
 Institute for
Healthcare
Improvement

This presenter has
nothing to disclose

Using Measurement for Learning and Strategies to Achieve Results

Gail Nielsen

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Session Objectives

Participants will be able to:

- Describe strategies for getting results in over burdened care delivery systems
- Apply strategies and tools for creating an action plan to coordinate and leverage all initiatives to improve care transitions
- Explain the recommended measurement strategy and rationale for using outcome, process and process measures to guide learning and assess progress



Achieving Desired Results



Execution of Strategic Quality Improvement Initiatives

1. Set priorities and breakthrough performance goals
2. Develop a portfolio of projects to support the goals
3. Deploy resources to the projects appropriate for the aim
4. Establish an oversight and learning system for achieving results



Leaders Demonstrate the Topic is a Key Strategic Initiative

- Include topic in strategic aims and plans
- Frequently reinforce need to close the gap
- Provide progress reports to the Board
- Calendar regular attention to spread work
- Assess and promote leadership commitment



Leaders Connect Initiatives

- Reducing avoidable readmissions
- Improving patient safety
- Coordinating care across the continuum
- Managing population health
- Building ACOs
- Improving patient experiences
- Posting data for transparency



Strategic Questions for Achieving System-Level Results

- Is reducing the hospitals readmission rate a strategic priority for the executive leaders at your hospital? Why?
- Do stakeholders know your hospitals readmission rate for patients with HF and AMI?
- What is your understanding of the problem?
- What will help drive success in your quality improvement initiatives?



Strategic Questions for Achieving System-Level Results (cont.)

- Have you declared your improvement goals?
- What projects will help you achieve your goals?
- Do you have the capability to make improvements?
- How will you provide oversight for the improvement projects, learn from the work, and spread successes?



Table Discussions

What actions have you taken on these strategic questions?

What are the hardest issues?




Infrastructure and Strategy to Achieve Results

1. CEO selects an Executive Sponsor and a Day-to-Day Leader to lead the improvement work
2. Executive Sponsor convenes a Cross-Continuum Improvement Team
3. Team identifies opportunities using:
 - In-depth review of the last five readmissions
 - 30-day all-cause readmission rates
 - Patient experience data on communications and discharge preparations
4. Select one or two pilot units or a pilot population
5. Develop an aim statement



Process Improvement Project Charter

AIM:	Timeline:
Current State/Background:	Team
Focus/Boundaries:	Senior Leader:
Measures:	Team Leader:
	Co-Leader:
	Improvement Advisor:
	Team Members:
	Consultants:



Using Charters to Drive Results

- Signal strategic work across the organization and attract resources
- Frame and enable strategic initiatives
- Keep the team focused through regular review of the aim, timeline, and measures



Table Discussion

What already works well
in your experience
to drive results?



Testing Changes and Designing Reliable Processes

- Focus first on one key change; identify opportunities
- Conduct iterative PDSA tests of change (PDSAs)
- Specify the who, what, when, where and how for the process (standard work)
- Understand common failures to redesign the process to eliminate those failures
- Use process measures to assess your progress over time (aim is to achieve > 90% reliability)
- Implement and spread successful changes



Observe the Actual Process

- Go see the real process
- Check assumptions: what really happens compared to what is described?
 - Observe and ask “Why?” five times
 - Get to the root causes of current performance
- Identify process failures you can change
- Discuss changes that your team would like to test



Build Will for Observations

Small sample – “Go Ask 5”

- Pick a process you want reliable that has been taught to frontline staff
- Review what was taught
- Ask 5 people who do the process to describe
 - Why the process is important
 - How they do the process
- How many of 5 got it right?
 - 4 of 5 means only 80% reliability is possible



API

Associates in Process Improvement

Model for Improvement

What are we trying to accomplish?

How will we know that a change is an improvement?

What changes can we make that will result in improvement?

