Session 4: Six Sigma

Dennis Deas
Senior Director Clinical and Operational Improvement Implementation Team,
The Center for Health System Performance, Care Management Institute,
Kaiser Permanente

Ryan Stanley
Director of Performance Excellence for the Kaiser Permanente Fresno Service Area

Celia Ryan
Area Quality Leader for the Fresno Kaiser Permanente Hospital and Health Plan

Tuesday, November 6, 2012

Today’s presenters have nothing to disclose

WebEx Quick Reference

- Welcome to today’s session!
- Please use Chat to “All Participants” for questions
- For technology issues only, please Chat to “Host”
- WebEx Technical Support: 866-569-3239
- Dial-in Info: Communicate / Join Teleconference (in menu)
When Chatting…

Please send your message to
All Participants

If you’re joining with colleagues, please type the organization you represent & the number of people joining from your organization.

*Example: Midwest Health Alliance – 3*

Please type your name and the organization you represent in the chat box!

*Example: Chris Jones, Midwest Health Alliance*
Today's Faculty

**Dennis Deas** is a Senior Director for Kaiser Permanente's Department of Care and Service Quality, responsible for leading the Performance Improvement implementation throughout the company. He has over 25 years of diversified experience in performance, process improvement and business transformation. He’s been with KP for 7 years. He has worked as a Senior Manager, Principal, and Director for several large external consulting firms including Cap Gemini, Ernst & Young, Gemini Consulting, and Accenture. Dennis served in the US Air Force as a Management Engineer for 20 years. He has a MBA in Business Administration, Master Black Belt in Lean Six Sigma, and is Accelerated Implementation Methodology (AIM) certified.
Today’s Faculty

Ryan Stanley is the Director of Performance Excellence for the Kaiser Permanente Fresno Service Area and is responsible for facilitating the development, management, and implementation of the medical centers performance improvement strategy. His previous healthcare experience is as the Director of Performance Excellence for the Kaiser Permanente Central Valley Area and as a Lean Six Sigma Master Black Belt for both the Providence Healthcare System in Los Angeles and the Adventist Healthcare System Central Valley Network. He holds a B.A. from the University of California, Los Angeles and an M.B.A. from Pepperdine University. He is a certified Lean Six Sigma Master Black Belt whose aspiration is to become an influential leader by motivating others in performance improvement work to promote quality, patient safety, and satisfaction.

Today’s Faculty

Celia Ryan has been the Area Quality Leader for the Fresno Kaiser Permanente Hospital and Health Plan for the past two years. In this position she has responsibility for strategic planning and oversight of quality; patient safety and risk management; and accreditation, regulation, and licensing for the Fresno Service Area, which includes a 169 bed hospital and several medical offices. During this time, she has taken a lead role in improving the safety culture at the medical center. She has partnered with The Permanente Medical Group in implementing a program to evaluate and address the causes and outcomes of disruptive behavior. She has also been instrumental in creating a Patient Safety Advisory Committee to incorporate the voice of the patient in discussions related to the design of safe care.

She is a Registered Nurse who started her career in critical care. She assisted in the creation of a hospital based home health company, which included home care, hospice, infusion, and DME. She has held management and leadership positions in acute care for the past 31 years.
Agenda

- Welcome
- Session 3 ‘Homework’ Review
  - Jill Duncan, Director, IHI
- Six Sigma
  - Dennis Deas, Senior Director Clinical and Operational Improvement Implementation Team, The Center for Health System Performance, Care Management Institute, Kaiser Permanente
- Safe Culture
  - Ryan Stanley, Director of Performance Excellence
  - Celia Ryan, Area Quality Leader
- Resources & Next Steps
  - Jill Duncan, Director, IHI

Expedition Objectives
Participants will be able to . . .

