HRET HIIN Virtual Event
Accelerating Improvement Fellowship

Spreading and Scaling-Up Improvement

Wednesday, May 9, 2018
12:30 – 1:30 p.m. CT
Welcome and Introductions

Mallory Bender, Program Manager, HRET
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>12:30-12:35</td>
<td>Welcome and Introduction</td>
<td>Mallory Bender, HRET</td>
</tr>
<tr>
<td></td>
<td>• Orienting participants to the program and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>platform</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Introducing faculty and agenda for the</td>
<td></td>
</tr>
<tr>
<td></td>
<td>call</td>
<td></td>
</tr>
<tr>
<td>12:35-12:45</td>
<td>Action Period Discussion</td>
<td>Lauren Macy, IHI</td>
</tr>
<tr>
<td></td>
<td>• Review outstanding questions related to</td>
<td></td>
</tr>
<tr>
<td></td>
<td>run charts, testing ideas, and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>implementation</td>
<td></td>
</tr>
<tr>
<td>12:45-1:15</td>
<td>Scale Up &amp; Spreading Successful Changes</td>
<td>Lauren Macy, IHI</td>
</tr>
<tr>
<td></td>
<td>• Defining Spread &amp; Scale Up</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Understanding the core areas in planning</td>
<td></td>
</tr>
<tr>
<td></td>
<td>for spread</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Learning the critical phases of scale up</td>
<td></td>
</tr>
<tr>
<td>1:15-1:30</td>
<td>Assignments, Suggested Tasks &amp; Additional</td>
<td>Lauren Macy, IHI</td>
</tr>
<tr>
<td></td>
<td>Materials</td>
<td></td>
</tr>
</tbody>
</table>
## Accelerating Improvement Call Topic Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 17th</td>
<td>The Model for Improvement &amp; Setting Up Your Team</td>
</tr>
<tr>
<td>January 31st</td>
<td>Setting Aims &amp; Developing Your Theory</td>
</tr>
<tr>
<td>February 14th</td>
<td>Developing Change Ideas &amp; Testing with PDSA</td>
</tr>
<tr>
<td>February 28th</td>
<td>Measuring Changes: How will we know a change is an improvement?</td>
</tr>
<tr>
<td>March 14th</td>
<td>Using and Analyzing Run Charts</td>
</tr>
<tr>
<td>March 28th</td>
<td>Practical Strategies for Managing Improvement Projects</td>
</tr>
<tr>
<td>April 11th</td>
<td>Testing vs. Implementation</td>
</tr>
<tr>
<td>May 9th</td>
<td>Scale Up &amp; Spreading Successful Changes</td>
</tr>
<tr>
<td>June 6th</td>
<td>Sustainability: Making Your Improvements Stick</td>
</tr>
<tr>
<td>July 11th</td>
<td>Celebration!</td>
</tr>
<tr>
<td>Deciding on the Scale of a Test</td>
<td>Current Commitment within Your Organization</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>No Commitment</td>
</tr>
<tr>
<td><strong>Belief in effectiveness</strong></td>
<td></td>
</tr>
<tr>
<td>Low degree of belief that change idea will lead to improvement</td>
<td>Cost of failure large</td>
</tr>
<tr>
<td></td>
<td>Cost of failure small</td>
</tr>
<tr>
<td>High degree of belief that change idea will lead to improvement</td>
<td>Cost of failure large</td>
</tr>
<tr>
<td></td>
<td>Cost of failure small</td>
</tr>
</tbody>
</table>

What do these different levels look like?

What would a test look like that your team would have a low degree of belief that the change would work?

1. It’s a new idea
2. The test requires a workflow change
3. Your colleagues are resistant

Source: IHI Open School, QI 103
What do these different levels look like?

What would a test look like that your team would have a high degree of belief that the change would work?

1. The same process has worked well in another, similar location
2. Previous testing in your location has been successful

Source: IHI Open School, QI 103
What about running tests you think will fail?

“I did not fail one thousand times; I found one thousand ways how not to make a light bulb.”  

Thomas Edison

Is there a test you could run that you predict would fail?
Key Concepts for Spreading Improvement

Lauren Macy
Sequence for Improvement and Spread

Spreading a change in your community

Implementing a change

Make part of routine operations

Testing a change

Test under a variety of conditions

Developing a change

Theory and Prediction

Act

Plan

Study

Do
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

**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?
Innovation Series 2006

A Framework for Spread

From Local Improvements to System-Wide Change
“Pockets of excellence exist in our health care systems, but knowledge of these better ideas and practices often remains isolated and unknown to others. Too often these improvements remain unknown and unused by others within the organization.”

