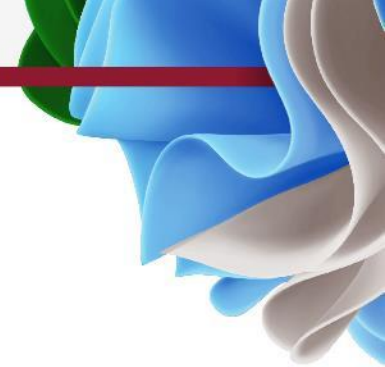
A Unified Approach to Building Responsive, Resilient Health Care Systems

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Healthcare Resilience in Extraordinary Times

Brought to you by:
Hamad Healthcare Quality Institute



Conflict of Interest

Dr. Nana A. Y. Twum-Danso has no conflict of interest or disclosure in relation to this presentation.

Learning Objectives

At the end of this session, participants will be able to:

1. Describe the basic principles of quality planning, quality control and quality improvement
2. Identify leadership principles and practices that need to be strengthened to animate a whole system approach to quality

Audience Poll



1.

Where does the drive for quality come from in your organization?
Are quality goals mainly internal vs external-driven?

- mainly external = 1
- mainly internal = 5

2.

To what extent do the strategic priorities of your organization drive your improvement agenda (vs reacting to emerging issues)?

- mostly reactive = 1
- mostly strategic = 5

3.

To what extent does your organization provide the information and data you need to plan, control, and improve quality?

- relevant information unavailable = 1
- relevant information readily available = 5

4.

How psychologically safe do your staff feel to reveal defects and experiment with new ideas?

- bad news is filtered, staff are compliance oriented = 1
- “brutal facts” are discussed, staff empowered to innovate and improve = 5

Does this sound familiar

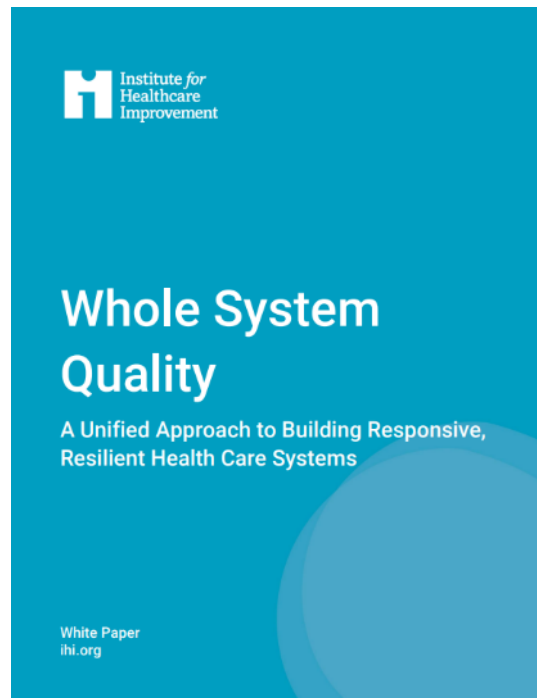


- Chasing externally driven metrics of quality (e.g. accreditation, quality assurance)
 - Growth/financial goals proactive and visible yet quality and safety agenda reactive
 - Quality goals do not resonate across departments
- Clinical staff are under enormous stress, predates COVID
 - Ongoing risk: safety lapses not visible, acknowledged, responded to
 - Medical-nursing divide is pervasive, wasteful quality efforts
- Numerous impressive quality projects that lack common goal
 - Quality activities “outsourced” to quality department
 - Staff, patients and families are not engaged as co-designers and co-producers of quality

There is a better way to achieve high quality care across a complex health system



IHI's Whole System Quality Approach



Whole system quality (WSQ) is the “organization-wide pursuit of quality through **management practices** that facilitate knowledge exchange and **leadership principles** that foster a culture of learning” in order to “**continually, reliably, and sustainably meet the evolving needs of patients, populations and communities**”

Leadership Principles

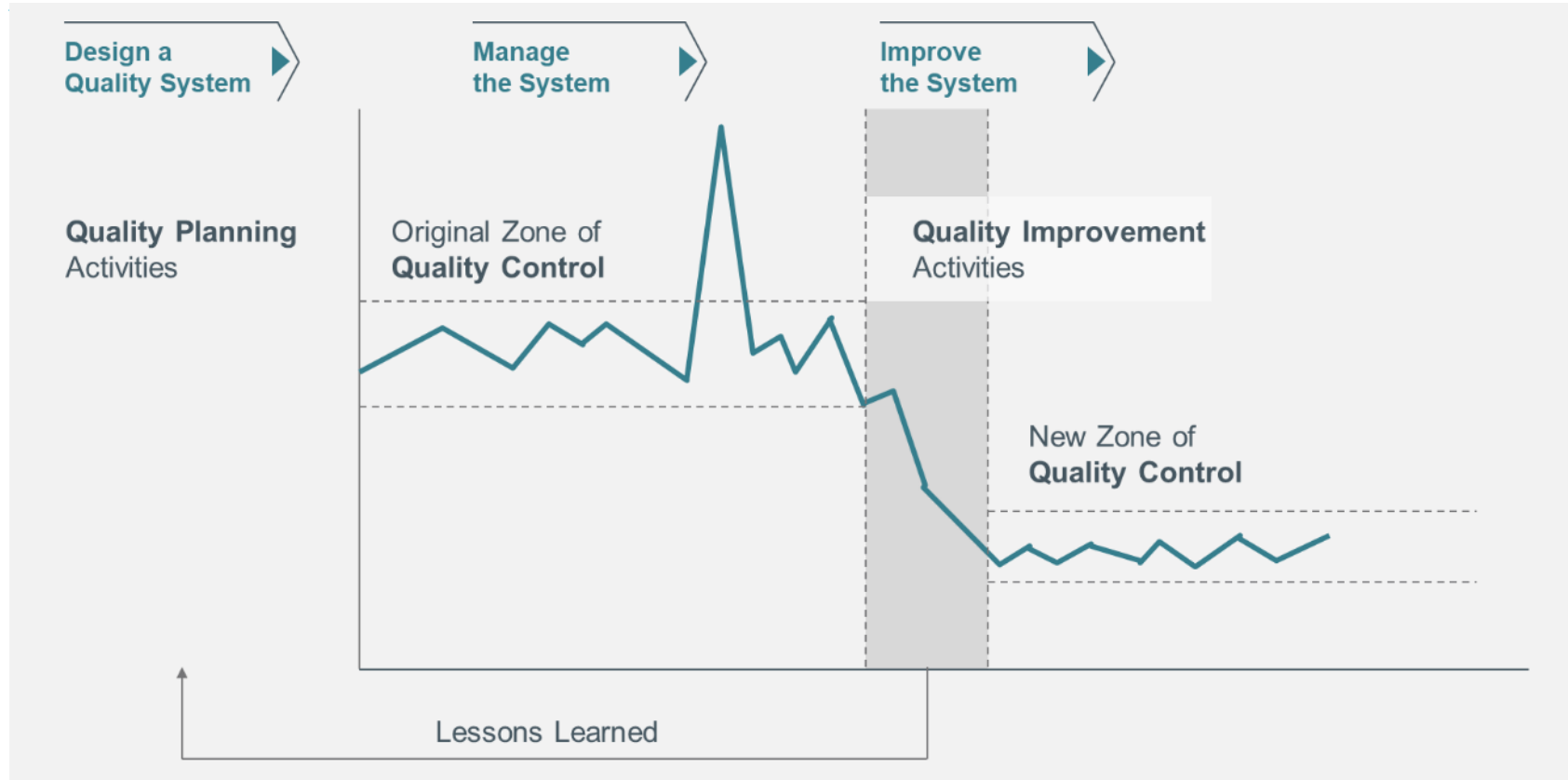
- Foster a culture that promotes inquiry, learning, reflection, systems thinking, and purpose