ACT

PLAN

STUDY


DO

the IMPROVEMENT GUIDE

A PRACTICAL APPROACH TO ENHANCING ORGANIZATIONAL PERFORMANCE

ARON K. LAMBERT, RONALD W. BAKER, KATHY H. BAKER, THOMAS M. BAKER, LUCY H. BAKER, LUCY H. BAKER

For more information, please visit the IHI Open School Course - QI 102: The Model for Improvement: Your Engine for Change at www.IHI.org



Plan-Do-Study-Act
(PDSA) Cycle
[action-oriented learning]

Act

Plan

Study


Do

- Determine if change(s) should be made
- Plan for next test
- Act to hold gains, continue to improve

- Plan 1 small change to test
- Predict what will happen
- Decide on data to evaluate test

- Analyze the data
- Compare results to predictions
- Summarize what was learned

- Run the test
- Document problems and observations
- Begin data analysis

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PDSA Worksheet	Team Name: _____ Cycle start date: _____ Cycle end date: _____
<p>PLAN: Describe the change you are testing and state the question you want this test to answer (If I do x will y happen?) What do you predict the result will be? What measure will you use to learn if this test is successful or has promise? Plan for change or test: who, what, when, where Data collection plan: who, what, when, where</p>	
<p>DO: Report what happened when you carried out the test. Describe observations, findings, problems encountered, special circumstances.</p>	
<p>STUDY: Compare your results to your predictions. What did you learn? Any surprises?</p>	
<p>ACT: Modifications or refinements for the next cycle; what will you do next?</p>	

Table Work

- Work in small groups to:
 - Develop a test of change using the PDSA worksheet
 - Write the plan only
- Faculty available for consults
- Report out > one or two volunteer(s) will share a plan for a test of change

Suggestions for Conducting PDSA Cycles

- Keep tests small, be specific
- Learning grows when each test of change informs the next
- Refine the next test with learning from the last test
- Expand test conditions to determine whether a change will work at different times e.g.,
 - day and night shifts, weekends, holidays, when the unit is adequately staffed, during staffing challenges

For more information please visit the "How to Improve" link within the Knowledge Center at www.ihl.org.



Model for Improvement Resources

Two excellent resources for learning (or refreshing your memory) about the Model for Improvement and how to run PDSA cycles:

- **On-Demand Video: [free]**
 - For the video, please visit On Demand: An Introduction to the Model for Improvement, listed under the Virtual Program section at www.ihl.org
- **Open School Module: [free for students]**
 - For the module, please visit QI 102: The Model for Improvement: Your Engine for Change, listed under the Open School course list at www.ihl.org



Influencing Your Team: The Value of Small Tests of Change

“Go slow to go fast!”

- The more series of testing cycles teams complete, the more teams learn
- The more teams build will through learning, the more they are capable of making improvements
- If you are not abandoning some tests, you are not testing enough
- There is a lot to learn from a failed test

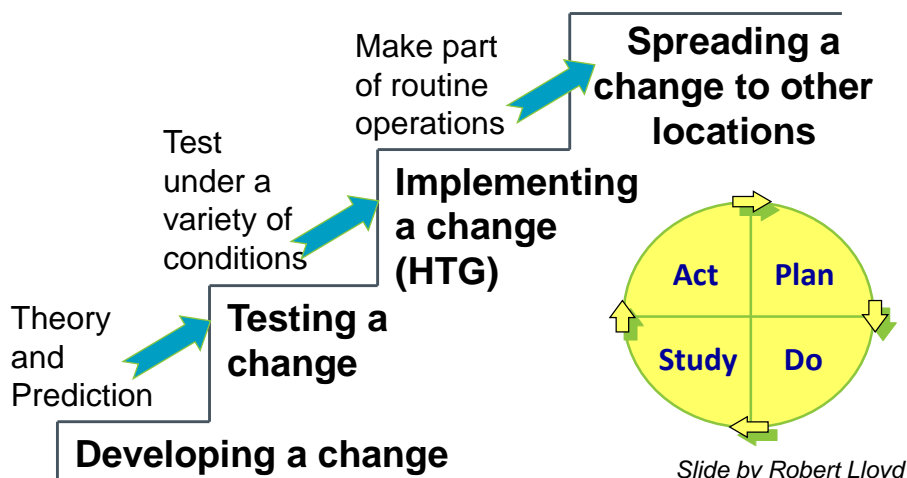


Determining the Pace of Spread of Innovations

Current Situation		Resistant	Indifferent	Ready
Low Confidence that current change idea will lead to Improvement	Cost of failure large	<u>Very Small Scale Test</u>	<u>Very Small Scale Test</u>	<u>Very Small Scale Test</u>
	Cost of failure small	Very Small Scale Test	Very Small Scale Test	Small Scale Test
High Confidence that current 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



Sequence for Improvement and Spread



What processes are done reliably
in your organization?

