TAHOE FOREST HOSPITAL DISTRICT

# 2022-11-03 Board Quality Committee Meeting

Thursday, November 3, 2022 at 9:00 a.m.

Pursuant to Assembly Bill 361, the Board Quality Committee meeting for November 3, 2022 will be conducted telephonically through Zoom.

Please be advised that pursuant to legislation and to ensure the health and safety of the public by limiting human contact that could spread the COVID-19 virus, the Eskridge Conference Room will not be open for the meeting.

Committee Members will be participating telephonically and will not be physically present in the Eskridge Conference Room.

If you would like to speak on an agenda item, you can access the meeting remotely: Please use this web link: https://tfhd.zoom.us/j/82934573067

If you prefer to use your phone, you may call in using the numbers: (346) 248 7799 or (301) 715 8592, Meeting ID: 829 3457 3067

TAHOE FOREST HOSPITAL DISTRICT

# Meeting Book - 2022-11-03 Board Quality Committee Meeting

TAHOE FOREST HOSPITAL DISTRICT

# QUALITY COMMITTEE
# AGENDA

Thursday, November 3, 2022 at 9:00 a.m.

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Public comment will also be accepted by email to mrochefort@tfhd.com. Please list the item number you wish to comment on and submit your written comments 24 hours prior to the start of the meeting.

Oral public comments will be subject to the three-minute time limitation (approximately 350 words). Written comments will be distributed to the board prior to the meeting but not read at the meeting.

**1. CALL TO ORDER**

**2. ROLL CALL**
Michael McGarry, Chair; Alyce Wong, RN, Board Member

**3. CLEAR THE AGENDA/ITEMS NOT ON THE POSTED AGENDA**

**4. INPUT – AUDIENCE**
This is an opportunity for members of the public to address the Committee on items which are not on the agenda. Please state your name for the record. Comments are limited to three minutes. Written comments should be submitted to the Board Clerk 24 hours prior to the meeting to allow for distribution. Under Government Code Section 54954.2 – Brown Act, the Committee cannot take action on any item not on the agenda. The Committee may choose to acknowledge the comment or, where appropriate, briefly answer a question, refer the matter to staff, or set the item for discussion at a future meeting.

**5. APPROVAL OF MINUTES OF: 09/07/2022** ..... ATTACHMENT

**6. ITEMS FOR COMMITTEE DISCUSSION AND/OR RECOMMENDATION**

**6.1. Safety First**

**6.2. Patient & Family Centered Care**

**6.2.1. Patient & Family Advisory Council (PFAC) Update .....** ATTACHMENT

An update will be provided related to the activities of the Patient and Family Advisory Council (PFAC).

**6.3. Patient Safety**

**6.3.1. BETA HEART Program Progress Report.....** ATTACHMENT

Quality Committee will receive a progress report regarding the BETA Healthcare Group Culture of Safety program.

**6.4. Leading a Culture of Safety**

Quality Committee will discuss the key question about our organization's capabilities and processes related to establishing a compelling vision for safety, including foundational and sustaining strategies.

American College of Healthcare Executives and IHI/NPSF Lucian Leape Institute. *Leading a Culture of Safety: A Blueprint for Success*. Boston, MA (2017) Downloaded on 3/9/22 from https://www.ihi.org/resources/Pages/Publications/Leading-a-Culture-of-Safety-A-Blueprint-for-Success.aspx **.....** ATTACHMENT

**6.5. Board Quality Education**

**6.5.1.** 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 **.....** ATTACHMENT

**7. REVIEW FOLLOW UP ITEMS / BOARD MEETING RECOMMENDATIONS**

**8. NEXT MEETING DATE**

The next committee date and time will be confirmed.

**9. ADJOURN**

*Denotes material (or a portion thereof) may be distributed later.

Note: It is the policy of Tahoe Forest Hospital District to not discriminate in admissions, provisions of services, hiring, training and employment practices on the basis of color, national origin, sex, religion, age or disability including AIDS and related conditions. Equal Opportunity Employer. The telephonic meeting location is accessible to people with disabilities. Every reasonable effort will be made to accommodate participation of the disabled in all of the District's public meetings. If particular accommodations for the disabled are needed or a reasonable modification of the teleconference procedures are necessary (i.e., disability-related aids or other services), please contact the Executive Assistant at 582-3481 at least 24 hours in advance of the meeting.

TAHOE FOREST HOSPITAL DISTRICT

# QUALITY COMMITTEE
# DRAFT MINUTES

Wednesday, September 7, 2022 at 12:00 p.m.

**Pursuant to Assembly Bill 361, the Board Quality Committee meeting for September 7, 2022 will be conducted telephonically through Zoom. Please be advised that pursuant to legislation and to ensure the health and safety of the public by limiting human contact that could spread the COVID-19 virus, the Eskridge Conference Room will not be open for the meeting. Committee Members will be participating telephonically and will not be physically present in the Eskridge Conference Room.**

## 1. CALL TO ORDER

**Meeting was called to order at 12:00 p.m.**

## 2. ROLL CALL

Board: Michael McGarry, Chair; Alyce Wong, RN, Board Member

Staff in attendance: Harry Weis, President & Chief Executive Officer; Jan Iida, Chief Nursing Officer; Janet Van Gelder, Director of Quality & Regulations; Dorothy Piper, Director of Medical Staff Services; Alix Crone, Patient Experience Specialist; Ashley Davis, Patient Safety Officer; Martina Rochefort, Clerk of the Board

Other: Kevin Ward, Patient Family Advisory Council member

## 3. CLEAR THE AGENDA/ITEMS NOT ON THE POSTED AGENDA

No changes were made to the agenda.

## 4. INPUT – AUDIENCE

No public comment was received.

## 5. APPROVAL OF MINUTES OF: 05/12/2022

**Director Wong moved to approve the Board Quality Committee meeting minutes of May 12, 2022, seconded by Director McGarry.**

## 6. ITEMS FOR COMMITTEE DISCUSSION AND/OR RECOMMENDATION

### 6.1. Safety First

Ashley Davis, Patient Safety Officer, shared the Health System is encouraging staff to communicate effectively using SBAR (Situation, Background, Assessment & R) and CUS (Concern Uncomfortable & Safety) tools.

*Theresa Crowe, Risk Manager, and Crystal Betts, Chief Financial Officer, joined the meeting at 12:04 p.m.*

### 6.2. Patient & Family Centered Care

#### 6.2.1. Patient & Family Advisory Council (PFAC) Update

Alix Crone, Patient Experience Specialist, reviewed the Patient and Family Advisory Council (PFAC) Summary Report on page 8 and 9 of the packet. Patient Experience Specialist also reviewed the list of

current PFAC members.

Goals for 2023 will include revising the charter and recruiting new members.

### 6.3. Patient Safety

#### 6.3.1. BETA HEART Program Progress Report

Ashley Davis, Patient Safety Officer, provided a progress report regarding the BETA Healthcare Group Culture of Safety program.

Patient Safety Officer reviewed the Gap Analysis Results Summary. The action plans will be presented to board.

BETA will attend the quarterly Medical Staff meeting on October 5.

*Dr. Annamieka Conway joined the meeting at 12:17 p.m.*

### 6.4. Governance of Quality Assessment (GQA) Tool

Quality Committee received an update on the following core process: *Board annually reviews management's summary of the financial impact of poor quality on payments and liability costs.*

*(*Reference: *Framework for Effective Board Governance of Health System Quality* (2018). Daley Ullem E, Gandhi TK, Mate K, Whittington J, Renton M, Huebner J. Boston, Massachusetts: Institute for Healthcare Improvement.

Last fiscal year we had three patient falls. Falls are reported on the National Database of Nursing Quality Indicators (NDNQI). An action plan was developed to re-educate staff. These patients did require additional care and/or time in the hospital. The impact was an additional $441,000.

TFHD does not have a program to calculate total cost.

There has been a lot of work to improve communication such as nurse to nurse handoffs on Med Surg. Nursing will incorporate different gowns for those patients that are fall risks. They are also looking into chair alarms. CNO said the Health System is looking into Vocera or Volt for better communication among providers.

The board regularly receives reports on service adjustments and risk management.

### 6.5. Board Quality Education

**6.5.1.** American College of Healthcare Executives and IHI/NPSF Lucian Leape Institute. *Leading a Culture of Safety: A Blueprint for Success*. Boston, MA (2017) Downloaded on 3/9/22 from https://www.ihi.org/resources/Pages/Publications/Leading-a-Culture-of-Safety-A-Blueprint-for-Success.aspx

Quality Committee reviewed the Culture of Safety graphic on page 25 of the packet.

Board members have a desire to drive the meetings to be more strategic and have a dynamic discussion on where quality is and where it is going.

The Administrative Council will complete the survey and review the assessment questions from the six domains.

**7. REVIEW FOLLOW UP ITEMS / BOARD MEETING RECOMMENDATIONS**
No discussion was held.

**8. NEXT MEETING DATE**
The next committee date and time will be confirmed.

**9. ADJOURN**
**Meeting adjourned at 1:00 p.m.**

# Patient and Family Advisory Council (PFAC) Summary Report

January 2022 – October 2022

*Alix Crone, DC – Clinical Patient Experience Specialist*

## Summary of Monthly Topics

**January –** PFAC cancelled due to the Omicron COVID surge in the community.

**February** – Theresa Crowe, our Risk Manager, presented on our partnership with BETA HEART. Meetings resumed after Covid restrictions, but virtual attendance was still very limited this month.

**March** – Scott Baker presented an update on the increased number of PCPs and Specialists. Addressed the concurrent demands of population growth, including increased provider visits, scheduling patient appointments quickly, and avoiding the need for ED /urgent care visits. Jan Iida, Chief Nursing Officer, was introduced and informed us of goals to improve discharge communication process.

**April** – Claire da Luz and Eileen Knudson presented information on the Substance Use Program and the position of Substance Use Navigator. Addressed community statistics reflecting the growing needs to address mental and behavioral health along with substance use.

**May** – Theresa Crowe, Risk Manager, revisited the presentation on the BETA HEART program with a larger group of attendees. Reviewed Culture of Safety, Communication and Transparency, Rapid Response and Analysis of an Adverse/Safety Event, Care for the Caregiver and Early Resolution. Invited members to join Beta HEART survey focus group on May 11 to review their knowledge and understanding of TFHD's Culture of Safety.

**June** – Elicited input for Truckee Surgery Center signage. Addie Brixie presented TFH's Level 3 Trauma Center designation. Alix presented on current patient satisfaction scores across all service lines at TFHD.

**July & August** – No meetings

**September** – Reviewed updates and changes for the upcoming year, with addition of Dr. Mieka Conway as Quality Medical Director, changes to Tahoe Forest's Vision, approved revisions to the PFAC charter and discussed the results of the PFAC input survey.

**October** – Karyn Grow, Director of Case Management and Care Coordination, presented on the Truckee/Tahoe region's senior demographics and identified gaps in needs. She presented Truckee's current

services and resources for seniors, and we discussed ideas to broaden these services with our existing resources (i.e., volunteer work from students, utilizing existing community recreational spaces, etc).

## Current Overview

- Welcomed new member, Bill Poland, whose first meeting was October 25, 2022.

- Members who are volunteering in other areas of the hospital in addition to the monthly PFAC meetings:
    - Kevin Ward assists the Quality Department tracking our service recovery toolkits. He also attends the quarterly Board Quality Committee meetings
    - Pati Johnson attends the quarterly Cancer Committee meetings
    - Alan Kern attends the quarterly Medical Staff Quality Committee

- Ongoing goal is to have PFAC identify ways to help educate community on all services offered by TFHS, as well as provide input and feedback on current and future processes and systems.

- Plan for 2023 is to address the current concerns and topics of interests within PFAC and the community – Access to care, behavioral and mental health, senior citizen resources and services, incoming providers, etc.

- PFAC meets every month, 9 months in the year. We do not meet during the months of July, August, or December.

- Next PFAC meeting is **November 15, 2022.**

## Current Members and Start Date

| | | |
|---|---|---|
| 1. | Doug Wright | 2/4/2015 |
| 2. | Anne Liston | 3/9/2016 |
| 3. | Dr. Jay Shaw | 8/11/2017 |
| 4. | Pati Johnson | 3/22/2018 |
| 5. | Helen Shadowens | 5/24/2018 |
| 6. | Sandy Horn | 9/5 /2019 |
| 7. | Kevin Ward | 9/20/2018 |
| 8. | Violet Nakayama | 10/31/2019 |
| 9. | Alan Kern | 2/20/2020 |
| 10. | Kathee Hansen | 4/1/2021 |
| 11. | Bill Poland | 10/18/2022 |

# Beta HEART Progress Report for Year 2022

**(October 2022)**

Beginning in 2020, Beta Healthcare Group changed their annual Incentive process to be "Annual", meaning that each year the five (5) domains have to be re-validated each year to be eligible for the incentive credit. General updates for 2022:

- Beta Heart Validation Survey completed on 5/11/21 with validation in all 5 domains with a total cost savings of $108,652.00.
- Beta Heart Validation Survey completed May 2022, Validated in all 5 Domains with a total cost savings of $149,654

| Domain | History of Incentive Credits (2% annually) | Readiness for next Validation | Goal | Comments |
|---|---|---|---|---|
| **Culture of Safety:** A process for measuring safety culture and staff engagement (Lead: Ashley Davis, Beta Heart Lead) | Validated<br>2019: $13,101<br>2020: $19,829<br>2021: $21,730.40<br>2022: $29, 8930 | 100% | Goal= Greater than 85% Response rate<br>RR 84% | Culture of Safety survey completed 2022. Response Rate 84%<br>Reports have been distributed to all department leaders and debrief sessions will take place May through July 2022 by HR and department leaders. Gap analysis focus group results presented by Beta team to leaders and open forum format in August and October; action plan for recommendations is in process. |
| **Rapid Event Response and analysis:** A formalized process for early identification and rapid response to adverse events that includes an investigatory process that integrates human factors and systems analysis while applying Just Culture principles<br>(Lead: Theresa Crowe, Risk Manager) | Validated<br>2020: $19,829<br>2021: $21,730.40<br>2022: $29, 8930 | 100% | Reinforce education related to timely event reporting and implementation of corrective action items. | TFHD incorporates the transparent and timely reporting of safety events to ensure rapid change in providing safer patient care. All investigations utilize "just culture" and high reliability principles and encourage accountability.<br><br>11 leaders attended Beta Heart Workshop in Los Angeles in February, 2022.<br>10 leaders attended Beta Heart workshop in Laguna Beach, April, 2022. |
| **Communication and transparency:** A commitment to honest and transparent communication with patients and family members after an adverse event<br>(Lead: Theresa Crowe, Risk Manager) | Validated<br>2020: $19,829<br>2021: $21,730.40<br>2022: $29, 8930 | 100% | Reinforce Beta HEART principles through targeted education at meetings, emails, Pacesetter, weekly Safety First, etc. | Disclosure checklist updated and refined as we update process and leaders trained to respond to events. |
| **Care for the Caregiver:** An organizational program that ensures support for caregivers involved in an adverse event<br>(Lead: Stephen Hicks, Peer Support Lead) | Validated<br>2020: $19,829<br>2021: $21,730.40<br>2022: $29, 8930 | 100% | Proactive support to peers, not just after adverse events | Ongoing training and monthly peer support meetings. Currently have 20 peer supporters available to all staff. Sunshine cart rounds weekly to remind everyone about talk space, peer support and Employee Assistance Program. Select team members to be trained in Critical Incident Stress Management (CISM) in 2022. |
| **Early Resolution:** A process for early resolution when harm is deemed the result of inappropriate care or medical error<br>(Lead: Theresa Crowe, Risk Manager) | Validated<br>2020: $19,829<br>2021: $21,730.40<br>2022: $29, 8930 | 100% | "Pacesetter Article" and "Safety Firsts" to enforce the principles of the 5 Domains | Early Resolution is the final domain, and is only achieved by successfully completing all 4 prior domains. TFHD utilizes the BETA Heart Dashboard to monitor the effectiveness of meeting these goals.<br>Plan to send at least 12 leaders to October 2022 training. |


# Leading a Culture of Safety: A Blueprint for Success

AmericanCollege *of* HealthcareExecutives
*for leaders who care®*

THE NATIONAL PATIENT SAFETY FOUNDATION'S LUCIAN LEAPE INSTITUTE

# Contents

# Leading a Culture of Safety: A Blueprint for Success

### American College of Healthcare Executives

**The American College of Healthcare Executives** is an international professional society of 40,000 healthcare executives who lead hospitals, healthcare systems, and other healthcare organizations. Its mission is to advance its members and healthcare management excellence. ACHE offers its prestigious FACHE® credential, signifying board certification in healthcare management. Its established network of 78 chapters provides access to networking, education, and career development at the local level. In addition, ACHE is known for its magazine, *Healthcare Executive*, and its career development and public policy programs. Through such efforts, ACHE works toward its vision of being the preeminent professional society for healthcare executives dedicated to improving health. **The Foundation of the American College of Healthcare Executives** was established to further advance healthcare management excellence through education and research. The Foundation of ACHE is known for its educational programs — including the annual Congress on Healthcare Leadership, which draws more than 4,000 participants — and groundbreaking research. Its publishing division, Health Administration Press, is one of the largest publishers of books and journals on health services management, including textbooks for college and university courses.

For more information, visit www.ache.org.

### The National Patient Safety Foundation's Lucian Leape Institute

Established in 2007, the NPSF Lucian Leape Institute is charged with defining strategic paths and calls to action for the field of patient safety, offering vision and context for the many efforts under way within healthcare, and providing the leverage necessary for system-level change. Its members are national thought leaders with a common interest in patient safety. Their expertise and influence are brought to bear as the Institute calls for the innovation necessary to create significant, sustainable improvements in culture, process, and outcomes that are critical to safer healthcare.

For more information, visit www.npsf.org/LLI.

### The National Patient Safety Foundation at the Institute for Healthcare Improvement

The Institute for Healthcare Improvement (IHI) and the National Patient Safety Foundation (NPSF) began working together as one organization in May 2017. The newly formed entity is committed to using its combined knowledge and resources to focus and energize the patient safety agenda in order to build systems of safety across the continuum of care. To learn more about our trainings, resources, and practical applications, visit ihi.org/PatientSafety.

# Letter from the Project Co-chairs

Dear Colleagues:

Healthcare is one of the most complex industries in our world. Amid all of the pressing priorities, we must remember that the elimination of harm to our patients and workforce is our foremost moral and ethical obligation. In our roles as healthcare leaders, we have numerous responsibilities for ensuring the quality of care provided within our organizations, including patient and family experience, improving the health status of our communities, and maintaining the financial sustainability of our organizations. However, one of the most critical roles we must fulfill is ensuring the safety of patients who entrust their lives to our care, as well as ensuring the safety of a workforce—both clinical and non-clinical—that entrusts their livelihoods to our organizations. It is the ultimate duty of leaders to ensure the safety and prevention of unnecessary harm to these individuals and their loved ones. Healthcare executives must address the need to create sustainable cultures of safety throughout a healthcare system full of daunting challenges.

As our organizations aim to continually improve the reliability and safety of care, we can look to resources and successful practices to assist us, our Boards, our executive colleagues, our healthcare professionals, and the entirety of our workforce. The American College of Healthcare Executives (ACHE) and the National Patient Safety Foundation's Lucian Leape Institute (NPSF LLI) have partnered to collaborate with some of the most progressive healthcare organizations and globally renowned experts in leadership, safety, and culture to develop *Leading a Culture of Safety: A Blueprint for Success*. This document is an evidence-based, practical resource with tools and proven strategies to assist you in creating a culture of safety—an essential foundation for achieving zero harm. It is our hope that this guide will inspire and motivate, while providing approaches and tactics leaders can implement in driving cultural change, with the goal of elevating healthcare into the realm of recognized industries that have succeeded in reducing error and harm.

ACHE and NPSF LLI stand ready to assist you on this journey. We invite you to use this guide in both a strategic and tactical manner to direct your efforts in creating and sustaining a culture of safety, and to evaluate your success along your journey to zero harm.

Sincerely,

Gary S. Kaplan, MD, FACMPE
Co-chair

Charles D. Stokes, RN, BSN, FACHE
Co-chair

# Acknowledgments

The American College of Healthcare Executives and the NPSF Lucian Leape Institute gratefully acknowledge the experts that contributed to this work along with Gary S. Kaplan, MD, FACMPE, and Charles D. Stokes, RN, BSN,

## Culture of Safety Roundtable Participants

**Gary Kaplan, MD, FACMPE***
Chairman and CEO
Virginia Mason Health System
***Project Co-Chair***

**Charles Stokes, RN, BSN, FACHE***
Senior Vice President and Chief Operating Officer
Memorial Hermann Health System
***Project Co-Chair***

**Jason Adelman, MD, MS**
Chief Patient Safety Officer,
Associate Chief Quality Officer
New York-Presbyterian Hospital
Columbia University Medical Center

**Timothy Anderson, RN**
Patient Safety Supervisor
Harry S. Truman Memorial Veterans' Hospital

**Peter Angood, MD, FRCS(C), FACS, MCCM**
President and CEO
American Association for Physician Leadership

**Thomas Balcezak, MD, MPH, FACHE**
Chief Medical Officer, Senior Vice President
Yale New Haven Health System

**Barbara Balik, RN, EdD**
Cofounder
Aefina Partners LLC
Principal
Common Fire Healthcare Consulting

**Ruth Brinkley, FACHE**
President and CEO
KentuckyOne Health

**Christine Candio, RN, FACHE**
President and CEO
St. Luke's Hospital

**Pamela Cipriano, PhD, RN, FAAN**
President
American Nurses Association

**Carolyn Corvi, MS**
Former Vice President and General Manager
The Boeing Company

**Teresa Edwards, FACHE**
President
Sentara Leigh Hospital

**Derek Feeley***
President and CEO
Institute for Healthcare Improvement

**David Fox***
President
Advocate Good Samaritan Hospital

**Vicki Good, RN, MSN, CENP, CPPS**
System Director for Quality and Safety
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**Deborah Grubbe, PE, CEng**
Senior Consultant
DuPont Sustainable Solutions
Owner and President
Operations and Safety Solutions, LLC

**Helen Haskell, MA**
President
Mothers Against Medical Error

**John Haupert, FACHE**
President and CEO
Grady Health System

**Mark Jarrett, MD, MBA, MS**
Senior Vice President, Clinical Excellence
Chief Quality Officer
Northwell Health

**Cheryl Knapp, MBA, RN, CPPS, CPHQ**
Vice President, Chief Quality Officer
Bronson Healthcare

**Edward Lamb, FACHE**
President and CEO
Mount Carmel Health System

**Della Lin, MD**
Consultant
Senior Fellow, Estes Park Institute
Physician Lead, Hawaii Safer Care

**John Lynch III, FACHE***
President and CEO
Main Line Health

**David Marx, JD, BS**
President and CEO
Outcome Engenuity

**Michael Leonard, MD**
Managing Partner
Safe & Reliable Healthcare

**Steve Muething, MD***
Vice President, Safety
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**Jonathan Perlin, MD, PhD, MSHA, MACP, FACMI**
President, Clinical Services
Chief Medical Officer
Healthcare Corporation of America

**Doug Salvador, MD, MPH***
Vice President, Medical Affairs
Baystate Medical Center

**Doron Schneider, MD**
Chief Safety and Quality Officer
Abington Jefferson Health

**Roger Seaver, FACHE**
President and CEO
Henry Mayo Newhall Memorial Hospital

**Lisa Shannon, MBA**
Chief Operating Officer
KentuckyOne Health

**Jack Silversin, DMD, DrPH**
Founding Partner
Amicus

**Sara Singer, PhD, MBA**
Professor of Healthcare Management and Policy
Harvard School of Public Health

**Maureen Swick, PhD, RN, MSN, NEA-BC**
CEO
American Organization of Nurse Executives
Senior Vice President, Chief Nursing Officer
American Hospital Association

**Beth Daley Ullem, MBA**
Patient Advocate and Governance Expert

**Kerry Watson**
President
Arnot Ogden Medical Center
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Arnot Health

**Sam Watson, MSA, MT(ASCP), CPPS**
Executive Director
Senior Vice President, Safety and Quality
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**Nicolas Wolter**
Former CEO
Billings Clinic

**Gary Yates, MD**
Partner, Strategic Consulting
Press Ganey Associates, Inc.

**Raul Zambrano, MS, MD, FAAFP, FACHE**
Chief Medical Officer
Aurora Health Care's Southeast Market

*Participated in both Culture of Safety Roundtable meetings (May and December 2016)

# The Culture of Safety Imperative

## Harm to Patients and the Workforce

In 1999, the Institute of Medicine (IOM) Committee on Quality of Health Care in America estimated that between 44,000 and 98,000 Americans die each year as a result of medical errors (IOM 1999). More recent estimates place this number closer to 200,000 deaths per year (James 2013). Though deaths due to medical error are notoriously difficult to measure, if this number is accurate within 100,000 deaths, medical error kills four times more Americans each year than motor vehicle accidents. It is important to note that these statistics, while disconcerting on their own, do not account for serious temporary or permanent physical and psychological harm caused by medical error, and they do not include harm to the healthcare workforce. Regardless of the measurement or estimation used, the rate of error and harm in healthcare is astounding, and sweeping, system-wide changes are imperative.