Management Practices

- Institute and support infrastructure for quality planning, quality control and quality improvement in an integrated manner



WSQ Approach: Integrated Quality Management System



WSQ Approach: Integrated Quality Management System

Quality Improvement

- **Focus** on strategic priorities for the system
- **Train and coach** staff in improvement methods using dosing approach
- **Collaborate** across patients, communities, and providers to ensure voice of the customer is embedded in processes
- **Test, learn, and adapt** process changes towards improved performance

Quality Planning

- **Identify** patients, families and providers needs
 - **Assess** performance and gaps
 - **Define** quality goals locally
- **Set priorities** for improvement
- **Invest** in required inputs and infrastructure
- **Invest** in people & **build** local capability

Quality Control

- **Ensure systems, protocols, skills, and processes** are in place for key activities
- **Reduce unwanted variation** from expected performance
- Establish **new standards and protocols** based on results of QI initiatives to promote **sustainability**
- Integrate **licensing, accreditation, and professional** oversight bodies



Cultivating a Learning System

Quality Improvement Methods

Clear Aim



Systems Thinking



Collaboration



Continuous Learning



Scale & Impact



Leading with Quality Intent



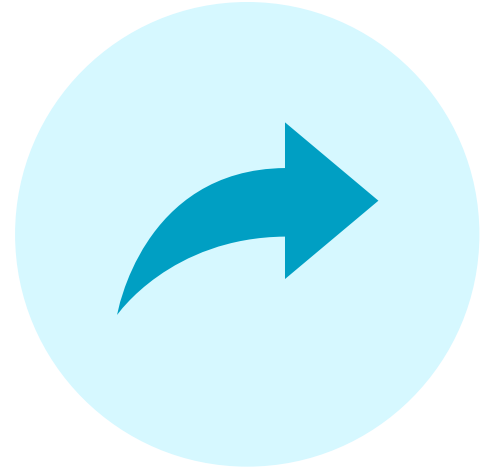
Leading with Quality Intent

“If I had to reduce my message for management to just a few words, I’d say it all had to do with **reducing variation.**”

- W. Edwards Deming

“**The level of mistakes, and the variation day to day, were accordingly predictable...** It means that here is a stable system for production of defective items. **Any substantial improvement must come from action on the system, the responsibility of management.** Wishing and pleading and begging the workers to do better was totally futile.”

- W. Edwards Deming



Types of Variation in Quality



Strategic Variation



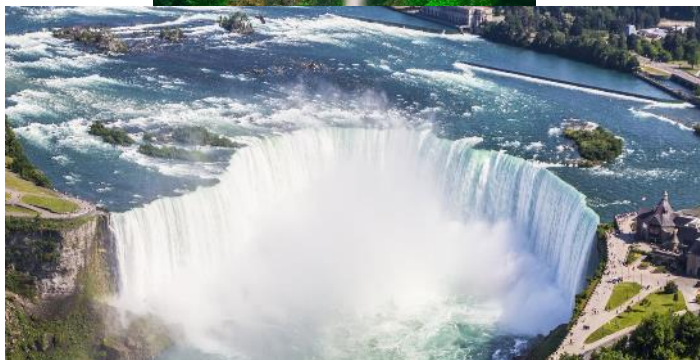
A result of expansive, unfocused, or misaligned organizational priorities



Operational Variations



Workarounds used to prop up old systems and structures that have failed to evolve to meet strategic goals



Clinical Variation



A product of disparate workflows and siloed teams, and a driver of poor quality



WSQ Approach to Tackling These Variations

	 Strategic Variation	 Operational Variation	 Clinical Variation
Locus of variation and control	At the board and executive levels	In the systems and structures that support strategy deployment	At the point of clinical care
Consequent Challenges/Symptoms	Often results in too many priorities or priorities are misaligned with strategic goals	Workarounds often emerge to prop up old structures and problems that should be addressed with system-level changes	Usually gets the most attention from quality improvement teams because they are patient-facing and often urgent
WSQ Approach	Engage multidisciplinary leaders at a “10,000-foot view” using both quantitative and qualitative data through a process called quality planning	Embed quality control principles to standardize and simplify routine work, surface and solve problems appropriately.	Rigorous strategy to reduce clinical variation by engaging staff and intentional planning for sustainable quality improvement