(e.g., interventions that are done
consistently 90% to 95% of the time)

Testing v. Implementation

- **Testing** – Trying and adapting existing knowledge on small scale. Learning what works in your system.
- **Implementation** – Making this change a part of the day-to-day operation of the system
 - Would the change persist even if its champion were to leave the organization?



Implementation

- The change is **a specified part of daily work** - need to develop all support infrastructure to maintain change
- High **expectation** to see improvement (no failures; but eagerness to continue testing if needed)
- Increased scope will lead to increased **resistance** (Value of evidence from successful tests)



Implementing Process Changes

- Develop supportive infrastructure including assigned accountability
 - Declared high expectation to see improvement
 - Would the change persist if its champion were assigned to a different project?
- Decrease resistance as scope of spread increases
 - Stories of patients build will to help
 - Spread stories of value of successful tests



Implementation Requires . . .

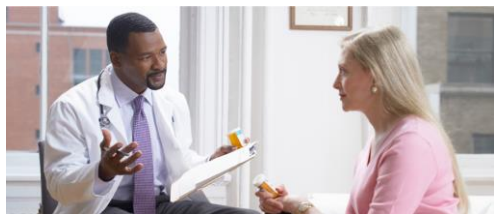
- PDSA cycles testing implementation steps
- Established buy-in & consensus building
- Communication
- Training
- Policies & Procedure



Reliable Use of Teach-back

Making it easier to train everyone in all settings

- Free, online, interactive training for hospitals, home care and office practices
- For individuals, their managers and coaches



UnityPoint Health

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www.teachbacktraining.org



Coaching to Always Use Teach-back



Giving staff knowledge on teach-back and its effectiveness is important. But, to change from a long-standing patient education habit of asking yes/no questions like “Do you have any questions?” to one of using teach-back to confirm understanding via the patient’s own words, takes coaching.

Tools and Videos

- [Coaching Tips \(PDF\)](#)
- [Observation Tool \(PDF\)](#)
- [Conviction and Confidence Scale \(PDF\)](#)
- [Making Teach-back an Always Event \(PDF\)](#)
- [Manager Perspective on Coaching \(VIDEO\)](#)
- [Coaching Keys \(VIDEO\)](#)
- [Coaching Overview \(VIDEO\)](#)
- [Coaching: Overcoming Obstacles \(VIDEO\)](#)
- [Coaching a Nurse to Always Use Teach-back \(VIDEO\)](#)
- [Coaching a Physician to Always Use Teach-back \(VIDEO\)](#)



UnityPoint Health

www.teachbacktraining.org



Help Mid-level Managers Coach

- Honor the current work through observation
- Understand that change is hard and uncomfortable
- Resistance to change is natural; comes from fear of change
- Promote new skill development
- Build confidence to integrate the new habit into work patterns
- Build reliability
- Manage relapses



www.teachbacktraining.org



Specification of Work

- Allows less than perfect design in the initial specifications (no need for a plan for every possible contingency)
- No need to spend months coming up with the perfect design
- Assumes that the observation of failures in the process will lead to further redesign of the process
- Build knowledge of how to design the process over time



Teaching New Processes

OLD WAY

- Teach & leave
- Static slides
- During busy staff meetings
- Teach in remote conference rooms

NEW WAY (TWI)

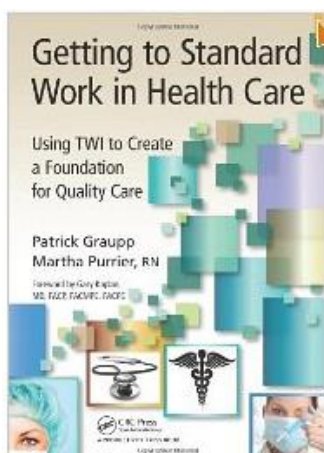
- Test to reliable process
- Specify the process
- Design education with help aids
- Teach test group in workplace
- Stick around to see if they can do it as taught
- If needed, redesign education, process or both
- Teach the next group, can they do it as taught?

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How do people learn their jobs?

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1. Identify key jobs
2. Break down by teacher**
 - “Know what”
 - “Know how”
 - “Know why”
3. Teach one-on-one
4. “If the student hasn’t learned, the teacher hasn’t taught.”