- **Describe** the similarities and differences among Lean, Six Sigma (which includes DMAIC) and the Model for Improvement.
- **Determine** which approach(es) are most appropriate for their organization.
- **Initiate** a plan to build an integrated quality improvement strategy.
- **Define** a customized approach for crafting projects and hardwiring discipline into improvement processes across participant’s organization.
- **Plan** small tests of change they can test throughout the Expedition.
Session 3 Homework Review

Assess the behaviors in your organization

‘Tweet’ and share the most surprising thing you learn from the self-assessment exercise

Send ‘Tweet-like’ summary of 140 characters or less to Jill at jduncan@ihi.org by Friday, November 2nd

Homework Example
I love this tool! Connecting behavioral indicators with outcome measures is a great way to get a richer picture of an organization's opportunities for improvement. For my organization, there were not a lot of surprises as we are a very young organization as far as a systematic approach to improvement.

Christianna B. Orvis
Director of Education
Gulf Coast Medical Center

There were no "surprises", but this is another excellent tool to guide the organization toward a culture of continual improvement. This tool provides more detail on the types of behaviors we are seeking for our managers and leaders. It will be a very useful self-assessment for our staff, helping them rethink their role in the organization and what types of behaviors we are seeking. The close alignment of this tool with the Caldwell Butler consulting approach introduced into our organization approximately 5 months ago will make this a useful tool for us. While in many areas we are organizationally in our infancy, we are heading in the right direction.

Wendy Manners

I like the ideas and points this assessment tool brings forward however there are a few barriers to some of the points. For example, one point was that "improvement ideas are processed quickly (within 2 weeks)", I am all for this however, when a system puts an expectation on the leadership to take on multiple quality improvement projects (3-5) at once, it’s very difficult to focus on one and thoroughly see it through within a reasonable time. This point also challenges the point that "Leaders and managers follow standard work and are routinely seen out of the offices and in the work areas". I love doing this but it’s difficult to position yourself within the workflow when you are saturated with meetings so that the quality improvement projects get accomplished.

I guess the key is for upper management to recognize this and set reasonable goals and timelines so that mid-management isn’t so saturated. Another help is to run efficient meetings since our time is so valuable.

Nicole Eddins, PharmD
Director of Pharmacy
Mason General Hospital
Shelton, WA
Poll Questions

1. Have you had previous training related to Six Sigma?

2. Do you have colleagues on your team(s) that bring Six Sigma expertise to your current improvement strategy?

Go to Poll

Six Sigma
Dennis Deas
History of Six Sigma & Lean

F. Taylor - The Principles of Scientific Management (1911)

Toyoda Family

Taiichi Ohno 1950-1980

Toyota Production System

Womack & Jones

Reference: Wortman 2001

F. Taylor - The Principles of Scientific Management (1911)

Toyoda Family

Taiichi Ohno 1950-1980

Toyota Production System

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Reference: Wortman 2001

Six Sigma, Lean, MFI

Six Sigma

Define

Measure

Analyze

Improve

Control

Lean

Identify Value

Understand Value Stream

Eliminate Waste

Establish Flow

Enable Pull

Pursue Perfection

Model for Improvement

What are we trying to accomplish?

How will we know that a change is an improvement?

What change can we make that will result in improvement?

Act

Plan

Study

Do

Source: The Improvement Guide, AFI
KP’s Blended PI Model for Care Delivery

- What are we trying to accomplish?
- How will we know that change is an improvement?
- What change can we make that will result in improvement?

Developed by Associates in Process Improvement

<table>
<thead>
<tr>
<th>Assess</th>
<th>Develop/Identify Change</th>
<th>Test</th>
<th>Implement/Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process Map</td>
<td>Voice of the Customer</td>
<td></td>
<td>Training</td>
</tr>
<tr>
<td>Baseline Data</td>
<td>Standardize &amp; Simplify</td>
<td></td>
<td>Policy &amp; Procedures</td>
</tr>
<tr>
<td>Cause &amp; Effect</td>
<td>Reduce Waste</td>
<td></td>
<td>Spread Plan</td>
</tr>
<tr>
<td>5 Whys</td>
<td>Apply evidence based practice</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Performance Improvement Methodology Assignment

- Recognize a Problem
  - Is the Solution Known?
    - Y - Just Do It
      - Obvious root cause, obvious solution
    - N
  - Is Root Cause Known?
    - Y - Rapid Improvement Event
      - Obvious root cause, non-data driven solution
    - N
  - Is it a New Product or Process?
    - N - IDEO Innovation
      - Or DFSS
    - Y
  - Does a Process Management System Exist?
    - N
  - Is Cycle Time Reduction the Objective?
    - N
  - Is the Bottleneck Driven?
    - Y - Lean
    - N