WSQ – Getting Started

14

Engaging Leaders at Multiple levels of the System

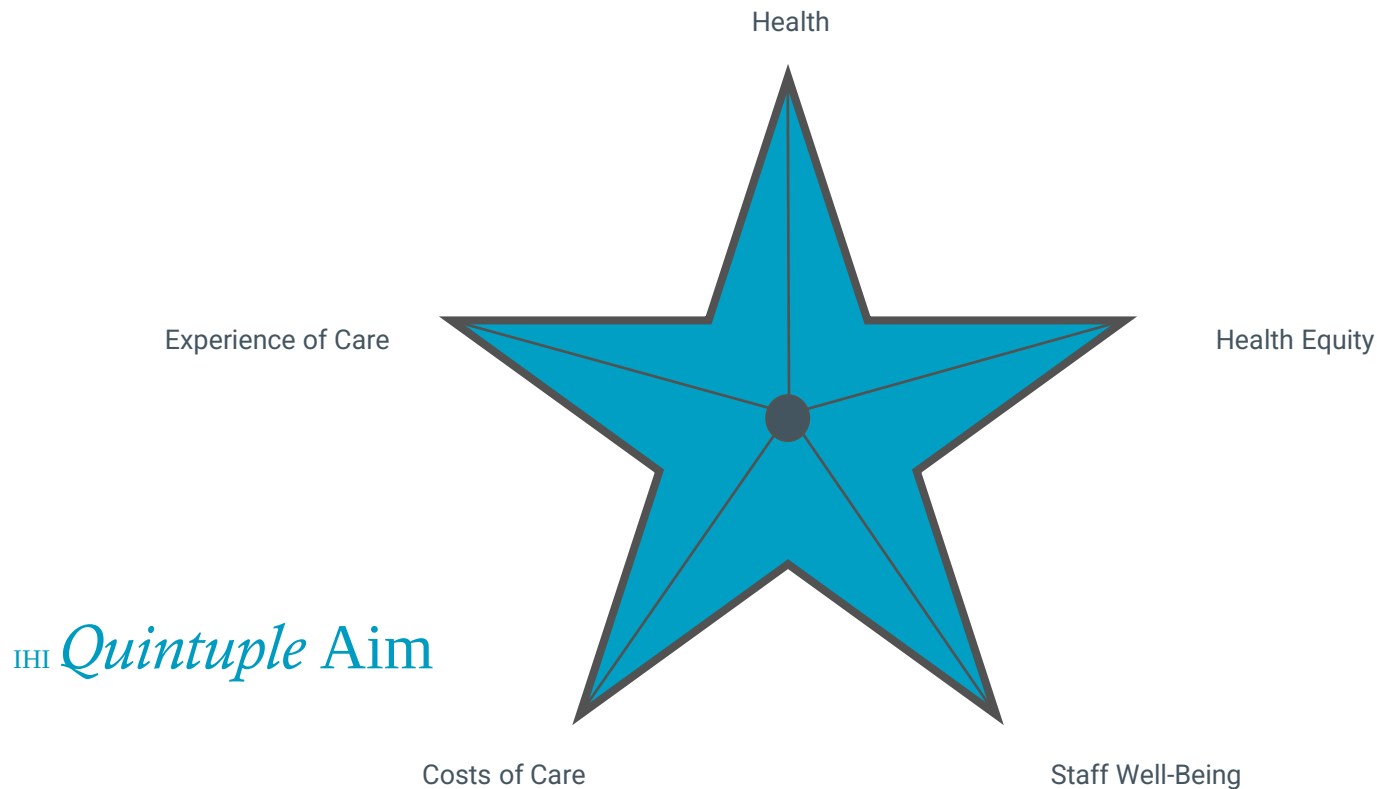


Quality Management Architecture

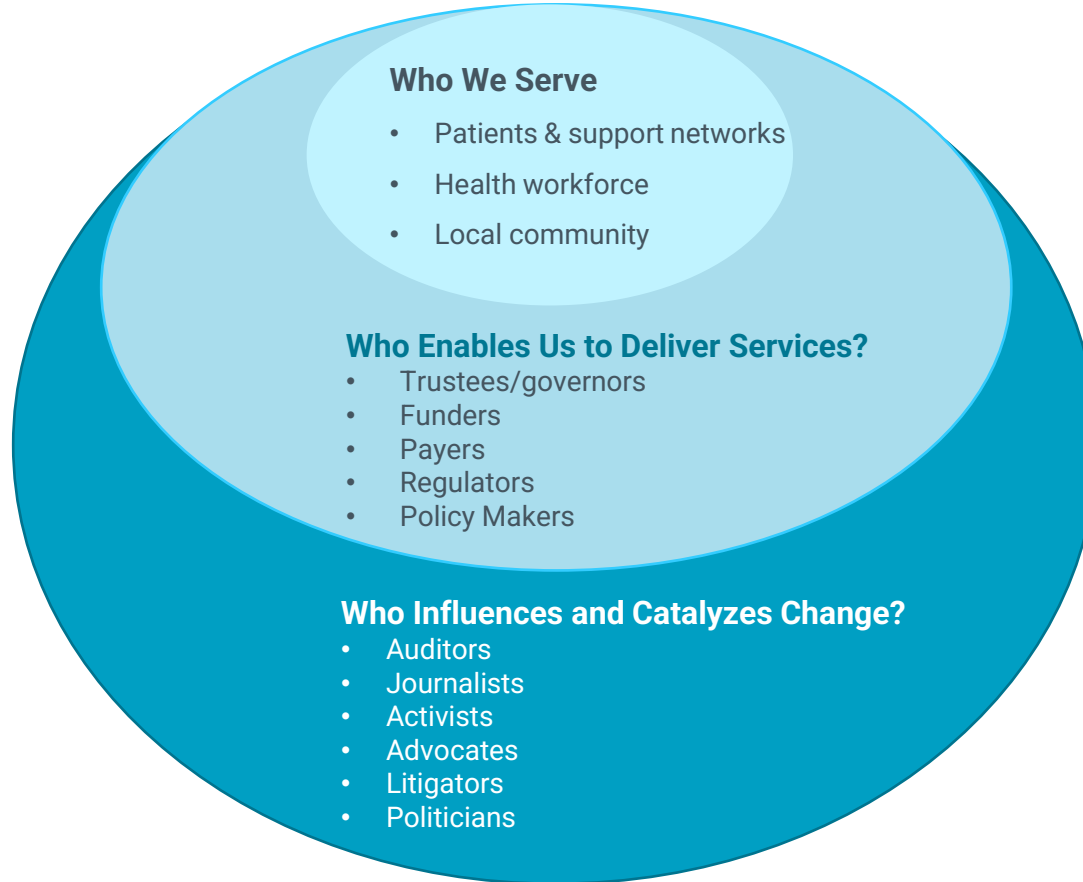
			KEY STAKEHOLDERS
Quality Planning	Quality Control	Quality Improvement	
Offer input to inform organizational strategy as primary customer group	Offer feedback on quality experience to inform understanding of performance	Engage as co-producer in relevant QI activities	Patients & Families
P O I N T O F 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 & analysis activities	Support development of QC standard work & infrastructure	Support local QI activities & inform project prioritization efforts	Quality Office
Work with execs and unit leaders to articulate how to execute on strategy	Identify cross-cutting problems & 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 regular basis	Board of Directors



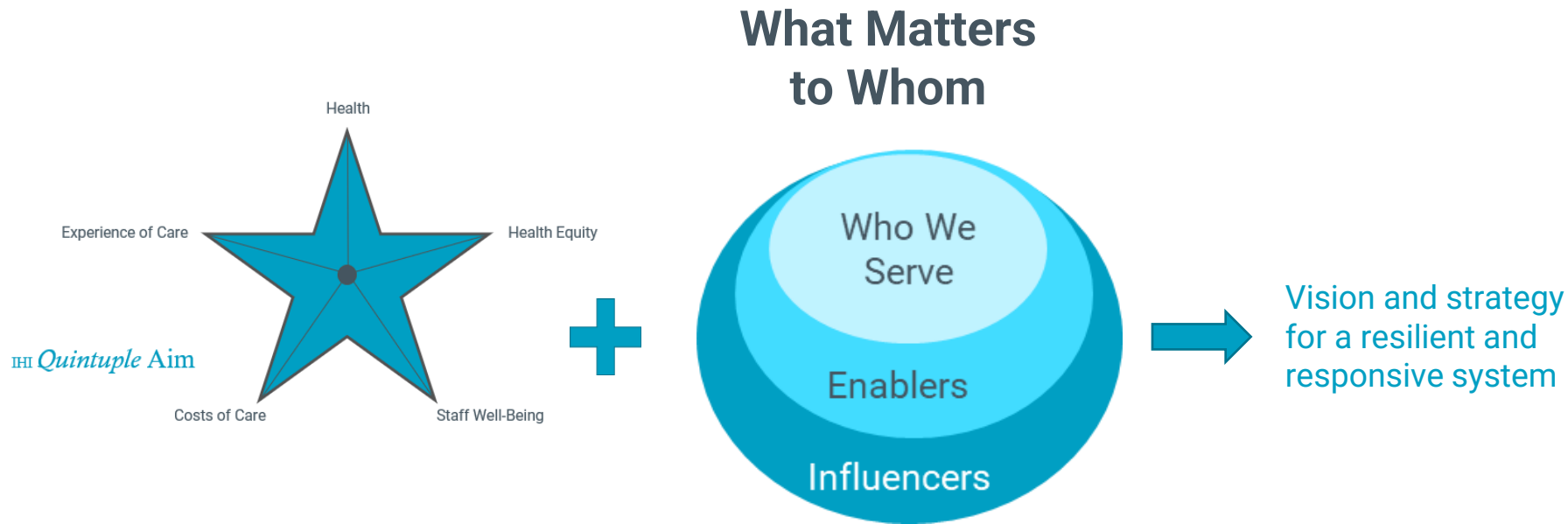
Starting with Vision (e.g., the Quintuple Aim)