“the way to get a person to quickly remember to do a job correctly, safely and conscientiously.” p. 73

**supervisor!

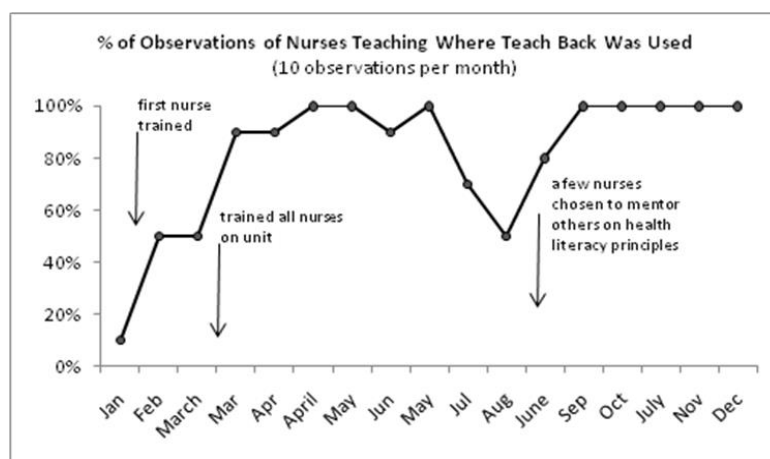


Using Process Measures to Evaluate the Reliability of Processes

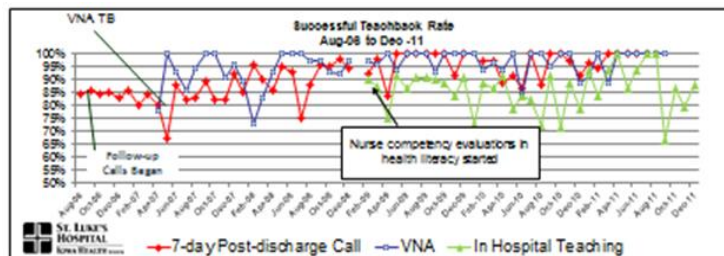
- Process measures tell us whether the specific changes we are making are working as planned.
- When displayed in annotated run charts, the data gives us feedback on the relationship between our theory (the changes we are making) and the outcomes for our patients (readmissions and overall experience).



Example of an annotated run chart: Process Measure for Using Teach Back



Improving Teaching Across Settings



- Teaching in hospital, in the home and post-hospital call on day 7
- Using the same teaching materials and Teach Back questions.
- As staff became more competent and used Teach Back more reliably, more patients could retain more vital information.
- Least retention is seen in the hospital; reinforcement helps.



Using Measures to Evaluate Impact and Progress

- **Outcome measures** directly relate to the aim of an initiative – improving care transitions and reducing readmissions
- **Process measures** reflect how processes in the work get done around key changes
- **Balancing measures** help ensure that we are not causing detriment to another outcome or part of the system



V. System of Measures

Outcome Measures: Readmissions				
Measure	Description	Numerator	Denominator	Data Collection Strategy
30-Day All-Cause Readmissions	Percent of discharges with readmission for any cause within 30 days	Number of discharges with readmission for any cause within 30 days of discharge Exclusion: Planned readmissions (e.g., chemotherapy schedule, rehab, planned surgery)	The number of discharges in the month Exclusions: Labor and Delivery, transfers to another acute care hospital, patients who die before discharge	Write a report to run no sooner than 31 days <u>after</u> the end of the measurement month. This report will: 1a. Pull all the discharges in the measurement month 1b. Remove exclusions (transfers to other acute care, deceased before discharge, Labor and Delivery) The number of discharges after you remove the exclusions is your denominator (or "index discharges"). 2a. Through the unique medical record identifier, identify those (index) discharges that resulted in readmissions within 30 days of the discharge 2b. Remove exclusions (planned readmissions like chemotherapy, radiation, rehab, planned surgery, renal dialysis) The number of (index) discharges that resulted in readmissions within 30 days will be your numerator.
Readmissions Count	Number of readmissions (numerator for % readmissions)	N/A	N/A	Use the numerator specified in the measure above
30-Day All-Cause Readmissions for a Specific Clinical Condition or pilot population	Percent of discharges with a specific clinical condition or pilot population readmitted for any cause within 30 days of discharge	Number of discharges with a specific clinical condition or pilot population readmitted for any cause within 30 days of discharge Exclusion: Planned readmissions (e.g., chemotherapy schedule, rehab, planned surgery)	Number of discharges in the month with the specific clinical condition or pilot population Exclusions: Labor and Delivery, transfers to another acute care hospital, patients who die before discharge	See above