Six Sigma
We try to start all Improvement Initiatives with a Strategic Driver Diagram to see the System

Then determine which initiatives will be JDI, MFI, Lean, & Six Sigma

Strategy for Six Sigma (DMAIC)

• Relentless focus on the customer

• The idea is not just to make improvements, but to ensure the improvements address critical quality issues—as seen by the customer—and are linked to our business goals. This is done in two ways:

• First, determine what the customer wants (VOC—voice of the customer), the motivation behind it, and how we might satisfy their needs. This is harder than it may sound because the customer’s needs/desires may evolve over time.

• Second, prioritize and quantify improvement opportunities by linking them with the business priorities (organizational goals).

• And to take it a step further, if we quantify the financial impact on our business strategy, we will make better decisions about how we will expend our limited time and resource in proper prioritization to address the efforts with the most impact first.
What’s Different in DMAIC

DMAIC
- Driven by customer
- Prevents defects
- Improves quality & bottom line
- Concentrates on customer requirements
- High on methodology & data
- Organization-wide initiative
- Design based on customer needs
- Design for variation – robust design

Traditional approach
- Driven internally
- Fixes defects
- Improves quality
- Concentrates on product/service
- High on theory
- Operations focus
- Design and see where it fits
- Design for target values

What’s in it for me?

- Solve the right problem effectively
- Expand and strengthen customer relationships
- Improve customer confidence in products and services
- Increase organizational competitiveness
- Increase quality, efficiency and productivity
- Transition from crisis mode to predictive, preventative, proactive mode
- Represents 3.4 defects per million opportunities for defects (99.9997% good)
- Great for reducing variation, removing defects, and improving quality within critical processes
What Should be Done First

- What are we trying to accomplish?
  - A succinct description of the project goal and objectives
- How will we know if a change is an improvement?
  - Identification of outcome, process and balancing measures

DMAIC Roadmap

- DMAIC focuses on a product or process that is in existence but is not meeting customer specification or is not performing adequately.
- Define
- Measure
- Analyze
- Improve
- Control
Process Improvement Steps

“When I was speaking to the National Governors Association, I shared these exact charts with them and they interrupted me with applause. They applauded because in each case, we obviously identified a problem, measured the problem, focused on the sources of the problem, and then took steps together as a team of caregivers to fix the problem. Data was an essential first step in that process”. George Halvorson, Sept. 07

Define – What are we trying to accomplish?

- Define Customers and Requirements (VOC, CTQs)
- Develop the problem/opportunity statement, scope (in/out of frame), Goals (SMART), objectives and Benefits, timeline (Charter)
- Stakeholder management
- Identify Champion, Process Owner and Team
- Define Resources
- Evaluate Key Organizational Support
- Develop Project Plan and Milestones
- Develop SIPOC (High Level Process Map)
- Process mapping
- Affinity diagrams
- Kano Model
- CTQ tree
Measure – How will we know a change is an improvement?

- Define Defect, Opportunity, Unit and Metrics
- Detailed Process Map (Value Stream Map) of Appropriate Areas
- Develop Measurement Plan (Operational definitions, Stratification, sampling, data collection frequency, duration, realistic)
- Balance score carding, link to big goals
- Validate the Measurement System
- Collect the Data
- Remember RIM measures?

Analyze

- Determine Process Capability
- Define Performance Objectives
- Identify Value/Non-Value Added Process Steps
- Identify Sources of Variation (Run chart, Control chart)
- Determine Root Causes (critical X’s)
- Cause and effect/Fishbone/Ishikawa diagram
- Scatter plots
- Hypothesis tests (t-test, paired t-test, ANOVA)
- Chi square, Regression analysis, DOE
Improve

- Develop Potential Solutions
- Define Operating Tolerances of Potential System
- Value stream mapping
- Waste identification
- Critical thinking
- Select solution
- Failure Modes and Effects Analysis (FMEA) of Potential Solutions
- Validate Potential Improvement by Pilot Studies (pilot plan)
- Correct/Re-Evaluate Potential Solution
- Test via PDSA’s
- Cost/benefit analysis
- Cycle time efficiency
- Collect data- input information (number of suppliers, delivery schedules, lead times)
- Collect customer data (number of customers, demand rate, cycle time expectation, cycle efficiency, quality and output expectations)
- Implement improvement plan

