Institute *for* Healthcare Improvement

Workshop 2, Day 3

March 15, 2017

Welcome back, warm up, questions from Day 2

Improvement Coach Professional Development Program

Karen Baldoza

Workshop 2: Day 3 overview

Time	Agenda Item
7:00 AM	Breakfast available
8:00 AM 9:55 AM Break	• Welcome back, warm up, questions from Day 2 • Breakouts: WIP presentations round 3 • Improving the long-term impact of improvement: Implementation, sustainability, and scale-up
12:00 PM	Lunch
1:00 PM 3:00 PM Break	• The art of coaching: Coaching practice round 2 breakouts • Graduation (almost)! • Day 3 debrief and next steps
4:00 PM	Adjourn

Breakouts

Break

Institute *for* Healthcare Improvement

Workshop 2, Day 3

March 15, 2017

Improving the long-term impact of improvement: Implementation, sustainability, and scale-up

Improvement Coach Professional Development Program

Karen Baldoza
Christina Gunther-Murphy

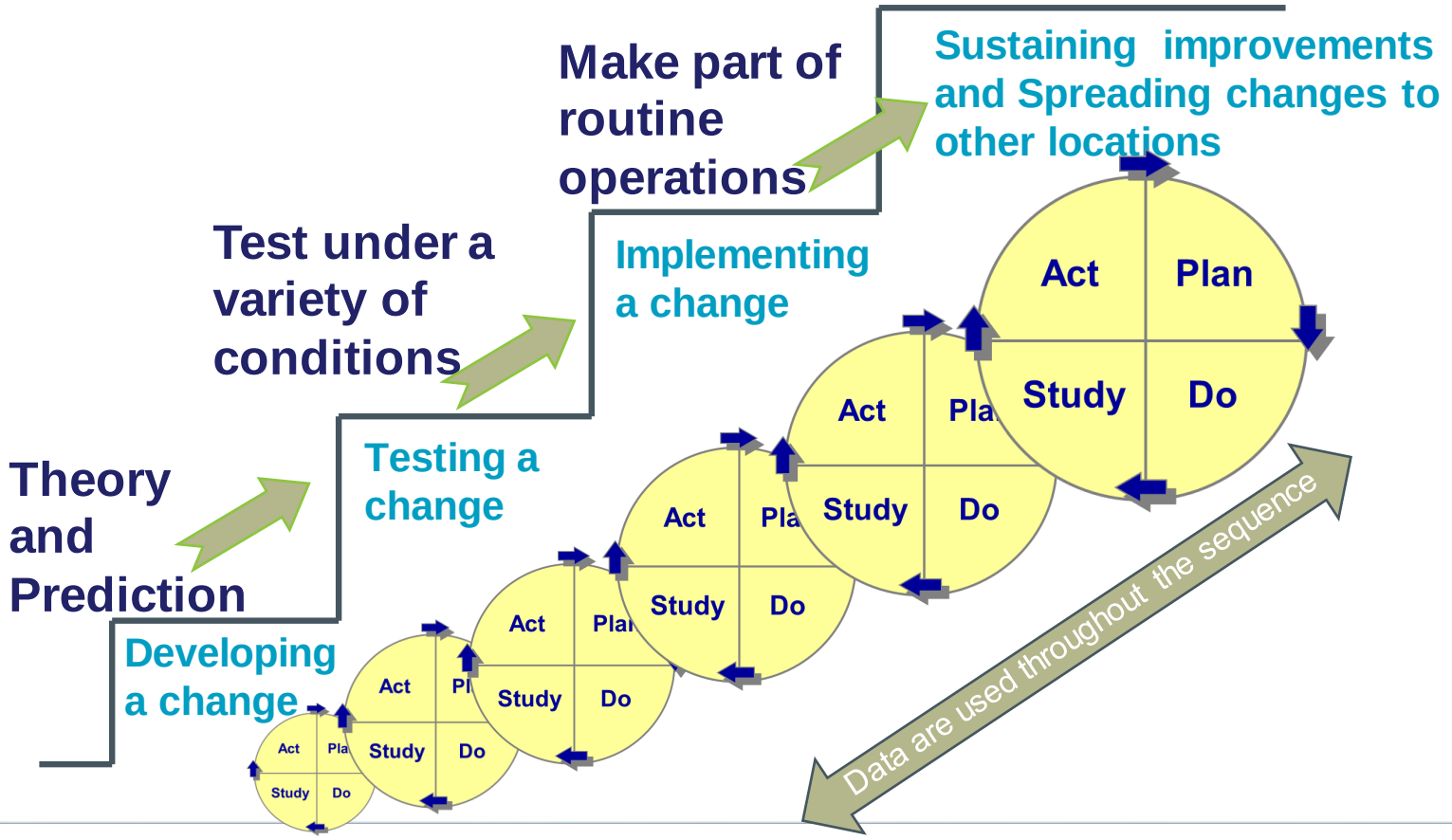
Session objectives

- Summarize the sequence of improvement and the use of PDSA cycles in each phase
- Describe when to move from testing to implementation
- Outline steps you might take to implement changes from your improvement project
- Summarize the IHI Scale-up Framework including the phases of scale-up, adoption mechanisms, and support systems
- Assess the readiness of one of your change ideas for spread

Questions to improve impact

- How do we move from testing to making the change permanent? (Implementation)
- How do we hold the gains from improvement over time? (Sustainability)
- How do we improve more quickly across a system?
  - How do we engage individuals to adopt changes identified elsewhere? (Spread)
  - How do we build the infrastructure to allow adoption of changes in different contexts? (Scale-up)

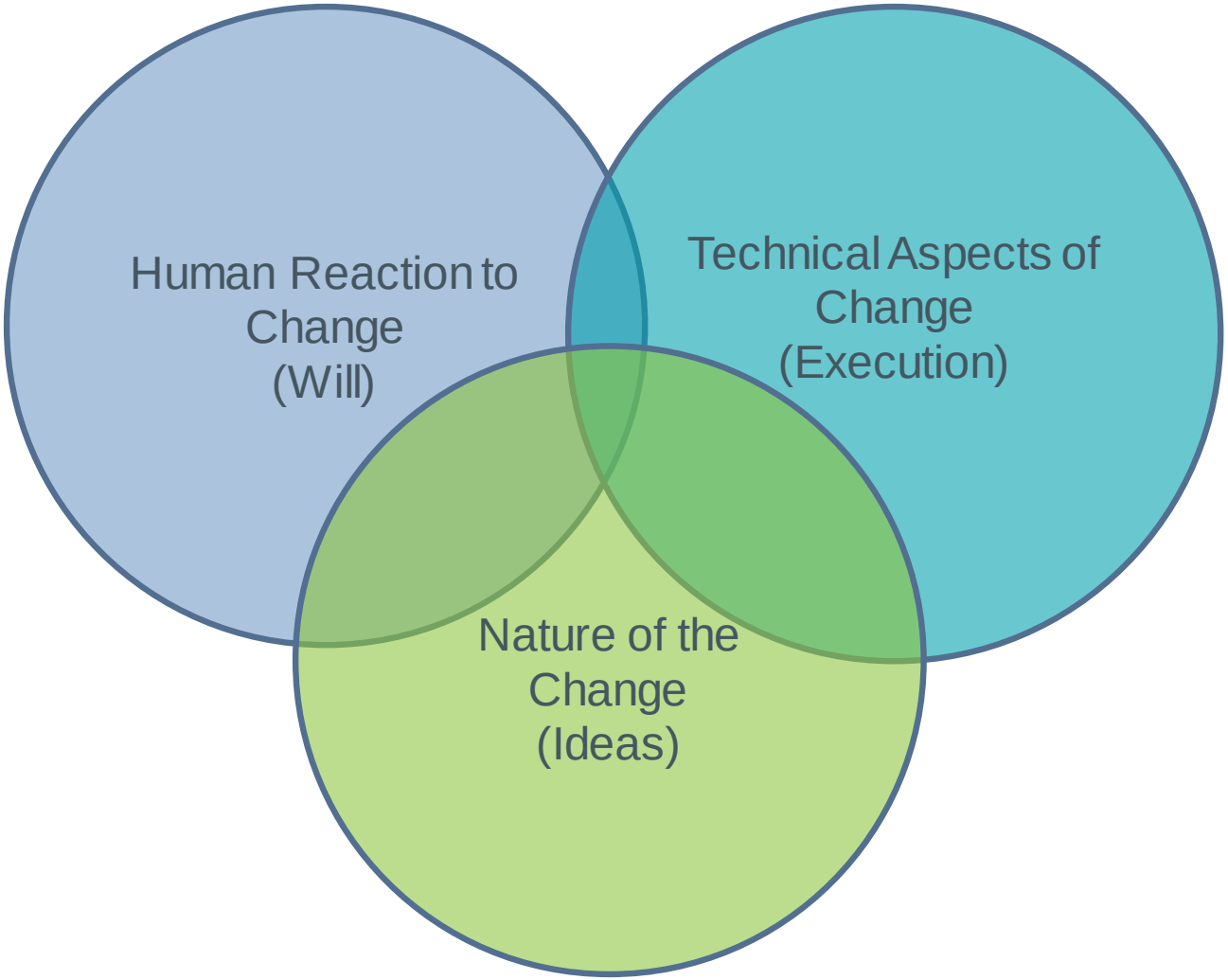
The sequence of improvement



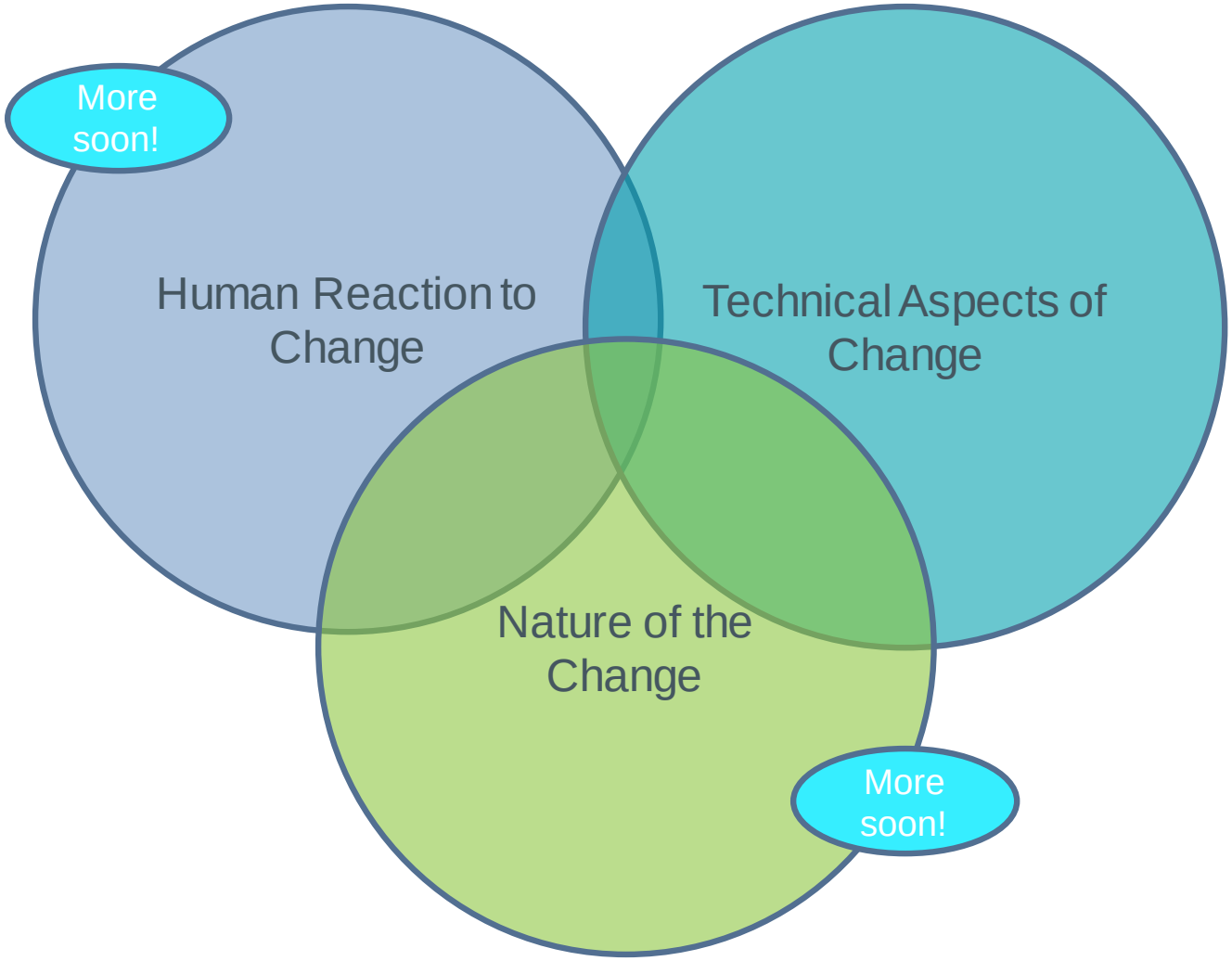
Improvement Sequence

- **Testing:** Trying and adapting ideas to learn what works in your system
- **Implementation:** Making a change a permanent part of the day-to-day operation of the system
- **Spread:** Having individuals adopt the changes
- **Scale-up:** Overcoming the structural issues that arise during spread