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V. System of Measures

Outcome Measures: Patient Experience				
Measure	Description	Numerator	Denominator	Data Collection Strategy
HCAHPS Discharge Question 19	"Did hospital staff talk with you about whether you would have the help you needed when you left the hospital?"	Number patients surveyed in the month who answered, "yes"	Number of surveys completed in the month for the hospital with an answer for this question	Use your organization's HCAHPS data Note that the CTM 3 (questions 23-25) have been newly incorporated into HCAHPS. CMS has not yet indicated how they plan to analyze this data.
HCAHPS Discharge Question 20	"Did you get information in writing about what symptoms or health problems to look out for after you left the hospital?"	Number patients surveyed in the month who answered, "yes"	Number of surveys completed in the month for the hospital with an answer for this question	
HCAHPS Care Transitions Measures Question 23 (adopted from CTM3 question)	"During this hospital stay, staff took my preferences and those of my family or caregiver into account in deciding what my health care needs would be when I left."	Number patients surveyed in the month who answered agree or strongly agree	Number of surveys completed in the month for the hospital with an answer for this question	
HCAHPS Care Transitions Measures Question 24 (adopted from CTM3 question)	"When I left the hospital, I had a good understanding of the things I was responsible for in managing my health."	Number patients surveyed in the month who answered agree or strongly agree	Number of surveys completed in the month for the hospital with an answer for this question	
HCAHPS Care Transitions Measures Question 25 (adopted from CTM3 question)	"When I left the hospital, I clearly understood the purpose for taking each of my medications."	Number patients surveyed in the month who answered agree or strongly agree	Number of surveys completed in the month for the hospital with an answer for this question (excluding those with the response "I was not given any medication when I left the hospital")	

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V. System of Measures

Process Measures				
Measure	Description	Numerator	Denominator	Data Collection Strategy
Patient and Family Involvement in Identifying Post-Discharge Needs	Percent of admissions where patients and family caregivers are included in identifying post-discharge needs Guidance: In order to determine whether patients and families were involved in discharge planning, you will need to define a process you want your staff to use. See change 1A for ideas.	Number of admissions in sample where patients and families were included in identifying post-discharge needs	Number of admissions in the sample	<ul style="list-style-type: none"> Option 1: Review charts of 10 to 20 patients discharged from the pilot unit: 2 to 5 per week for 4 weeks a month Option 2: Build data collection into discharge process – i.e., at discharge, review record to determine if patients and families were included in identifying post-discharge needs
Patient Teach Back	Percent of observations of nurses teaching patient or other identified learner where Teach Back is used to assess understanding This data can be measured for other disciplines (e.g., physician, dietary, pharmacy, etc.) as necessary.	Number of observations of nurses where Teach Back is used to assess understanding	Number of observations of nurses teaching	Observe 10 to 20 teaching opportunities: 2 to 5 per week for 4 weeks a month until the process appears effective and reliable.
Teach Back Communication	Percent of discharges where patient/family understanding of Teach Back is documented in the electronic medical record	Number of discharges where patient/family understanding of Teach Back is documented in the electronic medical record	Number of discharges in the sample	Retrieve from the Electronic Record.

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V. System of Measures

Process Measures				
Measure	Description	Numerator	Denominator	Data Collection Strategy
Timely Handover Communication	Percent of time critical information is transmitted at the time of discharge to the next care site or person continuing care (e.g., home health, long-term care facility, rehab care, physician office, or carer at home) Guidance: In order to determine whether critical information has been transmitted you will need to know what you mean by critical information. We recommend you work collaboratively with your receivers to make this determination. See change 4B for ideas.	Number of discharges in the sample where critical information is transmitted at the time of discharge to the next care site or person continuing care (e.g., home health, long-term care facility, rehab care, physician office, or carer at home)	Number of discharges in the sample	<ul style="list-style-type: none"> Option 1: Review charts of 10 to 20 patients discharged from the pilot unit: 2 to 5 per week for 4 weeks a month Option 2: Build data collection into discharge process – for example, collect copies of the transfer forms and count them up, or keep a tally sheet
Patient-Friendly Post-Hospital Care Plan	Percent of patients discharged who receive a customized post-hospital care plan written in patient-friendly language at the time of discharge	Number of patients in the sample who receive a customized post-hospital care plan written in patient-friendly language at the time of discharge	Number of patients in the sample	<ul style="list-style-type: none"> Option 1: Review charts of 10 to 20 patients discharged from the pilot unit: 2 to 5 per week for 4 weeks a month Option 2: Build data collection into discharge process – for example collect copies of the care plans and count them up, or keep a tally sheet.

