Using the Dosing Approach to Build Capability

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**Faculty**
(bios and contact information can be found at the end of this presentation)

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Workshop Discussion Questions

- What does it mean to build capacity and capability for QI?
- How should we “dose” the QI concepts, methods and tools to our staff?
- How and when will we know if building capacity and capability worked?
- How long will this take?

The Aim!

To build a renewable infrastructure that produces highly reliable quality and safety results by (fill in the date).

How good? By when?
The Journey To Organizational Excellence

"We are what we repeatedly do. Excellence then, is not an act but a habit!"
Aristotle (384 – 322 BC)

Capability
- The power or ability to generate results
- The ability to execute a specified course of action
- The sum of experience and capacity
- Knowledge, skill, ability, or characteristic associated with desirable performance on a job, such as problem solving, analytical thinking, or leadership
- Capability frequently includes values, motivation and beliefs

Capacity
- The ability to receive, hold or absorb
- The maximum or optimum amount of production
- The ability to learn or retain information.
- The power, ability, or possibility of doing something or performing
- A measure of volume; the maximum amount that can be held

“Developing Improvement Capability”
By Joy Furnival, PhD Health Foundation Blog, 06 Jan 2017

### “Our ongoing research suggests that there are different conceptualisations of improvement capability.”

- One perspective suggests improvement capability comprises **the improvement skills and abilities of individuals within organisations.**
- This perspective implies that **improvement capability is a set of technical skills** which can be taught through training sessions with certification, ‘belts’, and even ISO accreditation.
- **It suggests that the development and measurement of improvement capability is then relatively simple;** counting how many participants have been on a training course or have met the requirements for different levels of competency for a specific group of improvement approaches.
- It also **facilitates individuals to make judgements** of their own personal development needs based on their perceptions about their own improvement capability.
- **This viewpoint seems to us to take little or no account of the wider organisational context for improvement.**

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### (continued)

- An alternative perspective suggests that **improvement capability consists of organisational-wide processes and practices of innovation.**
- That is, rather than being limited to individual skills and abilities, improvement **capability is something that incorporates many aspects from across an organisation, including dimensions such as leadership, employee engagement, patient perspectives and other contextual factors as well as individual skills for improvement approaches.**
- This means that organisations may develop improvement capability through their operating procedures, rituals, culture and behaviours and that **the presence of improvement capability is less dependent on specific individuals within organisations.**
- **This type of perspective, informed by the wider research literature of organisational performance,** suggests that **improvement capability may take time and investment to develop and may also decay or atrophy over time if it is not continuously exercised and updated.**
In conclusion, to support the development of improvement capability, we need to be clear about what it means and why it is important for improvement capability to be developed.

Further, given the diversity in the perceptions of improvement capability, it is also important to think through whether there is a shared understanding of improvement capability across an organisation or health system, and with stakeholders including patients.

What do you and your organization mean by improvement capability?

Key Questions for Building Capacity and Capability

1. Will you involve everyone or just a few targeted groups?
2. Who needs to know what? (the dosing approach)
3. What methods do you plan to use to build capacity and capability?
4. Do you have a model or framework to guide your journey?
5. How will you make sure the learning system can be sustained?

Adapted and expanded from a conversation with Dr Tom Nolan, Associates in Process Improvement on material he presented at the IHI Strategic Partners Roundtable, April 17-18, 2006.
Key Questions for Building Capacity and Capability

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Key Question #2
Who needs to know what? (the Dosing Approach)

Different levels of knowledge and skill in the Science of Improvement (SOI) are required at different levels of the organization.
Organizations that have been successful at building capacity and capability recognize that people have different abilities, skills, interests and talents. They have figured out who has what knowledge and skills and work from there. Therefore, ...

One size doesn’t fit all.

Especially when it comes to building capacity and capability for QI.
Dosing is NOT based on a mathematical formula!

It will NOT tell you the precise number of people who need to be “trained” or how many need what dose of the Science of Improvement.

