Goals of a Quality Improvement Training Program

An Internal training program is an essential “core capacity” in most successful quality improvement rollouts. They are built with a specific intent to disseminate knowledge of the why and the how of process management and performance improvement. A quality improvement training program gives participants the understanding and tools necessary to conduct state-of-the-art clinical practice improvement projects and use quality improvement methods to manage and integrate non-clinical processes.

As part of the course, each participant is encouraged to select, complete and report an improvement project. Faculty and staff provide consultation and support for this important hands-on experience. These projects are often starting points for more ambitious endeavors within organizations.

Presentation Objectives

SESSION 1 – THEORY

Managing Clinical Processes: An Introduction to Clinical QI
- Definition of processes
- Quality improvement as the science of process management
- Classes of outcomes: physical, service, cost
- Process management

Three Methods to Manage Clinical Care
- Feedback of comparative data (QUE studies)
- Practice guidelines/protocols (ARDS study)
- Computerized decision support (Antibiotic Assistant study)

Modelling Processes
- Use of conceptual and detailed flow diagrams
- Use of cause and effect diagrams, tally sheets and pareto charts in organizing and displaying information
- Formal team tools: brainstorming, multi-voting, nominal group technique (NGT Dephi methods)
**Pragmatic Science**
- Accelerated improvement efforts
- Goal: improvement vs. research
- Fundamental improvement questions
- Graphical display of data
- Adjusting for differences in inputs (severity, cohort formation)
- Extracting medical evidence; synthesis / meta-analysis of data

**Understanding Variation**
- Specification limits
- Process capability
- Methods for separating random from assignable variation (introduction to Statistical Process Control)
- Methods to manage assignable variation: tracking to root causes
- Methods to manage random variation: Shewhart's PDCA cycle (the scientific method)
- Frequency distributions; central limit theorem
- Tampering

**Curing vs. Caring**
- Definition of "customer"
- Definition of "expectations"
- A generic, functional definition of quality
- Methods of managing customer expectations

**Features of Effective Teams**
- DVD Module available through Intermountain Healthcare Institute. Suggested for course participants to watch prior to the first session of the course and follow up with a discussion on teams, especially the participants QI project teams for the course, during the first session.
  - Explain the differences between committees and team structures
  - Describe the features of a "good" team; safe, inclusive, open, consensus seeking
  - Define team roles; team leader, facilitator, team member
  - Understand the value and use of ground rules
  - Create and utilize storybooks and storyboards

**Quality Controls Cost**
- Causal links between quality and cost
- Quality waste -- cost of poor quality
- Productivity / efficiency -- limited resource utilization
- Optimalist-maximalist argument -- implications of cost pressures for the health care system
Quality Improvement Project Storyboard
Have either a past Alumni of the course or someone in your organization that has
done a quality improvement project that shows an excellent use of the tools and
methodology of quality improvement present a storyboard of the project.
• Share the tools and methodology used in a quality improvement
  project
• Understand how quality improvement principles are applied in
  improving a specific process
• Have an opportunity to discuss a quality improvement project
  experience with team members actively involved in the process.

SESSION 2 – MEASUREMENT AND TOOLS

Data Types: Which SPC Chart Should I Use?
• Four types of data: nominal, ordinal, interval, ratio
• Correlation between SPC graphical analysis and data type
• Role of underlying distributions when constructing control charts
• Rules for collecting data

Deployment: Clinical Integration
• Understand the structural considerations for replicating improvement across
  systems of care
• Describe a management structure designed to accomplish implementation
• Understand drill-down versus outcomes tracking approaches

Designing Data Systems
• Concepts important when designing a data system
• Relationship between aim statement and data system design
• Components of self-coding data forms

Tracking Health Care Costs
• Reductionism and sub-optimization
• Fixed vs. variable costs
• Direct vs. indirect costs
• Activity based cost accounting
• Strategies to harvest quality savings
• The business case for quality

Patient Safety
• Recognize how system failures create errors
• Determine patient safety clinical focus areas for their organizations
• Identify and make recommendations for local and national collaborations.
Quality Improvement Project Storyboard
Have either a past Alumni of the course or someone in your organization that has done a quality improvement project that shows excellent use of involvement of front line clinicians present a storyboard of the project.
• Learn a method for involving front line clinicians in creating a care process model
• Understand how quality improvement principles are applied in improving a specific process
• Have an opportunity to discuss a quality improvement project experience with team members actively involved in the process

Quality Planning Tools
• Understand Quality Planning Tools
• Understand the relationship between quality planning tools and other quality planning processes
• Establish a framework for the prioritization of resources

SESSION 3 – POLICY AND SYSTEMS

Severity of Illness Adjustment
• Understand the conceptual implications of different severity measures
• Understand the impact of data on severity measurement
• Explore the impact of different severity measures on perceptions of outcomes

Protocols and Medical Malpractice
• Principles that can help a health care provider avoid medical malpractice claims or assist in defending against litigation
• Legal pitfalls and promises of protocol usage
• Suggestions for minimizing liability

Clinical Information Systems
• Core principles of clinical information systems
• Requirements of clinical information systems: central patient record, expert system, encoded data
• Issues of clinical information systems' implementation
Quality Improvement Project Storyboard

Have either a past Alumni of the course or someone in your organization that has done a quality improvement project that shows an excellent use of effective day-to-day use across a broad range of processes present a storyboard of the project.

• Learn a method for effective day-to-day quality improvement methods across a broad range of processes
• Understand how quality improvement principles are applied in improving processes
• Have an opportunity to discuss a quality improvement project experience with team members actively involved in the process

SESSION 4 – LEADERSHIP

QI Leadership

• Understand the components of reward and recognition systems
• Identify the principles regarding diffusion of change
• Define major factors of a quality leader

Participant Presentations

• Use of tools necessary to conduct state-of-the-art clinical practice improvement projects
• Use of quality improvement methods to manage and integrate non-clinical processes
• Peer to peer review and discussion of quality improvement projects

Course Curriculum Review

• Review of course curriculum and content
• Clarification on information presented that remains unclear
• Participant suggestions and recommendations for the course