Improving Long-Term Impact



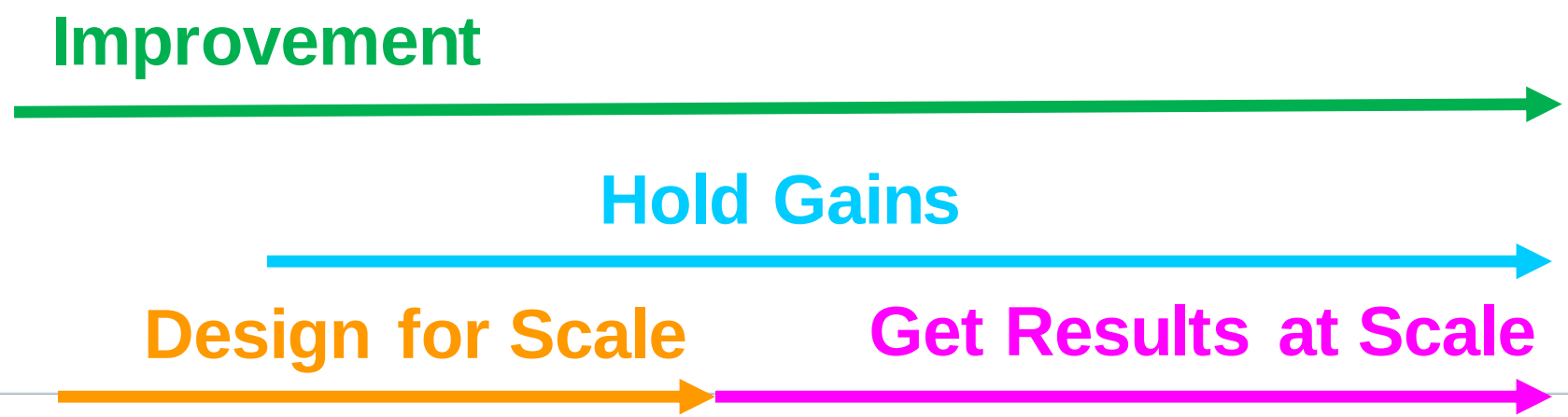
Improving Long-Term Impact



Creating a new system

Old way: Sequential Approach

New way: Parallel Approach



Implementation

How do we move from testing to making the change permanent?

Expectation for…	Testing	Implementation
Failure	20 – 25%	~0%
Surprises and learning	High	Low
Number of people affected	Few	Many
Resistance	Low	High
Redesign of existing processes (e.g., job descriptions)	No	Yes
New resources needed	No	Yes
Time needed to run PDSA	Fast	Slow

Deciding on the scale of the PDSA cycle

Current Situation		Current Commitment Within Organization: NO COMMITMENT	SOME COMMITMENT	STRONG COMMITMENT
Low degree of belief that change idea will lead to Improvement	Cost of failure large	*Very small-scale test*	*Very small-scale test*	*Very small-scale test*
	Cost of failure small	*Very small-scale test*	*Very small-scale test*	*Small-scale test*
High degree of belief that change idea will lead to Improvement	Cost of failure large	*Very small-scale test*	*Small-scale test*	*Large-scale test*
	Cost of failure small	*Small-scale test*	*Large-scale test*	*Implement*

Improvement Guide, page 146

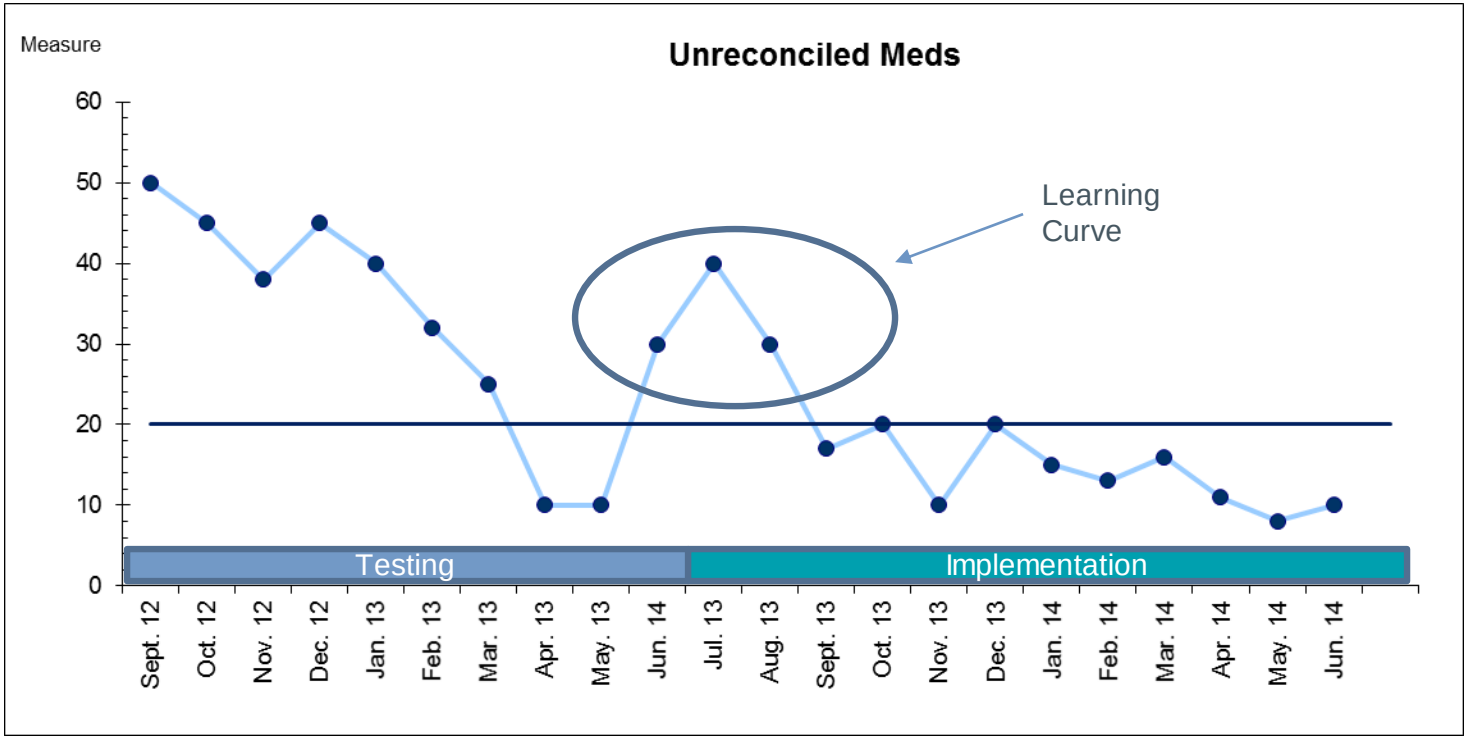
Pre-requisites to Implementation

- Change tested under a variety of conditions
- Data over time available to show changes leads to improvement
- Champions of change identified in key stakeholder groups
- Long-term process owner identified and engaged
- Impact on workload assessed during PDSAs

Technical strategies for implementation

- Continue to use PDSA cycles
- Three approaches when planning PDSA's
  1. "Just do it"
  2. Parallel approach
  3. Sequential approach
     a) One at a time with all staff
     b) All at one time with selected staff

Expectation for implementation



Lower is better

Individually, think about…

- What changes are you testing?
  - What are you learning from those tests?
- What (if anything) are you implementing?
- How are you deciding when you will move from testing to implementation?

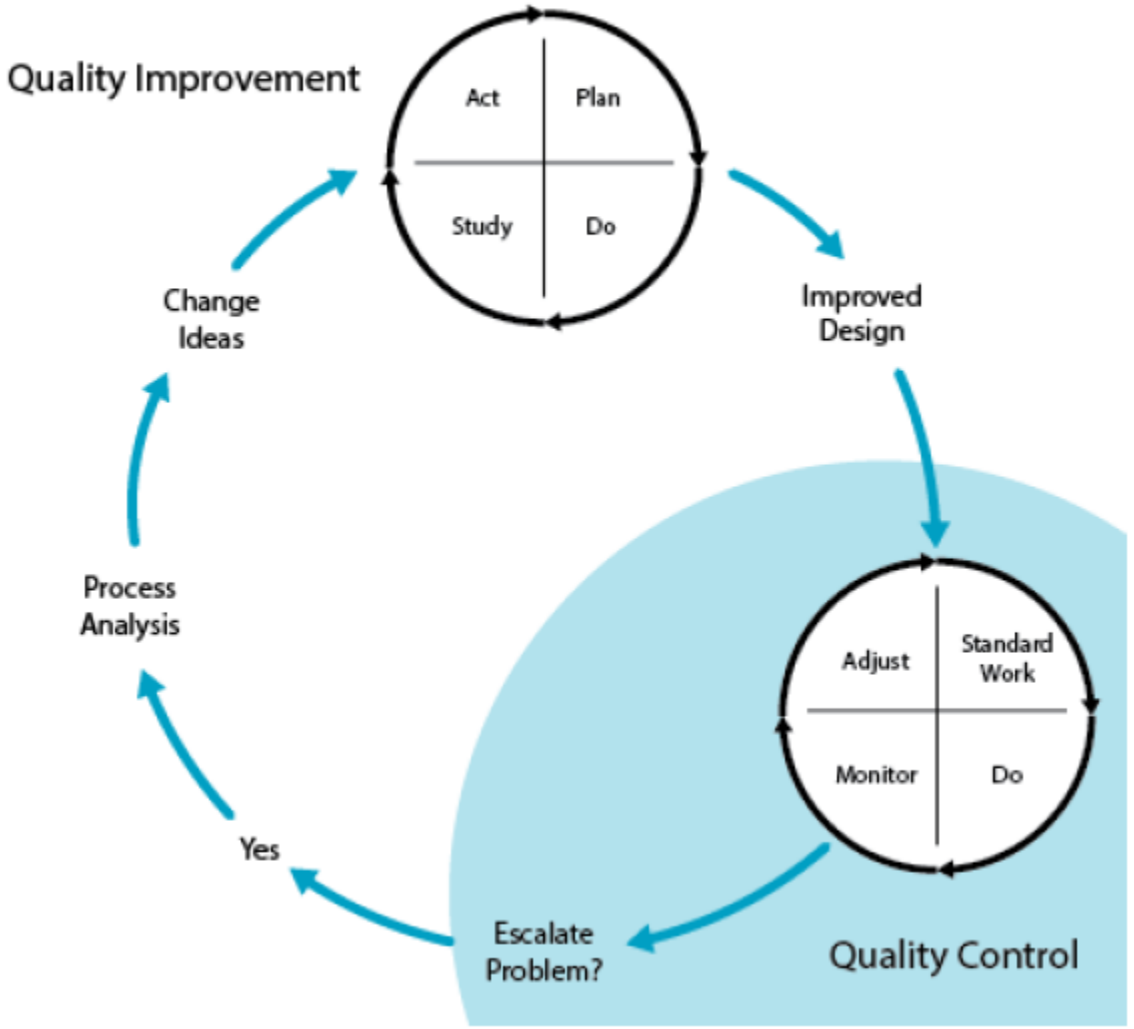
Sustainability

How do we hold the gains from improvement over time?

Discussion

- Think of a time in your experience when an improvement was implemented. Are the gains from that change still there?
  - If yes, what was done that resulted in the gains being held?
  - If no, why did the gains fail to be held? What got in the way?