Dosing is an approach that needs to be customized for each organization depending on where they are currently in the Quality Journey.

*It requires thinking not calculating!*
Who needs to know what about the SOI?
What dose of the SOI does an individual need?
What is the most appropriate way to deliver the dose?
What is the lasting impact of the dose?
Can the dose have any unexpected side-effects?

Have you discussed these questions?
What strategies and tactics have you developed to address each question?

Organizational Levels and QI Science in Saskatchewan Province (2006)

<table>
<thead>
<tr>
<th>Who</th>
<th>What</th>
<th>Why</th>
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<tbody>
<tr>
<td>Point of Service Teams</td>
<td>Model for Improvement Basics</td>
<td>To realize improvement can happen</td>
</tr>
<tr>
<td>Team leaders</td>
<td>How to support teams</td>
<td>To help teams use new tools</td>
</tr>
<tr>
<td>QI Experts</td>
<td>Theory of Profound Knowledge</td>
<td>To reveal system barriers to improvement</td>
</tr>
<tr>
<td>Senior Execs, Governance</td>
<td>How to set and monitor system aims</td>
<td>To drive improvement and learn</td>
</tr>
</tbody>
</table>

Source: Mary Smillie, Senior QI Consultant, Saskatchewan Health Quality Council, 2006.
### Results of KP Needs Assessment: Skills Needed (2007)

<table>
<thead>
<tr>
<th>QI Content</th>
<th>Staff</th>
<th>Change Agents</th>
<th>Operational Leaders/Sponsors</th>
<th>QI Experts</th>
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<td>67%</td>
<td>91%</td>
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<td>Leadership for improvement</td>
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<td>42%</td>
<td>97%</td>
<td>85%</td>
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</tbody>
</table>

Results: => 70 Green/40-69 Yellow/ <40 Red

### Results of KP Needs Assessment: Skills We Have (2007)

<table>
<thead>
<tr>
<th>QI Content</th>
<th>Staff</th>
<th>Change Agents</th>
<th>Operational Leaders/Sponsors</th>
<th>Experts*</th>
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</thead>
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<td>17%</td>
<td>42%</td>
<td>65%</td>
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<td>Teamwork and Facilitation</td>
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<td>Information analysis</td>
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<td>Understanding variation</td>
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Results: => 70 Green/40-69 Yellow/ <40 Red
**Who needs what about the SOI?**

This Exercise is designed to create a dialogue on appropriately “dosing” the Science of Improvement (SOI) throughout an organization. That is, which groups of individuals within the organization need to have what levels of knowledge and skill to successfully build a sustainable infrastructure that produces highly reliable QI results?

The worksheet on the next page provides a list of *Skills & Knowledge* (the rows) associated with the Science of Improvement. For each of the listed *Skills & Knowledge* items, indicate the level or “dose” of *Skill & Knowledge* you think each group (the columns) needs using the following response scale:

1 = They need to know the basic terms, concepts and methods when they hear them
2 = They need to be able to explain the terms, concepts and methods to others
3 = They need to be able to teach the terms, concepts and methods to others
4 = They need to be seen as an organizational lead and champion for the terms, concepts and methods.

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### Who needs what about the SOI?

<table>
<thead>
<tr>
<th>Science of Improvement Skills &amp; Knowledge*</th>
<th>Hospital Governance, Non-Exec, Board of Directors*</th>
<th>Senior Management (corporate)</th>
<th>Clinical Leadership (physicians and nursing)</th>
<th>Middle Management, Directors &amp; Supervisors</th>
<th>Frontline Staff</th>
<th>QI Experts (IAs)</th>
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<tbody>
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<td>Models for QI (theory &amp; concepts)</td>
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<td>Leadership for improvement &amp; cultural transformation</td>
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<td>Teamwork and Facilitation</td>
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<td>Analyzing and interpreting data</td>
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<td>Presentation skills</td>
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<td>SPC charts</td>
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<td>Change management</td>
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<td>QI tools and methods</td>
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*NOTE: The row and column headings will change for each organization.*
Applying the Dosing Approach to Groups within the Organization

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<td>Quality as a Business Strategy</td>
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<td>Scale-up and Spread</td>
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<td>Construction of control charts</td>
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Legend
- Minimal Dose
- Moderate Dose
- Maximum Dose

Note that the intensity of the color reflects the “dose” of the science of improvement knowledge and skills that would be administered to each respective group. The row and column headings will change for each organization.