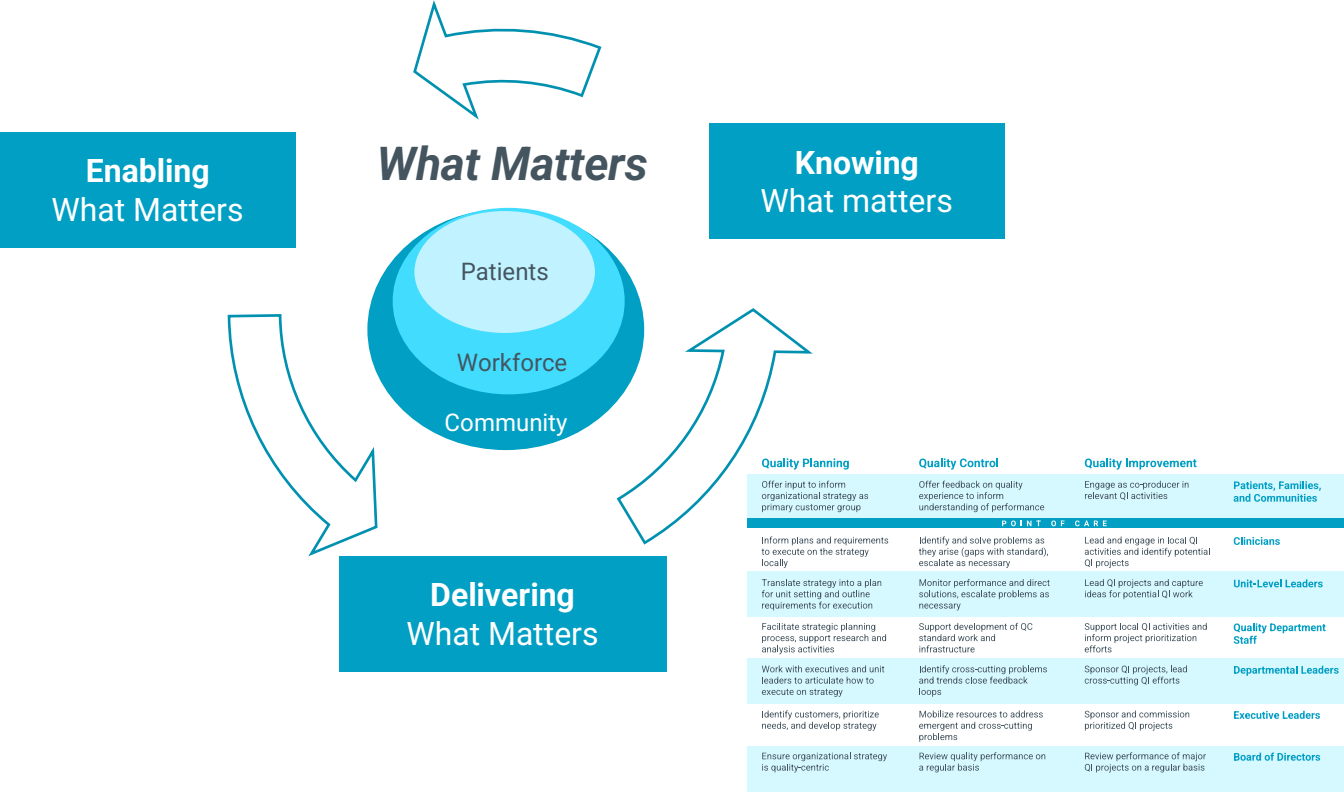
What Matters, to Whom: Multiple Constituencies



Leading Whole System Quality in Complex Adaptive Systems



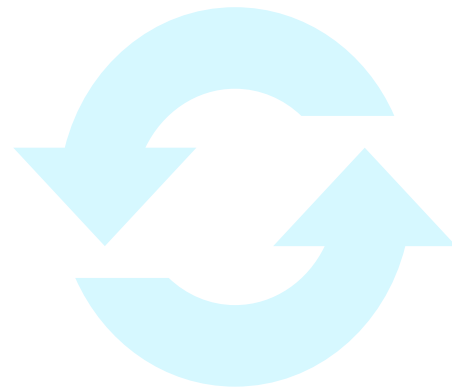
Leading Whole System Quality in Complex Adaptive Systems



Learning System

Definition

A system “in which **knowledge generation is so embedded into the core of the practice of medicine** that it is a natural outgrowth and product of the healthcare delivery process and leads to **continual improvement** in care.”



Quality Planning



Quality Planning

Quality planning (QP) is a process an organization undertakes to identify customer needs, define quality goals, and design and deploy a strategy to reliably meet prioritized needs.



Quality Planning – Step 1

What Matters to your Stakeholders

Complaint Data

Patient experience

Population needs assessments

Annual Community health needs assessment

Security Reports

Staff satisfaction

Staff engagement survey

Security Reports

Patient Safety Culture Data

Patient Safety Reports and RCAs

Existing scorecards and dashboards

Benchmarking Reports

Ongoing improvement work

Accreditation reports

Patients & Families

Clinicians

Unit-Level Leaders

Quality Office

Departmental Leaders

Executive Leaders

Board of Directors

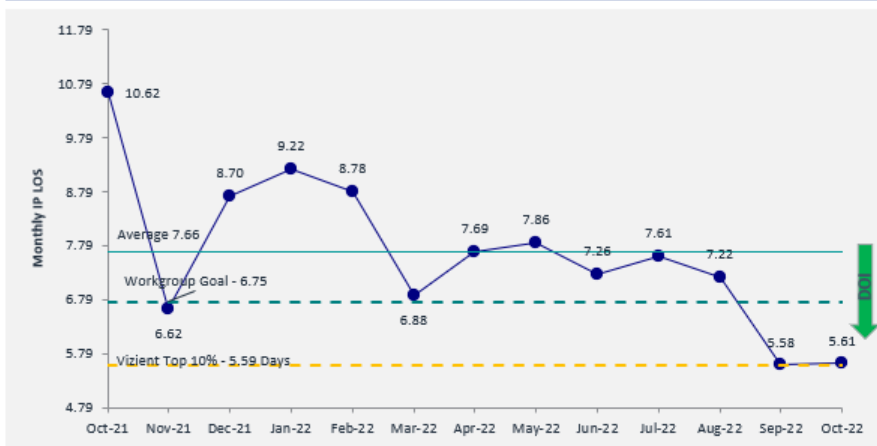


Quality Planning Step 2:

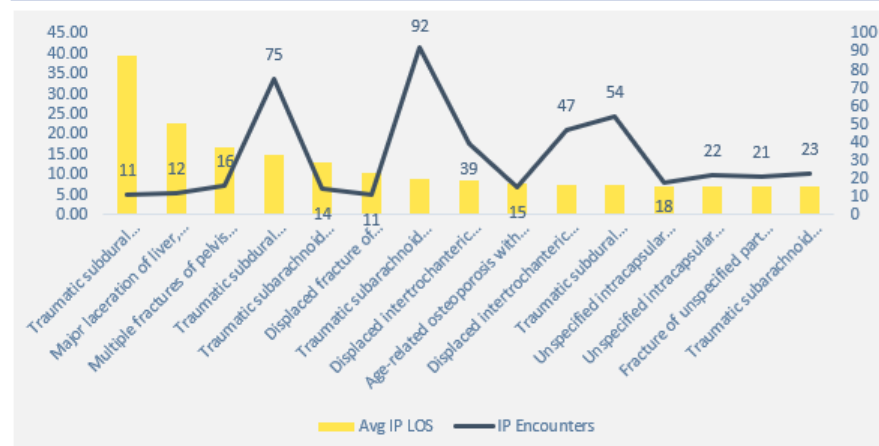
Visualizing the available Data

Display data in a consistent way to objectively evaluate opportunities for improvement

