

**Intermountain Healthcare
Institute for Health Care Delivery Research
Quality Improvement Training Program**

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