What Are We Trying to Improve?
Good Question!

Presenters: Koby Clements, Eric Franks, & Morgan Davis
IHI Improvement Science Session
December 11, 2017
8:00 am – 11:30 am
Course Code: ML2
• Your hospital has a specific problem that needs to be fixed. Over the last couple of years, committees have tried to solve the issue without success.

• With your improvement knowledge, you will work with a small group to solve the problem.

• This session will provide an interactive case to serve as a refresher of improvement science and provide a framework and materials for utilizing the training scenario in your own organization.
Learning Objectives

• Apply core improvement concepts and tools to a simulated improvement project.
• Demonstrate how concepts and tools fit together in an improvement project by focusing on the right questions and not the tools.
• Provide an improvement learning approach and materials that can be utilized at your home organization.
Disclosures

The presenters do not have any relevant, real, or apparent, personal or professional financial relationships to disclose with any organizations that could be perceived as a conflict of interest in the context of this presentation.
About the Presenters

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Center for Health Care Quality

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Center for Health Care Quality
Session Development and Use

Why did we create?
- Reinforce improvement tools and concepts learned in MU Health’s training program
- Reinforce that asking the right questions throughout an improvement project will lead to greater success than by focusing only on what tools should be used
- Create a dynamic case to simulate working on another problem outside of their training project
- Help participants work through creating effective presentations

How can you use?
- Supplement for your organization’s training program
- All materials used today will be available to you with supporting instructions
Deliverables

• Create a 10 minute QI Project Presentation
• From problem discovery to post-intervention results
  o Tell the story of what you learned and accomplished
  o Sell the reason you selected your intervention
  o Tell the impact of your intervention
  o Discuss your next steps
Instructions

• In teams, work through the case to answer **10 key questions** of quality improvement by using **QI concepts and tools**.

• Use the concepts/tools to answer questions as you work through the issue to come up with the **BEST initial intervention** to **achieve the hospital’s desired goal** and analyze post intervention data.

• Through this process, you will have completed one PDSA cycle.
1. What are you trying to improve?
2. What are the potential causes of the problem?
3. What cause is the most important to address?
4. What are the potential solutions to drive improvement?
5. Which potential solution are you testing?
6. How would you implement your change?
7. How do you know your intervention was implemented as desired?
8. How do you know your intervention worked?
9. What was the result of your intervention?
10. What are your next steps?
QI Concepts and Tools to Consider

- Aim Statement
- Flowchart
- Pareto Chart
- Silent Brainstorming
- Affinity Diagram
- Cause and Effect / Fishbone
- Histogram
- Run Chart
- Check Sheet

- Driver Diagram
- Stakeholder Analysis
- Effort Yield (2x2) Matrix
- Gantt Chart
- Action Plan
- Measures
  - Intervention Fidelity
  - Process
  - Intermediate
  - Outcome
### Potential Tools for Each Question

<table>
<thead>
<tr>
<th>PLAN</th>
<th>Aim Statement</th>
<th>Flowchart</th>
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The Hospital in the QI Scenario

- The hospital the case takes place in is a community-based, 750 bed facility.
- 34,000 admissions / year
- Units:

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The Problem:
The hospital has historically had higher than desired Clostridium Difficile (C. Diff) Infection Rates. Over the last couple of years a couple of committees have tried to solve the issue with no real movement on decreasing the rate.

Cost:
For FY18, the hospital is at risk of losing about $1 million to Hospital Acquired Conditions (HAC); of which the reported C. Diff is a leading factor due to the numerous cases already reported.
Goal:
To reach and sustain a rate of 1.5 C. Diff cases per 10,000 patient days by June 1, 2018

Intervention Go-Live:
To achieve the goal, your intervention must go live the first week of March, 2018 (12 weeks away)
Before You Start

Define roles of team members:

- Lead
- Recorder / Presentation Builder
- Time Keeper
# Session Schedule

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<thead>
<tr>
<th>Time</th>
<th>Duration</th>
<th>PDSA</th>
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<tbody>
<tr>
<td>8:00 – 8:30</td>
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<td>Welcome and Case Information</td>
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<td>8:30 – 9:30</td>
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<td>Plan</td>
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Getting Started

Session Materials:
- Case Information
- Information and Best Practices
- On Request Data
- QI Tool Templates
  - Action Plan
  - Aim Statement
  - Effort Yield Matrix
  - Cause and Effect (Fishbone)
  - Driver Diagram Template (Key and Secondary Drivers Filled In)
  - Effort Yield Matrix (2x2)
  - Excel Chart Template
  - Flowchart – Fishbone
  - Gantt Chart
  - Measurement
  - Stakeholders
QI Case Information
Current Presentation with case details

Team Presentation
Template to build your presentation as you work through the case
Information and Best Practices

Articles about C. Diff pertaining to:
- Basic Facts
- Prevention/Reducing Infections
- Cost
On Request Data

• Just as in real QI projects, you do not have all the information right away.
• More information can be requested as you work, but will only be received if you ask the right question(s)
QI Tool Templates

• 10 QI templates to choose from to answer the 10 key questions
• Guides describing templates and when to use various tools
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All of the materials to facilitate the case at your organization will be given during the learning lab session.