-- A Framework for Spread, IHI, 2006
Planning for Spread

• The responsibilities of leadership (including set-up)
• Identification of better ideas
• Communication
• Strengthen the social system
• Measurement and feedback
• Knowledge management
A Framework for Spread

Set-up
- Target population
- Adopter audiences
- Successful sites
- Key partners
- Initial spread strategy

Leadership
- Topic is a key strategic initiative
- Goals and incentives aligned
- Executive sponsor assigned
- Day-to-day managers identified

Social System
- Key messengers
- Communities
- Technical support
- Transition issues

Better Ideas
- Develop the case
- Describe the ideas

Knowledge Management

Measurement and Feedback

Communication Strategies (awareness & technical)
Leadership’s Role in Spread

• Send message that topic is a key strategic initiative
• Align goals and incentives – set a “spread” Aim
• Commit funding and staff time
• Assign responsibility at multiple levels
  – Executive to front line leaders
• Develop initial strategy to reach all sites
Better Ideas: Where do they come from?

• The ideas that benefit more adopters will be more likely to spread faster
• Consider the assembly and “packaging” of the ideas
Where did you find better ideas for your project?
A Framework for Spread

Leadership
- Topic is a key strategic initiative
- Goals and incentives aligned
- Executive sponsor assigned
- Day-to-day managers identified

Social System
- Key messengers
- Communities
- Technical support
- Transition issues

Set-up
- Target population
- Adopter audiences
- Successful sites
- Key partners
- Initial spread strategy

Better Ideas
- Develop the case
- Describe the ideas

Knowledge Management

Communication Strategies (awareness & technical)
Measurement and Feedback
Set Up

Once...
✓ Better ideas are documented
✓ Successful sites are identified

Then...
☐ Determine the target population
   – Who is your target audience? (Nurses, patients, technicians, etc.)

☐ Consider key partners
   – Who else will be impacted?

☐ Develop an initial spread strategy
   – Where to start? Why?
What do you know to be true about early adopters?
Early Adopters

• Often the key to successful change
• More socially integrated than innovators
• Thoughtful risk takers
• Often opinion leaders in the community
• Local missionary for change

The innovator finds or creates the idea, and the early adopter makes it happen!
A Framework for Spread

Leadership
- Topic is a key strategic initiative
  - Goals and incentives aligned
  - Executive sponsor assigned
  - Day-to-day managers identified

Social System
- Key messengers
- Communities
- Technical support
- Transition issues

Set-up
- Target population
- Adopter audiences
- Successful sites
- Key partners
- Initial spread strategy

Better Ideas
- Develop the case
- Describe the ideas

Measurement and Feedback

Knowledge Management

Communication Strategies (awareness & technical)
Understand the Social System

Five variables affecting the rate of adoption of new ideas (Rogers):

1. Attributes of the change
2. Type of adoption decision
3. Communication channels
4. Understanding of the social system
5. Promotion efforts (leadership)
Successful Spread Programs Include:

Attributes of an Idea that Facilitate Adoption:

- **Relative Advantage** (evidence from testing that idea is better)
- **Simple** (how easy to understand idea; less than 5 steps)
- **Trial-able** (how easy to test the idea)
- **Compatible** (reflects values of adopter, structure, and practices)
- **Observable** (how visible is the change and results)
Spread Fundamentals:
The Innovation-Decision Process

**Awareness:** Individual learns about the innovation – broad marketing and communication

**Persuasion:** Form a favorable attitude toward the innovation (Data Feedback)

**Decision:** Activities that lead to making a choice to adopt (Case studies, individualized communication)

**Implementation:** Put the innovation into use (Tools, resources and access to technical experience)

**Confirmation:** Seek reinforcement of the decision about innovation (Feedback from leaders, data on performance)

---

American Hospital Association

HRET
Poll: When your expectation is a change in behavior, What is your ‘go to’ communication strategy?

A. Flyers, Newsletters, videos, articles, posters
B. Letters, Cards,
C. Telephone, email, learning sets, modeling,
D. Road shows, conferences, exhibitions, mass meetings
E. One-to-one mentoring, shadowing
The WAY We **Communicate** is Important

SHARE INFORMATION

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

**Personal Touch**
- Letters
- Cards
- Postcards

**Interactive Activities**
- Telephone
- email
- Visits
- Seminars
- Learning sets
- Modeling

**Public Events**
- Road shows
- Fairs
- Conferences
- Exhibitions
- Mass meetings

SHAPE BEHAVIOR

**Face-to-face**
- One-to-one
- Mentoring
- Seconding
- Shadowing

*Adapted from Ashkenas (1995) by Sarah W. Fraser*
A Framework for Spread

Leadership
- Topic is a key strategic initiative
  - Goals and incentives aligned
  - Executive sponsor assigned
  - Day-to-day managers identified