Moreover, when patients experience harm, clinicians find themselves negatively impacted as well. Being involved in an error that results in the harm or death of a patient is devastating for an individual who is committed to serving those who are sick. At its worst, this devastation can lead to self-harm, depression, isolation, and even suicide. The desolation that often results from causing harm is compounded for clinicians who work in organizations without supportive systems. Based on the 2016 Agency for Healthcare Research and Quality (AHRQ) Hospital Survey on Patient Safety Culture's hospital comparative database, only 64% of staff respondents felt that reported mistakes led to positive changes in their organization. Even fewer members of the workforce, only 45%, responded positively to questions related to their organization's non-punitive response to error (AHRQ 2016).

Considering the impact described above, every healthcare executive should prioritize enhancing the safety of patients and the workforce. As an industry, healthcare has taken steps in improving quality and patient safety. However, these small-scale, incremental improvements are not enough. Our immediate work requires a focus on safety not just as a key improvement initiative but as a core value that is fully embedded throughout our organizations and our industry.

In every healthcare organization, the ultimate responsibility for system-based errors and their resulting costs rests with the CEO and Board of Directors. CEOs and Boards will be held increasingly responsible for harm and death caused by error. In the long run, patient and workforce safety will not only be a moral imperative but will likely be critical to sustainability and essential to delivering on value.

Based on data from James and the American Hospital Association, an average, 100-bed hospital committed errors in care that caused the death of 23 patients in 2013. Such statistics indicate that each organization contributed to the preventable death of almost one patient every other week (AHA 2014, James 2013).

### The Business Case for Safety

While the business case for patient safety continues to expand and to change with new regulatory and reimbursement requirements, the general consensus within the healthcare research community is that organizational costs for error and harm are high and will likely increase in the coming years. In addition to the increase in direct cost of care for the impacted patient and family following an error, organizations must also consider personnel costs, regulatory costs, and resource costs including investigation of errors, pursuit of legal defense, and payment of settlements. Perhaps most important to consider are the potentially immense costs related to repairing reputation after a catastrophic event has occurred and been publically reported (Weeks and Bagian 2003). When each of these costs is considered on top of the direct cost of patient care, the business case for improving safety becomes abundantly compelling.

# A Case Study in Culture:

Mr. Jones is a previously healthy 55-year-old man, with a recent history of shortness of breath that is related to exercise. He has been referred by his primary care physician for a cardiology consultation, at which a stress test is ordered. The results of the stress test indicate a positive finding for potential heart disease. These results are not communicated back to his primary care provider, and although they are sent to the referring cardiologist, he is away at a conference. Mr. Jones receives no communications about the results of his test. One week later, Mr. Jones presents to the emergency department with chest pain and is diagnosed with an acute myocardial infarction. Upon further review of his medical records, the care team reviews his past test results and learns about the positive stress test. Mr. Jones requires placement of a stent to open his coronary artery, and requires rehabilitation prior to discharge to his home due to reduced cardiac function. One week after discharge from inpatient rehabilitation, Mr. Jones returns to his primary care physician, who realizes that Mr. Jones is not taking one of the new cardiac medications that was ordered by his inpatient team.

## A Tale of Two Organizations: Which is more like yours?

### ORGANIZATION A:

The inpatient team notifies the patient safety department about the missed test result, and a root cause analysis is performed to determine why Mr. Jones' critical test result was not communicated to either him or his cardiologist. Action steps from the root cause analysis focus on re-educating the stress test department about the policy for communication of abnormal test results.

The lessons from the root cause analysis are not shared beyond the safety team. The action plan is not presented to the leadership team or the Board for approval, and does not include metrics for sustainability. The CEO and Board hear about the event only as a statistic presented quickly at the end of a quarterly Board meeting.

Mr. Jones is not informed about either the missed stress test result or the root cause analysis.

The primary care provider writes a new prescription for the cardiac medication. Mr. Jones ultimately misses several weeks of work.

### ORGANIZATION B:

The inpatient team notifies the patient safety department about the missed test result, and a root cause analysis is performed. Action steps include designing a new process for communication of test results that includes an escalation policy when it is not immediately possible to communicate critical test results to the ordering provider and/or the patient.

The primary care provider ensures that Mr. Jones begins taking the cardiac medication and also notifies the risk management/patient safety department about the delay in medication use. An additional root cause analysis is conducted, with a clear tracing of the breakdown during transition from hospital to rehabilitation and rehabilitation to home, and how and why it may have occurred.

The results of both RCAs, including strong action plans for improvement and metrics for sustainability, are presented to the organization's leadership team for review and approval. The CEO presents the case and action plan at the next quality and safety meeting.

Mr. Jones' care team informs him about these breakdowns in communication, and how they may have contributed to his myocardial infarction and could cause future health issues. His care team extends an apology, as well as an offer for early resolution and compensation that helps Mr. Jones pay for his medical bills, his time away from work, and the additional costs associated with the need for his family to care for him.

Six months later, an assigned member of the leadership team follows up with the frontline care team involved in the event to evaluate and reassess the action plan and review improvement metrics. These results are presented at the next Board meeting.

### DEBRIEF

Many organizations report that their response to handling Mr. Jones' situation is more similar to Organization A than to Organization B. This example is but one of many that illustrate why healthcare must create and improve systems that are committed to zero harm to patients and our workforce.

# Introduction

Dr. Lucian Leape, widely regarded as the father of the modern patient safety movement, has repeatedly stated that "the single greatest impediment to error prevention in the medical industry is that we punish people for making mistakes." By prioritizing, developing, and sustaining an organizational culture focused on safety, we can drive the future of healthcare to a place where patients and those who care for them are free from harm. It is not only one of many priorities, but is the overriding ethical imperative for all leaders.

AHRQ defines a culture of safety as one "in which healthcare professionals are held accountable for unprofessional conduct, yet not punished for human mistakes; errors are identified and mitigated before harm occurs; and systems are in place to enable staff to learn from errors and near-misses and prevent recurrence" (AHRQ PSNet Safety Culture 2014). The leaders of organizations must set and, more importantly, demonstrate the behaviors and expectations essential to a safe and transparent culture.

To help healthcare leaders achieve their mission of total system safety, ACHE and LLI have partnered to develop this guide, which is intended to assist leaders in creating, shaping, and sustaining the type of culture needed to advance patient and workforce safety efforts. It is designed to inspire, motivate, and inform you as you lead your organization on its journey to zero harm.

The information in this guide comes from industry leaders and experts who have had success in transforming their organizations into system-wide cultures of safety. It is designed for you and your team members to adapt to your organization, wherever you may be on your journey.

## Cultures of Safety Across the Continuum

**Because error and harm happen across the continuum, it is imperative that all improvement initiatives also encompass all care settings. While some of the tactics and recommendations throughout this document will be more relevant in certain environments than others, the key principles developed throughout the six domains are applicable to all who oversee the delivery of care—not just hospital settings. This work is intended to be adapted as needed to enhance applicability for all organizations. However, the key concepts—building trust, respect, and enthusiasm for improvement through behaviors and principles that focus on ameliorating systems issues while requiring fair and inclusive practices—are critical to safe care in all settings.**

**This resource is organized into six leadership domains that require CEO focus and dedication to develop and sustain a culture of safety:**


**Establish a compelling vision for safety.** An organization's vision reflects priorities that, when aligned with its mission, establish a strong foundation for the work of the organization. By embedding a vision for total patient and workforce safety within the organization, healthcare leaders demonstrate that safety is a core value.


**Build trust, respect, and inclusion.** Establishing trust, showing respect, and promoting inclusion — and demonstrating these principles throughout the organization and with patients and families — is essential to a leader's ability to create and sustain a culture of safety. In order to achieve zero harm, leaders must ensure that their actions are consistent at all times and across all levels of the organization. Trust, respect, and inclusion are non-negotiable standards that must encompass the Board room, the C-suite, clinical departments, and the entire workforce.


**Select, develop, and engage your Board.** Governing Boards play a vital role in creating and maintaining safety cultures. CEOs are responsible for ensuring the education of their Board members on foundational safety science, including the importance of and processes for keeping patients and the workforce safe. Boards must ensure that metrics that meaningfully assess organizational safety and a culture of safety are in place and systematically reviewed, analyzed, and the results acted upon.


**Prioritize safety in the selection and development of leaders.** It is the responsibility of the CEO, in collaboration with the Board, to include accountability for safety as part of the leadership development strategy for the organization. In addition, identifying physicians, nurses, and other clinical leaders as safety champions is key to closing the gap between administrative and clinical leadership development. Expectations for the design and delivery of relevant safety training for all executive and clinical leaders must be set by the CEO and subsequently spread throughout the organization.


**Lead and reward a just culture.** Leaders must possess a thorough understanding of the principles and behaviors of a just culture, and be committed to teaching and modeling them. Human error is and always will be a reality. In a just culture framework, the focus is on addressing systems issues that contribute to errors and harm. While clinicians and the workforce are held accountable for actively disregarding protocols and procedures, the reporting of errors, lapses, near-misses, and adverse events is encouraged. The workforce is supported when systems break down and errors occur. In a true just culture, all workforce members—both clinical and non-clinical—are empowered and unafraid to voice concerns about threats to patient and workforce safety.


**Establish organizational behavior expectations.** Senior leaders are responsible for establishing safety-mindfulness for all clinicians and the workforce and, perhaps even more importantly, modeling these behaviors and actions. These behaviors include, but are not limited to, transparency, effective teamwork, active communication, civility, and direct and timely feedback. These cultural commitments must be universally understood and apply equally to the entire workforce, regardless of rank, role, or department.

The journey toward patient and workforce safety requires vigilance and the highest level of dedication. Safety cannot be merely a strategic priority, but must be a core value that is woven into the fabric of our organizations. A culture of safety demands the involvement and commitment of the full healthcare team, from patients to clinicians to the rest of the workforce. However, an organization cannot be what its leader is not. It is both the obligation and the privilege of every healthcare CEO to create and represent a compelling vision for a culture of safety: a culture in which mistakes are acknowledged and lead to sustainable, positive change; respectful and inclusive behaviors are instinctive and serve as the behavioral norms for the organization; and the physical and psychological safety of patients and the workforce is both highly valued and ardently protected.

## **A Note** about Disparities in Care

Across the United States, individuals experience great differences in life expectancy and other health outcomes based on social determinants that may include ethnicity, religion, socioeconomic status, geographic location, sexual orientation, and gender identity, among others. It is impossible to envision an organization driving toward zero harm that is not also consciously focused on addressing these disparities.

Professor Margaret Whitehead, head of the World Health Organization (WHO) Collaborating Centre for Policy Research on the Social Determinants of Health, defines equity in health this way: "Ideally everyone should have a fair opportunity to attain their full health potential and, more pragmatically, no one should be disadvantaged from achieving this potential, if it can be avoided" (Whitehead and Dahlgren 2006). The reality of healthcare today is that quality and safety cannot be achieved without equity. Healthcare organizations have the power to address disparities at the point of care and to make an impact on many of the determinants that create these disparities (Institute for Healthcare Improvement 2016). Because equity in health is essential to quality and safety, mitigation of health disparities must be prioritized across the six domains for developing a culture of safety. Not only is creating health equity part of the safety imperative, but it requires many of the same mechanisms recommended throughout this document.

## **A Note** about Learning Systems

The IOM describes a learning healthcare system as one in which "science, informatics, incentives, and culture are aligned for continuous improvement and innovation, with best practices seamlessly embedded in the care process, patients and families are active participants in all elements, and new knowledge captured as an integral by-product of the care experience" (IOM 2013).

While this guide focuses on developing and sustaining a culture that drives patient and workforce safety outcomes, a CEO's accountability for developing and supporting a learning system is equally important. Change implementation is a vast interdisciplinary undertaking that requires all aspects of a safety culture, from safety science knowledge, to trust, respect, and visionary leadership (Friedman 2015). The design of learning systems may vary—from high reliability to Six Sigma™ to the Toyota Production System and other Lean methodologies—but the key characteristics are the same. Zero harm to patients and the workforce is only possible with both a robust culture of safety and an embedded organizational learning system.

# Recommendations for Use of This Guide

This guide was developed for CEOs and other executive leaders in order to provide a useful tool for assessing and advancing an organization's culture of safety. It can be used to help determine the current state of your organization's journey, inform dialogue with your Board and leadership team, and help you set priorities. The six domains are intended to be discussed with your Board, your leadership team, your workforce, and your community. These domains are interdependent, and each domain is an essential element that must be addressed along your journey. This guide contains recommendations for developing and evaluating plans to flourish in each of the six domains, and resources for helping you move forward and make measurable progress in your journey.

The high-level strategies and practical tactics in this guide are divided into two levels: foundational and sustaining. The foundational level provides basic tactics and strategies essential for the implementation of each domain. The sustaining level provides strategies for spreading and embedding a culture of safety throughout the organization. However, it is important to note that the journey to zero harm is more complex than this simple two-level structure. Each organization will be at a different place on the spectrum from developing the foundation of a culture of safety to embedding and sustaining these principles. An organization may work on strategies and tactics across the two levels, or may be at various levels of progress across each of the domains. In organizations that lack an empowering vision statement or trust and respect among leadership, clinicians, and the workforce, it may be most effective to begin improvement initiatives in these two domains. The keys to developing and sustaining a culture of safety are honest and transparent evaluation of your organization's current state, identification of gaps and goals, and an action plan that engages all members of the Board, leadership team, and workforce.

**Whether an organization is just beginning the journey to a culture of safety or is working to sustain its safe culture, the following steps are recommended:**

- Share this document with your Board Chair and leadership team.
- Complete the self-assessment with input from your Board, leadership team, clinicians and the frontline workforce, and patient and family representatives, as appropriate.
- Develop action plans based on an understanding of the current state of your organization. Use assessment results to frame discussions with your leadership team and the Board that focus on identifying ways to close gaps and aligning the direction of your organization with key safety and culture initiatives.
- Share the outcomes of the assessment, action plans, and progress with your senior leadership team, the Board, your workforce, and your patients and families, as appropriate and helpful.
- Ask for periodic feedback from your Board, your leadership team, and the workforce.
- Refer to this guide as a resource for systematic check-ins and adjustments, as needed.

# A Culture of Safety: The Six Domains


# Establish a Compelling Vision for Safety

## GOAL: COMMIT TO DEVELOP, COMMUNICATE, AND EXECUTE ON AN ORGANIZATIONAL VISION OF ZERO HARM TO PATIENTS, FAMILIES, AND THE WORKFORCE.

To engage and inspire all clinical and non-clinical healthcare professionals and the public, an organization's vision should reflect long-term, aspirational goals. This vision must be clearly aligned with the organization's mission, which establishes the foundation of what an organization does.

A compelling vision enhances performance, promotes change, motivates individuals, and provides context for decision making (Lipman 1996). Clearly articulated, a strong vision addresses the why, the how, and the when of the aspirational goal (Lipman 2003). Many CEOs of healthcare organizations strive to include safety among their top strategic priorities, and this objective must be clearly reflected as a core value in the vision and mission statements. The CEO is responsible for launching the critical first step of establishing safety as the most important part of what everyone does, every day.

| | Foundational | Sustaining |
|---|---|---|
| **Strategies**<br>*Overarching strategies for implementation at the CEO level* | ✓ CEO takes responsibility for educating himself/herself on how to develop vision and lead a culture of safety<br>✓ CEO communicates and models a shared vision of zero harm to patients, families, the community, and the workforce<br>✓ CEO communicates genuine, clear messages about vision, conveying purpose of safety culture to everyone, in all settings, repeatedly and for the long term<br>✓ CEO communicates how vision is critical to organizational success<br>✓ CEO prioritizes measurement, gap analysis, and improvement of culture of safety as foundational for vision<br>✓ CEO gains additional understanding of safety by participating in full harm investigation, including disclosure and apology and root cause analysis | ✓ CEO and leadership team provide consistent, personalized messaging about the importance of safety and zero harm<br>✓ CEO relays importance and urgency of safety vision to both internal and external audiences<br>✓ CEO practices transparency and shared accountability between Board and leadership team regarding vision and relevant measurement and reporting |


# Establish a Compelling Vision for Safety

A compelling vision with patient and workforce safety as a core value is essential to achieving safe care. Zero harm is the aspirational "North Star." Healthcare CEOs demonstrate their belief that safety is a primary, non-negotiable goal by working with their Board, clinical leadership, and workforce to develop such a vision, to embed it in their organization, and to demonstrate their commitment and energize frontline workers through direct involvement in safety activities (NPSF 2015).

The first step for a CEO in creating this vision is to understand, acknowledge, and communicate the current state of their organization. A successful vision statement may be developed by top management and shared with the organization, or created in partnership with the workforce. The key is that the vision statement must encompass all organizational interests and engage the entire workforce. Visions that offer long-term perspective and include a degree of difficulty or stretch are often the most powerful. Finally, a vision statement should be clear and concise, allowing it to be easily remembered, repeated, and communicated (Kantabutra and Avery 2010).

Leaders must work with their teams, in direct partnership with physicians, nurses, and other clinical and non-clinical leaders, to assess the internal and external landscape of their organization. They must consider safety metrics, clinicians' attitudes and perceptions, patient and family experiences, and current practices, as well as trends and events that affect or might affect the healthcare industry. Landscape analysis is often accomplished through tactics including focus groups, safety culture surveys, safety rounds, analysis of safety metrics and reporting, and other diagnostic approaches. As one team of management researchers tell us, "The best way to lead people into the future is to connect with them deeply in the present" (Kouzes and Posner 2009). Understanding and communicating the current state enables leaders to connect and work with their teams and clinical experts to create a shared vision that can inspire everyone within the organization and the community.

While it is important to get input and buy-in from all levels when developing a vision, CEOs must be the ones to define and model the vision. Leaders at every level need to be visible in their commitment to patient and workforce safety and vocal about supporting actions that align with the organizational vision.

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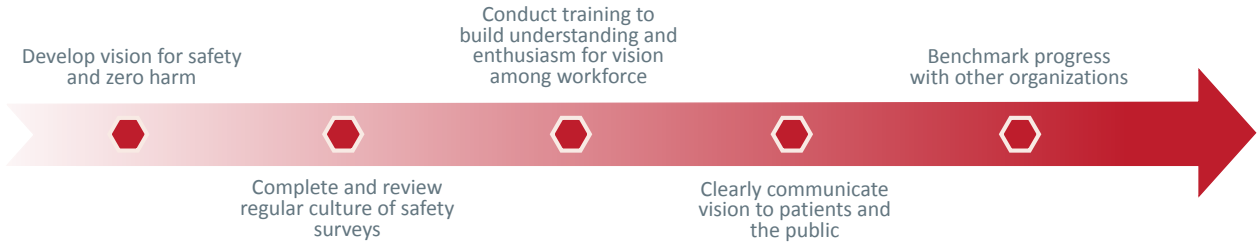
A clear and aspirational vision inspires the workforce and the public. The CEO works with the Board, leadership team, clinicians, and workforce to develop and embed this vision.

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# Establish a Compelling Vision for Safety

| Organizational Readiness Level | Foundational | Sustaining |
|---|---|---|
| **Tactics**<br>*Examples of tactics that may be implemented to create change at each of these levels* | **To engage your organization:**<br>✓ Work with select individuals throughout the organization to develop understanding of key organizational interests and goals<br>✓ Work with leadership team to develop aspirational end state (e.g., zero harm) that will be incorporated into vision<br>✓ Communicate the definition and importance of a culture of safety<br>✓ Build awareness of current state through culture surveys, observations, and focus groups, and communicate this throughout the organization<br>✓ Include zero harm vision in all communications from leaders at all levels, and keep this communication simple, consistent, and repetitive<br>✓ Include equity of care as part of vision statement and communicate the definition and importance of health equity<br>✓ Conduct training and information sessions for all employees to build understanding and enthusiasm for the vision<br>✓ Spend time on all floors and units communicating the connection of culture of safety and vision to the work of the frontline | **To engage your organization:**<br>✓ Clearly articulate your vision to the workforce and the public<br>✓ Benchmark culture progress and best practices with other similar organizations (e.g., participate in collaboratives)<br>✓ Develop and implement a recognition program for leaders, clinicians, and the workforce based on growth and adherence to vision<br>✓ Establish organizational goals that address safety and disparities in care<br><br>**To engage clinical leaders:**<br>✓ Include physician, nursing and other clinical leaders in development of vision statement and strategic plan<br><br>**To engage patients and families:**<br>✓ Clearly communicate the vision statement and values to patients<br>✓ Incorporate patient and family stories, along with statistics, when discussing vision at the Board level<br>✓ Include patient feedback in the development of vision statement |
| **Assessing Execution**<br>*List of questions that should be asked to further assess and measure progress* | **YES / NO**<br>☐ ☐ Are the CEO and leadership team able to clearly communicate the vision to all parties, in both internal and external interactions?<br>☐ ☐ Can all members of the organization articulate the vision for safety and how it relates to their individual work?<br>☐ ☐ Is a patient safety and quality dashboard (which includes safety culture metrics) utilized and regularly reviewed in the context of organizational vision? | |


# Value Trust, Respect, and Inclusion

## GOAL: ESTABLISH ORGANIZATIONAL BEHAVIORS THAT LEAD TO TRUST IN LEADERSHIP AND RESPECT AND INCLUSION THROUGHOUT THE ORGANIZATION REGARDLESS OF RANK, ROLE, OR DISCIPLINE.

Trust, respect for others, and inclusion are essential to creating environments that are both physically and psychologically safe. Building trust involves managing conflict and making the environment safe for communicating bad news. It also involves practicing honesty, inclusion, transparency, and respect with everyone. Each member of the workforce must feel compelled and empowered to uphold mutual accountability and speak up for safety. Healthcare leaders develop trust within their organizations by having authentic relationships and conversations. For example, undertaking humble inquiry, asking questions to which you do not already know the answer, and building relationships based on genuine curiosity and interest all help leaders find information that might otherwise elude them (Schein 2013).

| | Foundational | Sustaining |
|---|---|---|
| **Strategies**<br>*Overarching strategies for implementation at the CEO level* | ✓ CEO recognizes the critical importance of trust, respect, and inclusion in shaping organizational culture<br>✓ CEO creates expectation for trust, respect, and inclusion, and models these through his or her interactions with every individual at every level of the organization<br>✓ CEO holds the leadership team accountable for modeling trust, respect and inclusion<br>✓ CEO directs policies that empower the workforce to first and foremost act within the guidelines of trust, respect, and inclusion when making decisions<br>✓ CEO establishes the expectation that learning from failures and improving systems is a part of daily organizational activity | ✓ CEO establishes expectations and accountability for formal program focusing on trust, respect, and inclusion that includes patients and is implemented across the organization<br>✓ CEO and organization have clear, visible expectations of acceptable behavior and consequences for behaviors that do not meet standards of trust, respect, and/or inclusion<br>✓ CEO establishes transparent practices with the Board, senior leadership, workforce and community, as appropriate<br>✓ CEO takes ownership of partnering with similar organizations, through Patent Safety Organizations (PSOs) or other collaboratives, to share learning and best practices |

Trust, Respect, and Inclusion

# Value Trust, Respect, and Inclusion

The actions of leaders must be consistent over time and throughout the organization. Behavioral standards and expectations should apply to everyone, without exception. Respect for others—be they patients, family members, peers, or subordinates—is essential for creating and sustaining trust. Developing and holding all leaders and the workforce accountable to codes of conduct or code of ethics can help to solidify the practices and behaviors that encourage trust and respect (Chassin and Loeb 2013).