Average Monthly IP LOS in Days



Top 15 Primary Diagnosis- Average LOS and number of Encounters



Triangulation of Data



Quality Planning Step 3:

Preparing the Team

In order to be successful, QP participants need some preparation:

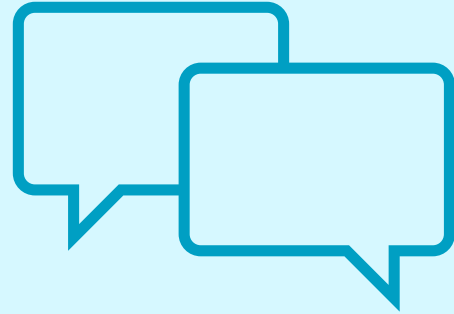
- Core understanding of data analysis to be able to distinguish between normal variation and special cause variation
- Review of data for learning not judgement (and/or financial allocation)
- Collaborate with key constituents in interpreting the data and prioritizing opportunities for improvement
- You cannot over communicate (7 times, 7 ways)



Quality Planning Step 4:

Convening and Prioritization

- Convene your stakeholders
- Review each potential measure for consideration
- Pause, ask questions, discuss and vote
- Define levels of priority for improvements
 1. System
 2. Local
 3. Quality control
 4. Delegate
 5. Defer



Quality Planning Step 5:

Stakeholders taking Action

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Quality Planning Step 6: Customization

Ask Units, Service Lines,
What is your contribution?

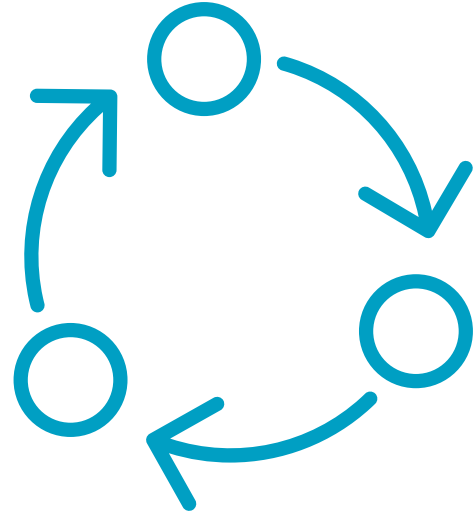


Quality Control



Quality Control

Quality Control (QC) entails establishing performance standards, developing continuous information relay systems to track performance, identifying gaps between actual and desired performance, and applying standard work to close the gap



Quality Management Architecture

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Quality Control Practices

Standardization: Processes to define and disseminate standard work (what to do, how to do it, and why) span the organization.

Accountability: Processes to review execution of standard work and fidelity are in place across the organization.

Visual management: Process performance information is continuously available to synchronize staff & leadership attention and guide future activities; reduces information overload.

Problem-solving: Methods for surfacing and addressing problems that are solvable at the point of care, and for developing improvement capability, are broadly understood.

Escalation: Point-of-care staff scope issues and escalate those that require management action to resolve (e.g., requiring cross-departmental coordination).

Integration: Goals, standard work, and quality improvement project aims are integrated across organizational levels and coordinated among units and departments.



Visual Management System

Historical Yearly Performance

FY20	FY21	FY22
2.96%	4.79%	3.87%

2023 Priority Level:

☐ 1	☐ 4
☐ 2	☐ 5
☐ 3	

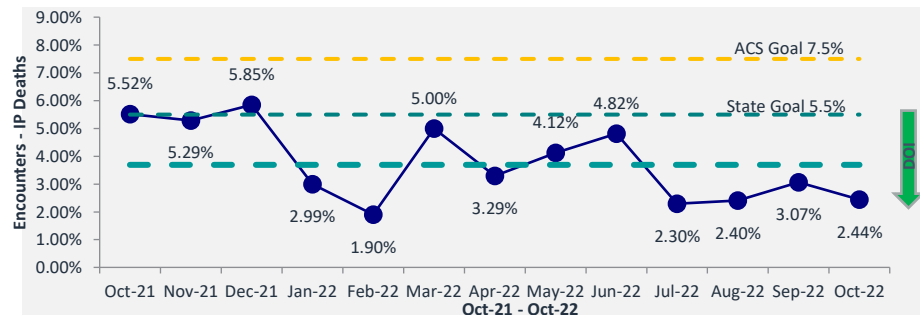
Guideline

All trauma-related mortalities must be systematically reviewed and those mortalities with opportunities for improvement identified for peer review.

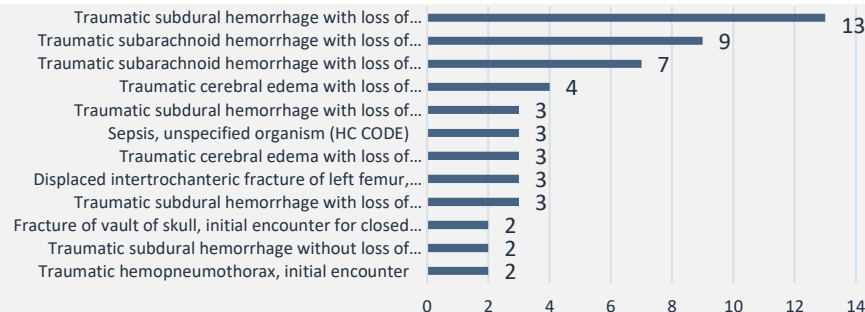
Encounters should be categorized as follows:

- DOA (pronounced dead on arrival with no additional resuscitation efforts initiated in the emergency department).
- DIED (died in the emergency department despite resuscitation efforts).
- In-hospital (including operating room).