Set-up
- Target population
- Adopter audiences
- Successful sites
- Key partners
- Initial spread strategy

Social System
- Key messengers
- Communities
- Technical support
- Transition issues

Better Ideas
- Develop the case
- Describe the ideas

Knowledge Management

Measurement and Feedback

Communication Strategies (awareness & technical)
• Two useful measures of spread:

1. Measures that demonstrate the **extent of the spread** of the recommended changes – *how far did we spread this?*

2. A set of measures that demonstrate the **outcome of the changes** implemented – *what impact did the spread have?*

What might you measure to know if your Spread has been successful?
A Framework for Spread

**Set-up**
- Target population
- Adopter audiences
- Successful sites
- Key partners
- Initial spread strategy

**Social System**
- Key messengers
- Communities
- Technical support
- Transition issues

**Leadership**
- Topic is a key strategic initiative
- Goals and incentives aligned
- Executive sponsor assigned
- Day-to-day managers identified

**Measurement and Feedback**

**Better Ideas**
- Develop the case
- Describe the ideas

**Communication Strategies (awareness & technical)**

**Knowledge Management**
• Do not underestimate the importance of KM
• Responsibility of the day-to-day manager
• Every encounter, event, and relationship
The IHI Seven "SPREADLY" Sins

(If you do these things, spread efforts will fail!)

1. Start with large pilots
2. Find one person willing to do it all
3. Expect vigilance and hard work to solve the problem
4. If a pilot works then spread the pilot unchanged
5. Require the person and team who drove the pilot to be responsible for system-wide spread
6. Look at process and outcome measures on a quarterly basis
7. Expect marked improvement in outcomes early on without attention to process reliability

http://www.ihi.org/resources/Pages/Tools/IHISevenSpreadlySins.aspx
Scaling Up Improvements
A framework for scaling up health interventions: lessons from large-scale improvement initiatives in Africa

Pierre M. Barker\textsuperscript{1,2*}, Amy Reid\textsuperscript{1} and Marie W. Schall\textsuperscript{1}

Abstract

Background: Scaling up complex health interventions to large populations is not a straightforward task. Without intentional, guided efforts to scale up, it can take many years for a new evidence-based intervention to be broadly implemented. For the past decade, researchers and implementers have developed models of scale-up that...
Core Elements Included in the Design:

• “Spread” – the leadership, social, and environmental factors that promote adoption and replication, with little modification, of an intervention within a health system

• “Scale-up” - overcoming the system/infrastructure issues that arise during efforts to scale-up implementation
Phases of Scale-up

• Introduction of a new evidence based intervention for system-wide scale-up
  OR
• An adaptation and scale-up of a successful innovation in one part of the system to the rest of the system
Phases of Scale-up: Set-up

- Answer key questions: clear aim, what is full scale, define scalable unit
- Analyze the existing programming strategies and protocols
- Assemble best practices, build change package (expert group)
- Select a baseline data collection method
Phases of Scale-up

- Administrative unit includes core activities and support systems that need to be replicated in the larger health system
- Intensively test local ideas, generate a set of context-sensitive interventions for the scale-up “change package”
The Scalable Unit

• The smallest representation of full scale that supports the patient journey, and includes components of a self-contained functional unit
  – (i.e., the people, processes and structures) that produces an output that is representative of the whole.

• Questions to consider: *Does it include all the elements that need scaling up? Is it representative enough of the whole system? Can it be scaled up?*

• Why build a scalable unit?
  – Generate change package
  – Test-bed the infrastructure capabilities
  – Generate will and interest for spread
Phases of Scale Up: Build Scalable Unit

- Best Practice exists
- New Scale-up Idea

Set-up → Build Scalable Unit → Test Scale-Up → Go to Full-Scale & Sustain

- Local Site Improvement
  - A unit?
  - A floor?
  - A shift?
  - A process?
  - A provider group?
For your project, what might be your scalable unit?
Phases of Scale Up: Test Scale-Up

Test and further develop preliminary change package in a broader range of contexts representing the predicted full-scale environment.
• Local Site Improvement
  – A unit?
  – A floor?
  – A shift?
Phases of Scale Up: Full Scale and Sustain

- Rapid deployment phase - well-tested set of interventions are deployed at large scale, adopted by frontline staff
- Focus on replication and sustainability

49
Adoption and Support Systems

Best Practice exists

New Scale-up Idea

Leadership, communication, social networks, culture of urgency and persistence

Learning systems, data systems, infrastructure for scale-up, human capacity for scale-up, capability for scale-up, sustainability

Phases of Scale-up

Adoption Mechanisms

Support Systems
Validate Support Structures

- **Learning system**
  - How people will be connected to learn improvements

- **Data systems**
  - Identify data, collection methods, method for review and accountability

- **Infrastructure**
  - Staffing, resources, communication systems, etc.