Approaches to laying out a dosing strategy will vary!
Building Capacity and Capability: Dosing Delivery Methods

IHI Open School

- Designed for the masses to build awareness (CBT)

ISIA & ICPDP

- ISIA designed for 100-200
- ICP designed for 30-50
- Building team and project based skills

IA

- Designed for 20-25 participants
- Building deep knowledge in the SOI


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Building Improvement Capability

Dr Uma Kotagal, MBBS, MSc
Senior Executive Leader, Population & Community Health
Senior Fellow, Cincinnati Children’s Hospital Medical Center
Senior Fellow, IHI
IMPROVEMENT CAPABILITY & CAPACITY

CONTEXT - Cincinnati Children’s
- Nonprofit pediatric academic medical center, established in 1883
- World leader in pediatric healthcare.
- Top ranked pediatric hospital (#2 USNWR)
- World class research institution
- 628 registered beds
- 1400+ employees
- Broad reach, serve patients from 50 states & 94 countries
- Major Teaching Institution

THEORY - Improvement Capability Building
- Building capacity & capability for improvement is necessary to transform Systems and sustain results
- The capacity and capability has to be multidisciplinary, multi modal, multisector
- Context should inform models for capacity building
- Scale should be considered from the beginning

PHASE 1 (2002)

Health Care Delivery System Transformation
http://www.cincinnatichildrens.org/systems-change

Build a Coalition
Phase 2 (2004)

Integrating Research

AIM- Advanced Improvement Methods

- Course for Faculty: MD, PhD
- Intended to build ability to research and report on “what works and why”
- National Course for all Pediatric Institutions
- Factorial Design models and multivariate factor impact
- Publication required

PHASE 3 (2006) Began Internal QI Training

When we had results

Theory

- Train broad and deep
- Build capacity at senior leadership
- Make it competitive
- Set very high standards
- Value all disciplines
- Action oriented
- Transparency of learning
- Make it special
- Attraction for generosity and optimism
**I²S² Instructional Design Characteristics**

**Intermediate Improvement Science Series (I²S²) - Instructional Design**

- Six 2-day sessions over a 6-month period – allows time for reflection & abstract conceptualization
- All sessions off-site, require 100% attendance
- A multidisciplinary cohort of 25-30 students
- Project-based - provides concrete experience & experimentation
- Coaching between sessions
- Project presentations & feedback in each session

**Leadership Topics - Intermediate Improvement Science Series (I²S²) - Instructional Design**

- Business Case for Quality
- Transformational leadership
- Chronic care improvement
- Managing a portfolio of projects
- Implementation & sustaining
- Patient safety
- Research & improvement

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**I²S² = Yellow**

**ATP = Green**

**Dosing the SOI within the Patient Services Area**
Phase 4 (2007)

Creating a Transformative Learning Network

1. Focus on outcome
2. Build community
3. Use data effectively
4. Employ multiple learning systems-clinical research, qualitative methods, QI science

Learning Networks

Network organizational model that allow communities of patients, families, clinicians, scientists and health system leaders to work together and use data to improve clinical outcomes, drive discovery and spawn innovation.

CCHMC serves as coordinating center for 9 networks impacting millions of children - 286 health care organizations in the US, Canada and Europe; 588 clinical care delivery sites (e.g., clinics); $96M/year revenue from fees, grants (federal, foundation, industry), contracts; $55M in federal research funding over past 10 years.