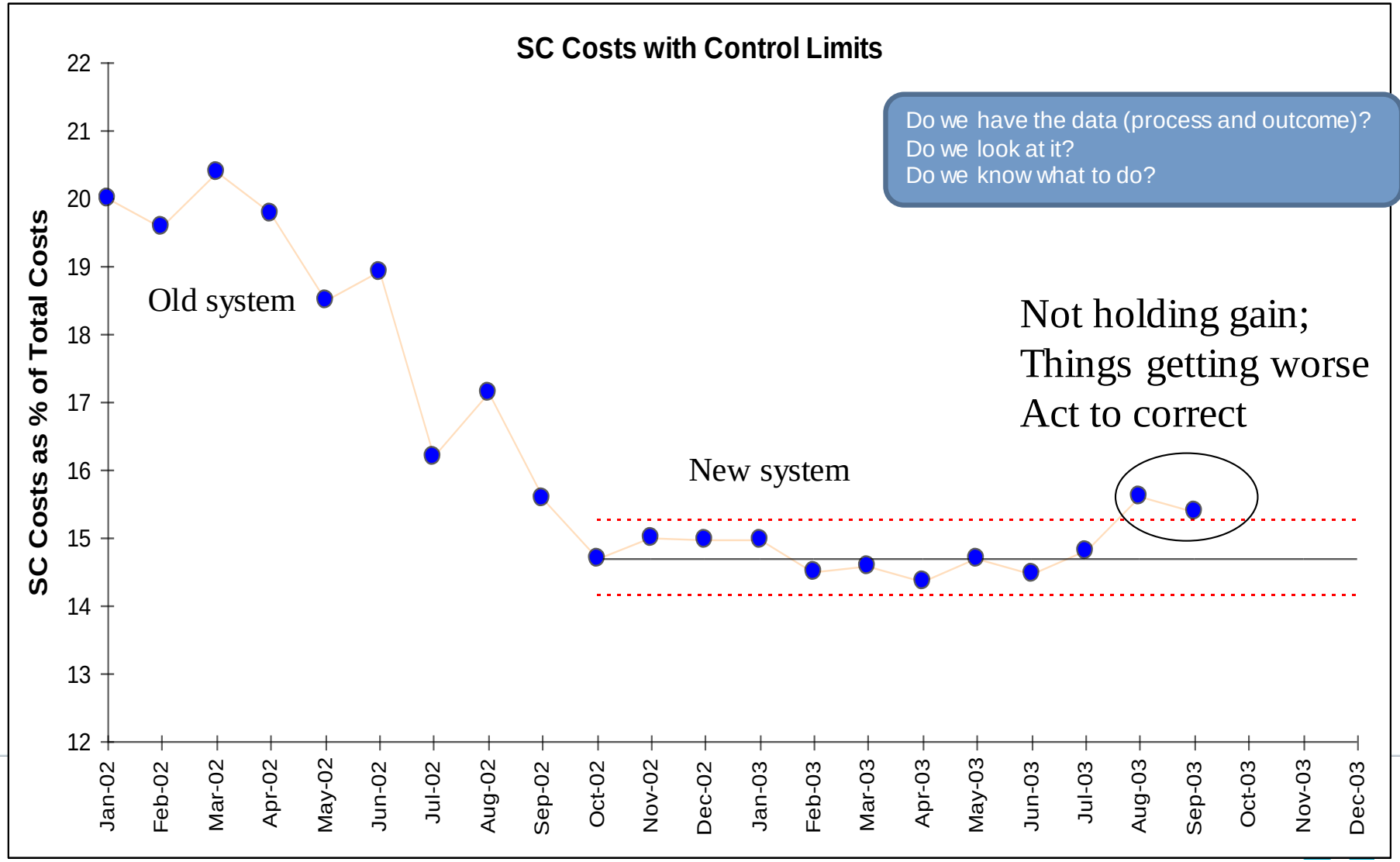
Figure 1. The Relationship of Quality Improvement and Quality Control



Technical Aspects

- Measurement
- Ownership
- Communication and Training
- Hardwiring and Standardization
- Assessment of Workload

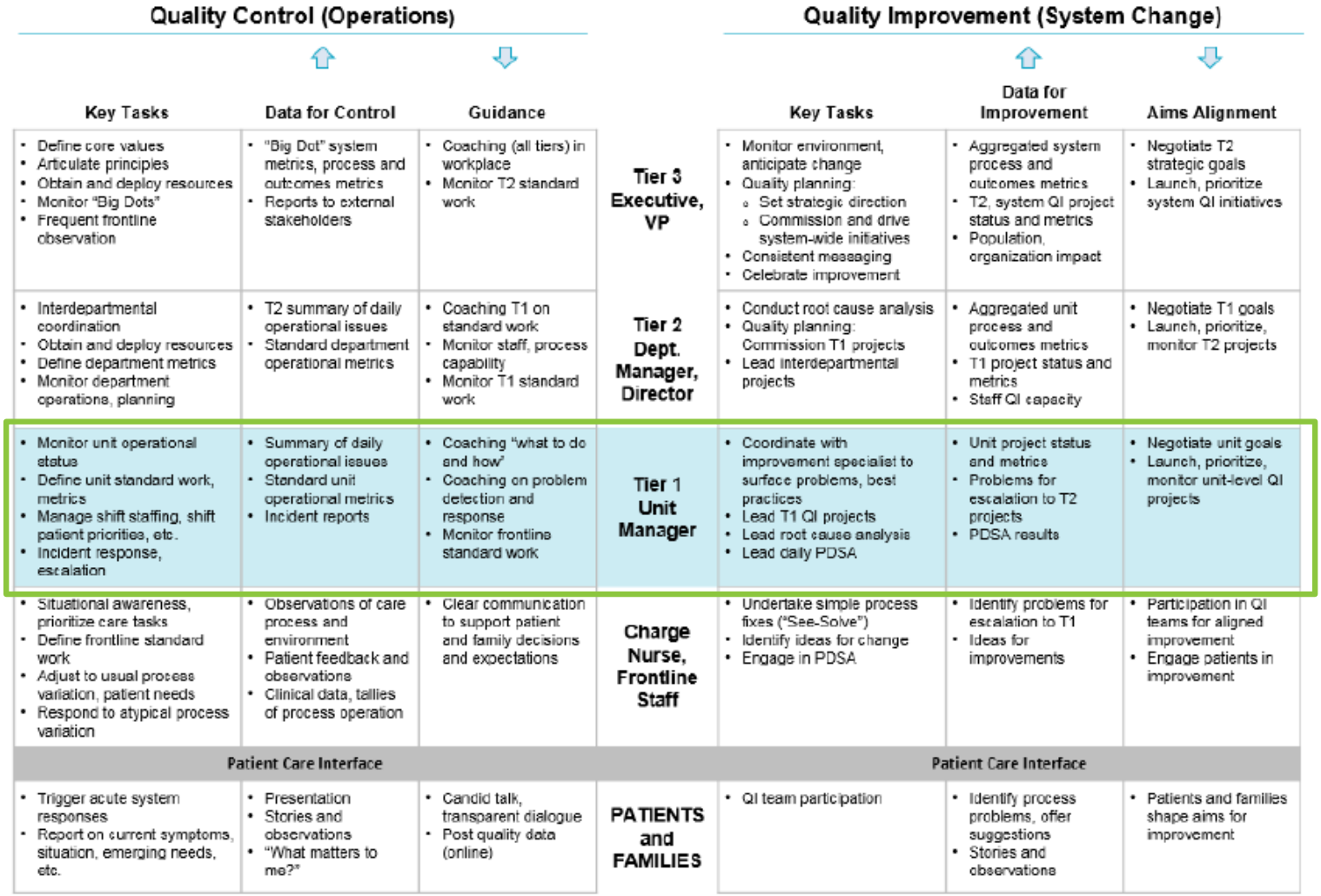
Measurement: Quality control



Ownership

Figure 2. Architecture of a High-Performance Management System

http://www.ihi.org/resources/Pages/IHIWhitePapers/Sustaining-Improvement.aspx



Communication and training

- Awareness to decision (communication)
- Decision to action:
  - Peer-to-peer
  - “At the elbow” or mentoring
  - Ongoing technical support or hotline
  - Learning + Action
  - Address mindsets + technicalities
- Consider training for existing and new employees (e.g., onboarding)

Training: How matters

- What do adults retain after three months?
  - Lecture-based training (e.g., presentations, videos, demonstrations, discussions) = 10%
  - Learn by doing (e.g., role plays, simulations, case studies) = 65%
  - Practice what was learned in the workplace = ~100%

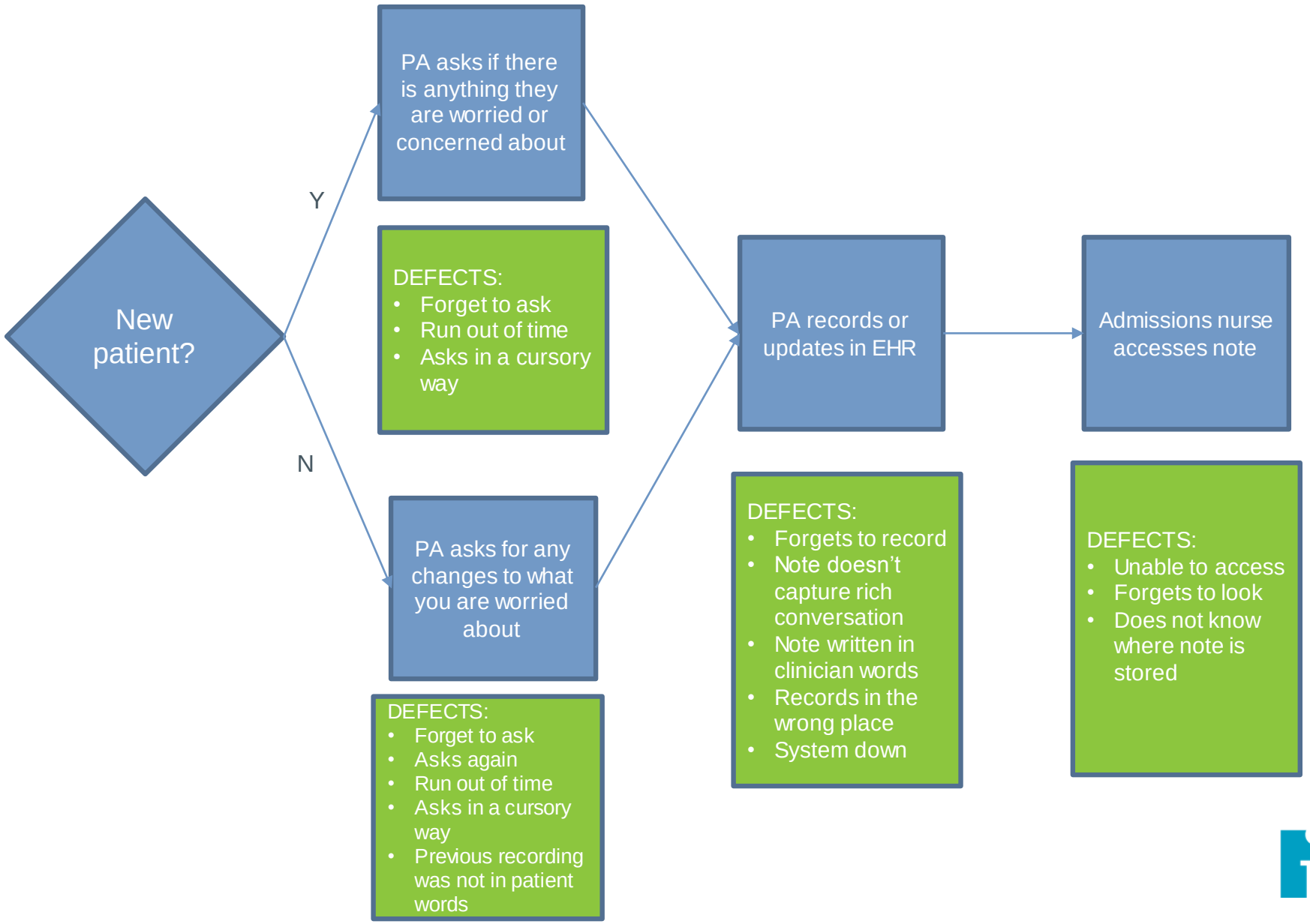
IBM research; Whitmore, “Coaching for Performance.”

http://www.aascu.org/corporatepartnership/McKinseyReport2.pdf

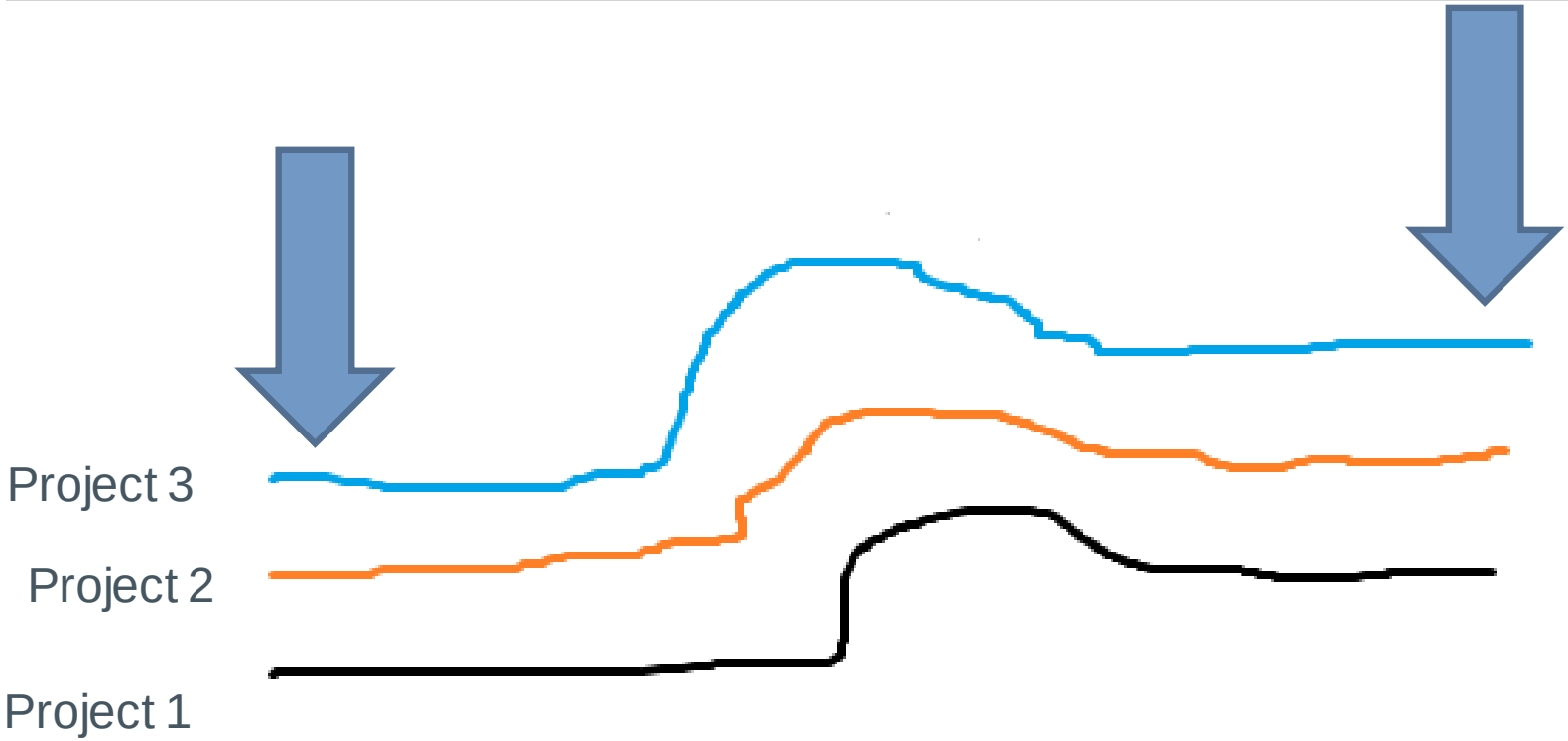
Hardwiring the change

- Make it easy to do the right thing and hard to do the wrong thing
- Sample methods:
  - Standardization and accountability for following standard work
  - Documentation
  - Remove “old way”
  - Reduce reliance on human memory (affordances, defaults)
  - Tend to resources: forms, equipment, etc.