Beyond modeling behaviors of respect themselves, leaders may need to institute ongoing education for volunteers, students, clinicians, and the workforce about appropriate behavior, and continue to actively encourage changes designed to increase fairness, transparency, collaboration, inclusion, and individual responsibility (Leape et al., 2012).

In pursuing safety as a core value, trust, respect, and inclusion are fostered by CEOs who make and keep commitments to the workforce, who communicate when a problem cannot be fixed immediately, who consistently display a sense of fairness, and who engage in and encourage reciprocal, helping behavior throughout the organization.

CEOs must also display their trust in others. Creating a strong team enables leaders to have confidence in delegating decisions and authority, though trust does not mean believing nothing will ever go wrong. Leaders can expect to continually work on building, sustaining, or repairing trust.

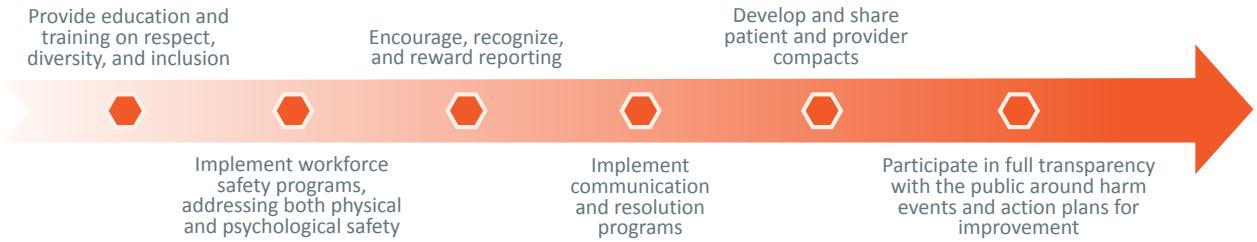
## Cultural Diversity and Respect in the Workplace

It is imperative that CEOs understand the cultural makeup of both the community and the organization in which they serve. Implementing and modeling behaviors that reflect a respectful and inclusive environment is essential to a culture of safety. This should include placing a high value on the positive impact of greater diversity and inclusion among leadership as well as the workforce. It should also include efforts to evaluate and eliminate disparities in patient care. Unleashing the potential of workforce diversity depends on the establishment of inclusion, the building of trust and respect, and training in skills and behaviors that support an inclusive and respectful organization. With this approach, cultural diversity can be an effective resource for creative problem solving and organizational learning, and can help to identify and ameliorate disparities of care. (EU-OSHA 2013)

Trust, Respect, and Inclusion

# Value Trust, Respect, and Inclusion

Trust, respect, and inclusion are the foundation of a culture of safety. The CEO develops trust and respect with individuals at all levels of the organization, and, with the Board, holds leaders, clinicians, and the workforce accountable for policies and behaviors that reflect these values.




| Organizational Readiness Level | Foundational | Sustaining |
|---|---|---|
| **Tactics**<br>*Examples of tactics that may be implemented to create change at each of these levels* | **To engage your organization:**<br>✓ Commit to implementing and holding all leaders and the work force accountable for processes and policies related to respect for people, just culture, and managing disruptive behavior<br>✓ Encourage and promote open discussion of safety issues via leadership rounds and reporting systems, and ensure follow-up and feedback<br>✓ Ensure that the workforce has dedicated time to devote to patient safety and safety culture work<br>✓ Implement workforce safety programs to reduce physical and psychological harm to the workforce<br>✓ Clearly define and encourage behaviors that show deference to expertise rather than hierarchy or title | **To engage your organization:**<br>✓ Aim for total transparency, but explain situations in which the organization is unable to be completely transparent<br>✓ Publicly share available information about events of harm, and plans for managing associated risks<br>✓ Ensure follow-up and feedback on identified safety issues, and be transparent if an issue cannot be resolved promptly<br>✓ Create compacts for leaders that clearly define expected behaviors in trust and transparency as they relate to other leaders, peers, and subordinates<br>✓ Build metrics for respect and trust (e.g., workforce psychological safety, error reporting) into the evaluation process for all leaders |

Trust, Respect, and Inclusion

# Value Trust, Respect, and Inclusion

| Organizational Readiness Level | Foundational | Sustaining |
|---|---|---|
| **Tactics**<br>*Examples of tactics that may be implemented to create change at each of these levels* | **To engage your organization (cont):**<br>✓ Recognize and reward reporting with the goal of reducing and eventually eliminating anonymous reporting<br>✓ Provide education and training on diversity and inclusion at every level of the organization<br>✓ Track employee engagement and turnover as a metric to evaluate trust, inclusion, and respect<br>✓ Include care disparity metrics on regularly reviewed patient safety dashboards<br>✓ Translate tools and resources for both patients and the workforce into a variety of languages, keeping in mind cultural context and linguistic idiosyncrasies<br>✓ Adopt communication and resolution/reconciliation programs for patients and families after events of preventable harm<br>✓ Establish patient and family advisory councils | **To engage clinical leaders:**<br>✓ Provide training for physicians, nurses, and other clinical leaders around patient engagement and communication<br>✓ Provide cultural competency training for all clinical leaders that is relevant to the patient populations they serve<br><br>**To engage patients and families:**<br>✓ Encourage and enable patients and families to speak up if they notice a risk to safety<br>✓ Ensure that crisis plans address how to communicate with patients and families in the event of an error, regardless of degree of harm<br>✓ Commit to shared decision making and consider patient preferences in all treatment plans<br>✓ Engage patients and families in creating and disseminating patient compacts that include what patients can expect from the organization, their care providers, and the workforce |
| **Assessing Execution**<br>*List of questions that should be asked to further assess and measure progress* | YES / NO<br>☐ ☐ Are all clinicians and workforce members provided with training in communicating with patients, including disclosure and apology?<br>☐ ☐ Are measures of respect included in all performance assessment tools?<br>☐ ☐ Is a formal program for respect and trust in place and evaluated regularly?<br>☐ ☐ Is there systematic training on diversity and inclusion for both the clinical and non-clinical workforce?<br>☐ ☐ Do the Board and leadership team regularly create and evaluate improvement plans for addressing disparities in patient care? | |

Board Engagement

# Select, Develop, and Engage Your Board

## GOAL: SELECT AND DEVELOP YOUR BOARD SO THAT IT HAS CLEAR COMPETENCIES, FOCUS, AND ACCOUNTABILITY REGARDING SAFETY CULTURE.

Boards of healthcare organizations oversee the fiduciary performance, reputation, and key performance outcomes of an organization, including those related to quality, safety, and culture. The accountability for safety is shared between the CEO and the Board. The CEO is responsible for guaranteeing Board education on the importance of safety, ensuring that the Board understands quality and safety metrics, and recommending the appropriate representation of safety expertise on the Board, which could mean a safety expert from another field. In line with the CEO's responsibilities, the Board is responsible for making sure the correct oversight is in place, that quality and safety data are systematically reviewed, and that safety receives appropriate attention as a standing agenda item at all meetings. It is imperative that safety be a foundational factor in how healthcare Boards make decisions, so that patient and workforce safety culture is a sustainable focus for the organization.

| | Foundational | Sustaining |
|---|---|---|
| **Strategies**<br>*Overarching strategies for implementation at the CEO level* | ✓ CEO guarantees Board education on importance of safety, the meaning of quality and safety metrics, and safety culture principles and behaviors<br>✓ CEO ensures Board membership includes clinical, safety, and patient/family representation<br>✓ CEO provides adequate agenda time for review and discussion of safety culture metrics and issues<br>✓ CEO sets up quality and safety committee(s) with Board representation<br>✓ CEO ensures each Board agenda includes time designated for Chief Medical Officer or Chair of Quality and Safety Committee to present safety and quality data<br>✓ CEO develops a robust Board-level patient and workforce safety dashboard that includes culture of safety metrics | ✓ CEO works with the Board to set direction, goals, metrics, and systems of mutual accountability for zero harm to both patients and the workforce<br>✓ CEO provides for the appropriate level of oversight of the credentialing and re-credentialing process, including elements of quality and safety<br>✓ CEO works with the Board and/or compensation committee to align executive compensation with patient and workforce safety and culture metrics<br>✓ CEO leverages patient stories and presentations to educate the Board<br>✓ CEO provides opportunities for Board member representation on appropriate safety committees |


# Select, Develop, and Engage Your Board

In recruiting new Board members, considerable thought should be given to the competencies, skills, experiences, and diversity needed to create and sustain a culture of safety. These skills may include specific competencies related to leading culture improvement efforts, as well as clinical and safety competencies. Ensuring that there is robust clinical expertise in the Board room is critical to incorporating frontline perspective into all conversations and initiatives, and allows for collaborative leadership in safety efforts throughout the organization (Goeshel et al. 2010). These decisions should also include measures of diversity that ensure the board is representative of the community and workforce it serves. Finally, leaders may encourage Boards or relevant committees to include a patient and family representative and safety experts from relevant industries. These recommendations should be made at the appropriate level based on each unique organization's needs.

A well-rounded and diverse Board empowers and supports the work of the CEO in creating and sustaining a culture of safety. The importance of Board education and training in safety science fundamentals, including just culture, human factors, and systems engineering cannot be overemphasized (NPSF 2015). There is real power in support for the CEO from the Board regarding issues of safety, allowing this focus to cascade to leadership and, ultimately, throughout all levels of the organization.

## Effective Patient and Family Representation on Boards and Committees:

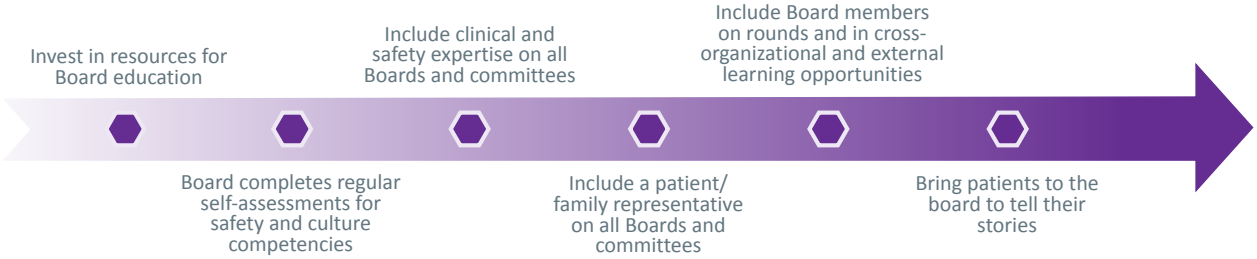
**CEOs should consider the following characteristics of effective representation, while keeping in mind the appropriate voice and level of representation of patient/family member(s) to meet the needs of their organization and community:**

1. Culture of the Board encourages total engagement and involvement of patient/family member(s)
2. Patient/family member(s) are representative of the community the organization serves
3. Patient/family member(s) have representation on quality and safety committee(s) and other committees, as appropriate
4. Patient/family representative is provided with ongoing learning opportunities in safety science and safety culture

Board Engagement

# Select, Develop, and Engage Your Board

An engaged Board plays a key role in organizational culture and safety. The CEO encourages Board competencies and commitment regarding safety, while providing a transparent line of sight between the Board and the rest of the organization.




| Organizational Readiness Level | Foundational | Sustaining |
|---|---|---|
| **Tactics**<br>*Examples of tactics that may be implemented to create change at each of these levels* | **To engage your organization:**<br>✓ Establish Board Quality and Safety Committee with oversight responsibility for culture change, safety, and performance improvement<br>✓ Include an individual with safety and culture expertise on Board and appropriate committees, or ensure an advisor with these skills is available to the CEO and the Board<br>✓ Begin each Board meeting with a slide detailing the number and names of patients and staff who experienced harm since last meeting, and include a story about at least one of these individuals<br>✓ Regularly share and discuss a dashboard that includes patient and workforce safety and culture metrics<br>✓ Utilize a Board self-assessment that includes inquiry on safety culture knowledge to determine educational opportunities<br>✓ Identify a list of required Board competencies specific to leading culture improvement | **To engage your organization:**<br>✓ Encourage the Board to link executive compensation to safety outcomes, while ensuring metrics chosen do not discourage safety efforts<br>✓ Include Board members on guided leadership rounds<br>✓ Align Board dashboards to show safety and quality metrics as segmented by categories related to disparities in care<br>✓ Ask Board members to participate in events to show their support during Patient Safety Awareness Week and to be present at major quality, safety, and culture-related events<br>✓ Bring frontline teams to Board meetings to share their success stories and receive recognition<br>✓ Consider a rotating position on the Board or Quality and Safety Committee reserved for the frontline workforce<br>✓ Request that Board members spend time on all floors and units communicating and supporting the safety agenda |

Board Engagement

# Select, Develop, and Engage Your Board

| Organizational Readiness Level | Foundational | Sustaining |
|---|---|---|
| **Tactics**<br>*Examples of tactics that may be implemented to create change at each of these levels* | **To engage your organization (cont):**<br>✓ Discuss whether Board reflects the community your organization serves and implement action plan to address any gaps<br>✓ Invest in resources for Board education, including patient safety science and quality<br>✓ Create a matrix of Board competency needs and seek candidates with those skills in mind<br>✓ Regularly review accreditation survey results with the Board<br>✓ Encourage ample clinical expertise, including physicians and nurses on the Board and/or on Board committees<br>✓ Include a presentation on a current organizational safety culture issue by an expert in safety and quality at each Board meeting<br>✓ Educate Board members on issues of disparities in care | **To engage your organization (cont):**<br>✓ Provide Board members with opportunities to learn from Boards and leaders of outside organizations and industries<br>✓ Require Board approval on resolutions to all serious safety events<br>**To engage clinical leaders:**<br>✓ Involve physicians, nurses, and other clinical leaders to present clinical and quality improvement efforts regularly to the Board<br>✓ Bring clinical leaders dedicated to culture to Board meetings to share their experience and receive recognition<br>**To engage patients and families:**<br>✓ Create positions for patient/family representatives on your Board and on your quality/safety committee(s)<br>✓ Present patient stories at Board and appropriate committee meetings<br>✓ Invite patients to attend Board meetings and personally share their stories and experiences (both positive and negative) |

**Assessing Execution**

*List of questions that should be asked to further assess and measure progress*

| YES | NO | |
|---|---|---|
| ☐ | ☐ | Does the Board conduct regular self-assessments related to knowledge and understanding of culture of safety? |
| ☐ | ☐ | Are programs in place to build competencies in culture improvement for Board members? |
| ☐ | ☐ | Is the amount of time spent on quality and safety during each Board meeting tracked and at least comparable to time spent on finance and other items? |
| ☐ | ☐ | Do performance assessments for the CEO include the organization's safety activities and measures of culture? |
| ☐ | ☐ | Do patient safety and quality leaders participate in at least a portion of all Board meetings? |
| ☐ | ☐ | Is a patient and/or workforce story presented at each Board meeting? |


# Prioritize Safety in Selection and Development of Leaders

## GOAL: EDUCATE AND DEVELOP LEADERS AT ALL LEVELS OF THE ORGANIZATION WHO EMBODY ORGANIZATIONAL PRINCIPLES AND VALUES OF SAFETY CULTURE.

Healthcare CEOs, in collaboration with the Board, are responsible for establishing the direction and accountability for the design and delivery of their organization-wide leadership development strategy. Within this strategy, it is imperative that safety is part of the education for both current and emerging leaders. It is the responsibility of the CEO to establish the priority for safety and culture in the development of leaders at all levels and in all departments across the organization.

Emphasis on safety education can also help close the gap between administrative and clinical leadership, providing all leaders with the shared goal of driving toward a culture of safety for the betterment of the organization and the patients they serve. Identifying and developing physician, nursing, and other clinical leaders as champions for safety is a key responsibility of the CEO. Numerous studies indicate the positive impact clinical leaders can have on culture and safety, particularly in an era when healthcare leaders are often in a position to make decisions that affect care at the frontlines. Clinical leaders have extensive understanding of healthcare's "core business" of patient care, and are therefore in a unique position to connect administration with the clinical workforce, and to garner support for safety and culture initiatives. In addition to safety education, CEOs can commit to developing effective physician, nursing, and other clinical leaders by providing and encouraging training in non-clinical skills, including professionalism, emotional intelligence, team building and communication, and basic business principles (Angood 2014).

| | Foundational | Sustaining |
|---|---|---|
| **Strategies**<br>*Overarching strategies for implementation at the CEO level* | ✓ CEO sets expectations and accountability for the design and delivery of the organization's leadership development strategy<br>✓ CEO ensures he/she and the leadership team receive necessary safety education, and provides the appropriate level of safety education throughout the rest of the organization<br>✓ CEO identifies physicians, nurses, and other clinical leaders as champions for safety | ✓ CEO serves as a mentor for other C-Suite executives<br>✓ CEO establishes expectation that quality and safety performance and competence are required elements for evaluating current and potential leaders for promotion and succession planning<br>✓ CEO assigns accountability for measurable outcomes of safety education as part of leadership development strategy<br>✓ CEO ensures patient and workforce safety are key parts of the organization's reward and recognition system |


# Prioritize Safety in Selection and Development of Leaders

The selection process for both current and emerging leaders should be predicated on their understanding of, dedication to, and alignment with the organization's vision for patient and workforce safety, communication skills, and modeling of expected safety behaviors. Safety can be a topic for individual professional development as well as organization-wide succession planning to ensure that the commitment to safety is sustainable throughout all levels and functional areas. Many organizations already have a process in place for identifying individuals with high potential to succeed as leaders, into which a safety and culture program can be integrated (Garman and Anderson 2014).

Finally, it is critically important to provide regular feedback to both current and developing leaders that is valuable to them, whether that is a 360-degree review model or another structured review (Garman and Anderson 2014). Feedback should clearly define, communicate, and embody required leadership competencies in safety culture, and safety development plans should be reviewed at regularly scheduled check-ins. CEOs are responsible for not only setting this direction, but also participating in these reviews from the perspective of gathering feedback about their own competence in safety culture and behaviors, and sharing input for members of their leadership team.

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A well-developed leadership team that is dedicated to a culture of safety provides a catalyst for the evolution of the organization. The CEO, in collaboration with the Board, is responsible for establishing the direction and accountability for the design and delivery of an organization-wide leadership development strategy.


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# Prioritize Safety in Selection and Development of Leaders

| Organizational Readiness Level | Foundational | Sustaining |
|---|---|---|
| **Tactics**<br>*Examples of tactics that may be implemented to create change at each of these levels* | **To engage your organization:**<br>✓ Define and develop organizational leadership competencies in safety culture and safety behaviors and ensure that all current and future leaders and the frontline workforce receive education in selected competencies<br>✓ Define cultural roles and expectations for all leaders within the organization, including clinical leaders<br>✓ Create systems to support leaders in culture work at all levels of the organization through training, coaching, and mentoring<br>✓ Consider safety expertise and credentialing along with leadership potential when considering emerging leaders<br>✓ Discuss whether leadership team reflects the community the organization serves and develop plan to address any gaps<br>✓ Create systems that ensure regular reporting on leadership development measures<br>✓ Develop and employ a talent review process that is candid and transparent<br>✓ Conduct gap analysis of CEO and leadership for knowledge, skills, and attitudes around patient safety and culture | **To engage your organization:**<br>✓ Build an incentive program into leadership reviews that is focused on reporting performance on key culture of safety metrics<br>✓ Provide continuing learning opportunities in safety and culture, with a focus on experiential learning<br>✓ Tie measures and performance on safety and culture to leadership development priorities, talent management reviews, and succession planning<br>✓ Provide opportunities and expectations for leaders to learn outside of the organization, both with similar organizations and outside industries<br>✓ Build a guiding coalition of champions, including clinicians and frontline workforce members, that provides candid and honest feedback to the CEO<br>✓ Incorporate leadership development into organizational people strategy<br>✓ Define talent as an organizational resource and allow for interdepartmental training and mobility<br>✓ Ensure leaders are trained to teach and coach their employees<br>✓ Recommend that each senior executive participate in communication and apology to patients and families who have experienced harm |


# Prioritize Safety in Selection and Development of Leaders

| Organizational Readiness Level | Foundational | Sustaining |
|---|---|---|
| **Tactics**<br>*Examples of tactics that may be implemented to create change at each of these levels* | **To engage your organization (cont):**<br>✓ Ensure all executives can clearly articulate how a culture of safety applies in their department, and that all leaders can do the same<br>✓ Develop systems that encourage deference to expertise rather than hierarchy or title in issues of safety | **To engage clinical leadership:**<br>✓ In leadership development programs, incorporate opportunities for clinical leader advancement<br><br>**To engage patients and families:**<br>✓ Ensure leaders have competencies in how to partner effectively with patients at all levels of care<br>✓ Include patient and family representatives in leadership recruitment and hiring process |
| **Assessing Execution**<br>*List of questions that should be asked to further assess and measure progress* | **YES / NO**<br>☐ ☐ Do all leaders receive training in patient safety science and safety culture?<br>☐ ☐ Is at least one member of the executive leadership team a Certified Professional in Patient Safety or a safety expert?<br>☐ ☐ Are leadership development plans reviewed annually? Do they include measures of key safety culture competencies?<br>☐ ☐ Do leadership development programs include cultivation of a robust skill set in communication, engagement, listening, performance improvement, and emotional intelligence, as well as business acumen? | |


# Lead and Reward a Just Culture

## GOAL: BUILD A CULTURE IN WHICH ALL LEADERS AND THE WORKFORCE UNDERSTAND BASIC PRINCIPLES OF PATIENT SAFETY SCIENCE, AND RECOGNIZE ONE SET OF DEFINED AND ENFORCED BEHAVIORAL STANDARDS FOR ALL INDIVIDUALS IN THE ORGANIZATION.

Healthcare organizations that are successful in improving safety and eliminating harm have leaders who understand and commit to the principles of just culture. A just culture "focuses on identifying and addressing systems issues that lead individuals to engage in unsafe behaviors, while maintaining individual accountability by establishing zero tolerance for reckless behavior. Just organizations focus on identifying and correcting system imperfections, and pinpoint these defects as the most common cause of adverse events. Just culture distinguishes between human error (e.g., slips), at-risk behavior (e.g., taking shortcuts), and reckless behavior (e.g., ignoring required safety steps), in contrast to an overarching 'no-blame' approach" (PSNet Safety Primer 2016).

| | Foundational | Sustaining |
|---|---|---|
| **Strategies**<br>*Overarching strategies for implementation at the CEO level* | ✓ CEO encourages commitment to just culture framework as an essential business philosophy<br>✓ CEO communicates and models the use of just culture principles in all decisions and actions as part of daily responsibilities and interactions, including root cause analysis<br>✓ CEO educates Board and leadership team on principles of just culture and role models these principles | ✓ CEO employs just culture principles throughout organization and communicates that rules apply to all, regardless of rank, role and discipline<br>✓ CEO sets expectations for accountability for anyone interacting with the healthcare organization to commit to utilizing just culture principles in every day practice and decisions<br>✓ CEO ensures just culture principles are implemented in all interactions |

A just culture is not a blame-free environment; clinicians and the workforce are still held accountable for following protocols and procedures. The vast majority of errors are not a result of individual failures, but are the result of systems that are inherently flawed and create environments of risk. A just culture acknowledges that punishing people for mistakes discourages reporting, fails to correct problems in the system, and sets up the likelihood of recurrence. Just culture also emphasizes the importance of the affected workforce after events occur, and focuses on support and peer-to-peer counseling for affected clinicians and the workforce.