Control

- Mistake proof the solution
- Define and Validate Monitoring and Control System
- Standardize Process
- Implement Statistical Process Control
- Determine Process Capability
- Develop Transfer Plan, Handoff to Process Owner
- Verify Benefits, Cost Savings/Avoidance, Profit Growth
- Close Project, Finalize Documentation
- Communicate to Business, Celebrate
Questions?

Improve Phase Report Out:
Safety Culture
October 3rd, 2012

Ryan Stanley, MBA
Director of Performance Excellence
Celia Ryan, RN
Area Quality Leader

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Joint Commission Center for Transforming Healthcare

Kaiser Permanente Fresno – Our Safety Culture Vision
"We speak up and hold each other accountable for our behaviors, decisions, and actions. There is nothing more noble than serving as advocates for our patients."
Define Recap (1)

Goals:
- Metric 1: Closed loop-50% decrease in the deficit between baseline rate and 100%
- Metric 2: Quality of loop-Decrease/Eliminate % problematic response (1, 2, 3)
- Metric 3: SOS-Decrease/Eliminate % problematic response (1, 2, 3, 4)

Unit of Improvement: Unsafe conditions/behaviors
Defect: Unsafe conditions/behaviors that are not addressed prior to reaching patients/staff.

KP Perinatal Report (L&D, OB MD & Midwives, Postpartum)

How Healthy Is Our Culture?
Safety Attitudes Questionnaire Domain Scores

...
VOC: Teamwork Climate-Perinatal

Details: Item Scores

Teamwork Climate
Positively Worded Items

I have the support I need from others in this work setting to care for patients.
The physicians and nurses here work together as a well-coordinated team.
It is easy for personnel here to ask questions when there is something that they do not understand.
Nurse input is well-received in this work setting.

Disagreements in this work setting are resolved appropriately (i.e., not who is right, but what is best for the patient).

Negatively Worded Items

In this work setting, it is difficult to speak up if I perceive a problem with patient care.

VOC: Safety Climate-Perinatal

Safety Climate
Positively Worded Items

I know the proper channels to direct questions regarding patient safety in this work setting.
I feel safe being treated here as a patient.
Medical errors are handled appropriately in this work setting.
I am encouraged by others in this work setting to report any patient safety concerns I may have.
I receive appropriate feedback about my performance.
The culture in this work setting makes it easy to learn from the errors of others.
Measure Recap (1)

Metric #1: Closed Loop Baseline

Measure Recap (2)

Metric 2: Quality of Loop % Problematic Responses
Measure Recap (3)

Metric 3: SOS % Problematic Responses

% Problematic Responses

Metric #1 Baseline Capability Analysis
## Ongoing Data Collection Plan

<table>
<thead>
<tr>
<th>Measure</th>
<th>Operational Definition (How is the measure calculated?)</th>
<th>Type (output, input)</th>
<th>Data Collection Plan (How will you collect data &amp; how frequently)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RRF Closed Feedback Loop (%)</td>
<td># of RRF Closed / Total # of RRF Reported</td>
<td>Output</td>
<td>MIDAS / Monthly</td>
</tr>
<tr>
<td>Quality of Closed Loop (%)</td>
<td>Survey Design (3 Questions)</td>
<td>Output</td>
<td>Survey attached to each RRF event</td>
</tr>
<tr>
<td>SOS Tool (%)</td>
<td>Survey Design (9 Questions)</td>
<td>Output</td>
<td>Annual Survey</td>
</tr>
<tr>
<td>Anonymous Reporting</td>
<td># of events reported anonymously / Total # of RRF reported</td>
<td>Input</td>
<td>MIDAS / Collected with each RRF event reported</td>
</tr>
</tbody>
</table>