Phase 5 (2011)

AIALS - ADVANCED IMPROVEMENT LEADERSHIP SYSTEM

CCHMC Transformation Framework

- Purpose: Vision, Articulate, Core Values, Strategic Plan
- Organizational View of System: What are your current processes working?
- Measurement & Reporting System: Charting improvement metrics, improvement science capability
- Developing the Portfolio: Leadership capability, programmatization, governance, funding, resources
- Managing the Portfolio: Charter improvement actions, improvement science capability

* James M. Anderson Center for Health Systems Excellence - September 2011
Improvement Science Education: Current Portfolio

PHASE 6 (2015) - Community Health

• ALL CHILDREN THRIVE LEARNING NETWORK
CCHMC Improvement Capability Timeline

1994 Evidence based guidelines developed
2001 Robert Wood Johnson Foundation Pursuing Perfection (QI) grant
2004 Launched AIM
2005 Launched IDEO
2007 Launched Academic Collaborative
2008 Launched Quality Scholars Program
2010 Launched RCIC
2011 Launched AUS
2012 Launched IDEO & Mentoring Program
2015 Launched ImpactU

Kaiser Permanente Health Care Performance Improvement

Lynn Garofalo-Wright, DPPD, MHA, LSSBB
Managing Director, Performance Improvement

lynn.m.garofalo@kp.org  Linkedin.com/in/lynn-garofalo-wright-aaa417
Our system is based on the attributes of high performing organizations

KP needs to build capability in these six areas in order to achieve breakthrough performance

- Best quality
- Best service
- Most affordable
- Best place to work

Leadership

- Leadership engaged and aligned
- Set clear priorities based on vital few breakthrough performance areas
- Shape organizational strategy by priority areas, focusing on clinical, financial, employee, and patient indicators
- Cascade systems to communicate from macro to micro levels

Systems

- Grow organizational leadership team capability to identify core business processes
- Establish local and national oversight infrastructure to manage improvement priorities and monitor progress
- Establish process map for those core areas and align improvement priorities with vital business needs

Measurement

- Build capacity to set outcomes and improvement process metrics for key areas
- Establish performance targets to achieve best-in-class at national level
- Use balanced scorecard system and time-trended metrics at front-line departments to build visibility and accountability

Learning

- Surface best practices based on evident of performance
- Create sharing learning, spread systems, and capability to drive performance across enterprise
- Focus on top-down and bottom-up execution

Capacity

- Establish oversight system at macro and micro levels by creating improvement infrastructure and staff
- Develop ability to execute from testing through spread of practice at all levels
- Embrace unified internal improvement methodology, representing multiple methods
- Deploy internally designed improvement curriculum, focused at several levels of staff and physicians
- Apply improvement skills immediately to improvement priorities

Culture

- Engage staff in improvement to make change meaningful
- Use Fellowship model to teach organizational level leaders deeper improvement skills
A wave approach accelerated learning while we built organizational capacity

Waves of Improvement Institute

- **2008**
  - Waves 1-2
  - 5 regions
  - 65 Improvement Advisors
  - 300 operations managers
  - 3,500 Front line staff

- **2009**
  - Wave 3
  - 7 regions
  - 300 Improvement Advisors
  - 35 UBTC’s
  - 1,250 Operations managers
  - 8,000 Front line staff

- **2010**
  - Wave 4 & beyond
  - All Regions
  - 500 IA’s
  - 15 internal faculty Mentors
  - 3,000+ Operations Managers
  - 20,000+ Front line staff

Learning and sharing systems regionally and program-wide Improvement Institute

We continue to expand our Improvement Institute offerings with more modularized offerings to provide the right capabilities at the right time

- Many People
  - General Awareness
  - Rapid Improvement Plus (RIM+)
  - KPJuran Black Belt
  - Advanced HCD@KP Programs