When clearly defined, articulated, and implemented by leadership, a just culture approach encourages the reporting of errors, lapses, near-misses, and adverse events. It is through reporting and event analysis that the organization learns what went wrong, or could have gone wrong, and how to prevent it from happening again.


# Lead and Reward a Just Culture

The hard work of establishing a just culture, however, goes well beyond agreeing to the concept itself. It involves incorporation of expertise in human factors engineering and systems design, full support and resources from the CEO and all leadership, and full engagement of departments such as Human Resources and Organizational Development. It also requires robust reporting systems with mechanisms in place to provide timely feedback to the workforce about not only what went wrong, but why it went wrong. This feedback also includes strong action plans to prevent future occurrence. Developing a just culture policy is just the first step, and organization-wide, systemic implementation is key.

While training of leaders and the patient safety workforce on just culture is vital, everyone at all levels of the organization must consistently integrate just culture principles as an organizational norm. The CEO's role in ensuring that just culture principles are understood and implemented across the organization is fundamental to success. If one individual within the organization is punished for a system flaw, just culture efforts can be severely undermined. Leaders must be transparent with the Board, physicians, the workforce, and the public about the organization's approach, so that when something does go wrong, the response is expected, practiced, and applied uniformly throughout the organization.

## Just Culture Principles

**Human behaviors within a just culture can be described as follows:**

- **HUMAN ERROR =** An inadvertent slip or lapse. Human error is expected, so systems should be designed to help people do the right thing and avoid doing the wrong thing.

  **Response:** Support the person who made the error. Investigate how the system can be altered to prevent the error from happening again.

- **AT-RISK BEHAVIOR =** Consciously choosing an action without realizing the level of risk of an unintended outcome.

  **Response:** Counsel the person as to why the behavior is risky; investigate the reasons they chose this behavior, and enact system improvements if necessary.

- **RECKLESS BEHAVIOR (NEGLIGENCE) =** Choosing an action with knowledge and conscious disregard of the risk of harm.

  **Response:** Disciplinary action.

(PSNet Safety Primer 2016)

Just Culture

# Lead and Reward a Just Culture

A just culture that focuses on identification and resolution of systems issues supports clinicians and the workforce when these systems break down. CEOs ensure that the principles of a just culture are implemented organization-wide and that they inform every action and decision.


| Organizational Readiness Level | Foundational | Sustaining |
|---|---|---|
| **Tactics**<br>*Examples of tactics that may be implemented to create change at each of these levels* | **To engage your organization:**<br>✓ Educate Board, leadership, and workforce about just culture through integrated training programs<br>✓ Develop and implement a decision-making process and application of just culture that is behavior-based, rather than harm-based<br>✓ Ensure organization-wide leadership commitment to frameworks of just culture and accountability that are aligned across all departments<br>✓ Create an interdisciplinary just culture champion team to review organizational policies, provide training, and ensure policies are being followed at all levels<br>✓ Identify metrics to track performance on just culture implementation | **To engage your organization:**<br>✓ Educate organization to be responsive to and transparent about actions related to professional discipline<br>✓ Implement a peer support program<br>✓ Hold workforce accountable for implementing just culture principles in daily practice and decision-making<br>✓ Include actual and mock scenarios on meeting agendas that demonstrate application of just culture principles<br>✓ Involve the media as a way to explain errors, decisions, and data to the public<br>✓ Treat and respond to gaps in culture and expected safety behaviors as adverse events<br>✓ Expect that leaders utilize just culture tools in all situations, even those not significant or punishable, to ingrain principles and use into organizational norms |


# Lead and Reward a Just Culture

| Organizational Readiness Level | Foundational | Sustaining |
|---|---|---|
| **Tactics**<br>*Examples of tactics that may be implemented to create change at each of these levels* | **To engage your organization (cont):**<br>✓ Align systems and standards for just culture across all organizational departments, including Human Resources<br>✓ Ensure employees are well-trained in just culture algorithm and tools and utilize them in daily activities and decisions<br>✓ Publicly reward positive examples of just culture | **To engage clinical leadership:**<br>✓ Include clinical leaders in the development of just culture policies<br>✓ Provide training for physicians, nurses, and other clinical leaders in just culture to build understanding and enthusiasm<br><br>**To engage patients and families:**<br>✓ Ensure that patients and family members who serve on Board and committees are educated on just culture principles<br>✓ Include patients and families in mediation committees/tribunals to assist in resolving conflicts between departments |

**Assessing Execution**

*List of questions that should be asked to further assess and measure progress*

| YES | NO | |
|---|---|---|
| ☐ | ☐ | Do Board, leadership, and workforce development programs include training on just culture? |
| ☐ | ☐ | Is there one set of defined behavioral standards for all individuals within the organization, including leadership, physicians, and the workforce? |
| ☐ | ☐ | Is compliance with the established just culture framework part of regularly reviewed performance reviews, including career development plans, for leaders and the workforce? |
| ☐ | ☐ | Does the organization use, evaluate, and define action plans related to measures of just culture on employee surveys? |
| ☐ | ☐ | Is there an existing measure that is regularly evaluated for assessing frontline knowledge of just culture algorithm? |


# Establish Organizational Behavior Expectations

## GOAL: CREATE ONE SET OF BEHAVIOR EXPECTATIONS THAT APPLY TO EVERY INDIVIDUAL IN THE ORGANIZATION AND ENCOMPASS THE MISSION, VISION, AND VALUES OF THE ORGANIZATION.

Much of the work involved in creating a culture of safety in healthcare is intrinsically linked to the everyday behaviors that characterize an organization (PSNet Patient Safety Primer: Safety Culture 2016). In fact, culture is often defined as "the way we do things around here." CEOs set the tone and have the power and responsibility to establish behaviors, set expectations, and promote accountability for these behavioral norms for everyone, including both employed and non-employed individuals. It is essential for Board members, the CEO, and leaders at every level to model the behaviors they aim to cultivate throughout the organization.

| | Foundational | Sustaining |
|---|---|---|
| **Strategies**<br>*Overarching strategies for implementation at the CEO level* | ✓ CEO creates, communicates, and models an organizational climate of personal and professional accountability for behavior<br>✓ CEO establishes systems to recognize and reward desirable behaviors<br>✓ CEO activates organization to develop, implement, and evaluate programs that address and improve personal, professional, and organizational behavior and accountability<br>✓ CEO engages Board by sharing metrics and dashboards related to organizational behavior<br>✓ CEO engages and holds all leaders and workforce accountable for defined behaviors | ✓ CEO prioritizes resources for professional accountability framework and programs to ensure and sustain behavioral excellence<br>✓ CEO ensures that succession planning and talent management programs prepare future leaders with competencies in organizational behavior and accountability<br>✓ CEO works with licensing bodies and medical executive committees, where applicable, to ensure behavioral expectations and accountability practices are consistent<br>✓ CEO and leaders at all levels of the organization encourage questions, increasing the likelihood that the right question will be asked at a critical time |


# Establish Organizational Behavior Expectations

Chief among the behaviors that contribute to an environment of physical and psychological safety are transparency, effective teamwork, active communication, just culture, respect, and direct and timely feedback. Each of these can be learned, and the workforce should be educated about what is expected and why. For example, educating health professionals in effective communication with patients and families, whether disclosing an error, seeking informed consent, or practicing shared decision making, is a key part of cultivating teamwork, communication, and respect.

One of the first responsibilities of a CEO is to understand the current accepted behaviors within the organization. One way to achieve this understanding is through use of validated surveys of patient safety culture, which can help identify areas of strength as well as areas for improvement at organizational, departmental, and unit levels. Surveys can also reveal the strength or weaknesses of organizational culture and "subcultures," and provide leaders a better sense of where they may need to focus attention. In this manner, leaders are able to better connect with the frontline workforce on a regular basis, whether through leadership rounding, safety huddles, briefings/debriefings, or other tactics, so they can hear about challenges firsthand. A Board, leadership, physician and other clinical professional, and workforce "credo" or compact also helps to communicate behavioral expectations. Such a compact can frame discussions and maintain accountability when someone violates the standard behavioral code (Webb et al. 2016).

It is also important to have a mechanism for escalating concerns when behavioral codes are violated and for dealing with disruptive and unsafe behaviors. Everyone within the organization should understand what that procedure is, and that it will be applied consistently across the organization, regardless of rank, department, revenue, or other considerations. It is essential to remember that the process of changing behavioral norms across an organization or system can be a long and challenging one. That is why it is equally important to ensure that there is also a system to reward individuals who are identified as modeling desired behavior. True progress can be accomplished with the dedication of a highly engaged, unwavering, and courageous CEO.

## Importance of Physical and Psychological Safety of the Workforce

**An environment that protects the physical and psychological safety of the workforce is fundamental to a culture of safety. Yet many healthcare workers suffer from harm, including bullying, burnout, and physical injury and assault, during the course of providing care. Under these conditions, it is difficult for care providers to find joy and purpose in their work, and patient safety is jeopardized. The prioritization of safety behaviors including respect, transparency, and teamwork is at the foundation of safety for the workforce, and therefore for patients. The workforce needs to know that their safety is an enduring, non-negotiable priority for the CEO and Board. This commitment is demonstrated when action plans are developed and implemented to ensure the workforce feels valued, safe from harm, and part of the solution for change (NPSF LLI 2013).**

Behavior Expectations

# Establish Organizational Behavior Expectations

Organizational safety behavior expectations are the daily demonstration of a true culture of safety. CEOs work with leaders and the workforce to develop these expectations and to personally demonstrate expected behaviors, while holding the leadership team accountable for doing the same.


| Organizational Readiness Level | Foundational | Sustaining |
|---|---|---|
| **Tactics**<br>*Examples of tactics that may be implemented to create change at each of these levels* | **To engage your organization:**<br>✓ Complete culture of safety surveys every 12-18 months and review with Board, leadership team, and workforce; set targets for improvement and take deliberate action to achieve them<br>✓ Stratify and track culture and safety metrics by sociodemographic variables that are important to the organization's community and develop plans to address any gaps<br>✓ Develop required processes for teamwork, communication, and handoffs among the workforce and with patients, using tools like SBAR, read back, "stop the line," briefings, and de-briefings<br>✓ Require, participate in, and give context for existing safety processes, including safety huddles and operational briefings, and use these opportunities as forums to build better teamwork and safety culture | **To engage your organization:**<br>✓ Require annual signatures on compacts for Board members, leaders, and the workforce that clearly define expected professional accountability behaviors<br>✓ Educate and explain to your organization and the public what you will be transparent about, and what limits may exist on transparency<br>✓ Design and implement a crisis communications policy and plan for both internal and external audiences<br>✓ Align and integrate organizational safety and respectful behaviors with all departments across the organization<br>✓ Provide feedback to employees when they report a safety issue, closing the loop and demonstrating how frontline callouts improve safety<br>✓ Recognize and reward individuals and teams for demonstrating positive safety behaviors and reporting |

Behavior Expectations

# Establish Organizational Behavior Expectations

| Organizational Readiness Level | Foundational | Sustaining |
|---|---|---|
| **Tactics**<br>*Examples of tactics that may be implemented to create change at each of these levels* | **To engage your organization (cont):**<br>✓ Define organizational safety behavior expectations and respectful behaviors, as well as the organizational response to disrespectful behavior and conflict<br>✓ Proactively promote and encourage teamwork by implementing a formal team training program<br>✓ Break down hierarchical policies and systems for reporting, and encourage reporting without fear of punishment or retribution<br>✓ Break down power gradients by communicating and rewarding a policy that requires all staff to speak up for safety concerns<br>✓ Develop and abide by leadership behaviors, including appreciative or humble inquiry<br>✓ Celebrate and recognize individuals and teams who excel at key safety behaviors<br>✓ Work with key stakeholders to clearly communicate and enforce the same behavioral standards for both employed and non-employed practitioners and staff | **To engage your organization (cont):**<br>✓ Ensure the existence of measurement tools and/or report cards for individual performance<br>✓ CEO requires and accepts notification of any serious safety events within 24 hours, without exception<br>✓ SBAR for all serious safety events is shared with full administrative and clinical leadership teams and with the Board<br>✓ Leadership distributes awards for teams and organizations based on culture of safety metrics<br>**To engage clinical leaders:**<br>✓ Recognize and reward physicians, nurses, and other clinical leaders who actively participate in teamwork and communication initiatives<br>✓ Create (and require signatures on) physician and leadership compacts that clearly define behavioral expectations<br>✓ Commit to and train the workforce on communication and resolution programs<br>**To engage patients and families:**<br>✓ Include patients in the development of required processes for communication with patients, using tools like AskMe3® and shared decision making<br>✓ Encourage and enable patients and families to report safety concerns, and follow up with families who have reported<br>✓ Ensure that safety behavior expectations are centered around the patient, and involve patients in setting these expectations<br>✓ Create, supply, and use understandable tools for patient involvement and shared decision making<br>✓ Invite patients to utilize versions of communication and reporting tools (e.g., SBAR) and to participate in team processes<br>✓ Have a designated team available to provide support to patients, families, and the workforce when an error has occurred |


# Establish Organizational Behavior Expectations

| Organizational Readiness Level | Foundational | Sustaining |
|---|---|---|
| **Assessing Execution**<br>*List of questions that should be asked to further assess and measure progress* | YES / NO<br>☐ ☐ Does the organization have a clearly defined reporting system and measure utilization of this system (including follow-up and feedback processes)?<br>☐ ☐ Are organizational behavior expectations, such as use of huddles and briefings, with follow-up plans and identified owners of action items, implemented and reviewed regularly?<br>☐ ☐ Are professional accountability standards (e.g., a process to address disruptive behaviors) in place, used, and regularly evaluated?<br>☐ ☐ Are specific tools to encourage teamwork and clear communication in place, used, and regularly evaluated?<br>☐ ☐ Are communication and resolution/reconciliation programs in place, utilized, and regularly evaluated? | |

# Appendix

## Key Terms Related to Patient Safety and a Culture of Safety

*Based on AHRQ PSNet Glossary [nd], Runciman et al. 2009, and others as noted.*

**Adverse Event:** Any injury caused by medical care. An undesirable clinical outcome that has resulted from some aspect of diagnosis or therapy, not an underlying disease process. Preventable adverse events are the subset that are caused by error.

**Clinician:** A health professional qualified in the clinical practice of medicine, such as a physician, nurse, pharmacist, or psychologist who is directly involved in patient care, as distinguished from one specializing in laboratory or research techniques or in theory.

**Error:** An act of commission (doing something wrong) or omission (failing to do the right thing) that leads to an undesirable outcome or significant potential for such an outcome.

**Harm:** An impairment of structure or function of the body and/or any deleterious effect arising therefrom, including disease, injury, suffering, disability, and death. Harm may be physical, social, or psychological, and either temporary or permanent.

**Inclusion:** Positively striving to meet the needs of different people and taking deliberate action to create environments where everyone feels respected and able to achieve their full potential (National Institute for Health Research 2012).

**Just Culture:** A culture that recognizes that individual practitioners should not be held accountable for system failings over which they have no control. A just culture also recognizes that many individual or "active" errors represent predictable interactions between human operators and the systems in which they work. However, in contrast to a culture that touts "no blame" as its governing principle, a just culture does not tolerate blameworthy behavior such as conscious disregard of clear risks to patients or gross misconduct (e.g., falsifying a record, performing professional duties while intoxicated).

**Patient Safety:** Patient safety refers to freedom from accidental or preventable injuries produced by medical care. Thus, practices or interventions that improve patient safety are those that reduce the occurrence of preventable adverse events.

**Psychological Safety:** Individuals' perceptions about the consequences of interpersonal risks in their work environment. These perceptions include taken-for-granted beliefs about acceptable interactions with co-workers, superiors, and subordinates, and how others will respond when one puts oneself on the line, such as by asking a question, seeking feedback, reporting a mistake, or proposing a new idea (Edmondson 2011).

**Respect:** The treatment of others with deference in daily interactions, weighing their values, views, opinions and preferences (Sergen's Medical Dictionary 2012).

**Safety Culture/Culture of Safety:** The safety culture of an organization is the product of individual and group values, attitudes, perceptions, competencies, and patterns of behavior that determine the characteristics of the organization's health and safety management. Organizations with a positive safety culture are characterized by communications based on mutual trust, by shared perceptions of the importance of safety, and by confidence in the efficacy of preventive measures (Health and Safety Commission 1993).

**Total Systems Safety:** Safety that is systematic and uniformly applied (across the total process) (Pronovost et al. 2013). A systems approach can help with the design and integration of people, processes, policies, and organizations to promote better health at lower cost.

**Trust:** The collective expectations by the public and other clinicians that health care providers will demonstrate knowledge, skill, and competence, and will act in the best interest of both patients and colleagues with beneficence, fairness, and integrity (Calnan 2008).

**Workforce:** Health professionals and all other workers employed in health service or other settings, including but not limited to clinicians, administrators, medical records personnel, and laboratory assistants.

**Workforce Safety:** Healthcare workforce safety refers to freedom from both physical and psychological harm for all those who work with patients as well as those who oversee or provide non-clinical support for those who work with patients.

**Zero Harm/Free from Harm:** The total absence of physical and psychological injury to patients and the workforce.

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# Self-Assessment Tool

## Culture of Safety Organizational Self-Assessment

***Please Note:*** *The questions in this self-assessment represent a selection of elements from the report, "Leading a Culture of Safety: A Blueprint for Success." This brief assessment may not accurately represent the full environment or state of each organization. It is recommended that teams review all strategies, tactics, and information in the full document for additional clarity and guidance.*

## Instructions:

1. **Select** a diverse team to lead the safety culture review and improvement process. It is recommended that this team include key C-Suite executives, clinical leadership, patient safety leadership, and a patient and family representative.

2. **Share** the guide, *Leading a Culture of Safety: A Blueprint for Success* with your team. Review the full document as a team or independently.

3. **Ask** each team member to complete this self-assessment independently. Conduct a series of meetings to:
   - **A)** Review self-assessment responses and scoring for each category as a team, and finalize your organizational score.
   - **B)** Develop action plans, metrics/dashboard, for assessment, and follow-up plans for low scoring domains (Refer back to *Leading a Culture of Safety: A Blueprint for Success* for assistance)

     ***Note:*** *if your team records low scores in Establish a Compelling Vision for Safety or Value Trust, Respect, and Inclusion, it is recommended that you begin with action plans for improvement in these domains.*
   - **C)** Review improvement metrics, revisit action plans, and make adjustments as necessary. You should include additional team members and/or consultants where applicable.

## Notes on Scoring:

**Each statement should be scored on a scale of 1-5 based on the following:**

- **1 – Never** true for my organization
- **2 – Rarely** true for my organization
- **3 – Sometimes** true for my organization
- **4 – Almost always** true for my organization
- **5 – Always** true for my organization

If you are **unsure** of the response, please check the box titled unsure. When adding responses for a total score, this box should be recorded as a **0**. For any item where a member of the leadership team is unsure of the response, it is recommended that he or she spend time speaking with frontline staff and other appropriate individuals in the organization to determine the best answer.

## Reviewing Responses:

The **total score** is the sum of the response for each of the three questions. The total score will correlate with one of the three ranges in the boxes below, 0 – 4, 5 – 9, or 10 – 15. Confirm that the **organizational state** box accurately describes the current state of your organization. If it does not, you may need to reevaluate your responses, or speak with additional individuals to better understand the current state of your organization.

Use the **recommended next steps** box in the column that correlates with your total score as a quick reference when developing action plans for improvement. For additional information and recommendations, refer to *Leading a Culture of Safety: A Blueprint for Success*.

## Scoring:

1 – **Never** true for my organization
2 – **Rarely** true for my organization
3 – **Sometimes** true for my organization
4 – **Almost always** true for my organization
5 – **Always** true for my organization
0 – **Unsure** of the response

# Establish a compelling vision for safety

| MEASURABLE ELEMENTS | SCORE | | | | | | OBSERVATIONS |
|---|---|---|---|---|---|---|---|
| ***Key questions to ask about your organization's capabilities and processes.*** | **1** | **2** | **3** | **4** | **5** | **Unsure 0** | ***Please provide a brief description of why you chose this score, considering all parts of each question.*** |
| **1.** My organization's safety vision statement and aspirational end state are clear and consistently communicated. | | | | | | | |
| **2.** My organization completes and reviews culture of safety surveys every 12 – 18 months with evidence of improvement. | | | | | | | |
| **3.** My organization's CEO and leadership team effectively build enthusiasm for and understanding of my organization's safety vision statement. | | | | | | | |

**Total Score = _____**

| | Score: 0 – 4 | Score: 5 – 9 | Score: 10 – 15 |
|---|---|---|---|
| **Organizational State**<br>*Brief description of current state of the organization* | Organization's vision statement does not reflect an end state of zero harm and is not regularly communicated to the workforce. Leaders and staff may have a difficult time understanding or communicating how their daily work contributes to advancement of the vision statement. | Organization has a defined vision with a clear, aspirational end state. Leaders communicate this vision consistently to the workforce, and understand how their work fits into the organizational vision statement. All members of the workforce are able to effectively communicate the vision statement. | Leaders and the workforce effectively communication the organization's vision to patients, families, and the public. The workforce is motivated by the vision statement and can clearly tie their daily work to the advancement of this vision. Metrics to benchmark progress toward vision are in place and regularly evaluated. |
| **Recommended Next Steps**<br>*Recommended next steps for improvement and implementation are based on domain and included in Leading a Culture of Safety: A Blueprint for Success* | *Begin with review of* ***Foundational*** *tactics*<br>Develop a vision statement with a clear end goal; Educate leaders and the workforce on the meaning of safety culture and zero harm; Host information sessions to build understanding and enthusiasm for the vision | *Review* ***Foundational*** *and* ***Sustaining*** *tactics*<br>Encourage leader visibility on front lines and communication about how daily work advances vision; Hold leaders accountable for regularly and consistently communicating vision to all units and departments | *Review* ***Foundational*** *and* ***Sustaining*** *tactics*<br>Share vision and action plans for change transparently with patients, families, and the public; Benchmark progress towards zero harm and share goals and strategies with similar organizations; Develop and support programs that recognize growth and adherence to vision |

## Scoring:

1 – **Never** true for my organization
2 – **Rarely** true for my organization
3 – **Sometimes** true for my organization
4 – **Almost always** true for my organization
5 – **Always** true for my organization
0 – **Unsure** of the response

# Value trust, respect, and inclusion

| MEASURABLE ELEMENTS | SCORE | | | | | | OBSERVATIONS |
|---|---|---|---|---|---|---|---|
| ***Key questions to ask about your organization's capabilities and processes.*** | 1 | 2 | 3 | 4 | 5 | Unsure 0 | ***Please provide a brief description of why you chose this score, considering all parts of each question.*** |
| **1.** My organization uses and regularly evaluates formal respect programs that provide education and support to patients and the workforce. | | | | | | | |
| **2.** My organization implements workforce safety programs to reduce physical and psychological harm to the workforce. | | | | | | | |
| **3.** My organization transparently shares information and metrics around harm events and action plans for improvement across our organization. | | | | | | | |