- **Capability for scale-up**
  - What improvement skills and training are needed

- **Sustainability**
  - Creating reliable systems (i.e., the train tracks)
Create Adoption Mechanisms

• Engage leadership
• Build a communication plan
• Identify and utilize existing networks and social systems
• Foster a culture of urgency and persistence
The Scale-Up Framework

Can you place each of your projects in this framework?

- **Best Practice exists**
  - Set-up
  - Build Scalable Unit
  - Test Scale-Up
  - Go to Full-Scale

- **New Scale-up Idea**

**Leadership, communication, social networks, culture of urgency and persistence**

**Learning systems, data systems, infrastructure for scale-up, human capacity for scale-up, capability for scale-up, sustainability**

Do you have the adoption and support systems necessary for scaling your projects?
Action Period Assignments

• Assignments:
  – QI 201: Lesson 1—How Change Spreads
  – QI 201: Lesson 2—Tactics for Spreading Change

• Suggested Tasks:
  – IHI’s Sustaining improvement white paper
  – Plan or have the conversation about how and where you will spread the improvements from your project

• Additional Material:
  – Seven Spreadly Sins
  – Is there a secret to sustaining improvements?
Reminders

• Next Office Hours is May 23rd at 11AM CT
  – We are looking for volunteers to share their work, questions, learnings with us!
  – Email Kathy Duncan at Kduncan@ihi.org

• Continue working on your Project Summary and share with Lauren (lancy@ihi.org) and/or Kathy for feedback.
  – Template is on the LMS page
  – Due Friday, June 8th!
Bring It Home

Mallory Bender, Program Manager, HRET
Continuing Education Credits

• Launch the evaluation link in the bottom left hand corner of your screen.

• If viewing as a group, each viewer will need to submit separately through the CE link.
THANK YOU!
EXAMPLE #1: 
NC CHILDREN’S HOSPITAL ACCESS TO SUB-SPECIALITY

1. Intended outcome at scale
   • Children in the state who need access to subspecialty care should have non-urgent access to UNC subspecialist within 3 weeks

2. Define what full scale looks like (your ambition)
   • All of the 13 sub-specialty clinics in the system, within 2 years
3. Describe the patient journey for the problem/gap you are trying to solve (start – end)

- **Starts** with primary care provider request
- **Involves** negotiation around best date for family
- **Includes** completion of clinic visit at arranged time
- **Ends** with timely communication of plan for management of child with primary care provider
4. Scalable unit: components of the smallest representation of a functional system that supports that patient journey

- Does it include all the elements that need scaling up?
- Is it representative enough of the whole system?
- Can it be scaled up?
EXAMPLE: REDUCING READMISSIONS

Intended outcome at scale:
30% reduction in avoidable rehospitalizations for a participating hospital within 18 months.

• Define what full scale looks like (your ambition):

  Patients discharged from a participating hospital will experience a well-coordinated and person-centered handover to the next care provider, including home health agencies, nursing homes, primary care practices and/or community-based agencies.

• Describe the patient journey for the problem/gap you are trying to solve (Start – end) and the pathways in-between):

  Starts with admission to the hospital; an assessment of post-acute medical, behavioral and social needs; a person-centered care plan; and ends with the coordinated hand-over of patient to the next care provider

• Scalable unit:

  Patients discharged from one hospital unit, the hospital care team, one home health agency, one nursing home, a primary care provider, and one or two community-based agencies.
PROCESS CHANGES TO ACHIEVE AN IDEAL TRANSITION FROM HOSPITAL/SNF TO HOME
EXAMPLE: HIV CARE FOR PREGNANT MOTHERS

• Intended outcome at scale:

  Decrease the transmission rate of HIV from mother to child in all health facilities in the public health care system across the country. Decrease HIV transmission rate to <5% in 3 years.

• Full scale, i.e., service units, and the population they serve:

  All 52 districts, including 350 hospitals and 4000 clinics
The patient journey for the problem/gap you are trying to solve

– Start: first antenatal care visit
– End: discontinue
Scalable unit:

The smallest representation of a functional system that supports the patient journey (may need steps to achieve full coverage within the scalable unit)

District is scalable unit
Full scale = 52 Districts
3 – 5 sub-districts in each District
Bring it Home

Mallory Bender, Program Manager, HRET
THANK YOU!