- Few People
  - Shared Knowledge
  - Deep Knowledge

Continuum of PI Knowledge and Skills

Leaders Support PI Across Continuum
Improvement Capability Building at East London NHS Foundation Trust

@DrAmarShah
qi elft nhs uk
amarshah nhs net

Mental health services
Newham, Tower Hamlets, City & Hackney, Luton & Bedfordshire

Forensic services
All above & Waltham Forest, Redbridge, Barking, Dagenham, Havering

Child & Adolescent services, including tier 4 inpatient service

Regional Mother & Baby unit

Community health services
Newham, Tower Hamlets & Bedfordshire

IAPT
Newham, Richmond and Luton
AIM
To Improve the Quality of Life for all we serve

Engaging, encouraging & inspiring

Developing improvement skills

Embedding into daily work

QI Projects

1. Targeting / segmenting communication for different groups (community-based staff, Bedfordshire & Luton staff)
2. Sharing stories – newsletters, microsite, presenting internally
3. Celebration – awards, conferences, publications, internal presentations
4. Share externally – social media, Open mornings, visits, microsite
5. Work upstream – training, regional partners, key national and international influencers

1. Pocket QI for anyone interested, extended to Beds & Luton
2. Refresher training for all ISIA graduates
3. Improvement Science in Action waves
4. Online learning options
5. Develop cohort and pipeline of improvement coaches
6. Leadership and scale-up workshops for sponsors
7. Bespoke learning, including Board sessions & commissioners

1. Learning system: QI Life, quality dashboards, microsite
2. Standard work as part of a holistic quality system
3. Job descriptions, recruitment process, appraisal process
4. Annual cycle of improvement: planning, prioritising, design and resourcing projects
5. Support staff to find time and space to improve things
6. Support deeper service user and carer involvement

Directorate-level priorities
- Defined through annual cycle of planning
- Most local projects aligned to directorate priorities

Trust-wide strategic priorities
1. Reducing inpatient physical violence
2. Improving access to community services
3. Enjoying work
4. Shaping recovery in the community
5. Value for money

Experts by experience
All staff

Needs = introduction to QI & systems thinking, identifying problems, how to get involved, behaviours linked to improvement

Staff involved in or leading QI projects

QI coaches

Needs = Model for improvement, PDSA, measurement and using data, leading teams, running projects effectively, quality control

Sponsors

Internal experts (IAs)

Needs = deep understanding of method & tools, understanding variation, coaching teams

Board

Needs = setting direction and big goals, executive leadership, oversight of improvement, understanding variation

Bespoke QI learning for service users and carers. 113 attended so far.

Needs = introduction to QI, how to get involved in improving a service, practical skills for QI

Psychology trainees – One year programme of learning. Embedded into QI projects
Nursing students – Intro to QI delivered within undergraduate and postgrad syllabus, embedded into QI project teams during student placements
Psychiatry trainees – Pocket QI at start of placement. Embedded into QI projects

1044 completed Pocket QI so far. 5th session for all staff at induction. New half-day induction course on improvement behaviours starting in Jan 2019

979 graduated from ILP in 8 waves. New Wave annually. Refresher training for grads.

117 QI coaches trained so far. All QI coaches with ½ day per week. New cohort trained annually

38 current sponsors. All completed ILP. 36 completed Senior Clinical Leaders programme

Currently have 10 Improvement Advisors (IAs), with 2 further IAs to be trained 2019

58 current sponsors. All completed ILP. 35 completed Senior Clinical Leaders programme

All Executives have completed ILP. Annual Board session with IHI & regular Board development

Bespoke QI learning for service users and carers. 113 attended so far.

Estimated number needed to train = 6000 Needs = introduction to QI & systems thinking, identifying problems, how to get involved, behaviours linked to improvement

Needs = Model for improvement, PDSA, measurement and using data, leading teams, running projects effectively, quality control

Needs = deep understanding of method & tools, understanding variation, coaching teams

Needs = deep statistical process control, deep improvement methods, effective plans for implementation & spread

2018-2019

Working upstream
Two half-day modules covering the basics of QI – the Model for Improvement and tools.