**Total Score = _____**

| | Score: 0 – 4 | Score: 5 – 9 | Score: 10 – 15 |
|---|---|---|---|
| **Organizational State**<br>*Brief description of current state of the organization* | CEO and organizational leaders understand the criticality of trust, inclusion, and respect, but may not model these values in all situations. The workforce fears punishment from reporting and disclosing errors to patients. Hierarchies based on rank and role exist throughout the organization. | Formal respect and teamwork programs are in place across the organization, and all staff participate in regular trainings. The workforce reports errors and close calls anonymously and without fear of retribution. Leaders across the organization embody behaviors that focus on trust, respect, and inclusion in all interactions. | Open and honest reporting is standard across the organization and includes defined feedback cycles. Both patients and the workforce are empowered to speak up about safety concerns. Robust communication and support programs are in place for patients, families, and the workforce. |
| **Recommended Next Steps**<br>*Recommended next steps for improvement and implementation are based on domain and included in Leading a Culture of Safety: A Blueprint for Success* | *Begin with review of* ***Foundational*** *tactics*<br>Develop organization-wide respect for people programs; Train all leaders, staff, and clinicians on respect program; Develop, implement, and train on anonymous reporting systems; Establish a patient and family advisory council | *Review* ***Foundational*** *and* ***Sustaining*** *tactics*<br>Educate leaders and workforce on inclusion, diversity, and communication with both patients and co-workers; Develop and implement disclosure and apology program; Include metrics for trust, respect, and inclusion as part of annual review process for all leaders | *Review* ***Foundational*** *and* ***Sustaining*** *tactics*<br>Publically share information about harm events and plans to prevent recurrence; Enable and encourage patients and families to speak up for safety through available tools and education programs; Provide cultural competency training for leaders and workforce; Regularly evaluate metrics on disparities in patient care |

## Scoring:

1 – **Never** true for my organization
2 – **Rarely** true for my organization
3 – **Sometimes** true for my organization
4 – **Almost always** true for my organization
5 – **Always** true for my organization
0 – **Unsure** of the response

# Select, develop and engage your Board

| MEASURABLE ELEMENTS | SCORE | | | | | | OBSERVATIONS |
|---|---|---|---|---|---|---|---|
| ***Key questions to ask about your organization's capabilities and processes.*** | **1** | **2** | **3** | **4** | **5** | Unsure **0** | ***Please provide a brief description of why you chose this score, considering all parts of each question.*** |
| **1.** At all Board meetings in my organization, the amount of time spent reviewing and discussing a transparent dashboard on safety and culture is equal to or greater than time spent reviewing financial performance. | | | | | | | |
| **2.** My organization's Board members are required to complete regular self-assessments and education related to safety culture and quality principles. | | | | | | | |
| **3.** Performance assessments and incentives for my organization's leadership are inclusive of safety culture metrics and performance. | | | | | | | |

**Total Score = _____**

| | Score: 0 – 4 | Score: 5 – 9 | Score: 10 – 15 |
|---|---|---|---|
| **Organizational State**<br>*Brief description of current state of the organization* | Organization's Board members have strong financial backgrounds, but lack quality and safety expertise. Safety metrics are presented briefly at each Board meeting, and few questions are asked. The majority of the meeting focuses on financial review. | Organization has a quality and safety committee that reviews all serious harm events, but these are rarely presented to the full Board. Time spent on safety during Board meetings includes a story of harm told by the safety/ quality manager, and some questions are asked about the event. Board meetings prioritize financial review over safety review. | Organization's Board and committees include experts in safety, clinicians, and a patient and family representative. Patients are invited to meetings to present their experiences directly to the Board. Safety is a top priority and Board members understand how safety impacts the bottom line and feel empowered to ask questions. |
| **Recommended Next Steps**<br>*Recommended next steps for improvement and implementation are based on domain and included in Leading a Culture of Safety: A Blueprint for Success* | *Begin with review of* ***Foundational*** *tactics*<br>Provide educational opportunities in safety science and culture for all Board members; Include a safety expert on the Board; Develop a patient and workforce safety dashboard for regular review; Establish a quality and safety committee | *Review* ***Foundational*** *and* ***Sustaining*** *tactics*<br>Consider including a patient/ family representative on Board and all committees; Provide opportunities for all Board members to participate on guided leadership rounds; Share all serious safety events and action plans with the full Board | *Review* ***Foundational*** *and* ***Sustaining*** *tactics*<br>Link CEO compensation and bonuses to performance on safety and culture metrics; Provide opportunities for Board members to learn from other organizations and industries; Bring frontline teams to Board meetings to tell their stories and be recognized for exemplary performance |

## Scoring:

1 – **Never** true for my organization
2 – **Rarely** true for my organization
3 – **Sometimes** true for my organization
4 – **Almost always** true for my organization
5 – **Always** true for my organization
0 – **Unsure** of the response

# Prioritize safety in the selection and development of leaders

| MEASURABLE ELEMENTS | SCORE | | | | | | OBSERVATIONS |
|---|---|---|---|---|---|---|---|
| ***Key questions to ask about your organization's capabilities and processes.*** | **1** | **2** | **3** | **4** | **5** | **Unsure 0** | ***Please provide a brief description of why you chose this score, considering all parts of each question.*** |
| **1.** All leaders in my organization receive education and review opportunities in safety science and safety culture. | | | | | | | |
| **2.** My organization has defined roles, safety competencies, and development programs for leaders at all levels. | | | | | | | |
| **3.** My organization allows leaders opportunities for learning across departments and from outside organizations and industries. | | | | | | | |

**Total Score = _____**

| | Score: 0 – 4 | Score: 5 – 9 | Score: 10 – 15 |
|---|---|---|---|
| **Organizational State**<br>*Brief description of current state of the organization* | Organization's leaders are considered for development opportunities and promotion based on business and financial competencies. Leader development programs focus on executive leadership. All leaders have semi-regular reviews that focus on financial performance. | Organization's executive leaders are provided basic safety science and culture educational opportunities. Leadership development programs are in place at all levels and throughout the organization. Both current and emerging leaders have access to peer coaching and mentoring programs. | Leaders at all levels of the organization are required to complete safety culture training. Regular reviews for all leaders include safety and culture metrics. Leaders are provided opportunities to learn from outside organizations and industries and are able to transfer among departments and units based on interest and organizational needs. |
| **Recommended Next Steps**<br>*Recommended next steps for improvement and implementation are based on domain and included in Leading a Culture of Safety: A Blueprint for Success* | *Begin with review of* ***Foundational*** *tactics*<br>Define required leadership competencies in culture and safety; Conduct regular gap analyses for CEO and senior leader competencies in safety culture; Develop and implement an organization-wide leadership development program | *Review* ***Foundational*** *and* ***Sustaining*** *tactics*<br>Provide continuing education opportunities in safety and culture for both new and emerging leaders; Develop systems that support leaders at all levels, including opportunities for cross-departmental training | *Review* ***Foundational*** *and* ***Sustaining*** *tactics*<br>Provide leaders at all levels opportunities for learning outside the organization; Define talent as an organizational resource; Tie performance on safety culture to leadership development priorities and promotional opportunities |

## Scoring:

1 – **Never** true for my organization
2 – **Rarely** true for my organization
3 – **Sometimes** true for my organization
4 – **Almost always** true for my organization
5 – **Always** true for my organization
0 – **Unsure** of the response

# Lead and reward a just culture

| MEASURABLE ELEMENTS | SCORE | | | | | | OBSERVATIONS |
|---|---|---|---|---|---|---|---|
| ***Key questions to ask about your organization's capabilities and processes.*** | 1 | 2 | 3 | 4 | 5 | Unsure 0 | ***Please provide a brief description of why you chose this score, considering all parts of each question.*** |
| **1.** My organization uses a defined just culture policy during all review processes and decisions (e.g. not just harm event review). | | | | | | | |
| **2.** My organization regularly reviews metrics for just culture education and understanding and defines improvement opportunities. | | | | | | | |
| **3.** My organization has one set of defined and employed behavior standards and accountability guidelines in place for all individuals, regardless of department, rank, or role. | | | | | | | |

**Total Score = _____**

| | Score: 0 – 4 | Score: 5 – 9 | Score: 10 – 15 |
|---|---|---|---|
| **Organizational State**<br>*Brief description of current state of the organization* | Organization may have just culture policy but it is not robust or embedded in decisions and processes across the organization. Patient safety and risk management professionals are systematically trained in just culture principles. | Organization has a robust just culture policy that is well-communicated internally and utilized in processes and departments across the organization and/or system. All staff are trained on just culture principles and use of just culture algorithm. | Just culture algorithm is embedded in all reviews and decisions across all departments. The Board, leaders, and the workforce are held accountable for utilizing the just culture policy. Patients and the public are educated on just culture and transparency around events through their providers and use of the media. |
| **Recommended Next Steps**<br>*Recommended next steps for improvement and implementation are based on domain and included in Leading a Culture of Safety: A Blueprint for Success* | *Begin with review of* ***Foundational*** *tactics*<br>Develop a robust just culture policy; Educate the Board, leadership team, and workforce on just culture principles and the daily use of the just culture algorithm; Ensure utilization of just culture principles in all event reviews | *Review* ***Foundational*** *and* ***Sustaining*** *tactics*<br>Work with the Board and organizational leaders to align just culture policies across all professions and departments; Develop and review metrics for just culture; Hold workforce accountable for the utilization of just culture algorithm | *Review* ***Foundational*** *and* ***Sustaining*** *tactics*<br>Treat gaps in culture as adverse events requiring review with the just culture algorithm; Educate providers on transparent communication of errors; Work with the media to educate and inform the public about just culture and plans for improvement |

## Scoring:

**1 – Never** true for my organization
**2 – Rarely** true for my organization
**3 – Sometimes** true for my organization
**4 – Almost always** true for my organization
**5 – Always** true for my organization
**0 – Unsure** of the response

# Establish organizational behavior expectations

| MEASURABLE ELEMENTS | SCORE | | | | | | OBSERVATIONS |
|---|---|---|---|---|---|---|---|
| ***Key questions to ask about your organization's capabilities and processes.*** | **1** | **2** | **3** | **4** | **5** | Unsure **0** | ***Please provide a brief description of why you chose this score, considering all parts of each question.*** |
| **1.** My organization uses and regularly reviews a formal training program and defined processes for teamwork and communication. | | | | | | | |
| **2.** Professional accountability standards, including processes to address disruptive behavior and disrespect, are implemented uniformly across my organization. | | | | | | | |
| **3.** My organization has a program for recognition and celebration when individuals or teams excel at key safety behaviors and culture metrics. | | | | | | | |

**Total Score = _____**

| | Score: 0 – 4 | Score: 5 – 9 | Score: 10 – 15 |
|---|---|---|---|
| **Organizational State**<br>*Brief description of current state of the organization* | Behavior expectations vary across the organization, often based on department, unit, or role. Leaders and the workforce are not aware of defined standards of respectful behavior or consequences for disrespectful behavior. Best practices and standard processes also vary. | Behavior expectations are consistent across care providers, but organizational response to disruptive behavior may vary. Non-clinical departments, including finance and human resources, may not utilize common behavioral standards. Leaders are held accountable for modeling expected behaviors. | All members of the organization are held accountable for the same behavior expectations and have the same consequences for disrespectful behavior. Organization provides transparency of these expectations through patient/provider compacts. Leaders and the workforce are rewarded for exceptional teamwork and communication. |
| **Recommended Next Steps**<br>*Recommended next steps for improvement and implementation are based on domain and included in Leading a Culture of Safety: A Blueprint for Success* | *Begin with review of **Foundational** tactics*<br>Implement a formal team training program; Develop and communicate organization-wide behavioral expectations; Develop and implement standard processes for teamwork and communication | *Review **Foundational** and **Sustaining** tactics*<br>Measure implementation and compliance of teamwork and communication programs; Develop compacts detailing behavior expectations for signature by leaders and the workforce; Ensure measurement tools and report cards for individual performance exist and are utilized | *Review **Foundational** and **Sustaining** tactics*<br>Work with key stakeholders to ensure identical processes for employed and non-employed clinicians and staff; Develop required processes for communication and teamwork with patients and families; Develop standard tools for patient and family involvement in teamwork and communication processes |

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Institute for Healthcare Improvement

# Whole System Quality

## A Unified Approach to Building Responsive, Resilient Health Care Systems

White Paper
ihi.org

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### Institute for Healthcare Improvement

For 30 years, the Institute for Healthcare Improvement (IHI) has used improvement science to advance and sustain better outcomes in health and health systems across the world. We bring awareness of safety and quality to millions, accelerate learning and the systematic improvement of care, develop solutions to previously intractable challenges, and mobilize health systems, communities, regions, and nations to reduce harm and deaths. We work in collaboration with the growing IHI community to spark bold, inventive ways to improve the health of individuals and populations. We generate optimism, harvest fresh ideas, and support anyone, anywhere who wants to profoundly change health and health care for the better. Learn more at ihi.org.

The ideas and findings in IHI White Papers represent innovative work by IHI and organizations with whom we collaborate. White papers share the problems IHI is working to address, ideas we are developing and testing to help organizations make breakthrough improvements, and early results where they exist.

# Contents

# Executive Summary

While health care organizations have made significant strides in improving the quality of care, health system leaders note persistent challenges in building resilient and responsive organizations that continuously, reliably, and sustainably meet the evolving needs of their communities.

The Institute for Healthcare Improvement's research on strengthening organizational resilience and responsiveness to patients and populations has been underway for a number of years. In a dramatic demonstration of how health systems are actively *learning* how to manage quality in new ways at an accelerated pace, the COVID-19 pandemic surfaced a number of emerging and evolving patient, provider, and community needs and forced health systems to quickly redesign care delivery to meet those needs.

Decades of scholarship, coupled with insights from the pandemic, reveal a way forward for health systems that are pursuing quality in health care: through a process of rigorous learning, health care organizations can design resilient and responsive management systems to continuously deliver services that reliably and sustainably meet the evolving needs of patients, populations, and communities — in times of both stability and crisis.

This paper proposes a more holistic approach to quality management — whole system quality — that enables organizations to close the gap between the quality that customers are currently receiving and the quality that they could be receiving by integrating quality planning, quality control, and quality improvement activities across multiple levels of the system. Whole system quality requires leadership principles and practices that foster a culture of learning to reliably and sustainably meet the evolving needs of patients, populations, and communities. The paper details how these leadership principles and management practices can enable health systems to pursue quality — with ambition, alignment, and agility — through a commitment to learning.

The white paper includes the following:

- Definitions for whole system quality and the leadership principles required to support this approach;
- A description of how whole system quality links to customer needs, organizational vision, and quality strategy;
- Detailed descriptions of three interrelated components — quality planning, quality improvement, and quality control — that inform a more holistic whole system quality approach; and
- A proposed set of simultaneous activities that health care organizations can undertake to build a foundation for the transition to whole system quality.

# Introduction

In the two decades since the Institute of Medicine published *To Err Is Human: Building a Safer Health System*,[1] the health care industry has made great strides in improving the quality of care, including decreases in surgical site infections and hospital-acquired conditions, among other fundamental quality improvements.[2] Despite these efforts, significant opportunities to improve health care quality remain, especially when considering the often unreported near misses.[3] As Dr. Don Berwick noted, "[O]verall, so far as we can determine, the progress toward truly safer patient care remains frustratingly slow and spotty. Doing projects is not the same as transforming a system. Well-run airlines don't rely on 'safety projects'; the scientific pursuit of safety infuses absolutely everything they do, all the time."[4] Pursuing quality holistically and embedding it into the health system requires positioning quality at the center of organizational strategy.

Today, quality in health care often means the attributes of products and services or conformance to requirements imposed by regulatory bodies. As *Forbes'* Steven Denning describes, "All too often quality management in its various forms and labels has come to mean improving quality in the sense of internal processes, and conformity to internal specifications. In a word, bureaucracy. All too often in quality management, the customer has seemed to be the last thing on anyone's mind."[5]

This reality would surprise the early quality theorists, whose work defined quality in terms of *meeting customer needs*. Deming introduced the concept of "customer-orientation," and Juran integrated this idea with the notion of meeting specified requirements to propose his view of quality as "fitness for use," comprising two elements: "features of products which meet customer needs" and "freedom from deficiencies" (see Figure 1).[6,7,8]

**Figure 1. Juran's Definition of Quality**


Source: Juran JM, Godfrey AB. *Juran's Quality Handbook (5th edition)*. McGraw-Hill; 1999.

Building on the ideas of quality movement pioneers, the Institute for Healthcare Improvement (IHI) proposes a strategic definition for health care quality: the endeavor of continuously, reliably, and sustainably meeting customer needs. This definition places quality at the center of the health care enterprise: quality *is* the organizational strategy, not merely a component of the strategy.

Like many complex organizations, health systems must consider the often-competing interests of myriad stakeholders to inform their strategy. To offer a clarity of purpose to organizational leaders, Peter Drucker proposed a useful distinction between primary and secondary customers:[6]

- **Primary customers:** Individuals whose lives are changed by pursuing quality. In the context of health care organizations, primary customers are defined as the health care workforce, patient population, and community members who are current or prospective consumers of health care services.
- **Secondary customers:** Individuals whose engagement is necessary to deliver quality to the primary customers. In health care organizations, secondary customers include payers, partners, regulatory bodies, and accreditation agencies, among others.

## The Pursuit of Quality Through Continuous Learning

Leaders advocating for health system transformation cite the urgency and need for a quality-oriented enterprise which enables person-centered care delivery, evidence-based clinical practice, sustainable and high-value care models, alignment in incentive structures, and systemic redesign for health equity.[9,10,11,12,13,14] Achieving this vision requires the proactive pursuit of quality by:

- Defining what quality means to patients, populations, communities, and the health care workforce, and crafting a strategy to achieve that quality vision in a sustainable way;
- Building structures and systems and embedding processes that make it easier for the health care workforce to work toward achieving the shared quality vision through continuous learning; and
- Fostering a culture of continuous learning by adopting leadership principles that enable problem identification, experimentation, and codification of solutions that work best.

While quality gives learning a purpose, learning steers organizations toward their quality vision. As leaders identify the needs of customers, gain insight into the interdependencies of their system, determine the drivers of persistent challenges for the workforce, and identify innovations and opportunities for improvement, the process of learning advances the organization toward its quality goals.

The idea of embedding learning into health systems has never been more relevant.[15] In recent decades there has been an evolving understanding of learning, particularly in the context of health care. In 2007, the Institute of Medicine presented a vision for a learning health system to link the disconnected insights and knowledge from policymakers, clinical practitioners, and scientists.[16] Since the term was first introduced, scholars of management theory, systems thinking, and organizational development have expanded the view of learning to encompass tacit knowledge of the contextual insights, information, and experiences of all who engage with the organization — from customers to the workforce to external partners.[17,18,19,20,21]

With this perspective in mind, Peter Senge introduced the term "learning organization" to identify an institution "where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together."[22] IHI's understanding of learning in pursuit of quality is drawn from this definition.

The COVID-19 pandemic spotlighted the key role of learning to solve urgent health system problems and spurred one of the most productive periods for rapid learning. The task of putting practical knowledge about both *what* and *how* to implement the COVID-19 response into the hands of leaders, managers, and practitioners has never been more urgent.

For example, in their quest to quickly adapt existing services to meet the needs of patients and populations, as well as their workforce, health systems introduced tiered escalation huddles to rapidly learn about and quickly respond to problems as they emerge;[23] rapidly developed standard processes to manage use of high-demand resources such as personal protective equipment and ventilators;[24,25] and adopted targeted measurement systems to track caseloads, provider capacity, and supplies to inform key strategic and operational decisions.[26]

Perhaps even more importantly, health system leaders have embraced behaviors during the COVID-19 pandemic that further enable a culture of quality: communication of a clear sense of purpose has unified the workforce in managing the crisis;[27] frontline staff have some freedom to rapidly experiment and innovate to meet patient needs;[28] and leaders recognize the importance of tacit knowledge and create opportunities for robust dialogue to exchange insights and information.[29] In the midst of the pandemic, quality improvement has proved helpful in facilitating rapid learning.[30] A distinctive characteristic underpinning the health care system's response to the global coronavirus pandemic is shared organizational commitment to learning. In the face of extreme complexity and uncertainty, health systems are compelled to adopt a dynamic approach to leadership and seek to continuously learn as circumstances evolve.

# Whole System Quality: Definition and Key Principles

Building on the definition of learning organizations from Senge, the view of a leader's role in promoting quality from Deming, and the notion of a quality-centric organization from Juran, IHI proposes a holistic approach to integrate learning into health systems: whole system quality.

- 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 (see Figure 2).
- Organizations that practice whole system quality look deeply within and beyond themselves to learn how to continually, reliably, and sustainably meet the evolving needs of patients, populations, and communities.

- Whole system quality comprises integrated quality planning, quality control, and quality improvement activities that inform an organization-wide, interlinked, and customer-centric strategic approach to quality.

**Figure 2. Whole System Quality Practices and Principles**


# Whole System Quality Management Practices

WSQ management practices include the roles, responsibilities, and activities across the health care organization, from patients and families to the board of directors. These practices are divided into the three domains of the Juran Trilogy: quality planning, quality control, and quality improvement.[31]

- **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 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 improvement** (QI) involves a structured approach to system redesign to achieve new levels of performance through the science of improvement.

Many practitioners will recognize the combination of QP, QC, and QI components in the whole system quality approach as a "quality management system." The concepts of QP, QC, and QI are described in more detail later in the paper. For more discussion on the theoretical context for whole system quality, see Appendix A.

While the Juran Trilogy doesn't include quality assurance, this domain serves as a crucial externally-driven mechanism to evaluate the performance of the system and identify persistent gaps. While recognizing that quality assurance remains an important part of quality activities in any organization, IHI's whole system quality approach excludes quality assurance to highlight the internally-driven management practices in pursuit of quality. Amar Shah provides a framework for quality management that integrates quality assurance.[32]

# Whole System Quality Leadership Principles

Table 1 presents the whole system quality leadership principles: the social norms and patterns of behavior that form the foundation for implementing the various quality management activities. These principles (described in more detail later in the paper) apply to leadership at all levels of the organization (e.g., unit, department, executive, board).

**Table 1. Whole System Quality Leadership Principles**

| Principle | Definition | Example |
|---|---|---|
| **1. Build a shared sense of purpose** | The co-production of a cohesive and unified vision for a future state of the organization to cultivate a shared sense of purpose | During the quality planning process, capture what matters to staff, patients, partners, and payers, and identify themes to develop a five-year quality strategy and annual quality goals. |
| **2. Practice systems thinking** | The ability to see the interconnected elements of the system, and to distinguish patterns instead of conceptualizing change as isolated events | Build models (e.g., process maps or flowcharts, enterprise value stream maps, performance measurement system) to understand the current system and the interdependence between its components to produce the intended results. |
| **3. Engage in collective learning and dialogue** | The process of collective inquiry, dialogue, and co-production to advance the organization toward the shared vision and goals | At every opportunity, practice dialogue by suspending assumptions, acknowledging internal dynamics, leading with curiosity and humility, asking questions (what and how, not who and why), discovering new ways of seeing and understanding the system, and generating ideas together. |
| **4. Practice personal inquiry and reflection** | The discipline of self-reflection, unearthing deeply-held belief structures and understanding how they dramatically influence behaviors | Dedicate time to introspect on personal biases and how they manifest in perspective, experience, and decision making. Learn and appreciate the context expertise of marginalized populations and recognize individual power that leaders, at senior and local levels, can exercise to design intentionally equitable systems. |

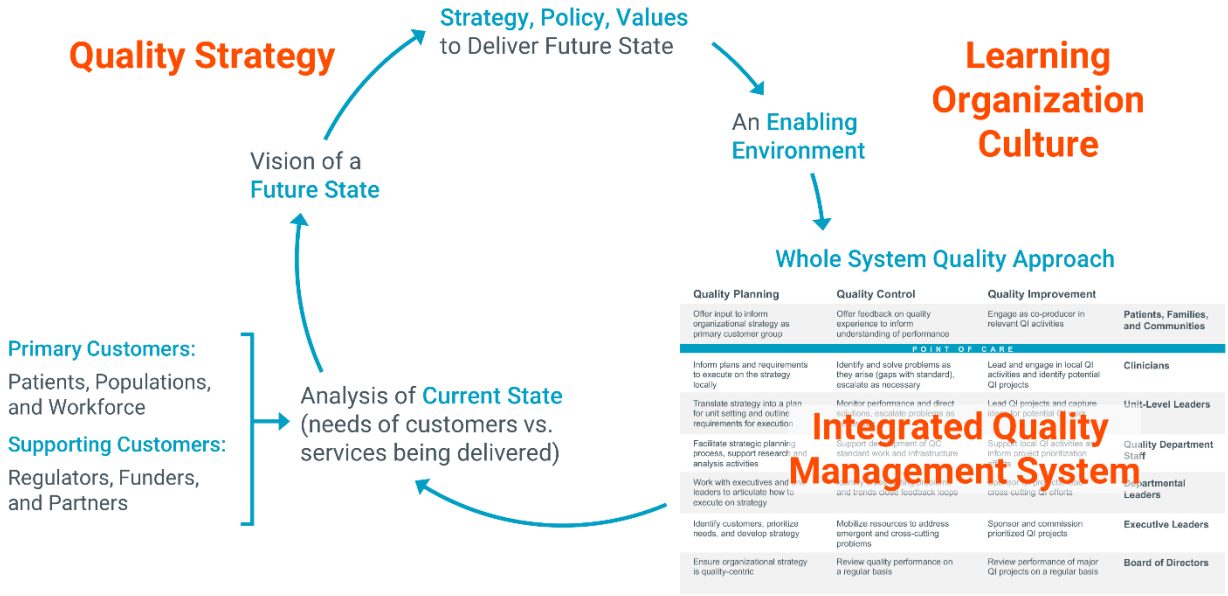
Figure 3 depicts the whole system quality approach that integrates quality planning, quality control, and quality improvement activities for key health care system stakeholder groups. These activities inform an organization-wide, interlinked, and customer-centric strategic approach to quality and promote learning across the organization toward the pursuit of whole system quality.