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V. System of Measures

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Process Measures				
Measure	Description	Numerator	Denominator	Data Collection Strategy
Post-Hospital Care Follow-up	Percent of patients discharged who had a follow-up visit <u>scheduled</u> before being discharged in accordance with their level of assessed risk	Number of patients in the sample who had a follow-up visit <u>scheduled</u> before being discharged in accordance with their level of assessed risk	Number of patients in the sample	<ul style="list-style-type: none"> Option 1: Review charts of 10 to 20 patients discharged from the pilot unit: 2 to 5 per week for 4 weeks a month Option 2: Build data collection into discharge process – i.e., at discharge, review record to determine if appointments were made in accordance with risk assessment

V. System of Measures

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Balancing Measures				
Measure	Description	Numerator	Denominator	Data Collection Strategy
30-Day All-Cause Readmission to Observation Status	Percent of patients readmitted to observation status within 30 days of a hospital discharge	Number of discharges with readmission to observation status for any cause within 30 days of discharge	The number of discharges in the month. Exclusions: Labor and Delivery, transfers to another acute care hospital, patients who die before discharge	<p>Write a report to run no sooner than 31 days <u>after</u> the <u>end</u> of the measurement month. This report will:</p> <ol style="list-style-type: none"> 1a. Pull all the discharges in the measurement month 1b. Remove exclusions (transfers to other acute care, deceased before discharge, Labor and Delivery) <p>The number of discharges after you remove the exclusions is your denominator (or "index discharges").</p> <ol style="list-style-type: none"> 2. Through the unique medical record identifier, identify those (index) discharges that resulted in admission to observation status within 30 days of the discharge <p>The number of (index) discharges that resulted in observation status admission within 30 days will be your numerator.</p>
Count of Observation Admissions within 30 Days of Hospital Discharge	Number of patients admitted to observation status within 30 days of a hospital discharge	Number of discharges with readmission to observation status for any cause within 30 days of discharge	NA	Use the numerator specified in the measure above

V. System of Measures

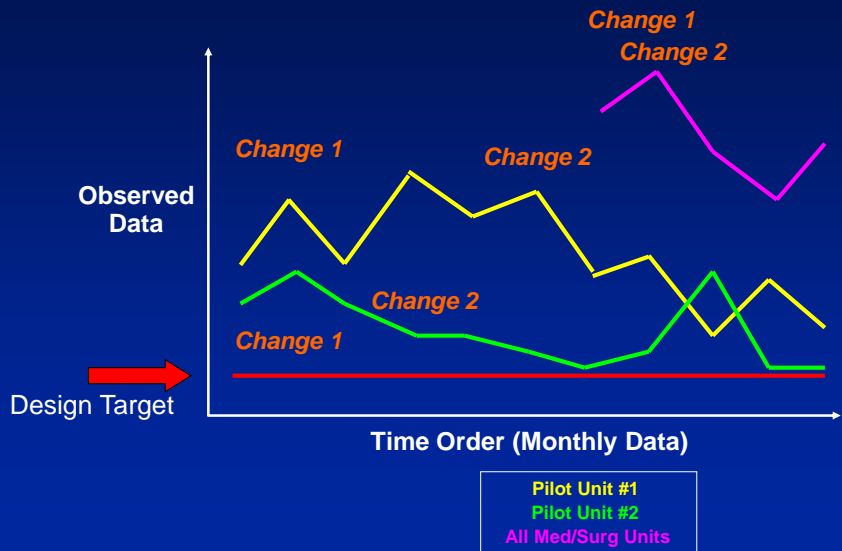
Balancing Measures				
Measure	Description	Numerator	Denominator	Data Collection Strategy
Emergency Room Visits within 30 Days of Hospital Discharge	Percentage of patients who have ED Visit within 30 days of hospital discharge	Number of patients with ED visit within 30 days of hospital discharge	The number of discharges in the month. Exclusions: Labor and Delivery, transfers to another acute care hospital, patients who die before discharge	Write a report to run no sooner than 31 days <u>after</u> the <u>end</u> of the measurement month. This report will: 1a. Pull all the discharges in the measurement month. 1b. Remove exclusions (transfers to other acute care, deceased before discharge, Labor and Delivery). The number of discharges after you remove the exclusions is your denominator (or "index discharges"). 2. Through the unique medical record identifier, identify those (index) discharges that resulted in an ER Visit within 30 days of the discharge. The number of (index) discharges that resulted in ER visits within 30 days will be your numerator.

