Strategies for Sustaining Improvements and Spread

Ruth S. Gubernick, MPH
QI Advisor

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I have no relevant financial relationships with the manufacturers of any commercial products and/or provider of commercial services discussed in this CME activity. I do not intend to discuss an unapproved/investigative use of a commercial product/device in their presentation.
Objective

- To enable you to apply current knowledge about holding and spreading improvements to your setting so that you...
  - can sustain and spread the improvements in this project
  - have skills to sustain and spread other improvements in future activities.
Breakthrough Series
(6-12 Months Time Frame)

Select Topic
Expert Meeting
Planning Group

<table>
<thead>
<tr>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prework</td>
</tr>
<tr>
<td>LS 1</td>
</tr>
<tr>
<td>LS 2</td>
</tr>
<tr>
<td>LS 3</td>
</tr>
</tbody>
</table>

How well do successful teams “hold the gains” after LS3?

Strategy:
- test
- implement
- hold the gain
- spread
2003 IHI Survey on “Holding the Gains”

Brief History - surveyed 33 successful teams from different collaboratives.

Objective: To determine how well successful teams involved in IHI’s Breakthrough Series Collaboratives (i.e. teams with gains to hold) have sustained their progress after the end of the final learning session.
Question: What is your current level of performance compared to the end of the final learning session for the key outcome measure?

<table>
<thead>
<tr>
<th>BTS Successful Teams</th>
<th>Much Better</th>
<th>Better</th>
<th>Same</th>
<th>Worse</th>
</tr>
</thead>
<tbody>
<tr>
<td>13 initial responders</td>
<td>3</td>
<td>8</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>20 follow-up responders</td>
<td>7</td>
<td>4</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>33 Total Teams</td>
<td>10 (30.3%)</td>
<td>12 (36.4%)</td>
<td>10 (30.3%)</td>
<td>1 (3.0%)</td>
</tr>
</tbody>
</table>

**Summary**

97% of teams at least “held the gains” from the BTS

67% of teams are now performing better than at end of BTS
### Additional Survey Findings

<table>
<thead>
<tr>
<th>Question</th>
<th>% Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are you still tracking your performance?</td>
<td>85%</td>
</tr>
<tr>
<td>Is there periodic reporting to leadership regarding performance?</td>
<td>88%</td>
</tr>
<tr>
<td>Were other residual benefits gained in the improvement process that took hold?</td>
<td>91%</td>
</tr>
<tr>
<td>Do you and your colleagues continue to use improvement methodology in your work?</td>
<td>91%</td>
</tr>
</tbody>
</table>
## Additional Survey Findings
*(strategies for holding the gains)*

<table>
<thead>
<tr>
<th>Question</th>
<th>%Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did the team begin to plan how to sustain its progress early on in the improvement process?</td>
<td>78%</td>
</tr>
<tr>
<td>Did you document the improvement process?</td>
<td>81%</td>
</tr>
<tr>
<td>Did you document the process of holding performance at your new level?</td>
<td>66%</td>
</tr>
<tr>
<td>Was a financial return on investment tied to the improvement that occurred?</td>
<td>16%</td>
</tr>
<tr>
<td>Has the team taken specific action in order to make the improvement process more permanent?</td>
<td>70%</td>
</tr>
</tbody>
</table>
### Additional Survey Findings (spread)

<table>
<thead>
<tr>
<th>Question</th>
<th>%Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has your organization pursued a spread plan?</td>
<td>97%</td>
</tr>
<tr>
<td>Was the same level of performance spread to other areas?</td>
<td>55%</td>
</tr>
</tbody>
</table>
General impressions

- The power of internal publicity (establish the high-water mark)
- Commitment to real sustainability versus “quick hits” (leadership, resources, ambition)
- Understanding that the end of the formal collaborative is only the beginning (and that success is only a step in the right direction)
Creating a New System

Improvement → Hold Gains → Spread
Table Exercise

1. Describe a specific change you have implemented during this project.

2. Assume your collaborative team members all retire:
   - Will this change continue to be used?
   - What could make your organization revert to the old system?
Strategies to Hold the Gains

I. During testing
II. During implementation
III. After implementation

Test  Implement  Hold Gains

Improvement
I. During Testing

- Test the changes under a wide range of conditions (robust design)
- Foolproof the new process/procedure
- Use technology where appropriate
Examples of Using a Wide Range of Conditions

- Set up two groups that have different conditions:
  - Group 1: experienced with screening and referral follow up
  - Group 2: inexperienced with screening tools
  - or
  - Group 1: full schedule
  - Group 2: open schedule
  - or
  - Group 1: Parent partners
  - Group 2: No parent partners
Test the changes with both groups

1. If the changes show improvement from both groups, the change is robust against the different conditions.

2. If the changes show improvement from one planned group but not in other, further test cycles are needed to better understand the relationship between the change being tested and the different conditions.
Repeated use of the cycle over a broad range of conditions builds a robust design

1. Early tests are simple designed to succeed
2. Test over a wide variety of conditions to identify weaknesses
3. Later tests designed to predict and prevent failures
Examples of fool proofing the new process/procedure