**Figure 3. Whole System Quality Approach: Quality Planning, Quality Control, and Quality Improvement Activities by Stakeholder Group**

| 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** |
| POINT OF CARE | | | |
| 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** |

Ultimately, whole system quality serves as a framework to inform the necessary management practices and leadership principles to embed quality at the center of the organizational enterprise. Figure 4 illustrates the continuous model of learning from customers, strategic visioning and planning, and refining the integrated delivery system that is the journey to WSQ. In many ways, this model is higher-order quality planning to inform and guide a health system's evolution toward a quality enterprise.

**Figure 4. Journey to Whole System Quality**




As a health system pursues the goal of closing the gap between the current state and future state of quality, it must engage in a series of customer orientation, visioning, strategic planning, and organizational development activities. As depicted in Figure 4:

- The journey begins with understanding the needs of patients, local populations, and the workforce as well as regulators, funders, and other partners.
- With stakeholder needs identified and prioritized, organizations can evaluate their current state of quality, define their quality aspiration, and craft a strategy to close the gap between the two.
- The organizational quality strategy that guides, and the quality policies that support, the delivery of quality are part of the quality planning aspect of WSQ.
- Guided by organizational values and a culture of learning, an organization pursues its priorities for improvement through a WSQ approach that deploys elements of quality planning, control, and improvement across the different levels of the health system. Fostering the leadership principles and building capability to practice continuous learning across the organization is required for quality management practices to take root.

# Learning Organization Culture

Fostering a culture of improvement and continuous learning requires whole system quality leadership principles (see Table 1 above) — the social norms and patterns of behavior that form the foundation for implementing the QP, QI, and QC activities depicted above in Figure 3 — that enable problem identification, experimentation, and codification of solutions that work best.

These principles apply to leadership at all levels of the organization (e.g., unit, department, executive, board).

Engaging in these leadership principles over time will ultimately advance organizations toward the aspiration of psychological safety, a culture of trust, constancy of purpose, equity, and innovation — all hallmarks of success.[33,34,35]

- **Psychological safety:** Anyone in the organization, including patients and families, can comfortably voice concerns, challenges, and ideas for change
- **Culture of trust:** An environment of non-negotiable respect, ensuring that people feel their opinions are valued, and any negative or abusive behavior is swiftly addressed
- **Constancy of purpose:** Apply organizational mission, vision, and values to every decision and always in service of quality (to continuously, reliably, and sustainably meet the evolving needs of patients, populations, and communities)
- **Commitment to equity:** Continually foster critical dialogue on identity and experience, take corrective action to address institutional and structural inequities, and create conditions in which all people, staff members and customers alike, have every opportunity to attain their highest potential
- **Discipline of innovation:** "The effort to create purposeful, focused change in an organization's social or economic potential."[36] This is achieved through a systematic examination, within and beyond the organization, to identify the areas of change that offer opportunities for creating new sources of value. Areas of change include adopting new ideas for application as well as abandoning practices that no longer serve the organizational vision.[37]

# Four Elements of a Learning Organization

Creating the necessary infrastructure for whole system quality requires a shared commitment to continuous learning. To that end, an organization must cultivate a community of learners, each curious to explore new ideas and practices. Such a mindset, established through shared behaviors and social norms, would relieve the workforce of "unproductive performance pressure, freeing [them] to offer ideas and to experiment in order to develop effective solutions."[38]

Peter Senge, a systems scientist and leading scholar in organizational development, coined the term "learning organization" to describe a group of people working collectively to create a future they desire through continuously seeking to learn and understand their current circumstances and their full potential.[39] An organization committed to profound learning is one in which each individual contributes to the shared vision, appreciates the interdependencies of the system, participates in dialogue with candor and curiosity, and practices self-reflection and meta-cognition.[40] These behaviors serve as a foundation for building a community where knowledge and understanding is highly prized, openly shared, and consistently applied to create the envisioned future.

The culture of a learning organization coupled with a management structure that enables exchange of insights, priorities, and plans unlock the capacity for any organization to realize their vision for quality. As first introduced in Table 1 above, the four whole system quality leadership principles that enable learning and knowledge sharing, and that build on the organizational learning model Senge proposed, are outlined again below.[41]

1. **Build a shared sense of purpose:** A participative process of establishing a shared vision focuses the learning objectives and ensures that all activities and efforts are aligned toward a singular purpose.
2. **Practice systems thinking:** Systems thinking serves as a critical tool to appreciate the complexity of the dynamic, interconnected health care system and identify the challenges and opportunities in pursuing quality goals.
3. **Engage in collective learning and dialogue:** Team learning, or the process of collective inquiry, dialogue, and co-production, expands the problem-solving capacity of the organization by providing access to insights, information, and expertise across different levels and groups.
4. **Practice personal inquiry and reflection:** The discipline of self-reflection, unearthing deeply-held belief structures, and understanding how these structures dramatically influence behaviors enables each member of the organization to contribute to dialogue in a meaningful way.

## Leadership Behaviors That Foster a Learning Organization to Support Quality

As health systems pursue organizational learning, they collectively learn how to learn — and how to build the capabilities to tackle any challenge they might encounter in the pursuit of quality. Senior leaders set the tone for organizational learning through their positional and symbolic power. By modeling the behaviors they seek to cultivate, executives and departmental leaders encourage, support, and normalize learning practices, ensuring psychological safety to acknowledge and help resolve individual and system issues.

Informal leaders at the point of care, who build meaningful relationships across the organization, appreciate the interdependencies of the system and consistently demonstrate a personal conviction to a shared vision and values and improving organizational quality. These informal, local leaders (e.g., physicians, nurses, social workers, senior residents, technicians) have the unique power to foster organizational learning behaviors and patterns among their peers.

Table 2 helps define the leadership roles and activities, at both the senior and local levels, necessary to develop a learning organization aligned with the four WSQ leadership principles described above.

**Table 2. Leadership Roles and Activities That Foster a Learning Organization to Support Quality**

| WSQ Leadership Principle | Senior Leadership Role and Activities (Executives and Departmental Heads) | Local Leadership Role and Activities (Individuals and Team Leads) |
|---|---|---|
| **1. Build a shared sense of purpose**<br><br>The co-production of a cohesive and unified vision for a future state of the organization to cultivate a shared sense of purpose | **Role:** Act as the steward of the organizational vision, seeking to understand, record, and iterate on the purpose as it evolves<br><br>**Activities:**<br>• Share your own personal connection and contribution to the vision<br>• Design and iterate on a process for all staff to express what really matters to them and be heard<br>• Continually reflect on whether the current organizational system, processes, and structure are designed to achieve the vision and purpose | **Role:** Reflect on a personal vision and connect it with that of others on the team and in the organization<br><br>**Activities:**<br>• Dedicate team meetings to sharing personal aspirations, goals, and visions and connect them to the organization's vision<br>• Organize joint sessions across departments to share personal aspirations and team visions and how they align with the organization's vision<br>• Develop action plans to pursue the vision together, both within and across teams |
| **2. Practice systems thinking**<br><br>The ability to see the interconnected elements of the system, and to distinguish patterns instead of conceptualizing change as isolated events | **Role:** Build and promote a holistic view of the system<br><br>**Activities:**<br>• Build and refine models for understanding the current state (e.g., linkage of processes, enterprise value stream maps)<br>• Understand variation and process capability to know if the system is capable of achieving the vision and, if not, commission efforts to improve the system<br>• Regularly review data from a concise, balanced set of measures that represent the work of the organization<br>• Examine the external and environmental forces — from evolving community needs to the regulatory landscape — to | **Role:** Gain an awareness of and appreciation for institutional interdependency<br><br>**Activities:**<br>• Develop stories of the role, work, challenges, and opportunities for each team, and share them across the organization<br>• Identify goals that are at cross-purposes; name them and openly discuss how to align incentives and activities<br>• Use balancing measures to ensure improvements don't create unintended effects |

| WSQ Leadership Principle | Senior Leadership Role and Activities (Executives and Departmental Heads) | Local Leadership Role and Activities (Individuals and Team Leads) |
|---|---|---|
| | identify emerging challenges and opportunities<br>• Eliminate management systems that encourage individual profit centers and encourage suboptimization of departments and units | |
| **3. Engage in collective learning and dialogue**<br><br>The process of collective inquiry, dialogue, and co-production to advance the organization toward the shared vision | **Role:** Foster a culture of learning, demonstrating inquiry, reflection, and dialogue<br><br>**Activities:**<br>• Acknowledge the dynamics within the executive team, including the functional and dysfunctional aspects, and points of consensus and controversy<br>• Develop an executive team learning agenda (note, inquire, learn, and refine a list of organizational known knowns, known unknowns, unknown unknowns)<br>• In every opportunity, articulate tacit beliefs, invite opportunities to challenge assumptions, and look for new ways of seeing the whole system<br>• Seek to learn from other leaders and organizations, exploring alternative ways of thinking and working, and identifying best practices to adopt<br>• Harness data to understand challenges and explore opportunities for improvement | **Role:** Seek to learn from and understand one another through inquiry and dialogue<br><br>**Activities:**<br>• Use problem escalation as an opportunity for dialogue, within and across teams<br>• Practice dialogue in meetings, making time to inquire about the current circumstances and understand the challenges as they are expressed<br>• Celebrate problem identification and articulation<br>• Use process maps, root cause analysis, and cycles of influence to identify underlying drivers of challenges |
| **4. Practice personal inquiry and reflection** | **Role:** Continually reflect on the gap between the current state and the organizational potential future state, and publicly demonstrate commitment to learning | **Role:** Embrace challenges as an opportunity for improvement, exchanging experiences and ideas with peers and senior leaders to foster learning |

| WSQ Leadership Principle | Senior Leadership Role and Activities (Executives and Departmental Heads) | Local Leadership Role and Activities (Individuals and Team Leads) |
|---|---|---|
| The discipline of self-reflection, unearthing deeply-held belief structures and understanding how they dramatically influence behaviors | **Activities:**<br>• Be humble, candid, and transparent<br>• Listen deeply by asking questions and respecting individual expertise<br>• Understand problems before pursuing solutions<br>• Be introspective to identify personal biases and limited perspectives<br>• Reflect on how current processes, incentives, and culture contribute to organizational challenges | **Activities:**<br>• Use the language of challenges and needs rather than blame<br>• Openly share and exchange perspectives on challenges, opportunities, suggestions, and ideas for improvement<br>• Practice deep listening and speaking with candor<br>• Focus on the process rather than the people |

# Quality Planning: Defining Quality Goals to Meet Customer Needs

In a context where quality is divorced from organizational strategy, quality assurance often propels quality-related activities as organizations try to comply with evolving regulatory mandates or accreditation requirements. With external forces driving priorities for organizational quality, many health systems fall into a cycle of reactive quality management. As quality becomes increasingly central to organizational strategy and management, leaders need a mechanism to discern the relative importance of quality efforts and proactively pursue activities that will more effectively advance organizational strategic goals.

The quality planning (QP) process, defined by Juran as a means of "developing the products and processes required to meet customers' needs,"[42] enables an organization to prioritize customer needs, design a strategy and quality goals to meet those needs, and deploy the strategy across the system. As the first and critical step in shifting an organization from a reactive to a proactive quality orientation, quality planning offers much value in reducing the waste of misaligned and poorly coordinated quality efforts across an organization.

## Quality Planning Process

Table 3 provides an overview of the three phases of the quality planning process, with each phase addressing a strategic organizational gap.

**Table 3. Organizational Gaps Addressed by Three Phases of the Quality Planning Process**

| Organizational Gap | Quality Planning Phase |
|---|---|
| **Understanding customer needs:** There is an incomplete understanding of the needs of patients and populations, often due to limited or discontinuous channels to capture needs | **Define the Organization's Quality Aspiration:** Quality dimensions are identified by prioritizing customer needs and aligning them with the organizational mission |
| **Designing a strategy and quality goals that meet customer needs:** Strategy is misaligned with identified customer needs as a result of poor integration of emerging ideas and customer insights with strategic planning | **Design the Quality Strategy:** Quality is central to strategic development and planning activities |
| **Building a delivery system that responds to the organizational strategy:** Strategy remains unrealized due to inadequate investment in strategy deployment and systemwide alignment | **Deploy the Quality Strategy Systemwide:** Strategy implementation is well-planned, well-timed, and well-executed across the entire system |

The quality planning process shown in Figure 5 seeks to respond to each gap using a systematic and sequenced approach, with specific processes outlined for each phase of the QP process. The steps are intentionally numbered to follow the defined sequence.

**Figure 5. A Sequenced Approach to Quality Planning**


## Define the Organization's Quality Aspiration

Quality is defined as a prioritized list of customer needs.

1. **Engage customers to identify and prioritize needs**

   The process of determining the needs of these diverse stakeholders involves an "organization-wide generation of market intelligence, dissemination of the intelligence across departments, and organization-wide responsiveness to it."[43] Health systems can pursue a customer-centric

quality strategy through a rigorous process of environmental scanning and customer-orientation activities (e.g., patient, staff, and community interviews, focus groups, surveys, market trend reports, community needs assessments) that inform market segmentation, strategic differentiation, and service innovation efforts.[44]

2. **Develop a shared vision, mission, and values**

   The idea that vision, mission, and values can guide a business and provide meaning for employees has been widely documented, underscoring how a forward-looking perspective and enduring values contribute to an organization's longevity and sustainability.[45] A common pitfall that compromises the process is senior leadership developing a vision, mission, and values without engaging or getting input from employees and other key stakeholders.[46] To mitigate this risk, organizational leaders must develop a *shared* vision. Once a shared purpose has been articulated, the annual planning process can begin by reaffirming the established mission, vision, and values.

3. **Establish an organizational definition of quality**

   Defining quality is an important early step in quality planning because it helps to orient all later stages of the QP process. The organizational definition of quality:

   - Serves as the foundation for planning, achieving, and monitoring quality;
   - Guides the areas of focus, priorities, measures of progress and reporting; and
   - Facilitates communication both internally and externally.

Most definitions of quality are: 1) guided by alignment with organizational strategy, 2) evidence-based, 3) strongly supported by leadership, and 4) aimed at promoting excellence at all levels of an organization.[47]

In practice, health systems can only begin to weigh and balance diverse needs once they have captured the perspectives of all stakeholders. In 2017, the East London NHS Foundation Trust in the UK hosted the Big Conversation, with 35 workshops involving more than 1,000 people, to define the purpose and quality aspiration for the organization through appreciative inquiry.[48] A qualitative analysis of the data captured in the process led to the development of the organizational strategy.

Similarly, the Sheffield Teaching Hospitals NHS Foundation Trust (a five-hospital system in Sheffield, UK) developed a patient-centric quality strategy informed by staff, patients, the governance board, regulators, and other partners.[49] Through a series of individual conversations, group discussions, presentations, and surveys, the Sheffield Trust gained insight into key factors that were vital to understanding priorities, building a shared vision, and defining quality for customers.

## Design the Quality Strategy to Achieve Quality Goals

Quality is central to strategic development and planning activities.

4. **Analyze the existing system and identify opportunities for improvement and innovation**

   Designing a system that fulfills the organization's definition of quality begins with an understanding of the current state of quality and the organizational system that delivers

the current results. By examining the current organizational system and performance, leaders can evaluate areas of strength and opportunities to improve the system as the organization strives to achieve its defined quality goals. Diagnostic tools that organizations might use to understand their current state of quality include, for example, a strategic review, SOAR (Strengths, Opportunities, Aspirations, Results) analysis, value stream mapping, quality initiative evaluation, and gap analysis.

5. **Develop breakthrough objectives and annual goals as an articulation of the quality strategy**

   Leaders use the organization's articulated vision, mission, and values, and the identified gap between current system performance and the articulated quality definition, to prioritize breakthrough objectives, which are three- to five-year goals that outline the path to advancing an organization's purpose. By evaluating a set of dynamic internal and external factors, health systems can arrive at an appropriate set of objectives. Internal factors include elements that are within the organization's control such as available resources, capacity, and capability. External factors comprise externally-driven environmental elements that are not within the organization's control, for example, government, policy and regulatory changes, the global economy, and international politics. Organizations often use the symbolic term "True North," derived from Lean management, and visual representations to communicate and reinforce these breakthrough objectives.

Western Sussex Hospitals NHS Foundation Trust in the UK, for instance, developed a Patient First True North framework that is centered on the patient and serves as "the one constant all efforts should strive to achieve, directly or indirectly."[50] The framework, borne out of a Trust-wide transformation initiative, communicates their strategic focus and ensures systemwide alignment.[51]

## Deploy the Quality Strategy Systemwide

Strategy implementation is well-planned, well-timed, and well-executed across the entire system.

6. **Translate quality goals and objectives into actionable plans and requirements**

   Strategic alignment, which involves translating the organization's priorities and goals for quality into actionable plans, begins at the highest level of the organization and is propagated throughout the organization, at all levels, using participative dialogue. This dialogue, widely known as "catchball,"[52] serves as a structured cascade mechanism for disseminating and contextualizing the breakthrough objectives and annual goals throughout the organization.

   By enabling both top-down and bottom-up communication, the cascading process facilitates development of a shared understanding of organizational goals as well as consensus on how to achieve the goals.[53] As the plan is disseminated across the organization, departments and teams develop their "local" plans, identifying how their activities contribute to achieving the breakthrough objectives and annual goals. Thus the articulated systemwide quality strategy — which encompasses the quality definition, annual goals, and related key measures (discussed below) — serves as the foundation that guides all activities implemented by each department, unit, team, and staff member in service of achieving that strategy.

7. **Align quality goals with systemwide measures**

   Aligning performance measurement for each quality goal is critical to understanding whole system quality and enabling a coordinated approach to achieve quality goals.[11] Systemwide measures cascade top-down throughout the organization, from senior leaders to point-of-care staff and from strategic organization-level dashboards to department- or unit-level tactical and operational dashboards. Performance measures also cascade bottom-up, enabling departments and units to align their work with high-level strategic objectives, and for unit-level performance metrics to roll up to the systemwide dashboard. Through this cascading process, key performance indicators (KPIs), aggregate measures that succinctly reflect organizational progress toward long-term strategic goals, are represented within a single measurement dashboard, providing visibility from summary-level to detail-level performance across quality dimensions.[54]

8. **Establish a quality management infrastructure**

   Quality planning efforts culminate in a set of aligned top-to-bottom plans to achieve annual goals that roll up to breakthrough objectives to create quality services that meet customer needs. These plans are then implemented by units and departments. Measures of local performance, aligned to the system-level breakthrough objectives, become the so-called “control” parameters that enable leaders and managers to oversee the system, and to understand whether the system is performing in accordance with the goals established for the unit/department by the system. The quality management infrastructure brings together quality planning and quality control activities.

To build a governance structure that establishes a line of sight for quality, from the boardroom to the bedside, Johns Hopkins Health System (JHHS) adopted a cascading process for strategy development and deployment across the organization. JHHS applied the A3 problem-solving approach, originally employed by Toyota to facilitate continuous improvement, as an instrument to facilitate their catchball process.[55] In another example, the East London NHS Foundation Trust developed a one-page driver diagram capturing the strategic activities taking place across the Trust.[56] This plan is cascaded from the Trust level to the facility/site level, and ultimately to the directorate level, to contextualize quality activities and goals across the system.

# Quality Planning: Engaging Key Stakeholders

As one of the three vital components of whole system quality, a robust quality planning process engages individuals throughout the organization to establish a shared vision, mission, and values; define quality; identify and prioritize customer needs; and design a strategy and quality goals to meet customer needs (see Figure 6).

**Figure 6. Quality Planning Activities by Stakeholder Group**

| 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** |
| | POINT OF CARE | | |
| 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** |

- **Patients and families** play a central role in defining quality and developing a strategy to meet their needs. Engaging patients and families, primary customers of the health system who are most affected by the care delivery process, is crucial to defining the quality aspiration. Mechanisms to involve and engage patients, families, and the community at large include surveys, focus groups, concept testing, as well as more generative approaches such as customer observation, journey mapping, and co-design processes. Organizations that engage in generative methods to discover and prioritize latent needs have been shown to build stronger relationships with their customers, deliver superior value, and pursue innovative solutions.[57]
- **Clinician engagement** is critical to building a shared vision of quality across the organization, identifying strategic priorities based on the realities at the point of care, and developing an actionable strategic plan. As internal secondary customers, clinicians and the entire health care workforce are key stakeholders; as such, their needs are also essential to defining the organization's quality vision. Joy in work and workforce enablement must be as integral to an organization's quality aspiration and strategic priorities as patient safety, equity, and efficiency.
- **Unit-level leaders** are tasked with adapting the systemwide strategy to the local context. A health system's breakthrough objectives and annual goals must be translated into actionable and measurable plans at the unit level. Unit-level leaders play a key role in identifying the specific point-of-care activities necessary to implement the plan and the resources required to do so effectively. The catchball process facilitates conversations between these local leaders, departmental leadership, and the executive team to

establish a reasonable set of goals and allocate appropriate resources to execute on them.

- **Quality department staff** provide a key support function in quality planning, facilitating the QP process, analyzing data to inform key strategic decisions, and creating materials to support clinical teams with prioritized quality interventions. In the first phase of QP, Define the Organization's Quality Aspiration, quality department leaders create and manage the process of gathering and synthesizing customer intelligence and market insights. This information is shared with the executive team to inform the organizational definition of quality. In the second phase, Design the Quality Strategy to Achieve Quality Goals, the quality department supports the analysis of the existing system to identify what is working well and opportunities for improvement. In the third phase of planning, Deploy the Quality Strategy Systemwide, quality department staff facilitate the catchball process to translate goals into plans and requirements.
- **Departmental leaders** ensure systemwide alignment throughout the quality planning process. As the breakthrough objectives and annual goals are propagated throughout the organization and translated into plans and requirements, departmental leaders play a crucial role in identifying the interdependencies of the whole system and collaborating with peers to support, align, and resource cross-functional projects and priorities.
- **Executive leaders** establish priorities, drive overall quality planning activities, and ensure organization-wide communication. From establishing strategic priorities to iterating on the annual plan in partnership with departmental leaders and the quality department, senior executives are the stewards of the quality planning process. Their role is to articulate the quality definition, based on the needs of their internal and external customers. In addition to driving the overall quality planning activities, the executive team must also practice transparency and continuously communicate with the workforce and customers about updates on and milestones in the process, as well as the rationale behind strategic choices.
- **Board of directors** play an oversight role in the quality planning process. Their primary responsibility is to ensure that the quality priorities align with a long-term vision — not only for the organization, but also for the community as a whole. With a customer-centric orientation of quality, the trustees provide ongoing feedback on the health system's strategic priorities and the annual plan.