Spreading Improvements

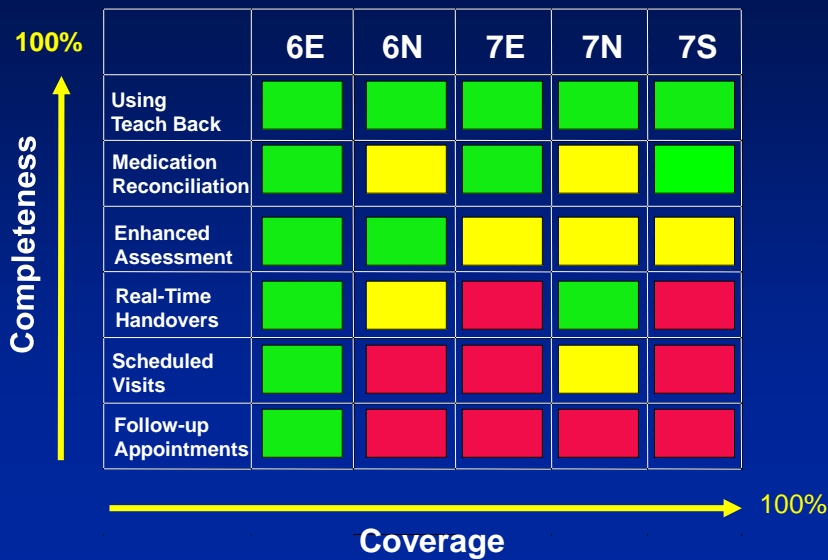
- Once local improvements show results in terms of outcome, process and balancing measures, spread to additional locations or units is possible
- Spread can be for success in:
 - The complete package of changes or;
 - Individual changes, such as Teach Back

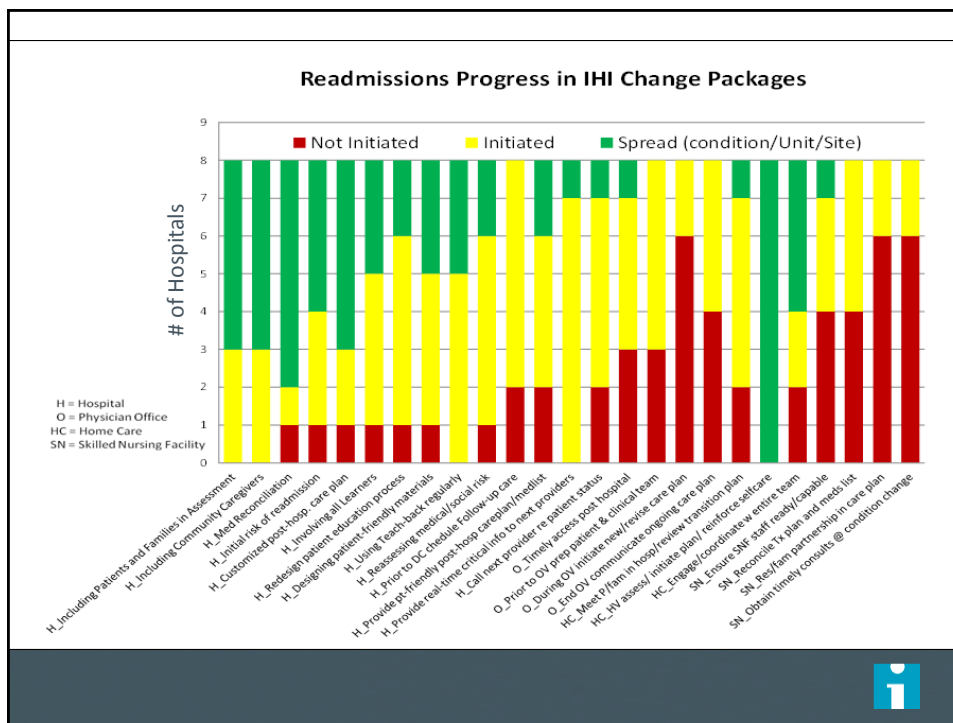


Evaluating Results and Spreading Successes



Getting to Every Patient Every Time





Reflections

- What ideas did you hear that you might apply?
- What was most exciting for you?
- What was confusing?
- Need more information about....?