Hardwiring the change



Assessment of Workload



Stop, Start, Continue

Category	Description
Stop	What are we doing in this area that is not working or no longer makes sense? (Something we should STOP)
Start	What should we put in place to improve our area? (Something we should START)
Continue	What is working well in our organization and should be continued? (Something we should CONTINUE)
Change	What is working to some extent and would benefit from minor changes? (something we should change)

Managing sustainability

4 Hour Project

SUSTAINABILITY PLAN

Process Description	Assessment and management of patients discharged from ED	**Core Team Members**		**Date First Completed**	7/22/2011
Process Owner		**Executive Director of Process Owner**		**Date (latest revision)**	8/13/2012

Control Plan									Response Plan				
Types of measure	**Operational Definition**	**How is the data taken**	**Who is accountable for the data**	**How is the data measured**	**Who is accountable for the measurement**	**How is the data reported**	**Who produces the report**	**Who receives the report**	**What is the target for the measure**	**Who is accountable for meeting the target**	**When do I take action**	**What actions do I take**	**Comments**
4 Hour KPI performance	The percentage of patients discharged from the ED with a length of stay of less than 4 hours	Crystal report from Symphony	Bruce Garbutt	Crystal report from Symphony	Bruce Garbutt	ED Scorecard	Bruce Garbutt	ED Leadership Group (Melinda Truesdale, Steve Pincus, Karen Clark, Liz Virtue)	> 80%	ED Leadership Group, Bruce Garbutt	< 80%	Review of more detailed ED performance data to identify delays	Performance during May - July 2013 maintained at 70 - 80%, 60 - 70% August 2013, most recent measurae 70% (week ending 1/9/13).
Fast Track - patient numbers and 4 hour performance	Number of patients managed through Fast Track per week and the percentage discharged within 4 hours	Crystal report from Symphony	Bruce Garbutt	Crystal report from Symphony	Bruce Garbutt	ED Scorecard	Bruce Garbutt	ED Leadership Group (Melinda Truesdale, Steve Pincus, Karen Clark, Liz Virtue)	100 patients per week, 4 Hour KPI > 80%	ED Leadership Group, Bruce Garbutt	< 75 patients per week, 4 Hour KPI < 80%	Audit of patients being managed through Fast Track, and potential missed patients in Emergency stream	Continued good performance: 90 - 110 patients per week, 4 hour KPI performance 80 - 100%
Q3 process times for patients discharged from ED	3rd quartile process times for waiting time, assessment time and length of stay for patients discharged from the ED	Crystal report from Symphony	Bruce Garbutt	Crystal report from Symphony	Bruce Garbutt	ED Scorecard	Bruce Garbutt	ED Leadership Group (Melinda Truesdale, Steve Pincus, Karen Clark, Liz Virtue)	Wait 90 minutes, Asses 150, LOS 240	ED Leadership Group, Bruce Garbutt	Wait 90 minutes, Asses 150, LOS 240	Review more detailed ED performance figures/workload, review staffing issues/allocations	Waiting time 105 - 135 minutes (originally 150 - 160 minutes). Assessment time 135 - 150 minutes (improved from 140 - 170 minutes). ED LOS 230 - 275 minutes (originally 315 minutes),
													Short Stay utilisation to

WORKSHEET: Redesign of Support Processes for Implementation of Change

Change Implemented: _____ Date: _____

Cycle No.	Change Tested or Implemented	Lead	June 24 25	July 1 8 15 22 29	August 5 12 19 26	September 2 9 16 23 30	October 7 14 21	November 28 4 11 18
	Policies							
	Documentation							
	Hiring Procedures							
	Staff education/training							
	Job descriptions							
	Information Flow							
	Equipment Purchases							

Implementation and sustainability require project management

Use a Gantt chart or similar tool to help set your timeframe

Sample Project Team Worksheet

Key Implementation Areas	Changes to Support Implementation	Lead	Cycle #	Objective of PDSA Cycle
Standardization	Policies and Procedures			• Update policies and procedures documents; test with a few techs and engineers
	Hiring Procedures			• Test use of screening tool • Try new orientation process
Documentation	Job descriptions			• Develop and test process techs job descriptions • Test description of new position for a lab analyst
Training	Staff education/training			• Offsite versus onsite versus web-based (in three learning cycles) • Learn about mentoring and shadowing approaches
Measurement	Information Flow			• Integrate time measurement into standard checksheet
Resourcing	Equipment Purchases			• Test one server • Investigate two types of networking

Holding the gains after implementation

If your current work team won the lottery, quit, and moved to St. Lucia, would your replacements be able to continue the work? (i.e., Would your improvements "stick?")

- If yes, why? What have you done to get the improvements to "stick?"
- If no, what would have to be done to get the improvements to "stick?"

Spread and Scale-up

How do we improve more quickly across a system?

Is this problem mainly due to spread or scale-up issues?

Malaria control interventions are still inadequate to reach the national and international targets to improve population health.

A key reason for this is that individuals will not seek preventive treatment when pregnant nor treatment for children with malaria.

A key reason for this is inadequate systems to deliver preventive treatment to pregnant women and treatment of children with malaria.

Your Project

- **Spread:** Having individuals adopt the changes
- **Scale-up:** Overcoming the structural issues that arise during spread

Most projects will have both, but weights might be different – how are these at play in your projects?

Technical Aspects

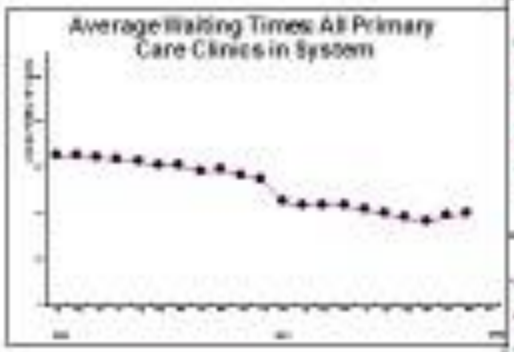
- Spread and scale-up aim
- Measures:
  - Awareness to decision
  - Decision to outcome
  - Outcome
- Plans:
  - Workplan
  - Communication
  - Measurement
- Project manager (25 – 50% FTE for high complexity)
- Infrastructure

Process Measure

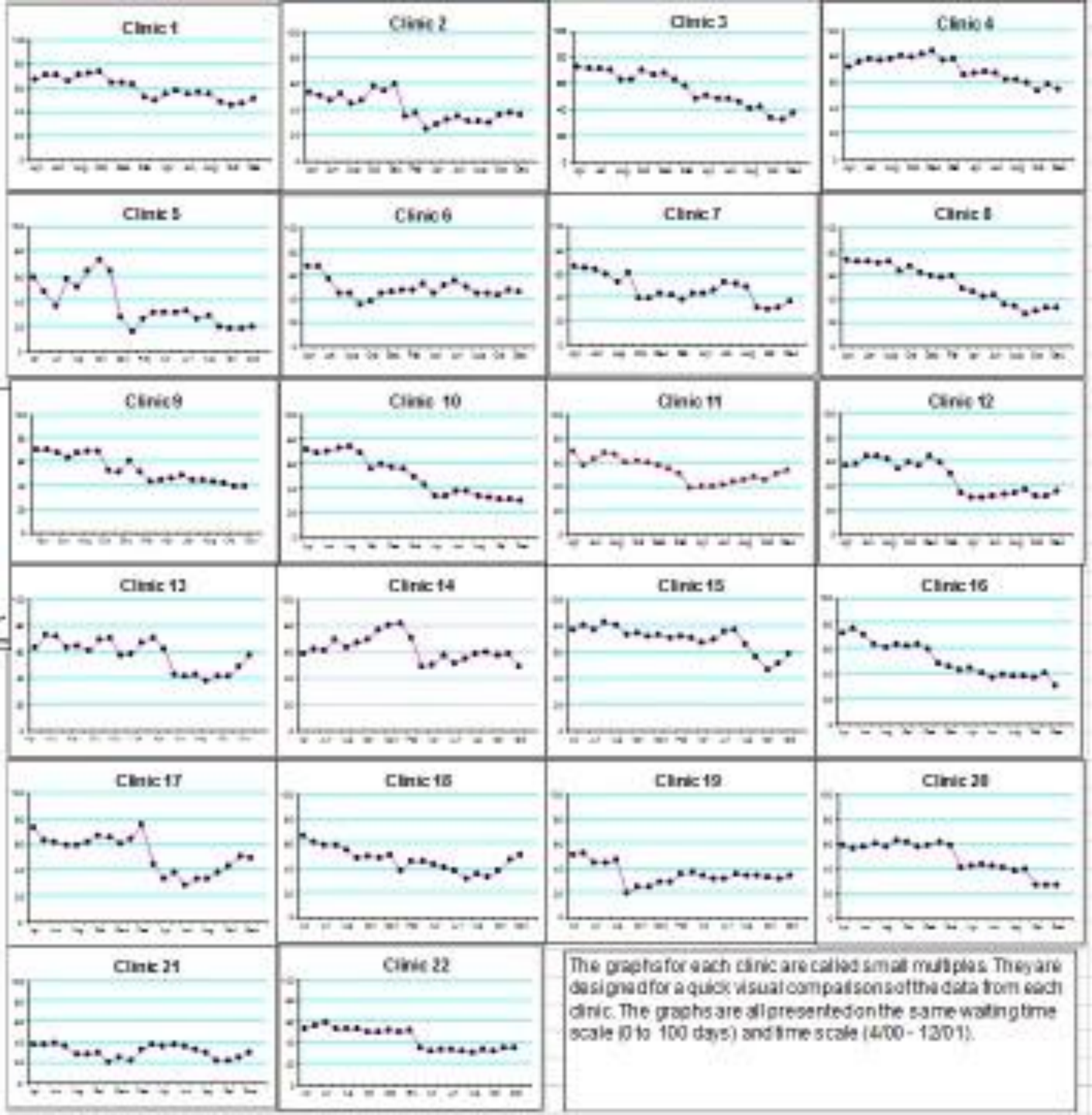
Site	Exec Walks	Unit Briefings	HFE Briefings	FMEA	Reconci-liation	Hazard Areas
1	X	X	X	X	X	Coumadin
2	X	X	X	X	X	PCAs
3	X	X		X	Plan	
4	X	X	Plan	X	X	
5	X	X	Plan	Plan	X	
6	X	X		X	Plan	Lovenox Heparin
7	X	Plan		Plan	X	
8	X	Plan		X	X	X

X = At least one unit implementing the change

Small Multiples: Overall System and 22 Clinics

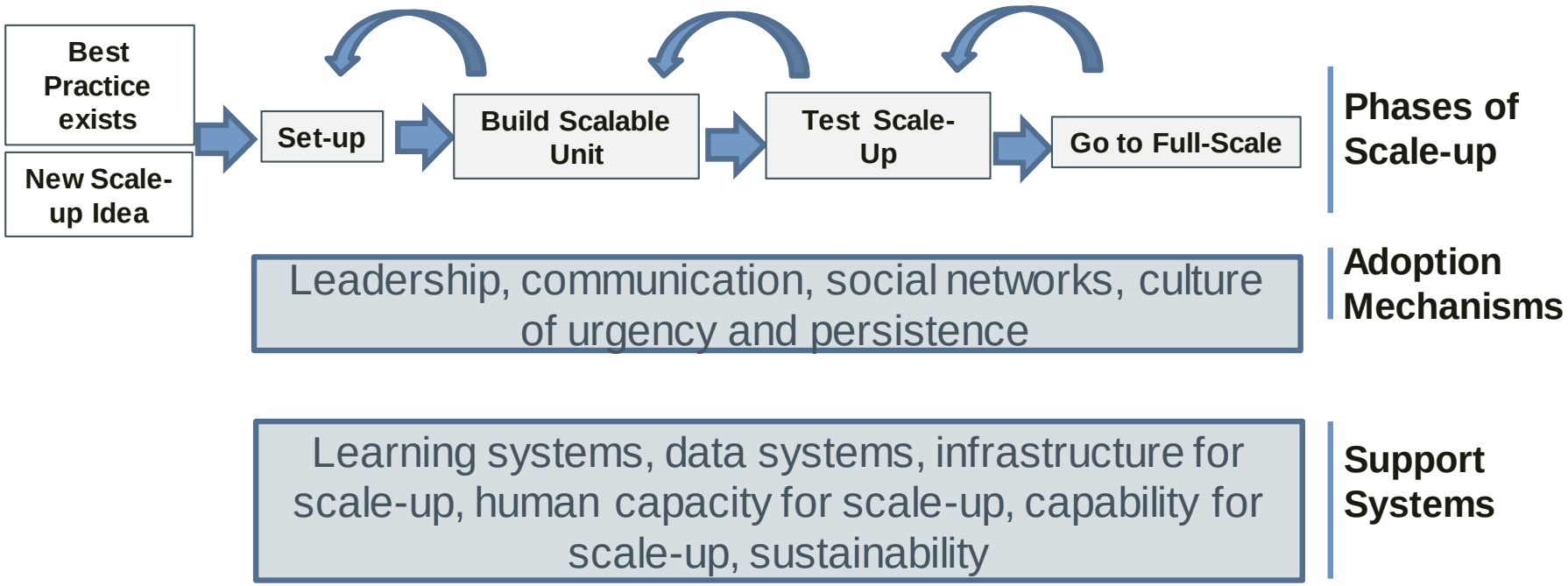


Average Waiting Times: All Primary Care Clinics in System



The graphs for each clinic are called small multiples. They are designed for a quick visual comparison of the data from each clinic. The graphs are all presented on the same waiting time scale (0 to 100 days) and time scale (4/00 - 12/01).