Available to all staff, service users – whether involved on QI projects or just interested in learning.
An 8-month programme involving 7.5 days of face-to-face learning. Experiential learning with all participants bringing a real project. For project leads, project team members and anyone in a management role.
Improvement Coaching Programme

The IHI’s 6-month professional development programme for those who have designated time ring-fenced to take on an improvement coaching role, supporting other teams with their QI work. Involves 7 face-to-face days.
Intro to QI for Service Users & Carers

Interactive, half-day introduction to quality improvement for patients, service users and family members interested in joining QI projects, or already part of QI project teams.
And now, we have real-time analytics available for each part of the organisation to see who has been trained at what level...

Take a look at qi.elft.nhs.uk/qi-training
Is it making a difference?
Staff experience and engagement

<table>
<thead>
<tr>
<th>Score (%)</th>
<th>ELFT Score</th>
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Overall Engagement Score

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Staff Motivation to Work

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Reducing the time it takes to complete the disciplinary process

Number of days taken to complete the disciplinary process

- 76% reduction

Notes:
1/1/2015 – 31 March 2015: Introduction of two hearing dates
22/3/2015 – 1st July 2015: New documentation and forms introduced
2/6/2016 – 1st July 2016: Accessing disciplinary policies and aligned outcomes process introduced
10/9/2016 – 29th September 2016: New Mediation Officer Training introduced
time to talk

How do you bridge the gap between these two conditions?

Where we are! Where we want to be!
### Quality Improvement Assessment Tools

<table>
<thead>
<tr>
<th>Assessment Tool Name</th>
<th>Target Audience</th>
<th>Guidance for Administration of the Tool</th>
</tr>
</thead>
<tbody>
<tr>
<td>From the Top</td>
<td>Board Members, Non-Execs and Senior Leaders</td>
<td>It is recommended that this survey be administered to the target audience(s) at a minimum of twice a year in order to gauge progress against a baseline on the six things all boards and senior leaders should do to improve quality and reduce harm: (1) setting aims to reduce harm this year, (2) getting data and hearing stories about the impact of harm, (3) establishing, monitoring and displaying system level measures, (4) changing the environment, policies and culture, (5) learning...starting with the board, and (6) establishing executive accountability.</td>
</tr>
<tr>
<td>Issues and Priorities for Healthcare Leaders</td>
<td>Board members, Non-Execs and Senior Leaders</td>
<td>This is a shorter version of the first tool. With only 9 items it will take less time than the first tool to administer but will still identify a number of key issues that need to be addressed if the organization is serious about making QI part of daily work. This also should be administered at least twice a year.</td>
</tr>
<tr>
<td>Improvement Capability</td>
<td>Senior Leaders, Directors, Middle Managers and Supervisors</td>
<td>This tool has been designed to assess alignment of senior and middle management leaders. It involves selecting descriptive summaries related to six areas: 1) leadership for improvement, 2) results, 3) resources, 4) workforce and human resources, 5) data infrastructure and management, and 6) improvement knowledge and competence. For each of these six areas, the tool provides a brief description of levels of capability, ranging from just beginning, to developing, to making progress, to significant impact, to exemplary. Respondents are asked to select the one description that best describes where they believe the organization is on each dimension. The tool should be administered separately to relevant target audiences, tabulated then brought to a joint meeting to see how well aligned the various target audiences are around the six key areas.</td>
</tr>
</tbody>
</table>