## Ongoing Data Collection Plan (cont.)

<table>
<thead>
<tr>
<th>Measure</th>
<th>Operational Definition (How is the measure calculated?)</th>
<th>Type (output, input)</th>
<th>Data Collection Plan (How will you collect data &amp; how frequently)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perception reporting is an RN function</td>
<td># of RRF reported by RN / Total # of RRF reported</td>
<td>Input</td>
<td>MIDAS / Collected with each RRF reported</td>
</tr>
<tr>
<td>MD Notification</td>
<td># of MD notified of reported RRF / Total # of RRF reported requiring MD notification</td>
<td>Input</td>
<td>MIDAS / Collected with each RRF reported</td>
</tr>
<tr>
<td>Lack of follow through on action plan</td>
<td># of RRF Investigations completed &lt; 14 days Management Investigation to RRF closure</td>
<td>Input</td>
<td>MIDAS / Collected with each RRF reported</td>
</tr>
<tr>
<td>Disagreements are resolved appropriately / Lack of confidence in resolution</td>
<td># of positive responses / Total # of responses</td>
<td>Input</td>
<td>SAO Survey</td>
</tr>
<tr>
<td>Staff Fear</td>
<td>Total # of people reporting / Total # of opportunity</td>
<td>Input</td>
<td>MIDAS / Collected with each RRF reported</td>
</tr>
</tbody>
</table>
Data Analysis & Collection Plan

**Process Map**

**C&E Matrix**

**Pareto Chart Ranking of Key Process Inputs**

**Categories**

**Key Process Inputs**

**Statistically Validated Factors:**
1. Lack of follow through on action plan (p=0.000)
2. Anonymous Reporting (p=0.914)
3. MD Notification (p = 0.567)

**Key factors to focus:**
1. Lack of follow through on action plan
2. Communication
3. Staff Fear
4. Lack of confidence in resolution

**Detailed Root Cause Validation**

<table>
<thead>
<tr>
<th>Input Variable (x)</th>
<th>Null Hypothesis</th>
<th>Analysis result: p-value &amp; conclusions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anonymous reporting</td>
<td>1. Anonymous reporting has no effect on loop closure</td>
<td>Chi-Square (p=0.914) FAIL TO REJECT NULL HYPOTHESIS Anonymous reporting is not statistically significant to closed loop</td>
</tr>
<tr>
<td>Lack of follow through on action plan</td>
<td>2. Lack of follow through on action plan has no effect on loop closure</td>
<td>2 Proportions Test (p=0.000) REJECT NULL HYPOTHESIS Lack of follow through on action plan is statistically significant to loop closure</td>
</tr>
<tr>
<td>MD Notification</td>
<td>3. MD notification has no effect on loop closure</td>
<td>Chi-Square (p=0.567) FAIL TO REJECT NULL HYPOTHESIS MD notification is not statistically significant to closed loop</td>
</tr>
</tbody>
</table>
## Detailed Root Cause Validation (cont.)

<table>
<thead>
<tr>
<th>Input Variable (x)</th>
<th>Null Hypothesis</th>
<th>Analysis result: Voice of the Process / C&amp;E Matrix</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>1. Communication has no effect on loop closure</td>
<td>Cause &amp; Effect Matrix Score: 88</td>
</tr>
<tr>
<td>Staff Fear</td>
<td>2. Staff Fear has no effect on loop closure</td>
<td>Cause &amp; Effect Matrix Score: 70</td>
</tr>
<tr>
<td>Lack of confidence of resolution</td>
<td>3. Lack of confidence of resolution</td>
<td>Cause &amp; Effect Matrix Score: 92</td>
</tr>
</tbody>
</table>

## Safety Culture Driver Diagram: Improvement Strategy

**Drivers:**
- CLOSURES LOOP
- COMMUNICATION
- STAFF PERCEPTION
- HIGH RELIABILITY TEAM

**Initiatives:**
- NOSCA'E UAE PILOT
- COMPLETE AND ACTIONABLE TEST PLANS
- DATA CULTURE COMMUNICATION BOARD
- IMPROVEMENT STANDARDS
- REGIONAL DIVERSITY COMMITTEE
- HIGH RELIABILITY SAFETY CULTURE TEAM

**Measures / Targets:**
- In progress
- In progress
- In progress
- In progress

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Department of Health and Human Services