The Scale-up Framework



Scale-up framework

Change Areas	5	25	125	625	3125
Change 1					
Change 2					
Change 3					
Change 4					
. .					

Scale-up framework

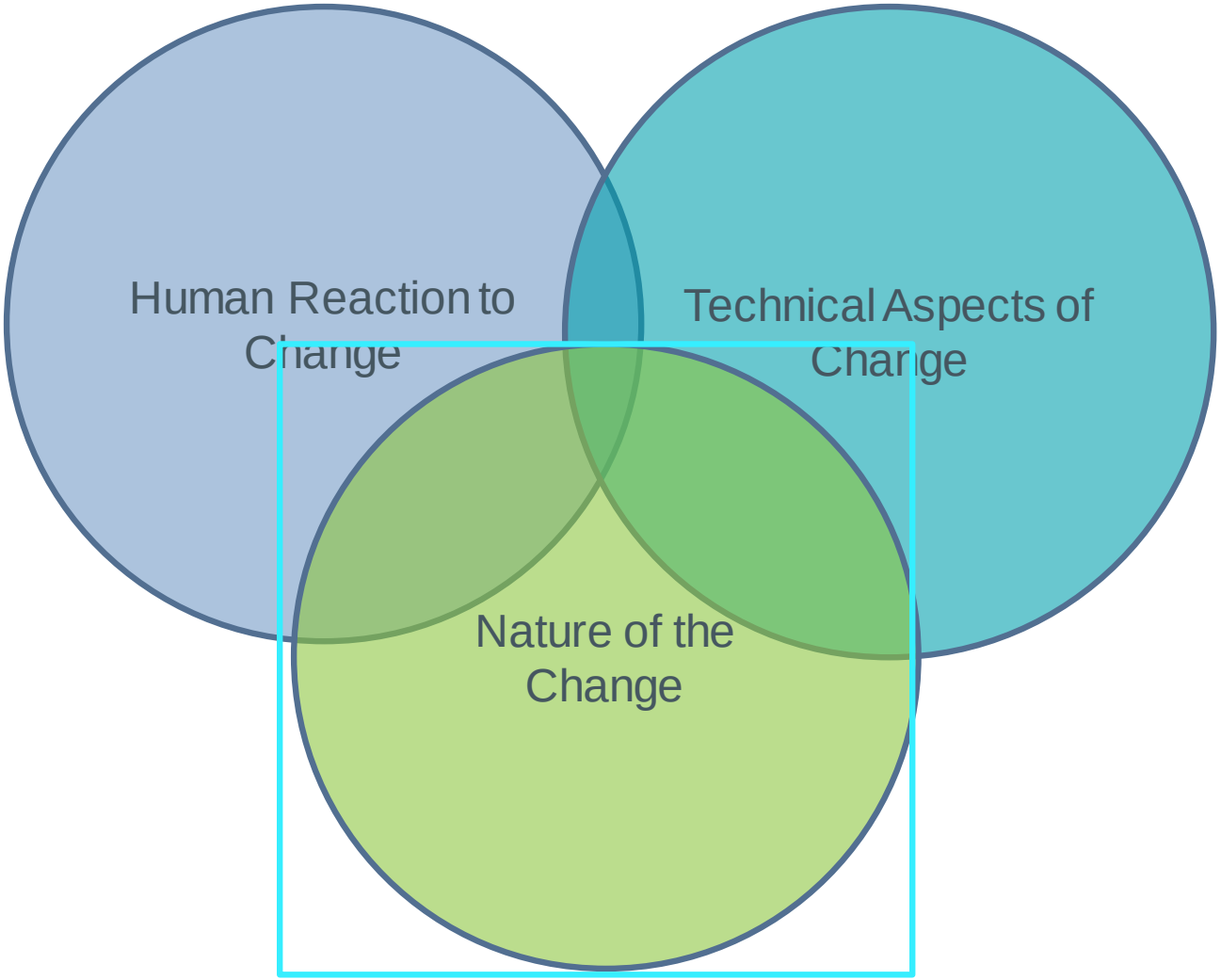
Change Areas	5	25	125	625	3125
Asking What Matters	Physician asks at primary care visit	PA asks during vital signs	Pre-visit planning	???	???
Documenting What Matters	Pen and paper	Standardized form	Whiteboard	EHR	???
Sharing What Matters	Physician head	Form in record	Care team meeting	???	???
Updating What Matters	N/A	N/A	Pre-visit planning	???	???
Learning System	N/A	Team Meeting	Champion	Database	???

Worksheet: Five-times (5x) Thinking

Use the following table to anticipate the kind of infrastructure issues you might encounter during the process of testing a change as you move to a larger number of units (e.g., sites, persons, providers)

5x Scale-up for _____	
Number of units affected	**System issues to overcome or questions to answer**
5	
25	
125	
625	
3,125	

Improving Long-Term Impact



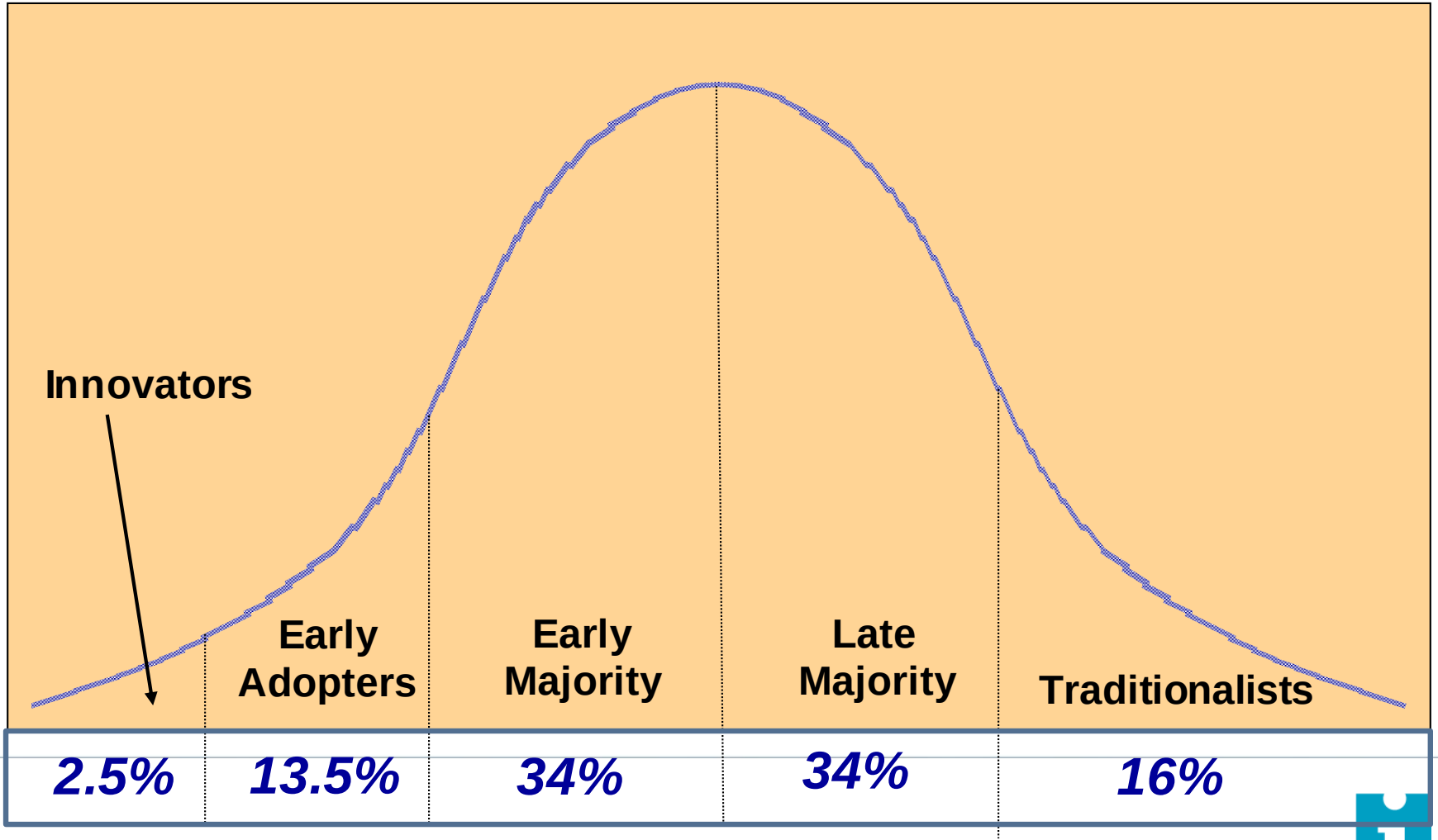
Selling an Idea

Needed:

1. A volunteer with a good idea

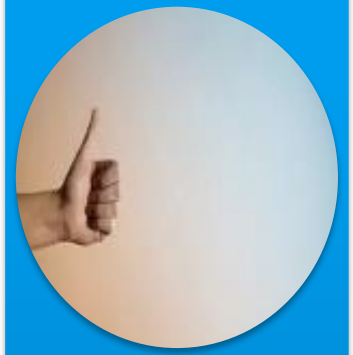
2. A group of potential adopters

Adopter Categories



Source: Rogers, 1995

Attributes of an idea that facilitate adoption



Relative Advantage

Simple

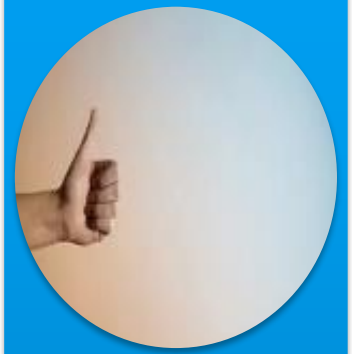
Trialable

Compatible

Observable

Rogers, E. M. (2003). Diffusion of innovations. New York, Free Press

Most influential in rate of spread



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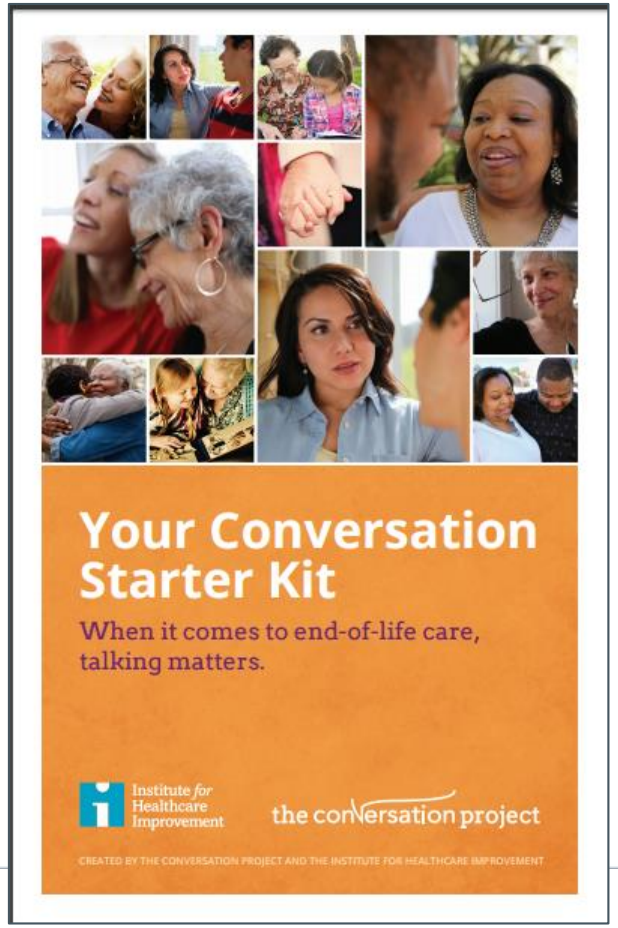
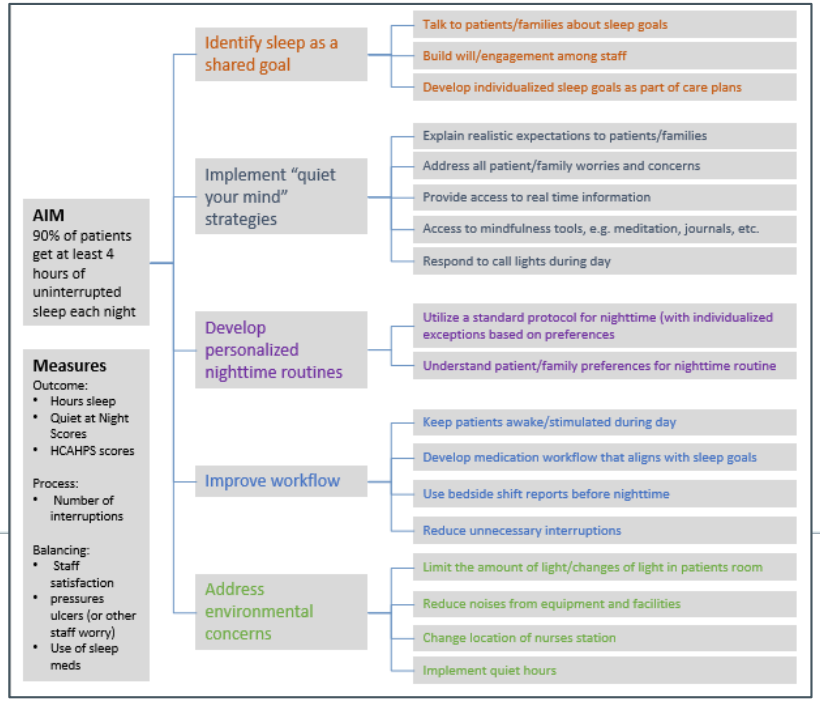