### Quality Improvement Assessment Tools (continued)

<table>
<thead>
<tr>
<th>Assessment Tool Name</th>
<th>Target Audience</th>
<th>Guidance for Administration of the Tool</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science of Improvement Self Assessment Tool</td>
<td>All staff but especially QI team members</td>
<td>This tool has been designed to help individuals gain a better understanding of where they personally stand with respect to their knowledge of the basic principles, tools and methods of the Science of Improvement (SOI). It can be administered at the beginning of a program or workshop designed to build knowledge and skill sets related to the SOI and then at the end of the program. It can also be administered several months after a program offering to determine the level of retention of SOI knowledge. Six skills to support improvement are assessed: (1) supporting a change with data, (2) developing a change, (3) testing a change, (4) implementing a change, (5) spreading a change, and (6) the human side of change.</td>
</tr>
<tr>
<td>Quality Measurement Assessment Tool (short version)</td>
<td>QI team members, QI coaches and facilitators and QI experts</td>
<td>This is the first of two tools designed to assess and individual’s knowledge of and skill with measurement tools and methods. The tool itself is shown in Exhibit 11.2 of this chapter. It is short and can be administered as a pre-post assessment when conducting workshops related to the quality measurement journey. It can be administered to QI team members and those expected to actually engage in quality measurement activities.</td>
</tr>
<tr>
<td>Quality Measurement Assessment Tool (long version)</td>
<td>QI team members, QI coaches and facilitators and QI experts</td>
<td>This is a much more comprehensive measurement assessment tool. It should not be administered frequently or as often as the shorter version (Exhibit 11.2) and should be aimed primarily at those expected to function as measurement leads or experts for the organization.</td>
</tr>
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</table>

The Formula for Improvement

Structure

+ Process

+ Culture* = Outcome


*Added to Donabedian’s original formulation by R. Lloyd and R. Scoville.

The Primary Drivers for Building Capacity & Capability

Having the **Will** (desire) to change the current state to one that is better

Developing **Ideas** that will contribute to making processes and outcome better

Having the capacity and capability to apply CQI theories, tools and techniques that enable the **Execution** of the ideas
### Exercise #1

**How prepared is your organization?**
(your team, your department or your organization?)

<table>
<thead>
<tr>
<th>Key Components*</th>
<th>Self-Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Will (to change)</td>
<td>• Low Medium High</td>
</tr>
<tr>
<td>• Ideas</td>
<td>• Low Medium High</td>
</tr>
<tr>
<td>• Execution</td>
<td>• Low Medium High</td>
</tr>
</tbody>
</table>

*All three components MUST be viewed together. Focusing on one or even two of the components will guarantee sub-optimized performance. Systems thinking lies at the heart of CQI!

### Senior Leadership Attention

**“Constancy of Purpose”**

- Setting clear improvement goals, expectations, priorities, and accountability
- Monitoring and supporting all improvement goals.
- Establishing a system for sharing the learning
- Maintaining focus on the system of care: integrating improvement activities across the organization.
It must be remembered that there is nothing more difficult to plan, more doubtful of success, nor more dangerous to manage than the creation of a new system.

For the initiator has the enmity of all who would profit by the preservation of the old institution and merely lukewarm defenders in those who would gain by the new one.

Machiavelli, The Prince, 1513

Thanks for joining us today!

Good luck with your Quality Journey!

Please contact us with any questions.

Lynn  Amar  Uma
Rebecca  Bob
IHI Faculty
Robert Lloyd

Robert Lloyd, PhD is Vice President at the Institute for Healthcare Improvement (IHI). Dr. Lloyd provides leadership in the areas of performance improvement strategies, statistical process control methods, development of strategic dashboards and building capacity and capability for quality improvement. He also serves as lead faculty for various IHI initiatives and demonstration projects in the US, the UK, Sweden, Denmark, New Zealand and Africa.

Before joining the IHI, Dr. Lloyd served as the Corporate Director of Quality Resource Services for Advocate Health Care (Oak Brook, IL). He also served as Senior Director of Quality Measurement for Lutheran General Health System (Park Ridge, IL), directed the American Hospital Association’s Quality Measurement and Management Project (QMMMP) and served in various leadership roles at the Hospital Association of Pennsylvania. The Pennsylvania State University awarded all three of Dr. Lloyd’s degrees. His doctorate is in agricultural economics and rural sociology.