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High Reliability Value #1: Sensitivity to operations

Team’s ability to exchange information clearly and acknowledge receipt of information

- Speak clearly and exchange information effectively
- Apply task strategies and anticipate future situations

Kaiser Permanente implemented Nurse Knowledge Exchange Plus (NKE+) to improve information exchange and closed loop communication

High Reliability Value #2: Commitment to resilience

- Provide verbal feedback and coaching
- Monitor performance and provide feedback
- Share compatible knowledge of team roles for effective team interaction

Kaiser Permanente developed a Coaching for Excellence Model to provide feedback on performance behaviors and support the development of shared mental models
High Reliability Value #3: Deference to expertise

- Allow team members to provide feedback, state opinions, and initiate action
- Encourage collective teamwork
- Value all team members expertise

Kaiser Permanente has added Crucial Conversations/Confrontations as a STAR Leadership training to encourage Team feedback and opinions.

Source: Promoting health care safety through training high reliability: K A Wilson, CS Burke, H A Priest, E Salas

High Reliability Value #4: Reluctance to simplify

- Respond to environmental factors and adjust team strategies
- Plan by setting goals, assigning roles, and identifying barriers

Kaiser Permanente has added daily huddles with a communication board to identify potential opportunities, prioritize tasks, and to strengthen the communication of the feedback loop.

Source: Promoting health care safety through training high reliability: K A Wilson, CS Burke, H A Priest, E Salas
High Reliability Value #5:  Preoccupation with failure

- Encourage error reporting
- Provide and receive constructive feedback
- Monitor team behavior and correct deficiencies

Kaiser Permanente uses the Business Performance Review (BPR) process to provide feedback and develop action plans for ongoing tracking of Safety Culture initiatives

### Improvement Implementation Plan

<table>
<thead>
<tr>
<th>Outcome (Y)</th>
<th>Factor (X)</th>
<th>Action Item</th>
<th>Operational Definition (What)</th>
<th>Rationale or Reason</th>
<th>Quick Wins</th>
<th>Implement From Completion Due Date</th>
<th>Baseline Performance Prior to Improvement</th>
<th>Improvement Tracking and Monitoring Plan (What, Where, When, How)</th>
<th>Results</th>
<th>Lessons Learned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y: Closed Loop</td>
<td>Communication</td>
<td>Daily huddles (%)</td>
<td># of daily huddles/Total # of required huddle days</td>
<td>C&amp;E Matrix Rating: No resistance of formal top closure process</td>
<td>Creates culture of transparency</td>
<td>Future State process</td>
<td>What: Daily huddles (%) When: Birthing Ctr When: Shift</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Y: Closed Loop</td>
<td>Communication</td>
<td>Implement Closed Loop on Board</td>
<td>Unit board to report issues and opportunities and track top closures</td>
<td>C&amp;E Matrix Rating: No resistance of formal top closure process</td>
<td>Create culture of transparency</td>
<td>Future State process</td>
<td>What: Daily huddles (%) When: Birthing Ctr When: Shift</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Y: Closed Loop</td>
<td>X: Lack of follow through on action plan</td>
<td>Develop a risk-trend process for closing the reports</td>
<td>Timeframes set FTF investigation needed 2-week risk to patient 1-week risk/potential risk to patient</td>
<td>(P=0.000) Facilitate the finding for the managers</td>
<td>Shorten the risk delegation process for manager</td>
<td>Process changed in Phase 6.10.12</td>
<td>Manager TAT</td>
<td>What: Occurrence reports from department When: Birthing Ctr When: Closures by Mgr collected weekly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Y: Closed Loop</td>
<td>X: Lack of follow through on action plan</td>
<td>Develop delegation process for managers</td>
<td>Define for manager reports that can and should be delegated to assistants</td>
<td>(P=0.000) Standardize process, monitor completion, shorten timelines</td>
<td>Encourage delegation assistants to participate in PI</td>
<td>POSA in the process of development</td>
<td>Manager TAT</td>
<td>What: Occurrence reports from department When: Birthing Ctr When: Closures by Mgr collected weekly</td>
<td></td>
<td></td>
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</tbody>
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<th>Quick Wins</th>
<th>Implementation Completion Date</th>
<th>Baseline Performance Prior to Improvement</th>
<th>Improvement Tracking and Monitoring Plan (What, Where, When, How)</th>
<th>Results</th>
<th>Lessons Learned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y: Closed Loop</td>
<td>Implement Nurse Knowledge Exchange Plus behaviors</td>
<td>NOC/NPS- RN Communication</td>
<td>Info exchange Closed loop process</td>
<td>12/31/2012</td>
<td>77.1%</td>
<td>AGE / Monthly</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Y: Closed Loop</td>
<td>Implement Coaching for Excellence</td>
<td></td>
<td>Strengthened behaviors shared mental models</td>
<td>On going STAR Leadership Training</td>
<td>N/A</td>
<td>STAR / Monthly</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Y: Closed Loop</td>
<td>Crucial Conversation or Combined trainings</td>
<td># of trainings completed / # of required training</td>
<td>C&amp;E Matrix Score: 88</td>
<td>On going STAR Leadership Training</td>
<td>N/A</td>
<td>STAR / Monthly</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Y: Closed Loop</td>
<td>Business Performance Reviews</td>
<td># of BPR / total # of required BPR</td>
<td>C&amp;E Matrix Score: 88</td>
<td>Error Mgt Team Self Correction Feedback</td>
<td>N/A</td>
<td>BPR / Monthly</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Change Management Strategies: Mobilizing Commitment Improve Phase