Performance Over Time and Against Goal



Mortalities by Primary Diagnosis



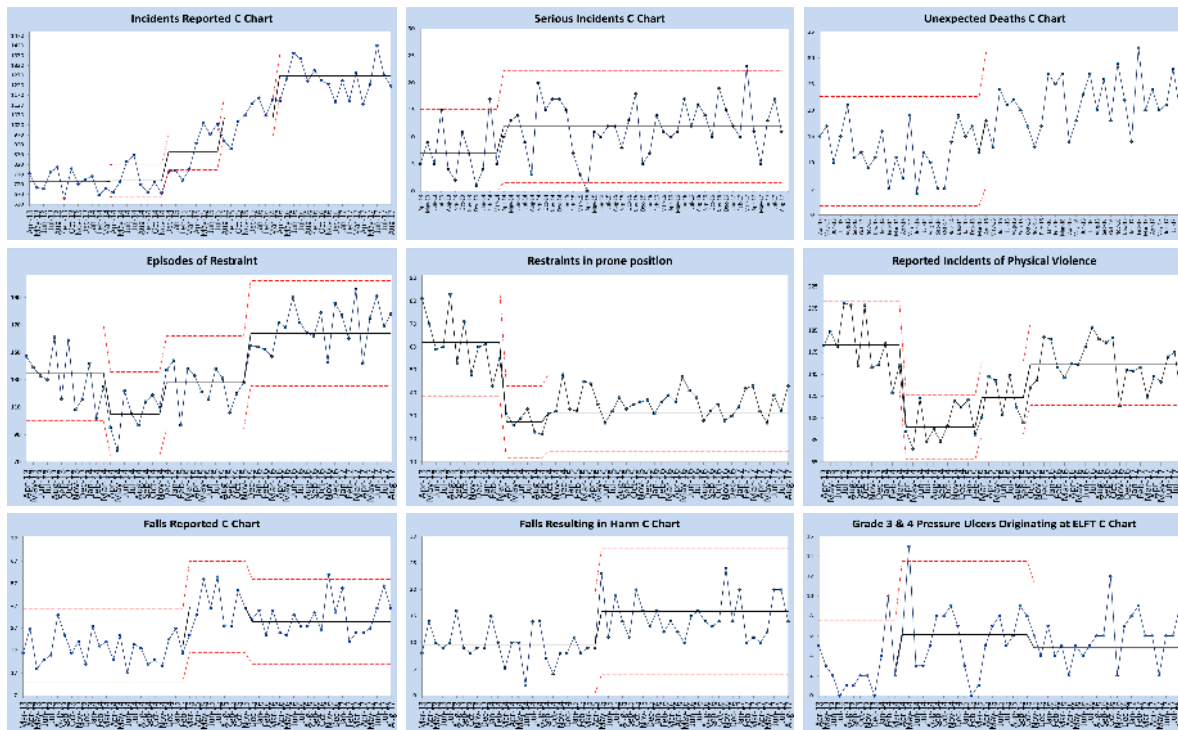
Analysis, Opportunities, Updates

- Top Three Mortality Count by Primary Diagnosis –
 - Traumatic subdural hemorrhage with loss of consciousness of unspecified duration, initial encounter - 13
 - Traumatic subarachnoid hemorrhage with loss of consciousness of unspecified duration, initial encounter - 9
 - Traumatic subarachnoid hemorrhage with loss of consciousness of any duration with death due to brain injury prior to regaining consciousness, initial encounter - 7
- Mortality rates for Top Three Highest Encounter volume by Primary Diagnosis –
 - Traumatic subarachnoid hemorrhage with loss of consciousness of unspecified duration, initial encounter – 9.78% (9 Deaths / 92 Encounters)
 - Traumatic subdural hemorrhage with loss of consciousness of unspecified duration, initial encounter – 17.33% (7 Deaths / 75 Encounters)
 - Traumatic subdural hemorrhage without loss of consciousness, initial encounter – 3.7% (2 Deaths / 54 Encounters)

Example of “Family of Measures” trust wide including Bedfordshire and Luton

Use of control
charts

Related measures
grouped together



Huddles

- Situational awareness
- Timely problem-solving
- Systems-thinking
- Team-building
- Standardized procedures for escalating problems needing management action to resolve

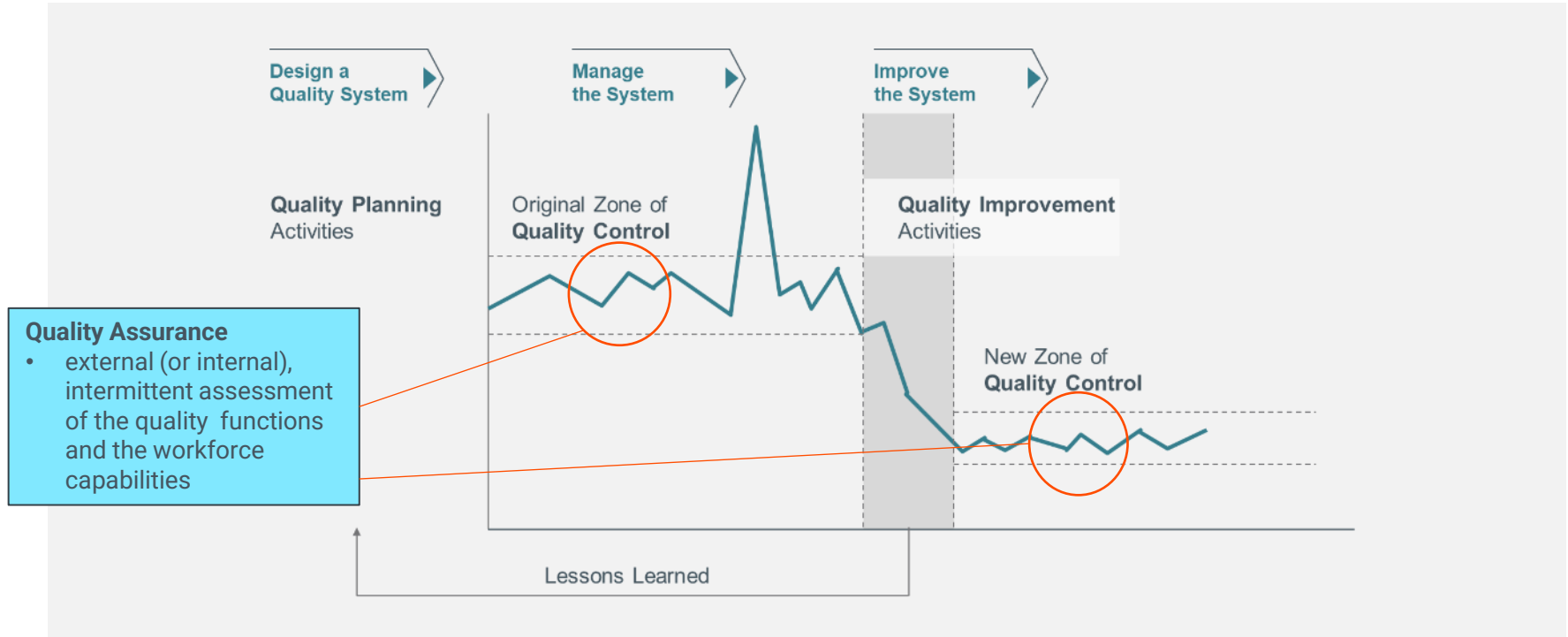


Leadership Presence at the Frontlines

- Gain nuanced insights from frontline practitioners
- Deepen understanding of the system as is, not as “should be” or “would like to be”
- “Walk the talk”
- Reinforce strategic priorities
- Humanize concept of leadership



The Role of Quality Assurance



Quality Improvement



Quality Improvement

Quality Improvement (QI) involves a structured approach to system redesign to achieve new levels of performance through the science of improvement