100,000 Homes: "Simple Rules"

- Housing First
- Know Everyone by Name
- Track Your Progress (by Name)
- Housing Systems are Simple and Easy to Navigate



Hard core, soft periphery

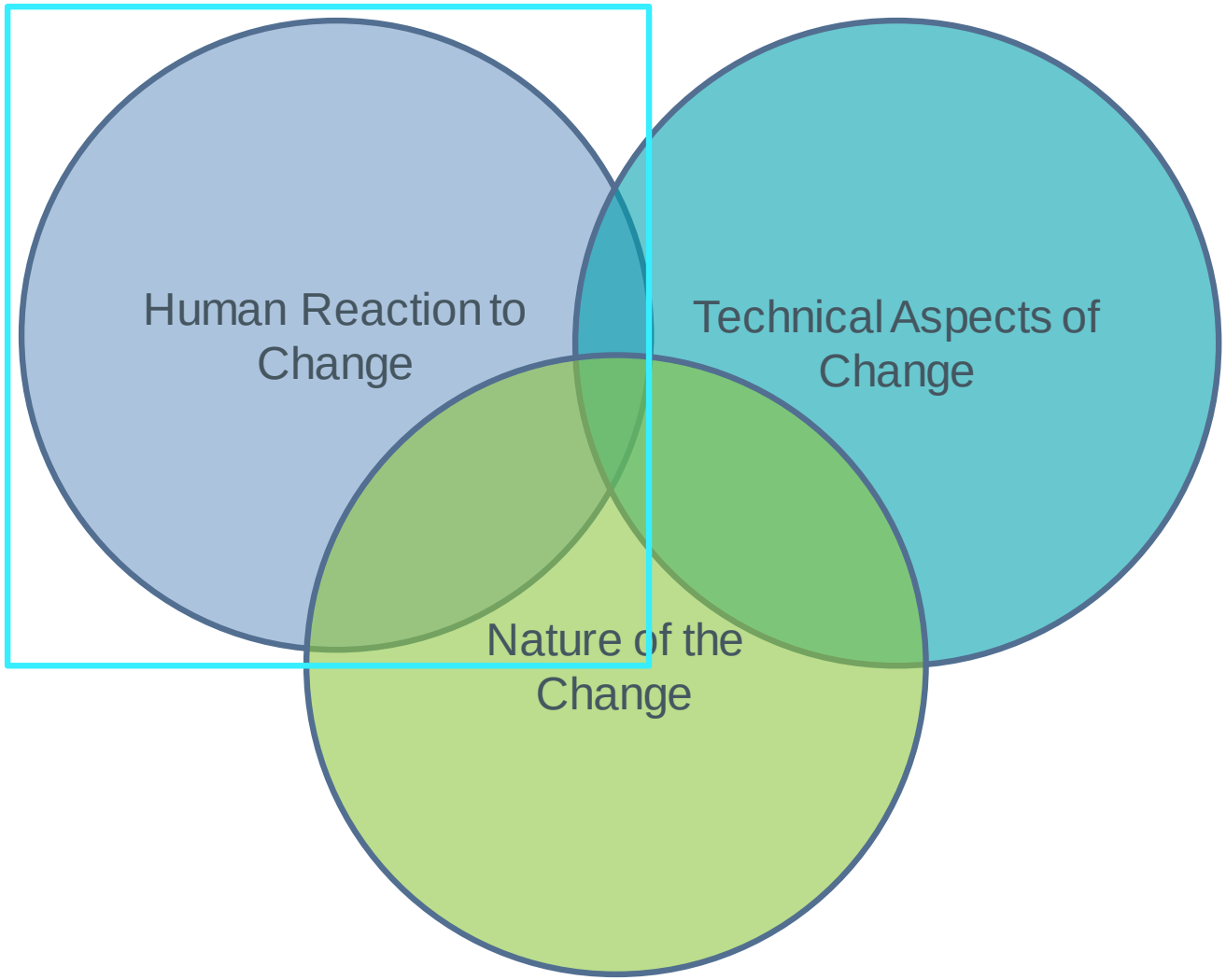
Rapid Response Systems		
Technical Specifications	**Large, academic medical center**	**Small, rural hospital**
Anyone can easily sound an alarm if they see a deteriorating patient	Number to call	Staff approach Nurse Director
Team of individuals can respond very rapidly	Physician, nurse, respiratory therapist available and on call	Nurse Director or sub (on off days) is available to respond at any point
Individuals have the training and skills to evaluate and stabilize the patient	Team goes through extensive training and simulations quarterly	Nurse Director with 20+ years experience
Necessary supplies are available immediately, at the point of care	Rapid response system “pack” ready to go	Materials are readily restocked at nursing station

Worksheet: Assess the Readiness of an Idea for Rapid Spread

Change/Improvement/Intervention: _____

Attribute	Score (1 – 5)	Actions to Take
Relative advantage (i.e., how strong is the evidence that the change is better than the old way)		
Compatibility with current system (i.e., how well does it fit the current structure, values, and practices)		
Simplicity of the change (i.e., how easy is the change to adopt)		
Testability (i.e., can people try it)		
Observability (i.e., can people see it before trying it)		
Hard core, soft periphery (i.e., to what extent can individuals customize to their context)		

Improving Long-Term Impact

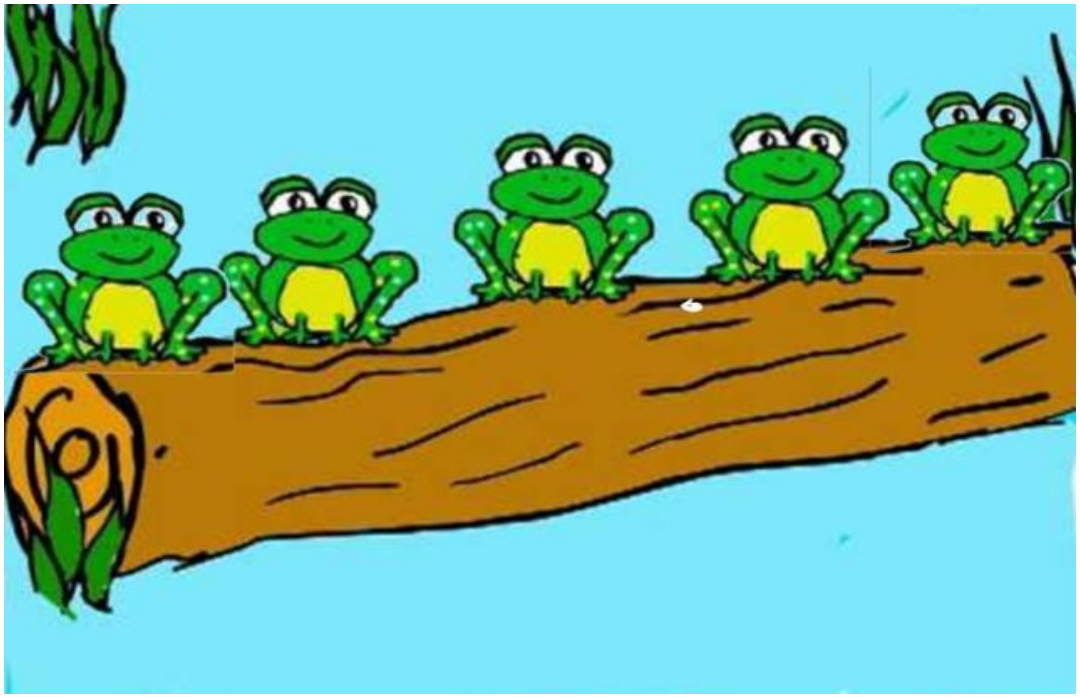


“Think how hard physics would be if particles could think.”

Nobel Laureate Murray Gell-Mann

Challenge question for today!

There are five frogs on a log. Five decide to jump in. How many frogs are left on the log?



Human reaction to change

- How people react to change
- The message: why and how
- The messenger
- Other levers
- What if people still won’t change

How people react to change

- **Resistance:** an emotional or behavioral response to real or imagined threats to the work routine
- **Apathy:** feeling or showing little or no interest
- **Compliance:** publicly acting in accord with social pressure while privately disagreeing
- **Conformance:** a change in behavior or belief as a result of real or imagined group pressure
- **Commitment:** the state of being bound emotionally or intellectually to a course of action

The message: why

- What motivates you doesn't motivate employees (~20% across dimensions)
- Motivations:
  - Company
  - Society
  - Customer
  - Personal gain
  - Working team

The message: why (example)

- **Company:** Team-based care is the only way our primary care practice is going to survive in the new payment environment.
- **Society:** Team-based care is the future of health care—better health at lower cost. This is vital given that health care is too much of the GDP and chronic conditions are continuing to rise.
- **Customer:** Team-based care creates better outcomes for our patients.
- **Personal gain:** Team-based care means better work-life balance for all of us. It also makes us more likely to hit pay-for-performance metrics and, therefore, our bonus.
- **Working team:** Team-based care means your teams will be able to be more coordinated and benefit from greater communication, coordination, and space to problem solve together.

The message: other tips

- Create dissatisfaction with current state
- Relentlessly communicate direction
- Express excessive faith in success
- Empathize with anxiety
- Make it personal:
  - Logistical implications of change (e.g., where will I sit)
  - Clear message on what I will be doing differently
  - How will this make my job easier?