- Decrease the likelihood that a needed item is left off or undone - checklists
- Make it impossible to do the wrong thing or leave a vital task incomplete - toll booth
- Differentiate lookalikes - Use of colors or shapes
Examples of Using Technology

- Computer to edit and cross-check entries
- EMR - registry, reminders, recall, EBM
- Bar coding
- Alarms or reminders (Outlook)
Strategies to Hold the Gains

I. During testing
II. During implementation
III. After implementation
II. During Implementation

- Use multiple PDSA cycles to implement the change
- Collect data over time when conditions are expected to change
- Redesign support processes for new process
- Address the social aspects of change
Use Multiple PDSA Cycles to Implement

- Seek and use input from others, specially those affected by the change, during testing
- PDSA cycles useful for managing the implementation phase
- PDSA cycles could address parts of the implementation
Collect Data Over Time When Conditions Are Expected To Change

Baseline

Testing

Begin implementation on pilot unit

Successful Testing

Evidence of improvement during implementation
Redesign support processes

- Make changes to job descriptions

- Provide training on the new process
  - Chance to explain the “why” of the change
  - New skills may be needed
  - Include method of maintenance

- Map out the flow of the new process
## PROJECT TEAM WORKSHEET:
Redesign of Support Processes for Implementation of Change

**Change Implemented:**
Date: __________

<table>
<thead>
<tr>
<th>Cycle No.</th>
<th>Change Tested or Implemented</th>
<th>Lead</th>
<th>Feb 2011</th>
<th>March</th>
<th>April</th>
<th>May</th>
<th>June</th>
<th>July</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>7 14 21 28</td>
<td>7 14 21 28</td>
<td>4 11 18 25</td>
<td>2 9 16 23</td>
<td>30 6 13 20 27</td>
<td>4 11 18 25</td>
</tr>
</tbody>
</table>
Address the Social Aspects of Change

- Provide information on why the change is being made and how the change will effect people (WIFM)
- Show appreciation for people’s efforts
- Understand and address the causes of resistance
- Publicize the results and learning
Strategies to Hold the Gains

I. During testing

II. During implementation

III. After implementation
Hold the Gains

- Aim:
  Increase your “degree of belief” that the new system will be better than the old system in the future
III. After Implementation

- Readiness for “Holding the Gains”
- Success of collaborative team
- Intention to hold gains
- Organizational priority
- Leadership responsibility clear
- Appropriate Infrastructure in place
- Attention focus on measures/dash boards
### III. After Implementation

#### Some Inhibitors

<table>
<thead>
<tr>
<th>Old System</th>
<th>New System</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&quot;We met our goals&quot;</td>
</tr>
<tr>
<td></td>
<td>&quot;We assumed the improvement would hold&quot;</td>
</tr>
<tr>
<td></td>
<td>Other priorities took all resources away (not on senior management’s radar screen)</td>
</tr>
<tr>
<td></td>
<td>Did not learn how to hold the gains</td>
</tr>
<tr>
<td></td>
<td>Infrastructure not in place</td>
</tr>
</tbody>
</table>
Readiness for “Holding the Gains” After Implementation

- Success of collaborative team
- Intention to hold gains
- Organizational priority
- Leadership responsibility clear
Teams who hold the gains

- Use data and continue with run charts
- Continue to report and create accountability
- Have leadership’s support
- Meet periodically
- Train and orient, make policy
- Assign responsibility for key tasks
III. After Implementation

Key Components of Strategy

- Communication
- Infrastructure
- Design effective Control System
Communication

- Make aims, successes, learnings, and benefits to all stakeholders clear
- Document the improvement efforts
- Keep in contact with your team and other teams
Infrastructure

- Address training and development of new skills
- Make changes to job descriptions, policies, and procedures
- Assign ownership for improvement and maintenance work of the new process
- Ensure senior leaders hold responsibility to sustain changes & remove inhibitors that might allow slippage back to old system
Plan to standardize new process and verify conformance to the standard
Continue to use run charts and control charts to monitor measures for performance/outcomes
  - Outcome measures required
  - Process measures may be desirable as early warning signals
Creating a New System

 Improvement → Hold Gains → Spread

American College of Medical Genetics
Medical Genetics: Translating Genes into Health"
Spread:
Why & how do ideas spread?

- Diffusion characteristics:
  - See it
  - Try it
  - Is it:
    - Compatible?
    - Easy to use?
    - Better?
  - What supported it? Hindered it?
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 audience
- Key partners

Better Ideas
- Successful tests
- Positive attributes

Social System
- Adopter types
- Key messengers

Measurement and Feedback

Communication Strategies

Knowledge Management
Create a spread plan . . .

- Take your better idea(s)
- What
- Who
- How: show, tell, share story, data
- When:
- Next level:

- Share with team members
  - Group reflection
<table>
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<tr>
<th></th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
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<tbody>
<tr>
<td>North</td>
<td>A B C</td>
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<td></td>
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<tr>
<td>South</td>
<td>A B</td>
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<td>Central</td>
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<td></td>
<td>A B C</td>
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A=Discussion with Parents, B=Registry, C=Co-management
QUESTIONS??

Thank you!

Special thanks to Jane Taylor, Ed.D