# Quality Control: From Change to Sustainability

The *Sustaining Improvement* IHI White Paper defines quality control as "ensuring that a process remains stable ('in control') over time — that is, its performance remains within the upper and lower control limits. QC is usually performed by those closest to the process."[58] (In a statistical process control chart, the control limits denote the boundaries between which data can fluctuate based on random variation.)

## Quality Control and Quality Assurance

In *Juran's Quality Handbook*, Joseph Juran notes that while both quality assurance (QA) and quality control (QC) serve a similar purpose — each compares actual quality with the quality goal — the difference between the two lies in their focus. Quality control is an activity performed by those doing the work to inform ongoing activity. By contrast, quality assurance informs those actors — often situated outside the daily quality production system — who need to know that the work is meeting the quality goals. QA often occurs with a considerable time lag — weeks or months after the actual delivery of the service. In health care, external stakeholders (e.g., patients and families) often also drive quality assurance. QC by contrast, according to Juran, focuses on daily operations, ensuring that processes are stable and correcting abnormalities.

Traditional quality assurance systems (e.g., accreditation, licensing, credentialing, quality inspections and audits) are mostly concerned with external assessment of the quality of institutional functions and the workforce capabilities to deliver quality work, and are often given statutory responsibilities. While QA was once the principle method for driving better health care quality, more recently health systems have adopted proactive QC approaches to continuously assure quality. QA has increasingly been accommodated in WSQ design[59] and QA itself has adopted QI learning methods to address defects that are uncovered in the audits.[60] In this sense, quality control activities can be thought of as a subset of the broader group of quality assurance activities. Today, health system senior leaders continue to participate in QA, often via the review of a dashboard containing the KPIs described above that result from the quality planning process, and by responding to the "grades" they receive from external auditing agencies.

## Quality Control and High Reliability

Quality control is related to another concept that has gained currency in recent years in health care quality: high reliability. The Joint Commission describes high reliability as "consistent excellence in quality and safety across all services maintained over long periods of time."[61] In practice, the behaviors and tools used to ensure quality control and high reliability are similar.

As with quality improvement and planning, the quality control concepts described in this paper draw on different methodological schools of thought (e.g., high reliability, Lean, Quality as a Business Strategy) as well as the experiences of health care systems that have developed their own robust approaches to quality management (e.g., Kaiser Permanente's performance improvement system, Intermountain Healthcare's operating model, the Virginia Mason Production System, the Cleveland Clinic Improvement Model).

## Effective Quality Control Systems

Today's health care system still has major quality defects, requiring attention not only in terms of quality planning (to identify the quality strategy, priorities, goals, and measures) and quality improvement (to operationalize the quality strategy to achieve goals), but also via systems that ensure quality control (to monitor performance against goals and adjust as needed).[62]

The *Sustaining Improvement* IHI White Paper identifies six main drivers of quality control that represent the key elements of an effective quality control system within a health care organization.[63]

- **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 attention and guide current activities.
- **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.

The whole system quality approach described in this white paper also defines a set of activities at each layer of the organizational structure based on these six drivers of QC, and including patients and the board of directors, to outline relevant activities for quality control (see Figure 7) as described below.

**Figure 7. Quality Control Activities by Stakeholder Group**

| 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** |
| | POINT OF CARE | | |
| 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** |

- **Patients and families** offer feedback regarding quality performance (i.e., how well does the system meet their needs). Mechanisms for enabling patients to provide feedback on quality include whiteboards in hospital rooms and easy-to-access digital feedback forms in hospitals and other settings. Near real-time feedback offers a channel for quality control and other feedback (e.g., submitted after the patient leaves the facility, or delivered to the care team days or weeks after an incident occurs) is an important source of quality assurance information. The leadership principles described above (see Table 1) highlight the norms and practices that promote the submission and discussion of this kind of feedback.
- **Clinicians** play a key role in quality control, especially via execution of standards articulated in evidence-based protocols. Many health systems have invested in broad systems of clinical governance to "standardize what makes sense" for key clinical services (e.g., care pathways for procedures and for specific chronic diseases like heart failure and chronic obstructive pulmonary disease, along with role-specific standard work). Strong quality control systems make these care pathways the easy default by building recommendations directly into the clinical workflow, often using the electronic health record, and allowing physicians to articulate exceptions that can receive an immediate or near-immediate response.
- **Unit-level leaders**, such as a senior charge nurse or assistant nurse manager, play an essential role in quality control. They are responsible for daily monitoring of a team's performance, identifying gaps between desired and actual performance, and working with the team and others (e.g., quality staff) to identify, test, implement, and sustain solutions. Unit-level leaders are often key to determining whether a quality control system succeeds or fails. Coached by senior leaders and middle managers, unit-level leaders also model the behaviors that promote dialogue and trust, as discussed below. They promote learning from failure as well as from success, and they turn problems into opportunities for learning.
- **Quality department staff** play a vital supporting role by assisting staff and leaders throughout the organization with problem-solving, testing and implementing improvements, facilitating data collection and analysis where necessary, and helping teams understand where they need to change current policies and procedures to align with current work and how best to do so.
- **Departmental leaders** (e.g., a cardiac or respiratory operations director) offer support to both teams and leaders at the point of care. They identify emerging trends across multiple units (e.g., shortages of drugs and equipment), use their influence to quicken solutions (e.g., facilitate deployment of specialty staff like social workers, pharmacists, or specialists where necessary), and also manage emerging problems that exist at the intersection of teams (e.g., immediate problems with patient flow that are often not managed by any specific team, but are the result of challenges in multiple parts of the organization).
- **Executive leaders** identify whether the organization is meeting the needs of customers on a daily basis. They review safety, flow, staffing, and other quality data and focus on abnormalities, which they often delegate or escalate into specific improvement projects;

provide coaching for other leaders and model effective problem-solving behaviors (e.g., appreciative inquiry); and ensure that the current system as a whole is functioning effectively (e.g., appropriate structures are in place across teams to ensure that quality goals are being met, appropriate standard work is in place, teams are using tools like visual management in effective ways).

Executive leaders engaging with quality control demonstrate two fundamental activities: facilitating solutions to emergent problems, and going to the point of care to offer coaching, guidance, and encouragement and to champion continuous learning. An effective quality control system includes standard work not only for clinical staff, but also for managers and administrative leaders (e.g., tracking and resolving problems on a daily basis).

- **Board of directors** review operational performance on a regular basis (e.g., financial performance) to ensure progress according to expectations, and to support further analysis and focus leaders' energies on areas for further work.

## Quality Control Practices and How to Operationalize Them

Effective quality control systems use practices like huddles, visual management, and leadership presence at the point of care to support problem-solving and barrier removal.

- **Standard work:** A fundamental quality control practice, defined standard work for key clinical and administrative processes outlines key steps, the roles of relevant staff, and a rationale for why each step is important. These activities might range from patient call light response to management review of a team's progress in meeting strategic objectives. Leading organizations like Intermountain Healthcare have developed clear standard work at multiple organizational levels, co-produced with staff. Some organizations use the Training Within Industry approach, championed in manufacturing during the 20th century, to build and teach standard work.[64]
- **Huddles:** Daily and/or weekly huddles[65] offer the foundation for quality control by providing an opportunity for team members to identify problems, review simple measures of fidelity to standard work and operational control, and update leaders, while also providing a forum for escalating problems as necessary. The huddle enables a team to review problems that occurred in the recent past and identify opportunities to fix them, and also to look forward to anticipate problems and needs and deploy resources to prevent problems from occurring or recurring.
- **Visual management boards:** Visual management boards offer a simple means to ensure good team communication, establish and maintain discipline around measurement, and ensure tracking of problems that require resolution.[66,67]
- **Leadership presence at the point of care:** Research suggests that leadership presence at the point of care can support execution of standard work, create opportunities for coaching and learning, and reinforce continuous problem-solving and improvement. For example, at Kaiser Permanente, leadership rounding — in the form of executive rounds or daily operational rounding in departments and on clinical units — incorporates questions

about quality, safety, service, and efficiency and helps identify opportunities for rapid improvement.[68] Understanding the nature of local work helps senior leaders move beyond traditional roles as financial and policy experts.

Organizations should use Plan-Do-Study-Act (PDSA) cycles to test these practices on a small scale, starting with a limited number of high-performing teams, refine the practices based on learning, and then scale up the practices to implement them more broadly across the organization.

- **Tiered, escalating daily huddles:** Organizations with advanced quality control systems embrace tiered, escalating daily huddles to ensure timely communication at all levels throughout the organization. Daily huddles give participants a rapid, updated "line of sight" to the key processes of their work, allowing them to escalate problems, resolutions, and learning from the unit level to the department level to the executive level — that is, unit-level leaders meet with department-level leaders (or one designated leader), and departmental leaders then meet with executive leaders (or one designated executive). This process proceeds, usually in a sequential manner each morning, with attention to a common set of agenda items, and often requires a 90-minute to two-hour "no meeting zone" to create dedicated time for executives and other managers to attend daily huddles and have their own linked huddles.

Health systems such as Cleveland Clinic, Intermountain Healthcare, Virginia Mason Medical Center, and Baptist Health Services in the US and East London NHS Foundation Trust in the UK have implemented escalating daily huddles, which also supports continuous teamwork and the development of a strong safety culture. While health systems have used escalating huddles for some time, evidence from scientific evaluation is still in its early stages. Early evidence supports benefits for safety and efficiency (e.g., length of stay) for such strategies.[69] Some evidence suggests that this type of huddles can also increase staff situational awareness of safety.

## Visual Management Boards with Linked Measures

The use of visual management boards by point-of-care teams and at each layer of management supports quality control throughout the organization. This approach has been tested to good effect in sustaining improvement.[70]

Point-of-care visual management boards typically merge both quality control and improvement. For example, teams at Fairview Health Services select two measures linked to the organization's strategic domains (e.g., quality, safety, engagement, efficiency) and review two or three quality control standards each day (e.g., compliance with a falls prevention bundle). Teams charter improvement work focused on any gaps revealed in their daily review of data for key measures displayed on the visual management board.

At higher levels of management, daily review of a visual management board typically includes a set of 10 to 20 key measures of operational stability in areas such as safety (e.g., number of adverse events or number of high-risk patients), efficiency (e.g., on-time discharge across units), and workforce (e.g., staff illness and absence). This board or an adjacent board may also reflect any locally escalated problems with planned resolutions, with an assigned individual and follow-up tasks. With less regular review (e.g., weekly or monthly), higher-level leaders separately track a set of measures linked to the organization's current strategic priorities and improvement work

planned to execute on that strategy. At Baptist Health, for example, middle management's visual management board includes a small set of operational measures for each domain in the organization's strategy (e.g., safety, efficiency) and aggregates this data across multiple areas such as the cath lab, facilities, and the OR.[71]

In general, when using visual management as a tool for quality control, the focus is on the relevant system or subsystem that a leader manages and is uniquely positioned to see and influence. For example, a director overseeing multiple teams tracks measures that reflect the interactions of those teams (e.g., flow measures) on the visual management board. An executive-level visual management board includes both aggregate measures (e.g., total adverse events) and operational measures for the system as a whole (e.g., may focus on subsystem gaps in particular departments or between departments such as hospital-wide patient flow, total length of stay, and other similar measures).

Little research examines the effect of visual management boards in isolation, as they typically complement huddle structures. Visual management boards are a fundamental tool of Lean approaches to management, and recent reviews find overall positive effects from Lean approaches on quality, efficiency, and staff engagement.[72] Reviews of visual management from the manufacturing industry cite critical success factors such as modeling leadership behavior (e.g., leaders create their own boards to model desired behavior), providing implementation support for teams, and ensuring relatively simple visual management processes and displays tied to daily work.[73]

## Leadership Presence at the Point of Care

Both middle and senior managers should routinely (i.e., at least daily for middle managers and at least weekly for senior leaders) attend point-of-care team huddles and speak with staff about their understanding and execution of standard work.

Although different approaches are used for leadership presence at the point of care (e.g., Gemba walks, leadership rounds, leader walkarounds), the concept typically includes a few simple questions posed to point-of-care teams:[74]

- What are the team's targets or goals for today?
- How are you doing now?
- What is your plan?
- How can I help you?

Leaders are trying to assess how well staff understand the standard work and their ability to problem-solve, including determining causes for problems they encounter in care processes, articulating the desired state of quality on the unit, and identifying any gaps between the current state and desired state. Through their presence at the point of care, leaders serve as coaches and teachers, help remove barriers, and connect unit-level work to organization-wide strategy and goals.

At East London NHS Foundation Trust, for instance, the executive team holds "walkarounds" with 200 to 250 teams every year, working with the teams to understand challenges, improvement work, and bright spots. Leaders share notes with service leaders, and quality staff

analyze any resulting themes for broader sharing (e.g., with the board of directors). The literature supports the impact of this type of leadership presence, while also noting that a lack of follow up by leaders can be destructive to staff morale and reduce engagement.[75] Health systems should thus have a robust system to track problems and follow up. Baptist Healthcare in Oklahoma offers an example of such a system, integrated with tiered, escalating daily huddles and a visual management system.[76]

## Quality Control as a Source of Staff Empowerment

Quality control comprises point-of-care activities performed by staff who do the work (or their immediate supervisors) to ensure that the work meets quality specifications (ideally identified via staff involvement in quality planning). As Don Berwick noted in 1991, quality control should not be a "dirty word" in health care.[77] Quality control offers teams a foundation to understand their work and make improvements. If a team does not understand the performance of the current system, how can they understand the impact of the changes they make to improve that system?

Tools used to ensure quality control (e.g., daily huddles, visual management, leadership presence at the point of care) are most effective when implemented in conjunction with good processes for escalating problems. This ensures that problems are escalated to the most appropriate level of the organization for attention and effective resolution, helping to "close the loop" rather than potentially getting lost amid routine business operations. Leaders model the desired behaviors that create a culture of quality (as discussed in more detail below), encouraging staff throughout the organization to surface and track problems and embrace a learning mindset that supports experimentation, even if the initial solution does not prove successful.

# Quality Improvement: From Planning to Change

The quality improvement system reflects an intermediate phase between quality planning and quality control (see Figure 8). Organizations identify the quality strategy, priorities, goals, and related measures through the quality planning process. The quality improvement system enables the organization to operationalize the quality strategy and constitutes the necessary structures and resources to bring performance to a new level to achieve the quality goals. Successful improvement initiatives eventually transition to a quality control phase, in which organizational units (e.g., teams, departments) monitor performance using measures related to quality goals, make adjustments as needed, and continuously execute on standard work.

**Figure 8. Relationship Between Quality Planning, Quality Improvement, and Quality Control**


The specific structure of the quality improvement system in each organization may differ, but successful QI systems share similar elements as described below.

- **Common approach to problem-solving:** One agreed upon approach to problem-solving provides a common language, methods, and tools that are used throughout the organization. There are numerous relevant approaches such as the Lean methodology, the Model for Improvement and Plan-Do-Study-Act (PDSA) cycles, Six Sigma tools, DMAIC (Define, Measure, Analyze, Improve, Control) improvement cycle, 7 Quality Tools, A3 problem-solving, or a blend of methods and tools from different approaches.[78,79]
- **Improvement capability and capacity among designated staff:** Organizations need to support improvement work via dedicated time and training for staff. Although many larger health systems have full-time quality staff, it's also important to train staff throughout the organization in the fundamentals of improvement methods and tools, including physicians.
- **Process to track and scale up improvement:** Organizations need a structured internal scale-up process to track the status of improvement work over time, identify and solve common barriers to progress, and share lessons learned among teams while driving the spread of successful changes throughout the organization.

## Common Approach to Problem-Solving

Health care organizations have adopted various improvement approaches — including a focus on high reliability, Lean methodologies, and the Model for Improvement, among others — and many organizations use a combination of several approaches and methods. A health system needs a consistent approach to improvement across the organization and the partnership between the quality department and senior leadership can help ensure this is the case. For example, leaders serve as sponsors for improvement initiatives and, in doing so, can coach teams to use a common set of improvement tools (e.g., 5 Whys, root cause analysis, A3, PDSA)

as methods for frontline improvement. Quality staff, in turn, provide consistent improvement training based on the common approach to support teams' work throughout the organization.

Several years ago, Kaiser Permanente developed its own unique approach to improvement by borrowing from different established methods, including systems thinking, statistical process control, Lean and Six Sigma, and user-centered design.[80] At the Providence health system, the improvement curriculum includes the foundations of quality improvement, the business of health care, change management, and the science of spread and scale, blending concepts from the science of improvement, Lean management, and leading management theories on change and leadership. For years, Providence has also trained leaders in the principles of high-reliability organizations.

As with quality control and planning, key stakeholders play important roles in supporting a common approach to improvement and ensuring effective system-wide quality improvement (see Figure 9).

**Figure 9. Quality Improvement Activities by Stakeholder Group**

| 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** |
| POINT OF CARE | | | |
| 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** |

- **Patients and family members** engage as co-designers and co-producers in QI activities. For example, some health systems engage Patient and Family Advisory Council members on quality improvement teams. At IOV, a provider of cancer treatment services in Brazil, a small number of patient volunteers, many of whom work in quality in other industries, engage as team members in QI projects.
- **Clinicians** lead and engage in local QI activities and identify potential QI projects. Many QI projects, especially those relating to the safety or effectiveness of care, benefit from having a physician lead. At Northwell Health, a physician serves as the QI coach for a

pilot team-based quality management system, and physicians have led QI work in areas such as reducing the use of unnecessary prescribing.

- **Unit-level leaders** lead QI projects and capture ideas for potential QI work. For example, they may lead weekly huddles to review improvement work, ensure consistent execution on standard work, and ensure QI project plans are in place.
- **Quality department staff** support local QI activities and inform project prioritization efforts. The most important job of quality staff is to build QI capability in others rather than do the QI work themselves. Quality staff support improvement teams in a number of ways, including providing data analysis support, ensuring the accuracy and flow of data, teaching staff how to use QI tools for analysis and improvement, and helping teams keep improvement projects on track.
- **Departmental leaders** sponsor QI projects, oversee the improvement work of unit-level teams, and may lead select improvement work that impacts multiple departments in the organization. Departmental leaders focus on areas that are not under the control of a given team such as flow of people, information, and patients between teams. Middle managers (above the unit level) also play an essential role in managing the productive tension between problems that surface in routine work and problems or opportunities identified through the quality planning process, and ensuring appropriate prioritization of improvement work.

  For example, at Cincinnati Children's Hospital Medical Center, division directors work to advance institutional objectives by managing a portfolio of improvement projects to achieve strategic goals while also ensuring alignment of individual teams' work with those goals.[81] The health system developed an educational program called Advanced Improvement Leadership Systems to increase these leaders' capability to do so. Sessions include assessing the current state, safety and productivity, care coordination and outcomes, patient and family experience, and execution of system goals.
- **Executive leaders** sponsor larger-scale improvement projects, which may include new processes or new products, and launch new organization-wide initiatives such as the development of the quality management structure itself, which comprises a set of smaller-scale improvement projects with leaders for each project. To engage executives in improvement, Providence health system started by structuring an improvement project at each hospital, led by the chief financial officer (CFO), chief nursing officer (CNO), and chief medical officer (CMO) at the facility. The CEO selects projects based on a review of quality and cost data and on system priorities. The CFO-CNO-CMO partners work together over five months to advance the projects, supported by five training sessions in which they learn about the science of improvement and change management. For example, one hospital leadership team focused on reducing unnecessary cardiac interventions. The CFO, CNO, and CMO at that hospital partnered with service leads to support advancement of the project and keep the work on track.
- **Board of directors** review progress of select improvement work on a regular basis, often based on a performance dashboard for the health care system.

# Improvement Capability and Capacity for Designated Staff

Many organizations now have dedicated quality staff (and often a quality department) who support improvement at the system level. These staff may be referred to as performance improvement experts, improvement advisors or specialists, coaches, consultants, Six Sigma Black Belts, or other titles. Too often, however, these staff have taken on a role that is heavily rooted in quality assurance — data collection and analysis for those who "need to know" such as payers and regulators — rather than supporting true quality improvement work.

For example, Kabcenell and colleagues found that quality department staff spend less than 30 percent of their time on reducing defects and variation in key processes, and on direct performance improvement work; instead, most of their time is dedicated to data collection and compliance activities.[82] Ideally, quality staff spend significant time both supporting local improvement work and the organization's progress in achieving breakthrough objectives and major clinical redesign.

The quality infrastructure in many health systems is often inadequate, as is training for quality or performance improvement staff to effectively support continuous improvement and other quality activities.[83] Investment in dedicated staff roles to support quality, scoped appropriately, helps establish a strong foundation for a hospital's quality efforts.[84] Plain language training in a small number of concepts, using adult learning principles, works best.[85]

## Optimizing the Role of Quality Staff

Quality staff are most effective when they spend a majority of their time at the point of care, working together with teams to advance the organization's priorities while also helping teams solve emerging problems as they arise. For example, at IOV in Brazil, two full-time performance improvement experts trained in Lean methods support six cancer clinics. As part of their roles, these experts hold open office hours for two hours each week when managers and staff receive coaching on improvement work. These experts also provide support for the organization's quality planning, improvement, and control infrastructure, helping teams build measurement systems (e.g., visual management boards) and guiding their improvement work.

Cleveland Clinic dedicates one continuous improvement expert to each of its hospitals in addition to maintaining other quality staff. East London NHS Foundation Trust employs 15 improvement advisors — experts in improvement science — in addition to more than 100 trained improvement coaches who are dispersed throughout the organization.

Kaiser Permanente (KP) found success with a model that embeds one improvement advisor at each medical center, who reports directly to an executive responsible for leading KP's quality planning, improvement, and control activities.[86] In addition, given the size of the KP health system, these embedded advisors receive support from regional and national master Six Sigma Black Belts, who also serve as internal consultants to support medical center executives in making the transition to their performance improvement system.[87] The Black Belts have at least 15 years of experience in improvement (either in health care or in other industries), change management, and managing complex portfolios of projects, in addition to deep expertise in the science of improvement. The total number of improvement advisors increased from 3 to 500 in three years as part of KP's strategy to develop a systemwide approach to quality.

Further, quality staff play both a "horizontal" and "vertical" role, supporting linkages between improvement activities across departments and between departmental activities and organization-wide strategic priorities, as well as facilitating shared learning across teams.[88]

While quality staff require more in-depth training to support them in their roles, it's also important to provide some level of foundational training for all staff to enable them to effectively engage in improvement efforts. Many health systems have introduced broad quality improvement training for staff throughout the organization (point-of-care staff, clinicians, unit leaders, division managers, executive leaders), at different levels of expertise, depending on need, priorities, and local context. In general, only a small number of staff require the highest level of expertise (e.g., to lead systemwide improvement, apply advanced statistical process control tools), but it's helpful when staff throughout the organization have the necessary knowledge and skills to apply basic QI concepts, methods, and tools. IHI experts have previously written about a "dosing" approach that establishes and deploys targeted levels of improvement knowledge and skills throughout an organization to build improvement capacity and capability.[89]

# Process to Track and Scale Up Improvement

Health care organizations need mechanisms to understand progress on improvement and share learning across teams in order to scale up improvements throughout the organization. Health systems can use a variety of approaches to structure scale-up processes and develop an internal learning system for improvement.[90] Internal learning systems can be permanent (i.e., the management structure supports continuously shared learning from ongoing improvement work) or temporary (i.e., the structure supports specific, time-bound improvement workstreams focused on particular topics such as an internal sepsis reduction "campaign").

## Examples of Permanent Improvement Learning Systems

Lean organizations often use "policy review" to understand progress on achieving the organization's current priorities, typically executed on using improvement work, and may have regular updates (e.g., weekly, biweekly) at multiple levels of the organization to monitor progress on achieving strategic priorities. For example, a team may report its progress in improving aspects of patient experience scores (e.g., HCAHPS) as part of an organizational priority for improving patient experience established during quality planning.