Create a burning platform

The message: how

Raise Awareness

Shape Behavior

General Publications
- Flyers
- Newsletters
- Videos
- Articles
- Posters

Personal Touch
- Letters
- Cards
- Postcards

Interactive Activities
- Telephone
- Email

Public Events
- Fairs
- Conferences
- Exhibitions
- Meetings

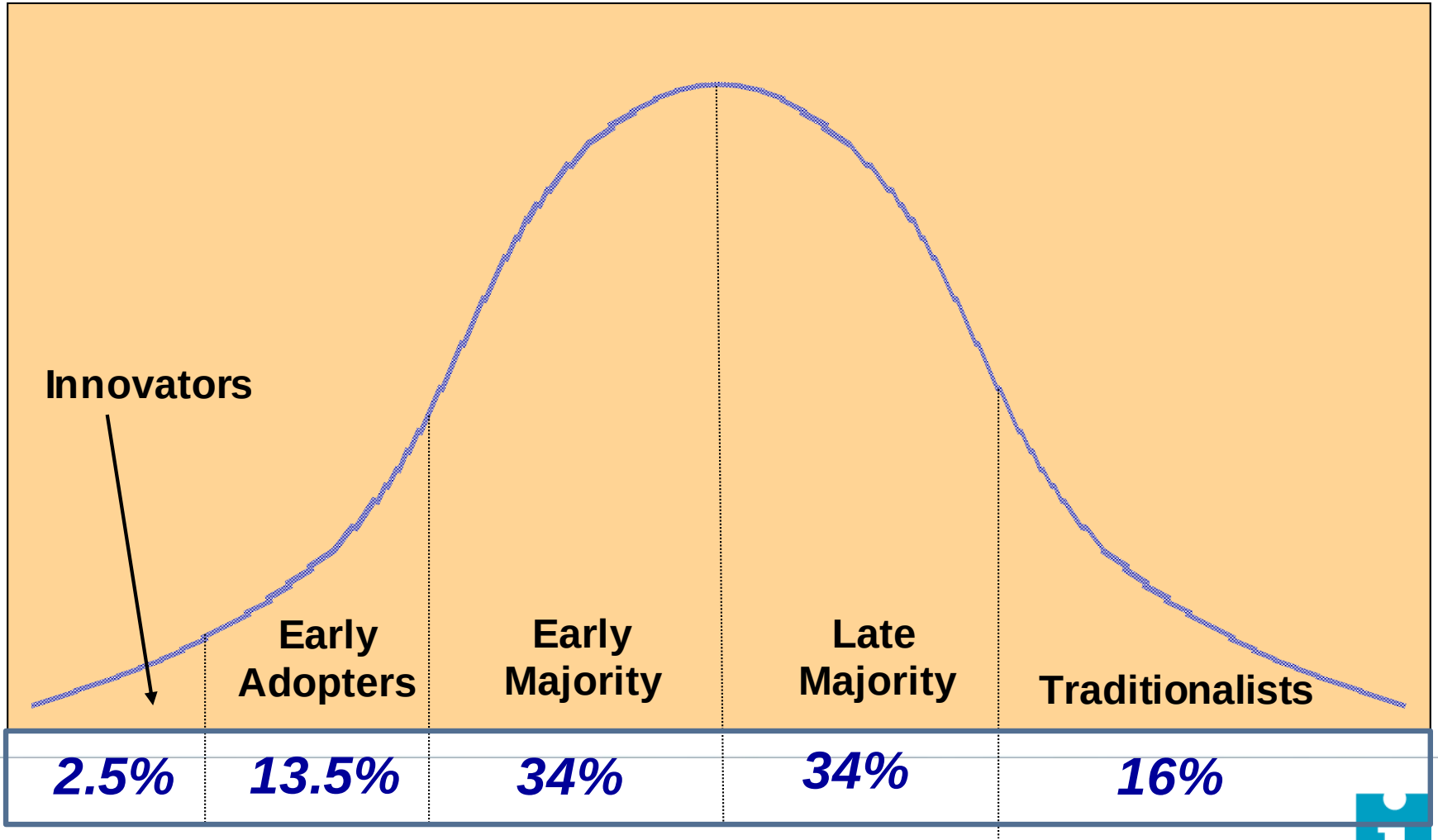
Peer-to-Peer
- Communities of practice
- Shadowing
- Visits
- Mentoring

Adapted from Sarah W. Fraser

The messengers

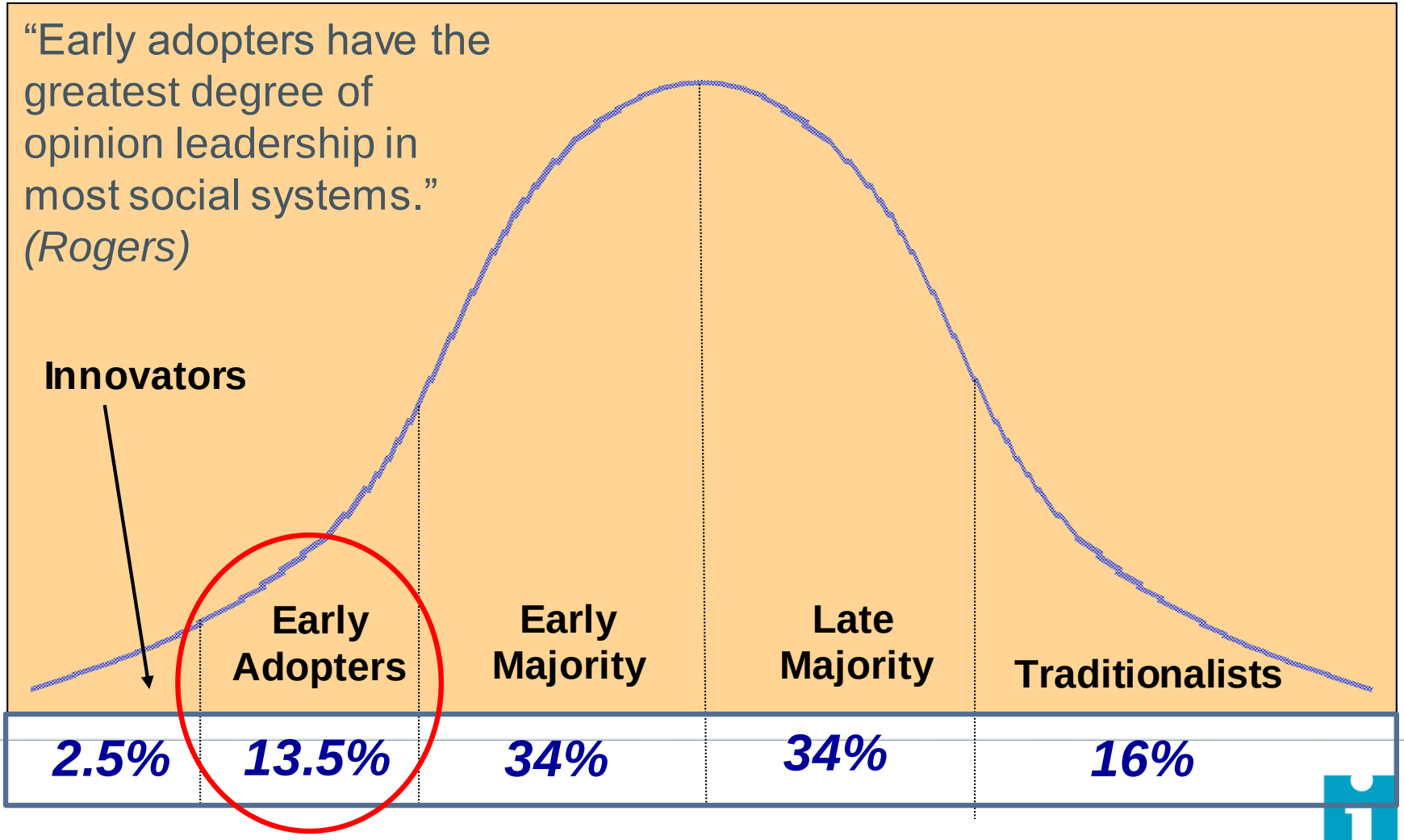
- Include influencers/opinion leaders
- To identify opinion leaders:
  - Survey (Whom do you go to for advice and information about ____?)
  - Discussion and observation within the social system
- Testing teams should be front and center
- Understand the nature of networks

Adopter Categories



Source: Rogers, 1995

Adopter Categories



Source: Rogers, 1995

Leverage the recognition economy

Fully Committed List

100,000 HOMES
August 2013

Fully Committed List Criteria:

1) The community has completed a Registry Week or uses a similar method of knowing everyone by name, AND

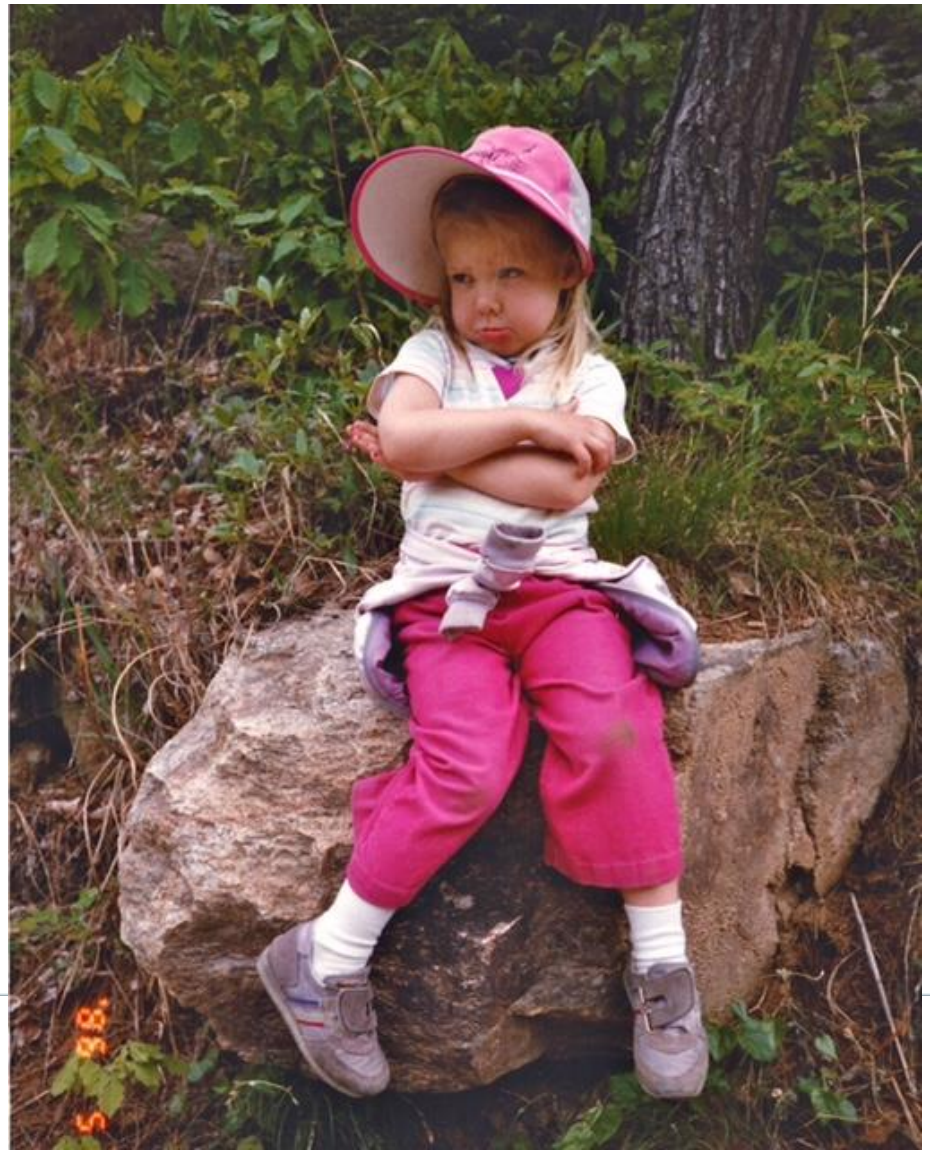
2) The community has reported every month for at least the last three months, even if they have not housed anyone

2.5% Club

Atlanta, GA	Maricopa County, AZ
Baltimore, MD	Memphis, TN
Bellflower, CA	Monroe, LA
Bergen County, NJ	Nashville, TN
Boston, MA	New Orleans, LA
Bridgeport, CT	New York, NY
Central Louisiana - Alexandria, LA	North Hollywood/Sun Valley, CA
Central Mississippi, MS	Oklahoma City, OK
Charlotte, NC	Philadelphia, PA
Chesapeake, VA	Pinellas County, FL
Chicago, IL	Pittsburgh, PA
Delaware	Portland, OR
Denver, CO	Portsmouth, VA
Erie County, NY	Prince William County, VA
Forsyth County, NC	Richmond, VA
Fresno, CA	Salt Lake County, UT
Glendale, CA	San Francisco, CA
Houston, TX	Santa Monica, CA
Indianapolis, IN	Shreveport, LA
Jacksonville, FL	Suburban Cook County, IL
Kansas City, MO	Tallahassee, FL
Kern County, CA	Treasure Coast, FL
Lafayette, LA	Tulsa, OK
Lake Charles/SW Louisiana, LA	Whittier, CA

*These communities have been housing at least 2.5% of their chronic and vulnerable population for 3 consecutive months. They are also on the Fully Committed List.

What if people still won't change?



Tips

- Start with the end in mind. Develop a clear aim for your expansion efforts (i.e., what are you trying to take to scale and why it's important, who you need to reach, when you need to accomplish this, and what level of system performance do you expect to achieve).
- Avoid "pilot-itis" by working through the sequence of activities in the Scale-up Framework (i.e., anticipating and addressing methods you need to both promote adoption and develop system supports for the change).
- Match your activities and methods to each phase of scale-up (e.g., how might you engage a small number of sites in the Scalable Unit Phase? How would you select the sites?)
  - Consider a range of methods to support going to full scale (e.g., Campaigns, BTS Collaboratives, wave sequence, extension agents)
- Remember to include strategies to foster adoption and build infrastructure at each phase of scale-up
- Learn your way to full scale. It is an iterative learning experience. Don't be afraid of the feedback loops!

Additional Resources

- Chapter 9 – Langley GL, Moen R, Nolan KM, Nolan TW, Norman CL, Provost LP. The Improvement Guide: A Practical Approach to Enhancing Organizational Performance (2nd Edition). San Francisco, California, USA: Jossey-Bass Publishers; 2009.
- Barker PM, Reid A, Schall MW. A framework for scaling up health interventions: Lessons from large-scale improvement initiatives in Africa. Implementation Science. 2016 Jan;11(1):12. (Available on www.IHI.org)
- Massoud MR, Donohue KL, and McCannon CJ. Options for Large-scale Spread of Simple, High-impact Interventions. Technical Report. Published by the USAID Health Care Improvement Project. Bethesda, Maryland: University Research Co., LLC; 2010. (Available on www.IHI.org)
- Massoud MR, Nielsen GA, Nolan K, Schall MW, Sevin C. *A Framework for Spread: From Local Improvements to System-Wide Change*. IHI Innovation Series white paper. Cambridge, MA: Institute for Healthcare Improvement; 2006. (Available on www.IHI.org)
- Sodzi-Tettey S, Twum-Danso NAY, Mobisson-Etuk N, Macy LH, Roessner J, Barker PM. Lessons Learned from Ghana's Project Fives Alive! A Practical Guide for Designing and Executing Large-Scale Improvement Initiatives. Cambridge, Massachusetts: Institute for Healthcare Improvement; 2015. (Available on www.IHI.org)

Lunch

Institute *for* Healthcare Improvement

Workshop 2, Day 3

March 15, 2017

The art of coaching: Coaching practice round 2 breakouts

Improvement Coach Professional Development Program

Phyllis Virgil

Break

Debrief Coaching Practice: Report out key learnings

Institute *for* Healthcare Improvement

Workshop 2, Day 3

March 15, 2017

Graduation (almost)!