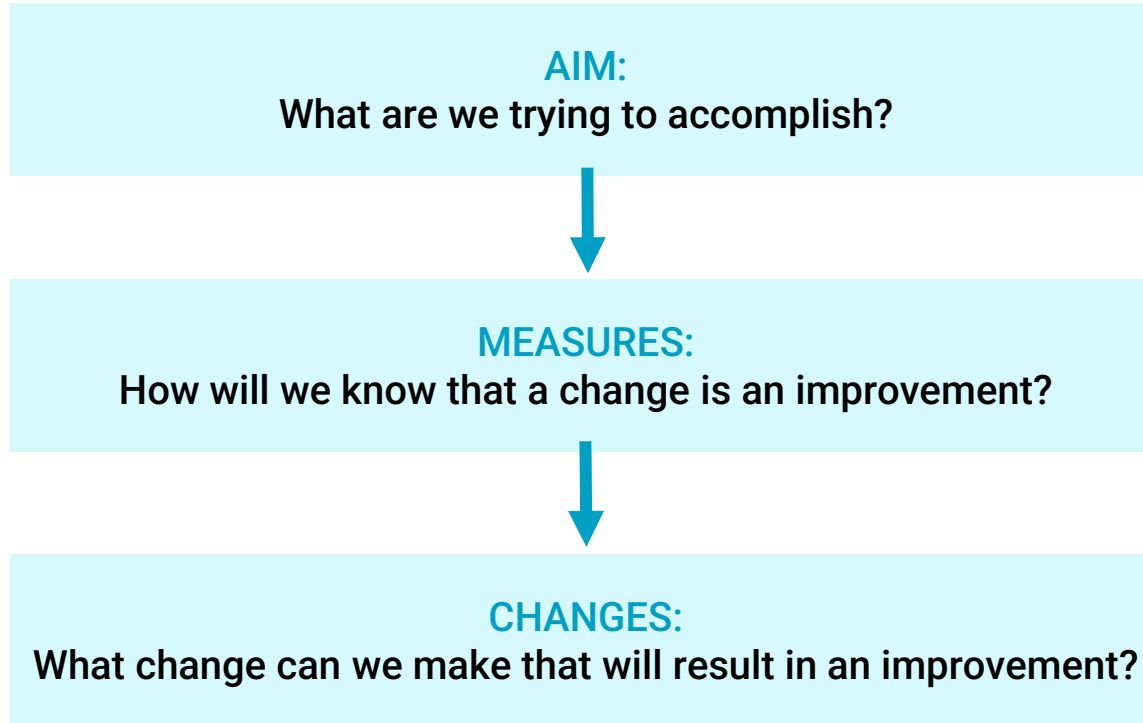


Quality Management Architecture

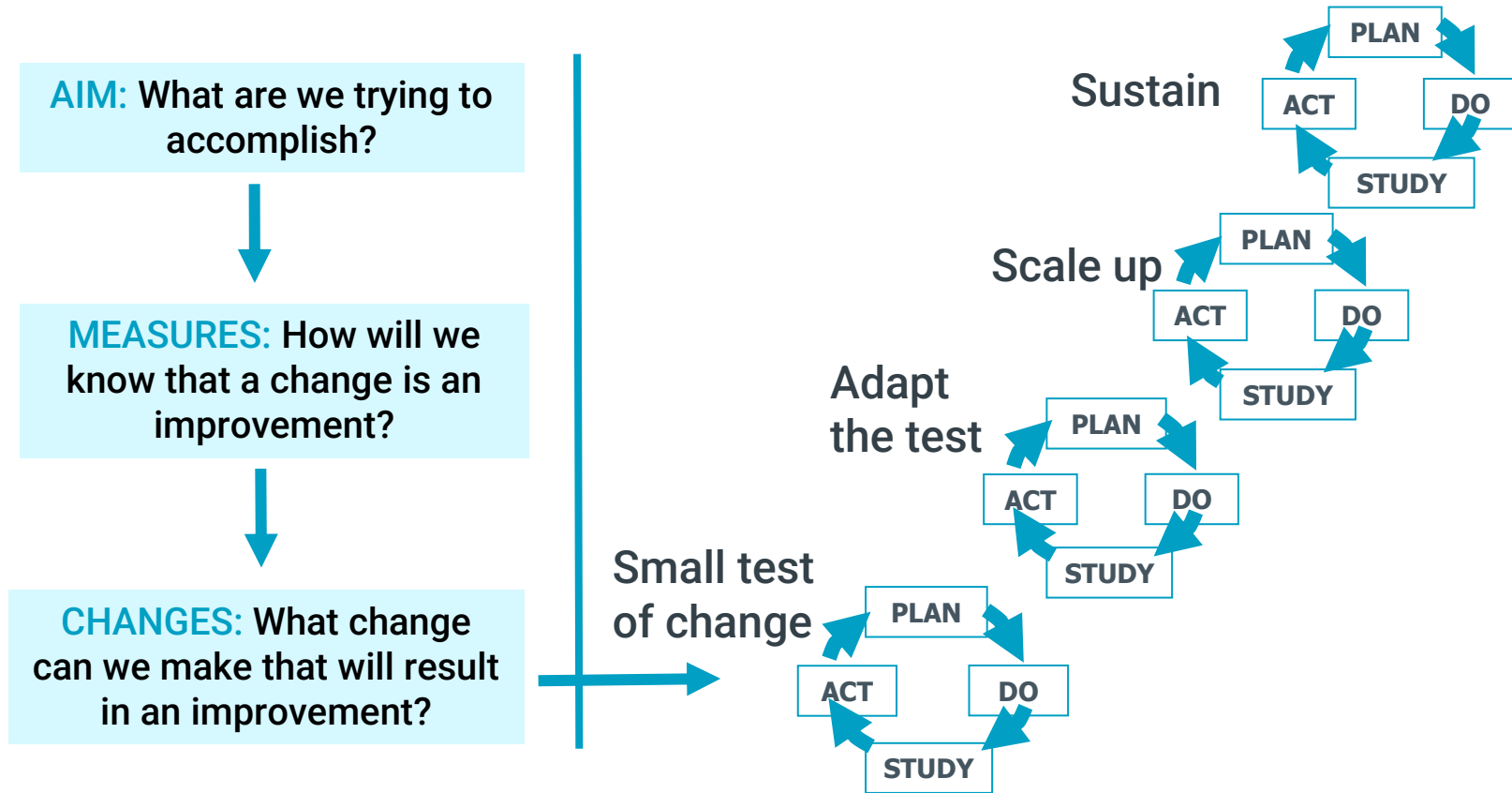
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3 Central Questions in Quality Improvement



3 Central Questions + Learning System → CQI



Innovation & Adaptation at the Core of Continuous Quality Improvement



1. Harness best practices and successful innovations locally, nationally and internationally for testing, adaptation and scale



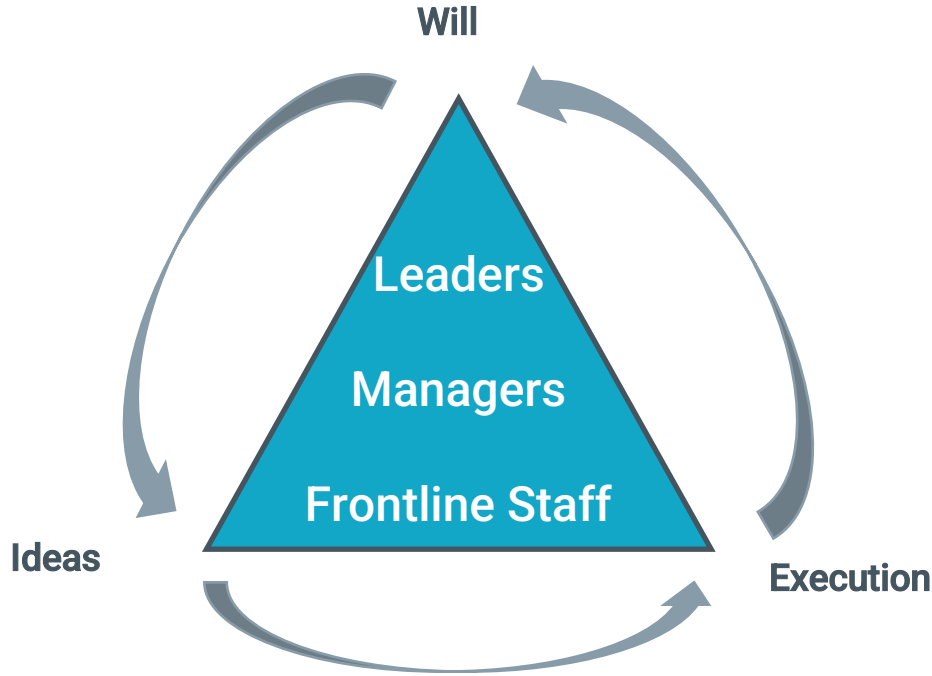
2. Unleash better ways of working from frontline staff & their managers through disciplined use of the Model for Improvement



3. Learn and leverage other high-performing sectors (e.g aviation, health tech, fintech) to improve health and health care

Adapted from Juran J, Godfrey AB, eds. Juran's Quality Handbook: Fifth Edition. New York: McGraw-Hill, 1999.