### STAKEHOLDER ANALYSIS

<table>
<thead>
<tr>
<th>Level of Commitment</th>
<th>Stakeholder</th>
<th>People or Group</th>
<th>Leadership</th>
<th>Physicians</th>
<th>Management</th>
<th>Team Members</th>
<th>Quality / Risk</th>
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<td>Hostile</td>
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</tbody>
</table>

**Key:**
- O - Level Necessary for Success
- X - Level at the start of project
- _ - Current Level
Change Management Strategies: Monitoring Progress / Balanced Scorecard

<table>
<thead>
<tr>
<th>Scorecard</th>
<th>Goals</th>
<th>Strategies</th>
<th>Performance</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>JCQI: Inpatient</td>
<td>Enhance Patient Experience (PCE)</td>
<td>Improve patient satisfaction</td>
<td>Target all</td>
<td>在他的 сыновьях, эмигрировавших до их смерти, умерли от этого же заболевания.</td>
</tr>
</tbody>
</table>

Challenges encountered

- **Lessons learned**
  - Enable champions to encourage staff to complete closed loop questions
  - Create a shared need as you implement solutions

- **Unresolved questions**
  - Continuing measurement strategy around correlation between SAQ and SOS surveys

- **Foreseeable and experienced challenges**
  - Response rate for Quality of the Loop Survey
  - Maintain consistency with huddle process

- **Issues/concerns**
  - Organizational Survey Fatigue
### Next Steps

<table>
<thead>
<tr>
<th>What</th>
<th>Who</th>
<th>When</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creation of Risk Based Triage Pilot</td>
<td>Nitza</td>
<td>12/31/2012</td>
</tr>
<tr>
<td>Implement Behavioral Standards</td>
<td>Hendrix, Alves, Veneski</td>
<td>12/31/2012</td>
</tr>
<tr>
<td>Complete analysis to validate improvements to closed loop</td>
<td>Ryan</td>
<td>12/31/2012</td>
</tr>
</tbody>
</table>

### Thank You!

Questions
Questions?

Raise your hand

Use the Chat

Resources for Self-study

- ASQ: http://asq.org/sixsigma/
Homework for Next Session

Utilize the Organizational Assessment Tool with your team, department, or medical center to see how mature your Performance Improvement program is today.

Identify one (1) gap and develop an action plan to close the gap.

Send ‘Tweet-like’ summary of 140 characters or less to Jill at jduncan@ihi.org by Friday, November 16th.

Upcoming Calls

- Session 5 – Tuesday, November 20th 1:00 – 2:00 ET
  - Sustaining an Effective Quality Improvement Strategy
  - Robert Lloyd, Executive Director of Performance Improvement, IHI
Thank You

Please let us know if you have any questions or feedback following today’s Expedition webinar

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