IHI Faculty
Rebecca Steinfield

Rebecca Steinfield, MA, has been with IHI since 1996. She currently serves as Director of IHI’s Improvement Advisor Professional Development Program, teaches IHI courses on improvement methods, and mentors “improvers-in-training.” Rebecca sits on IHI’s Improvement Capability Focus Area.

Past IHI work includes serving as an Improvement Advisor on IHI’s programming for reducing unnecessary re-hospitalizations and primary care transformation in academic settings. Rebecca received her MA in Applied Psychology from Boston University.
IHI Faculty
Uma Kotagal

Dr. Uma Raman Kotagal currently serves as the Executive Lead for Community and Population Health at Cincinnati Children's Hospital and Medical Center and Professor of Pediatrics Obstetrics and Gynecology at the University of Cincinnati. A neonatologist and Health Services Researcher by training, Dr. Kotagal previously served as Senior Vice President for Quality Safety, and Transformation at Cincinnati Children's Hospital Medical Center and Executive Director of the James M. Anderson Center for Health Systems Excellence. Dr. Kotagal has been a pioneer in the application of System Science to improve outcomes in health care delivery across the world with the goal of dramatically changing medical and quality of life outcomes, patient and family experience, and value. Dr. Kotagal directed the Robert Wood Johnson Foundation's Pursuing Perfection initiative at Cincinnati Children's. As a result of Dr. Kotagal’s endeavors, Cincinnati Children’s has received several prestigious National and International awards for their efforts to transform health care delivery.

Dr. Kotagal is a Senior Fellow of the Institute for Healthcare Improvement, serves on the Board of the Ohio Children's Hospital Association and Chairs the Quality Improvement Committee of the Children's Hospital association. She has served on the Advisory Committee of the Toronto Patient Safety Center, and as Associate Editor of BMJ Quality and Safety. Dr. Kotagal is a member of the Institute of Medicine and a recipient of the Prestigious Daniel Drake medal from the UC College of Medicine. Most recently, Dr. Kotagal was honored with the William Cooper Proctor medal, the highest honor bestowed by at Cincinnati Children's Hospital. Dr. Kotagal holds a MS in Epidemiology from Harvard University-School of Public Health, and a medical degree from Grant Medical College in Mumbai, India.

IHI Faculty
Lynn Garofalo-Wright

Lynn Garofalo-Wright, DPPD, MHA, is the Managing Director, Performance Improvement for Kaiser Permanente's Southern California Region. In this role, she collaborates with physician, administrative, and labor leaders to lead Transformational change including strategy deployment, high reliability, and spread. Lynn has worked in the health care industry focusing on strategy development and process improvement for twenty-five years, including at Good Samaritan Hospital in Los Angeles, University Hospital in Denver and Deloitte Consulting's health care strategy and operations improvement group.

Dr. Garofalo-Wright holds a Bachelor’s Degree in Financial Management from Tulane University, Master of Health Administration and Doctor of Policy, Planning and Development degrees from USC, and a lean six sigma black belt. In her free time, Lynn enjoys serving as a docent in her children’s school art program and volunteering in the community.
Amar Shah, MD is a forensic psychiatrist at East London NHS Foundation Trust (ELFT) and leads the organisation-wide QI program aimed at supporting the Trust to provide the highest quality mental health and community care in the country.

As part of the program, ELFT is building the will and alignment for improvement at scale. They have partnered with the IHI in this work, who support with building capability at scale and providing strategic guidance.

Dr Shah has experience of providing local quality improvement support within a number of NHS providers, and national improvement work while seconded to the National Patient Safety Agency in 2009-10. He is an IHI Improvement Advisor and faculty member, and has completed an executive MBA in healthcare management, a masters in mental health law and a postgraduate certificate in medical education.