Enabling Environment for Improvement



Key Elements

Will to do what it takes to change the current system

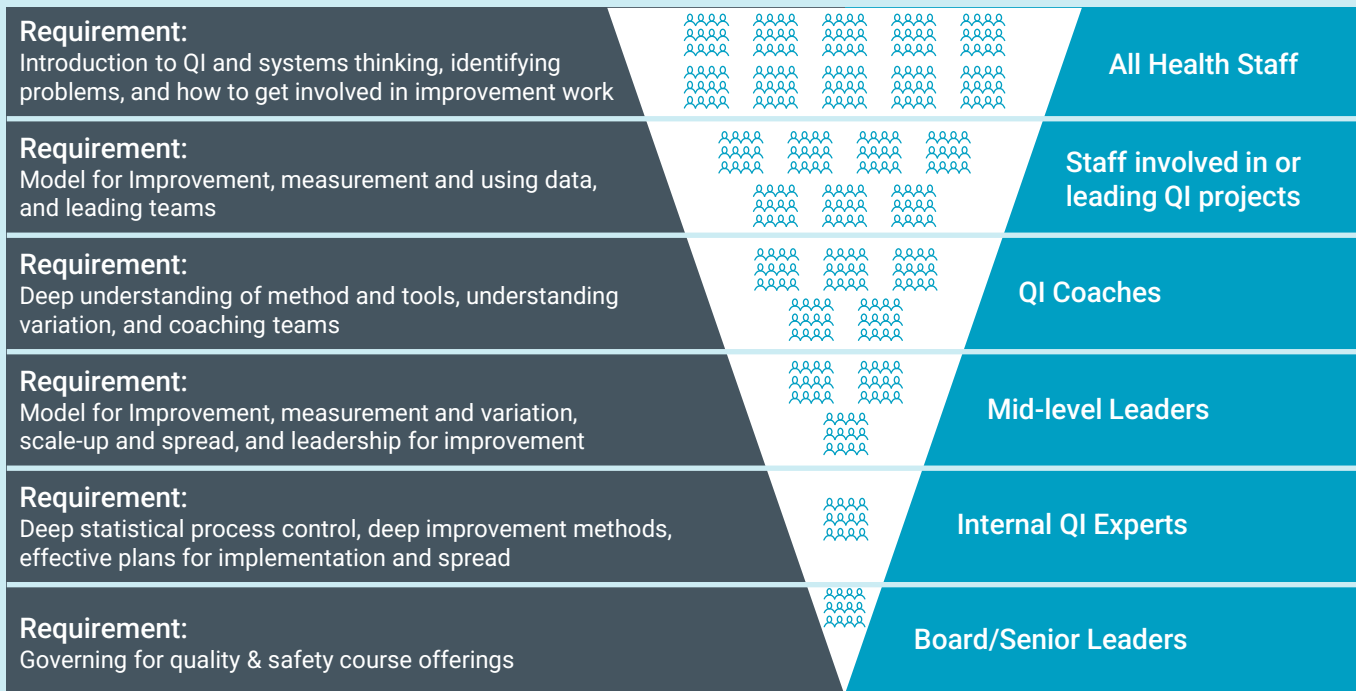
Ideas on which to base the design of the new system

Execution of change ideas reliably to achieve results on a portfolio of projects which serve to build more will

System-Wide Approach to QI Capability Building

The Right Dose for Each Level

Suggested Tailored QM Training

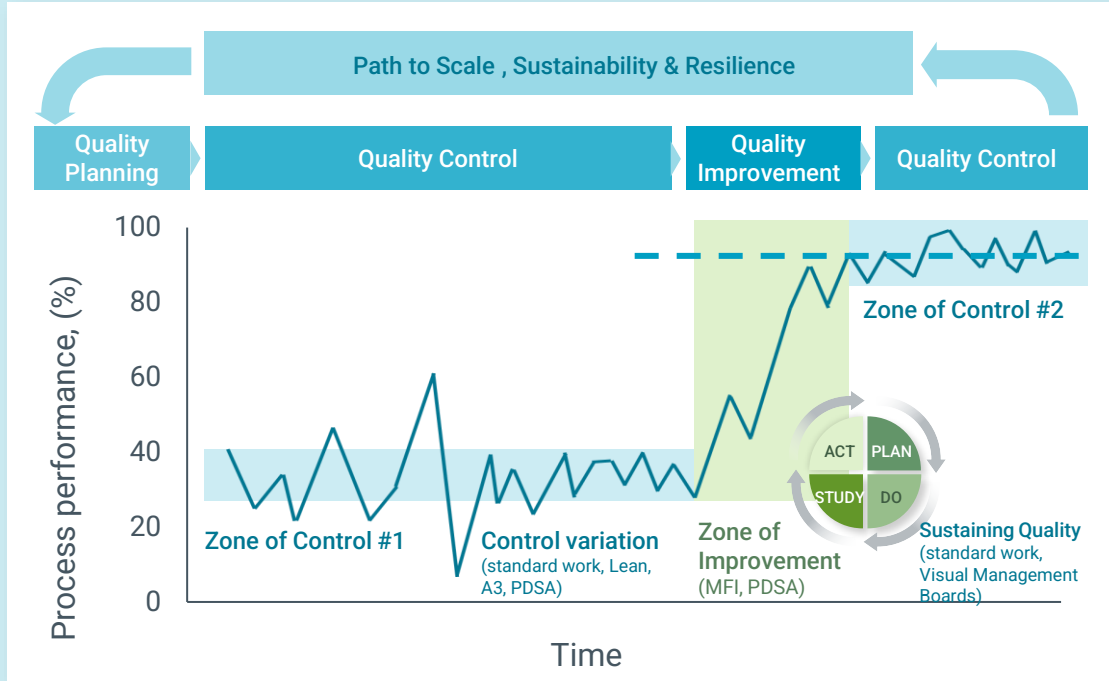


Summary



Summary: Integrated Approach to WSQ

Joseph Juran's Quality Trilogy

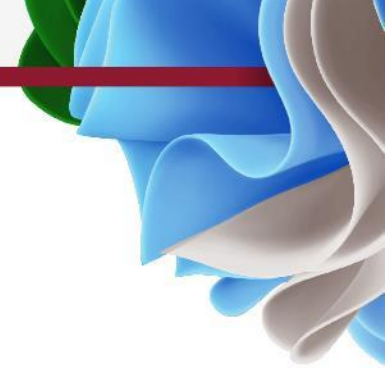


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1. Develop, disseminate and implement plans, policies and strategies to achieved desired quality (i.e., **quality planning**)
2. Monitor implementation of plans within expected limits of quality (i.e., **quality control**)
3. Develop, test and adapt innovations within existing system (i.e., **quality improvement**)
4. Embed successful innovations and process changes into standard work to leverage existing **quality control** systems
5. Incorporate new standard work into **quality planning** to promote scaling up across the system and sustainability
6. Establish **learning system** to support iterative process of quality planning, quality control and continuous quality improvement

Questions?





Thank you