At Fairview Health, for instance, unit- and department-level leaders have weekly meetings to review measures and progress in executive strategic improvement work to advance organizational priorities. Intermountain Healthcare uses as similar process of monthly "step-backs" where managers meet with the next-level leader to review progress in meeting goals for strategic priorities, with a designated visual management board structure used for this purpose.

Clinical governance models offer yet another version of a permanent quality improvement learning system. Traditionally led by physicians, these models offer teams a mechanism to deploy improvement work in specific areas, such as patient falls or infections, across sites. For example, at Hackensack Meridian, the clinical governance model facilitated improvement work focused on hypertension management. Johns Hopkins Hospital funds quality "vice chair" roles

at 50 percent salary to support clinical improvement activities, and these leaders meet regularly to share learning to advance their priorities.[91]

## Examples of Temporary Improvement Learning Systems

IHI's Breakthrough Series Collaborative model offers a classic approach for structuring improvement work when multiple teams are engaged in implementing a common set of changes; many health care organizations have implemented the Breakthrough Series model at the system level to address diverse topics like readmissions, patient falls, or other quality improvement priorities.[92] In this model, multiple teams convene at regular intervals for Learning Sessions, providing teams with the opportunity to learn from each other about changes being tested, exchange tips for testing and implementing changes, and share data on teams' progress. Action Periods occur between Learning Sessions to enable teams to test evidence-based changes locally. A strong data management system, with regular submission of data for three types of measures (process, outcome, and balancing), provides the foundation for an effective Breakthrough Series Collaborative.

East London NHS Foundation Trust's collaborative on reducing waiting times is an example of a successful temporary learning system — engaging multiple teams, senior leaders, local leaders, and QI experts, with the overall learning system sponsored by the system's chief operating officer. In addition to offering traditional Collaborative Learning Sessions, East London also held sessions every two months where sponsors, project teams, and QI staff convened to gauge the effort's progress.[93]

Other structures such as communities of practice can also help facilitate shared learning about improvement, especially in larger health systems.[94] For instance, Kaiser Permanente introduced communities of practice in specific content areas (e.g., falls management) to facilitate shared learning across sites. These communities include physicians, staff, and managers and are led by a content expert. Designated websites facilitate sharing ideas, stories, and practices and might also include storyboards or articles related to topics relevant to the community.

Given the variety of options for developing an improvement learning system, organizations should align their structure to the nature of the goal. The development of targeted clinical pathways among many hospitals in a large system often aligns well with a clinical governance model. Targeted work to spread known changes across similar services (e.g., falls reduction in medical units) often fits well with a Breakthrough Series Collaborative approach. Organizing a complex set of improvement priorities across multiple levels of the organization, with tiered goals linked up and down the hierarchy, often fits well with a policy review approach.

Quality staff support the organization and functions of the improvement learning system, standardizing learning so that it can be easily disseminated, understood, and adapted by local teams throughout the system. For larger health care systems, multiple learning subsystems might exist based on regional preferences and the best-fit solution. In Kaiser Permanente's quality management model, for instance, some sites participate in external Collaboratives and some regions have established internal Collaboratives with partner hospitals to advance specific quality goals.[95] Quality leaders also support the transition from quality improvement to quality control by teaching teams how to build standard work, reviewing standard work across

teams to ensure alignment and consistency. Quality leaders can also lead efforts to measure the uptake of interventions at a system level.

## Strategies for Successful Organization of Improvement Activities

- **Create a prioritized list of a small number (three to five) of system-level improvement initiatives on which to focus at one time:** In a 2007 IHI White Paper, Tom Nolan outlines the elements of successful system approaches to improvement; most importantly, less is more.[96] Jim Lancaster writes that an organization should not have more than four or five major improvement initiatives happening at one time; this also holds true at the department, unit, and team levels.[97] Further, these initiatives should result from the quality planning process described above.
- **Senior leaders need to create a shared understanding of the science of improvement throughout the organization:** The Model for Improvement and PDSA cycles are perhaps the most fundamental elements of improvement science since they apply to quality control (What is standard work? What actually happened? Why? What next?), quality improvement (What was the planned change and our prediction? What happened when we tried it? How does that compare to our prediction? What do we do next?), and quality planning (What do we need to accomplish this year? How will we know that we succeeded?).

  Simple reinforcement by senior leaders of PDSA as a metaphor for the organization's work — or similar framings like DMAIC (Define, Measure, Analyze, Improve, Control) or the Toyota Kata five questions (What is the target condition? Actual condition? Obstacles? Next step? When can we go and see what we learned from taking that step?) — provides a good foundation for creating a culture of improvement and learning by making improvement part of everyday work.
- **Ideas for improvement activities flow both up and down the organization:** Staff continuously surface and solve problems in the work through QC. At the same time, teams conduct QI projects and implement changes rooted in the system's strategic priorities identified through the QP process. Thus organizations must create space (and most fundamentally, time) for both point-of-care and staff-driven improvement efforts and activities, and for projects driven by the QP cycle. Both are important. Urgent issues surfaced at the point of care may, at some times, displace prioritized QI projects commissioned during the QP process. Unit-level leaders, working in tandem with department directors, determine the appropriate prioritization. The policy review system (to review priorities, goals, and data on measures surfaced during QP), as well as the problem escalation system, can inform this decision-making process.
- **Patients co-produce improvement activities:** Research suggests that full patient participation in improvement activities can result in a threefold increase in a project's likelihood of success in achieving aims.[98]

# Whole System Quality: Shaping the Transition

Introducing the practices described in this paper to develop a whole system quality approach might seem like an overwhelming undertaking. Organizations that are the most advanced in establishing whole system quality infrastructures and processes have spent more than 10 years making quality the center of their missions and visions, and building the necessary systems and capabilities to do so.

Health care organizations need to consider two dimensions when assessing their approach to whole system quality:

- **Penetration:** QI, QC, and QP skills and activities exist throughout the organization.
- **Cohesion:** QI, QC, and QP work together as a cohesive system rather than independent, siloed activities.

Many organizations develop pockets of excellence in quality control, quality planning, and quality improvement, but fail to effectively link the disparate efforts and thus the quality activities do not penetrate the organization.

## Examples from the Field

Below we share the experiences of Intermountain Healthcare, Cleveland Clinic, IOV, East London NHS Foundation Trust, Kaiser Permanente, and Fairview Health as just some examples from which other health care organizations may learn as they seek to establish whole system quality.

Organizations like Intermountain Healthcare and Cleveland Clinic have followed a particular trajectory in building their quality management systems. They often start with a focus on finite improvement work (e.g., a focus on improvement tools and methods, or improvement projects in a particular clinical or administrative area), then transition to a focus on management and quality control (e.g., the introduction of Lean management systems) to sustain improvement, and finally integrate a focus on quality planning and increased customer focus once this infrastructure is in place (at this point, the quality plan is really actionable at scale). Other organizations, like East London NHS Foundation Trust, start their journey by reducing quality assurance activities to create space for targeted quality planning, improvement, and control activities.

In many ways, this trajectory makes sense. Given years of investment, teaching quality improvement methods and tools relies on many widely available resources and approaches. Establishing management interventions to sustain improvement proves challenging, but is still feasible and often builds on existing management systems such as huddle practices or similar communication methods. Further, tools like Lean management huddle boards can be introduced using improvement methods (e.g., PDSA cycles), so use of these tools logically follows the introduction of quality improvement, and the capacity to apply improvement methods enables staff to act on problems surfaced in daily work.

Engaging senior leaders is often the *most difficult* element, and thus it's logical that quality planning is often the last area of focus. Yet, organizations that fail to prioritize senior leader engagement early in their transition to whole system quality often find it difficult to sustain early gains in building the system itself. Just as Lean management practices provide the "glue" that sustains improvement at the microsystem level, senior executive engagement proves the effective ingredient for sustaining the system as a whole. While we acknowledge the paucity of high-quality literature studying Lean management and total quality management, most existing reviews cite leadership engagement as one of the most critical success factors informing the viability of such efforts.[99]

In developing and rolling out its quality management model, Kaiser Permanente adopted Kotter's 8-Step Process for Leading Change.[100,101,102] According to this model, Kaiser's approach included, among other steps, building an internal national quality committee, selecting a set of system-level quality measures, benchmarking performance against exemplars such Baldrige award winners (quality planning), building data transparency for selected measures (quality planning and control), and creating an organization-wide infrastructure to drive quality (quality control and improvement). They used, in part, the continued "quality chasm" highlighted at the beginning of this white paper as part of their platform for change to create a sense of urgency, in addition to their own results compared to top-performing health systems.

At Fairview Health and IOV, organizational mergers created an opportunity and a sense of urgency to realign each organization around a new set of values, ways of working, and organizational structure to drive sustained quality. Fairview Health used 10 organizational commitments (e.g., "set and hold standards") to organize and inform their quality transformation work, connecting all management interventions (e.g., introduction of tiered, escalating huddles) to these 10 commitments, which enabled the health system to more broadly communicate their vision and build the foundation for a new way of working. IOV in Brazil used its merger as an opportunity to spread practices that had been introduced incrementally and build a robust Lean management system.

## Essential Elements for Building the Foundation for Whole System Quality

Fully implementing a whole system quality approach requires multiple years of work. Notably, the three components of whole system quality — quality planning, improvement, and control — do not exist in isolation; all three link together as a system. Since all three components are essential, we recommend that organizations simultaneously introduce scaled-down activities for each component rather than focusing solely on one component for one year or more at the exclusion of the other two.

To begin building the foundation for whole system quality, we propose a smaller set of simultaneous activities — that focus on the six essential elements described below — on which organizations can focus over one to three years as they work toward their longer-term transition to whole system quality. This foundation can be used for initial testing of the WSQ approach, to learn what does (or does not) work and to inform later organization-wide scale up of the approach.

## Element 1: Establish “model teams” to demonstrate quick wins.

Early in their journey, health systems need to establish “model teams” to work on addressing quality control, planning, and improvement together at a microsystem level, with a focus on demonstrating quick-win results (e.g., improvement in a specific area, cost reduction). The continuous value management approach developed by IHI and NHS Scotland can serve as a pathway for building these model teams.[103] This method includes a weekly huddle to review quality, productivity, and cost data, as well as continuous improvement work (quality control and improvement) linked to a small set of measures that tie directly to organizational strategy (a link to quality planning). The approach has demonstrated potential cost savings of 10 to 15 percent per patient in a cardiac ICU or a respiratory unit through increased patient volume and reduced spending on drugs, supplies, and supplementary staffing.

## Element 2: Refine the role of quality department staff and rightsize the QI function to optimally support the QP and QC workstreams.

As noted above, quality departments serve many functions (e.g., training, coaching, facilitation, dissemination, learning), supporting the organization’s overall quality work and helping build capability within the organization to achieve strategic quality goals. Quality department staff can effectively serve as technical experts to support work by senior leaders and others, while strengthening the capability of point-of-care staff and managers to execute the quality management system and associated improvement work.

Operational leaders need to review the roles and responsibilities of quality staff to identify the right balance between quality assurance activities and support for the quality management system itself (e.g., supporting executives in quality planning, supporting teams in QC and QI), and to ensure a consistent improvement approach is used throughout the organization. The suggested allocation of quality staff to support whole system quality versus support for regulator and payer needs is 70 percent (at a minimum) and 30 percent, respectively.

## Element 3: Introduce rudimentary quality planning to put customer needs immediately at the forefront.

From the beginning of their efforts to implement a WSQ approach, executive leaders need to work with quality staff and service-line leaders on quality planning, including defining customer needs (using methods like focus groups, surveys, and segmentation), developing a strategy to meet these needs, and identifying associated measures to gauge progress. Begin by reviewing the organizational strategy, revise it to ensure strategic domains are mutually exclusive and comprehensive, and develop a relatively small set of measures for each domain, using data from these measures to identify areas for improvement and prioritize improvement projects. Over time, increasing detail on the needs of various customer groups informs quality planning.

## Element 4: Build a skeleton problem-escalation system to support whole system quality control.

A system-level approach to problem escalation requires daily huddles are implemented at multiple layers of management (e.g., unit, department, division, facility, system) to support two primary functions: 1) risks and adverse events are identified on a daily basis and elevated to the attention of managers and leaders for action and resolution, and 2) managers at all levels are able to regularly monitor operations and ensure effective deployment of resources where necessary (e.g., additional nursing or social work support). Health systems like Intermountain Healthcare and Cleveland Clinic have adopted such tiered problem-escalation huddles, with associated measures and problem tracking, as a foundation for their WSQ approaches.

Quality control requires problem escalation since issues that arise may not always be within the unit-level team's control to address; thus there needs to be a timely system in place to escalate issues to leaders when necessary and to remove barriers. A tiered escalation process also creates the expectation of a regular review of daily performance across teams — the foundation for effective quality control.

## Element 5: Develop a learning system to ensure strong linkages between all QP, QI, and QC activities.

The quality planning, improvement, and control activities all need a senior-level sponsor (e.g., an executive or vice president). The chief quality officer, for example, might sponsor the workstream to optimize quality department staff; the chief operating officer or chief nursing officer might sponsor the problem-escalation workstream; the chief financial officer or chief medical officer might sponsor the "model teams." These senior leaders meet regularly with quality department staff, who continuously harvest learning from individual teams to ensure best practices are shared and to support continuous evolution of the organization-wide learning system.

The introduction of the learning system itself will form part of the organization's quality plan in early years, and thus review of the learning system operations becomes part of regular monthly strategy review meetings at each level of management to gauge progress. At Kaiser Permanente, for instance, regional and facility-level quality improvement consultants serve a key "linkage role" to ensure learning is shared across the health system. At East London NHS Foundation Trust, QI professionals also serve to create linkages among teams that support a learning system and use a single digital platform to track improvement activity.

## Element 6: Introduce leadership coaching to clarify and reinforce execution of the norms, values, and behaviors that support whole system quality.

As described in the paper, the WSQ transformation requires certain behaviors to achieve a culture that consistently meets customer needs (i.e., the definition of "quality"). Investment in leadership coaching, including existing organizational values, desired future state, and behaviors that support desired values (e.g., coaching staff where necessary, developing measures that link to values such as staff engagement measures), can help in this regard. Coaching often initially requires support from external experts, shifting to internal quality

improvement experts as the organization advances, with executives and managers themselves ultimately becoming coaches for staff on behaviors that support whole system quality.

## Whole System Quality Organizational Assessment

So, how do you determine at what stage your organization is for implementing a WSQ approach? Organizations should begin with an assessment to understand their overall areas of strength and opportunity. Table 5 outlines a basic organizational assessment with examples. Organizations may also pursue various quality awards, as discussed in Appendix A.

Depending on current assets and current stage of WSQ implementation, organizations may choose to focus on specific essential elements rather than all six at once. For example, an organization with strong improvement capability and strong linkages between the work of point-of-care teams and executive-level strategy (as well as executive-level strategy that is informed by the work and needs of point-of-care teams) may elect to focus on element 5 (the learning system) and element 1 (building "model teams") in order to establish a stronger foundation for quality control and continuous learning. An organization with a strong quality control system may seek to focus on element 3 (rudimentary quality planning) and element 6 (leadership coaching) to tighten the connection and strengthen alignment between point-of-care work and executive-level strategy.

**Table 5. Organizational Assessment: Stages of Whole System Quality Implementation**

| Stage of WSQ Implementation | Description | Supporting Clarification |
|---|---|---|
| Stage 0 | • The organization has a clear strategy.<br>• Quality priorities are not integrated or aligned with organizational strategy.<br>• QC and QI activities are driven by individual leaders (e.g., at the unit level) and/or by inspection and meeting quality assurance requirements. | • At this stage, an organization has multiple QI projects occurring, but these projects have many different focuses without (or limited) clear connection to, or review by, senior leaders.<br>• The organization may have dedicated quality department staff, but they focus most of their time on meeting the needs of payers, regulators, and accreditors rather than on supporting point-of-care teams and middle managers in executing change. |
| Stage 1 | • Quality is articulated in the organization-wide strategy and goals, but systems and processes do not exist to operationalize quality. | • Leaders monitor quality as part of an executive-level dashboard, with select improvement work informing the dashboard, but the organization lacks consistent systems (e.g., tiered escalation huddles) to drive organization-wide QC.<br>• Quality activities are time-bound, not perceived to be part of everyday work. QI projects often fail to sustain results because standard work is not followed over time and specific QC activities are not in place to monitor ongoing performance. |

| Stage of WSQ Implementation | Description | Supporting Clarification |
|---|---|---|
| Stage 2 | • Quality is integrated into the organizational strategy, but largely pursued in silos across the organization.<br>• Quality plans reflect clinical quality goals. | • The organization includes pockets of excellence, within certain divisions, departments, or units making quality part of their routine work, but quality does not happen at scale at the system level.<br>• Quality is reflected in strategic plans across the organization, but it is focused on traditional clinical quality (e.g., patient falls, infections) without attention to many other aspects of quality (e.g., equity, a deeper focus on person-centered care, meeting patient needs and expectations). |
| Stage 3 | • The organization's mission, vision, and values reflect its definition of quality.<br>• The organizational strategy is a quality-driven strategy.<br>• Quality goals and priorities are clearly articulated, communicated, resourced, monitored, and supported organization-wide.<br>• The organization is able to demonstrate results in terms of quality, efficiency, and cost, linked to its whole system quality. | • The organization has a clear strategy oriented toward quality that is well understood by all staff via dedicated strategic planning work that engages staff at all levels and makes their feedback a key input into devising the strategy. Quality is fully integrated into the strategy.<br>• Staff understand quality is defined as "consistently and reliably meeting the needs of the customer" rather than a narrower definition that focuses only on clinical quality, quality that only comes through improvement projects, or quality that is separate from daily work.<br>• Staff at all levels understand how their daily work impacts the strategic goals of the organization, and in turn has quality implications, since the strategy is focused on quality.<br>• Staff have clear measures to monitor performance and improvement work where necessary, to continuously move this strategy forward.<br>• Leaders see their job as translating strategy at the division, department, and unit level, while continuously building the capability of all staff to do their jobs well while making changes where necessary, using improvement methods. |

# Conclusion

In recent decades, the patient safety movement, the rise and influence of regulatory and accreditation systems, value-focused management, and consumerism are largely credited for spurring the growing importance for health care organizations to implement a system for quality management. While some health systems have made great progress in improving quality, many continue to operate in a pattern of reactive quality management, working to continuously address issues caused by poor quality instead of designing systems to prevent them altogether.

The whole system quality approach offers health care organizations a mechanism to embed quality into their enterprise. As health systems pursue a whole system quality approach, they will institute the management infrastructure and cultivate the learning disciplines needed for a more holistic, integrated, and strategic approach to quality — and thus consistently and reliably meet the needs of patients, populations, and communities.

# Appendix A: Comparison of Quality Management Approaches

While several quality management models (e.g., total quality management, Lean management, Training Within Industry, high-reliability organizations) resemble the whole system quality approach, WSQ aims to integrate the best aspects of each to build a common approach. Many practitioners will recognize the combination of QP, QC, and QI components in the whole system quality approach as a "quality management system."

Total quality management (TQM), the dominant approach historically used in health care, is less commonly used today in the US but still has proponents in Europe.[104] TQM is more heavily rooted in Deming's thinking and emphasizes his 14 Points for Management as a roadmap for leaders.[105] Organizations using the TQM approach may devote more attention to developing managers and leaders who can coach their staff according to these principles — by, for example, focusing on ensuring all staff have at least some improvement training and can thus contribute to continuous improvement in the organization to achieve the highest possible quality.

Many elements of TQM continue to inform Lean management, which is commonly used in health care today to manage quality.[106] In reality, Lean management and TQM are similar and share common intellectual influences (e.g., Deming, Juran, Toyoda, Ohno, Ishikawa, Shewhart). Lean management is rooted in the Toyota Production System, with a focus on standardized work at all levels, organization by "value streams" to improve flow and make timely work delivered to the customer a central motivator, and continuous attention to building improvement capability in staff at all levels. Organizations implementing Lean and TQM use many of the same diagnostic tools to understand the nature of process problems (e.g., forms of Pareto analysis) and many of the same measurement tools to understand variation over time (e.g., run charts, control charts).

Training Within Industry (TWI) — a set of approaches to build and teach standard work, first used in the US for workforce remobilization during World War II[107] — also had significant influence on quality, though with less application in health care. This approach focuses on building standard work to simplify jobs, building a foundation for constant scientific learning, and ensuring rapid training. Today, the TWI approach informs many Lean management applications, especially TWI's focus on building standard work.

A high-reliability organization in health care puts safety at the center, with a focus on building a culture where everyone in the organization understands how their job contributes to safer patient care. In practice, the management approaches adopted in high-reliability organizations (e.g., huddles, standard work, rigorous measurement) are similar to those adopted by Lean organizations, and many organizations today implement tools and practices from both approaches.

The various quality management (QM) methods may each have a different focus and use distinct, but overlapping, sets of tools, but they still share many similar features:

- A focus on the customer as the definer of quality;
- A set of tools to effect continuous quality improvement at a system level, rooted in scientific thinking, comparing actual performance to predicted performance, and then analyzing gaps to inform action; and
- Some reference to the need to link quality to customer demand and, in this sense, linking customer needs directly to strategy.

## Which Approaches Are Most Effective?

The published literature shows mixed results for most of these quality management approaches. For example, reviews of Lean interventions in health care find overall positive effects on quality, efficiency, and staff engagement.[108,109] Studies over longer periods of time show positive impacts on quality and cost, but analysts note the poor quality of many studies.[110] Overall, more studies analyze the impact of Lean tools rather than Lean transformation as a unifying management approach. Individual organizations adopting Lean as a wholesale approach to management and leadership transformation have noted significant improvements. For example, after a period of losses, Virginia Mason Health System reported positive margins every year since implementing the Virginia Mason Production System and received recognition as a Leapfrog Top Hospital in numerous years.[111]

The literature on total quality management shows similarly mixed impacts. Some research suggests that essential practices for TQM success (e.g., staff empowerment, systemwide focus on quality improvement, customer focus) have a mixed effect on total performance, with stronger evidence for impact on clinical outcomes than on the system as a whole for other elements of performance (e.g., efficiency, overall competitiveness).[112] Researchers note obstacles to success using the TQM approach include poor employee engagement, lack of leadership support, and inadequate training. They cite leadership engagement (not just passive support) and the transition from a top-down management style to a more collaborative approach with managers and staff as crucial to longer-term success.[113,114]

Similarly, reviews of the high-reliability organization (HRO) model find that the overall quality of evidence is low, but also find positive impact on process measures (e.g., reporting of safety measures) and outcome measures (e.g., total serious adverse events) with this approach.[115]

In general, the effectiveness of the various QM approaches in health care has not been studied with a high level of rigor, perhaps because health systems adopt these approaches to address practical problems, often without relationships to formal evaluators. Each method has predictable benefits based on its relative focus (e.g., safety, waste reduction, employee-driven quality).

It is not least for this reason that IHI does not advocate for using a single approach, but rather for incorporating the best and most common aspects from each quality management method to offer the whole system quality approach as a unifying framework. Whole system quality

embraces many of the cultural principles adopted by TQM organizations, the management practices adopted by Lean organizations, and the focus on defect reduction and the linkage between culture and safety advanced in HROs.

## Quality Awards and Accreditation

Several awards and accreditation programs recognize organizations for their quality efforts, including the Malcolm Baldrige National Quality Award, the Deming Prize, the Shingo Prize, ISO 9001 certification, and The Joint Commission's High-Reliability Organization certification. These awards and certifications all have in common the articulation of a set of standards across numerous quality domains, and can serve as useful roadmaps for organizations as they strive to understand their level of success in various elements of quality.

However, we caution that these forms of recognition should not be confused with the management approach itself. Pursuing such recognition can be extremely time-intensive for health care organizations, diverting time away from vital activities such as building staff capability, instituting relevant measurement and management systems, and improving processes and work.[116] That said, the organizations sponsoring these recognition systems harvest rich learning about the quality journey and most offer examples of best practices from which other organizations can learn.

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