Improvement Coach Professional Development Program

Karen Baldoza

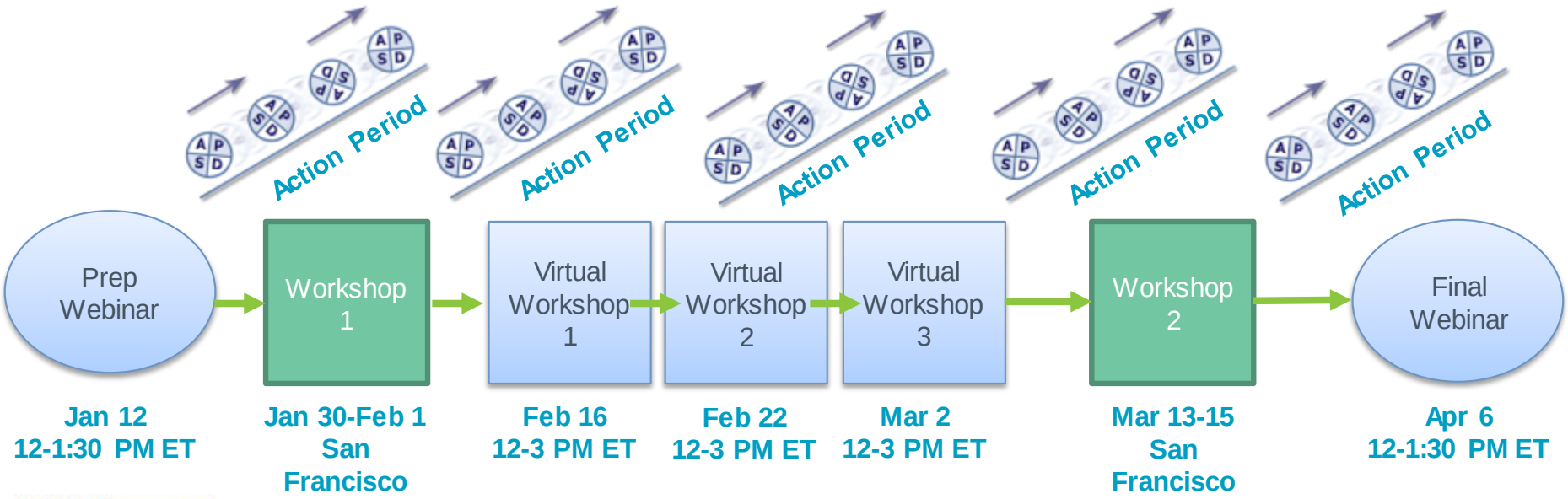
Session objectives

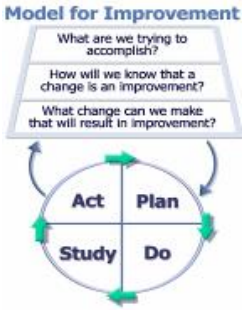
- Reflect on and CELEBRATE your progress!
- Summarize next steps

Session agenda

Topic	Time
Overview and individual reflection on progress	10 minutes
GRADUATION (almost)!	15 minutes
Group reflection	10 minutes
Next steps	5 minutes

Program design and key dates



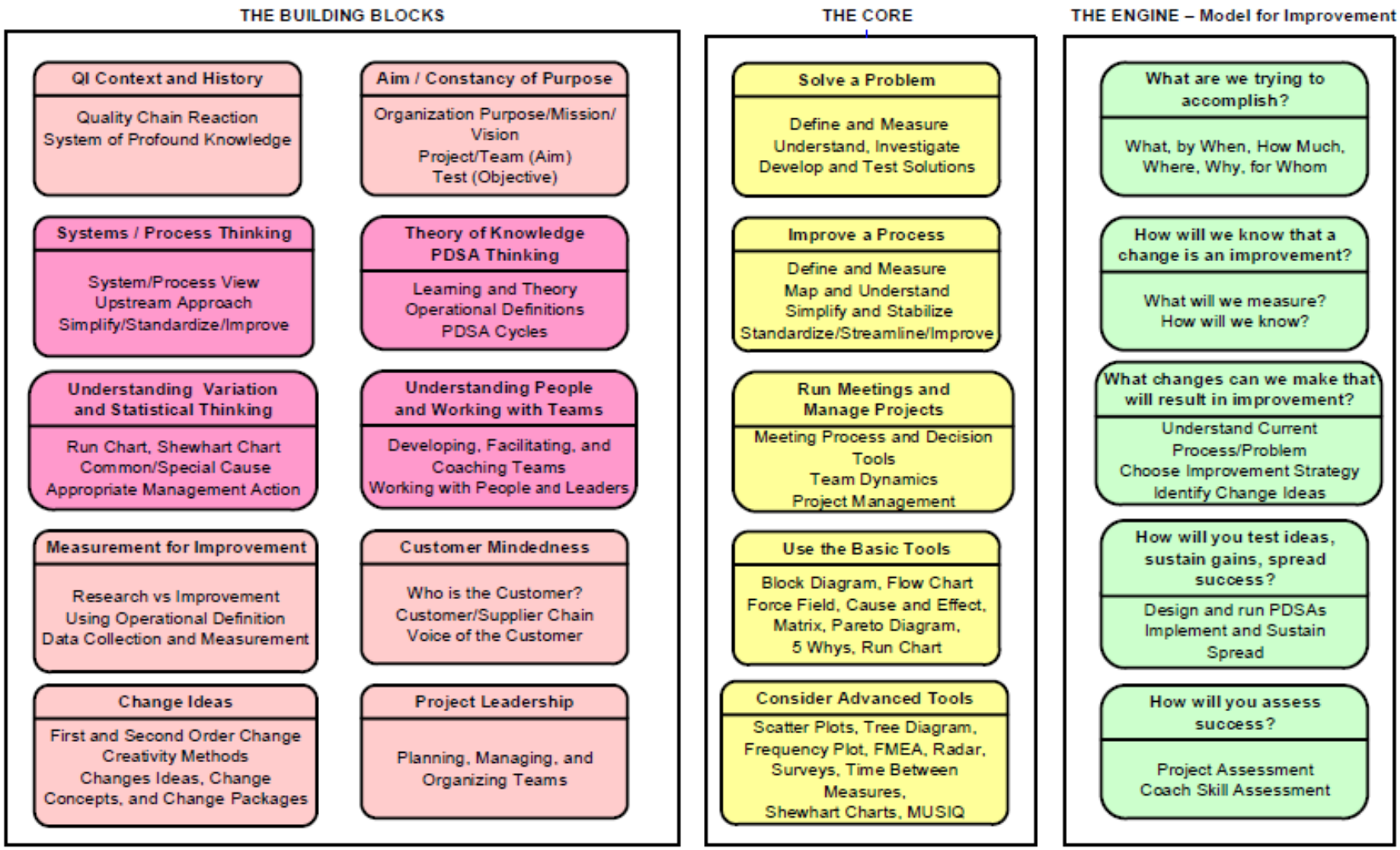


Support

IHI.org **Email distribution list** **Faculty consults**

Coaching feedback from fellow coaches and faculty

Curriculum framework



QI = Quality improvement

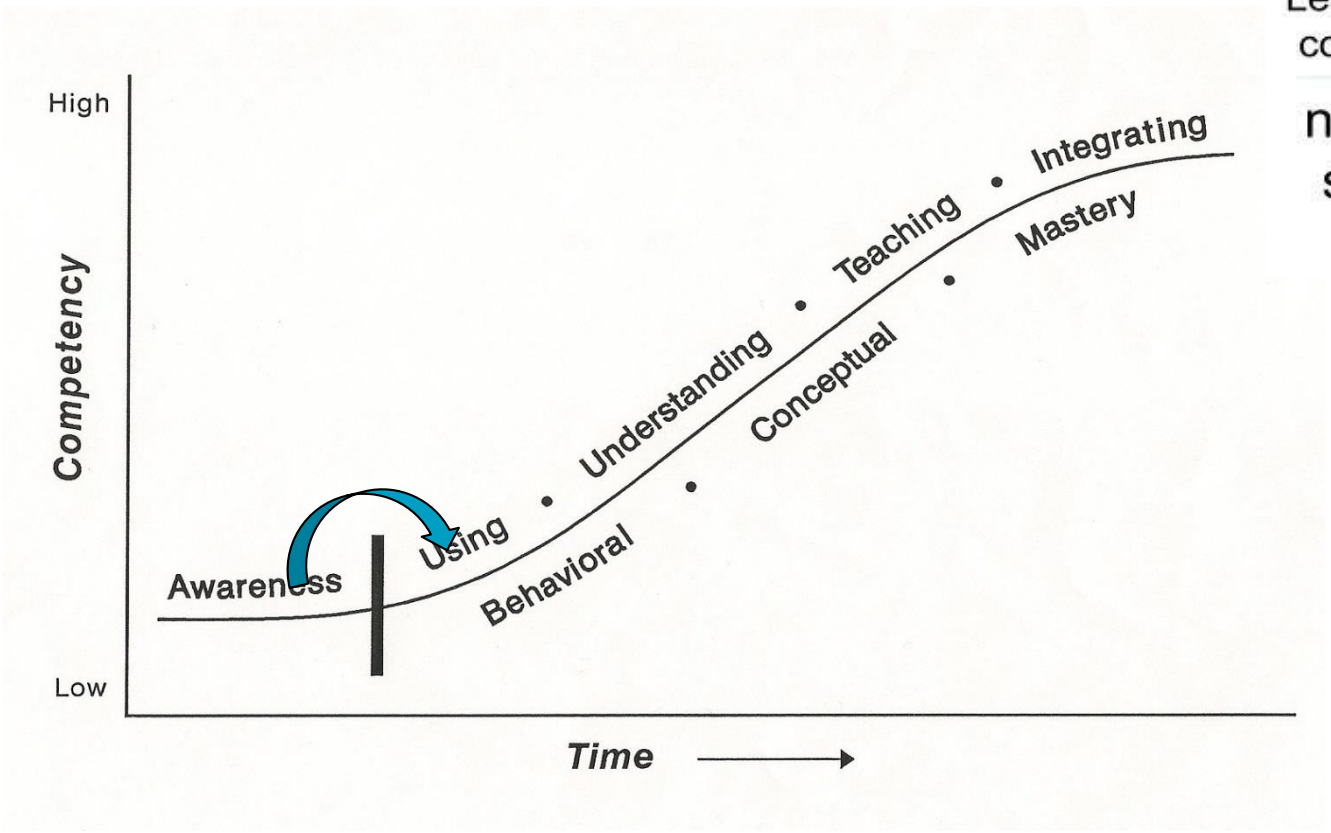
This program is designed to help you…

- Understand the science of improvement and use the Model for Improvement as a roadmap for improvement projects
- Coach improvement teams on how to develop, test, and implement changes including identifying high-leverage change ideas and testing them using PDSA cycles
- Become skilled in how to use data for improvement and other key quality improvement tools
- Build skills in team facilitation, communication, decision making, and understanding team culture
- Apply just-in-time teaching of improvement skills to team members in order to advance the team's work
- Leave with a specific plan for how you will continue coaching your team and prepare yourself to coach subsequent teams
- Learn concepts of implementation, sustainability, and scale-up

The aim of this program is to…

Further develop your improvement knowledge and skill so you can coach and facilitate improvement teams as well as support the implementation of improvement strategies throughout your organization.

So, where are you on your coaching journey?



Learning is not compulsory...

neither is survival

W. Edwards Deming

Adapted from Bloom's Taxonomy of Educational Objectives ,1956

Time to celebrate!

The learning, the spirit,
the fun!

Improvement Coach Professional Development Program
Winter 2017 Class

It's been a great journey!

Your reflections…

- What has been the impact of the IC Program for you professionally?
- What has been the impact of the IC Program for you personally?
- What is your biggest takeaway; what do you do differently now?


Congratulations Improvement Coaches!!!
The journey continues……

Next steps

- Repeat self-assessment
- Repeat MUSIQ score
- Final Webinar – April 6, 12-1:30 PM Eastern
  - Reflect on self-assessments and MUSIQ scores
  - Selected project presentations
  - Close-out

Words to work and live by…

"Quality means doing it right when no one is looking."
- Henry Ford

"All work is a process."
- Phil Crosby

"It is not enough to do your best. You must first know what to do, and then do your best."
- W. Edwards Deming

"Quality is never an accident; it is always the result of high intention, sincere effort, intelligent direction, and skillful execution. It represents the wise choice of many alternatives."
- William A Foster

"Be a yardstick for quality. Some people aren't used to an environment where excellence is expected."
- Steve Jobs

"In the race for quality, there is no finish line."
- Eliyahu Goldratt