



# Improvement & Implementation Science

## Improvement and Implementation Science Domain Definition

*To reduce avoidable variation in process and outcome and ensure the systematic update of research findings in a health system*

## Domain Competencies and Objectives Relevant to Quality Improvement

- **Using quality improvement methods to standardize clinical processes\***
- **Using quality improvement methods to reduce avoidable variation in clinical outcomes\***
- Using implementation science methods and strategies to study and promote systematic uptake of evidence into routine practice
- **Using quality improvement methods to study and promote systematic uptake of evidence into routine practice\***
- Using strategies to implement successful interventions in new settings (e.g., other facilities, departments)
- Using strategies to sustain successful interventions

\*Competencies in **bold** are highlighted in this Use Case

## Applied LeaRRning Case: A Quality Improvement Initiative to Standardize Clinical Processes in Outpatient Rehabilitation

### Introduction to the Case Study

This Case is based on a presentation by Dr. Gerard Brennan at the CoHSTAR Implementation Science Institute entitled: *The Synergy of Implementation & Improvement Science*. Dr. Brennan highlighted the complementary aspects of quality improvement and implementation science from his perspective as a leader in quality improvement at Intermountain Healthcare. [Click here](#) to see the presentation.

## Learning Resources to Advance Your Competencies in Quality Improvement Methods

### Introduction to Quality Improvement

- [Quality Improvement Presentation](#) by A. Rani Elwy, PhD

### Readings

- [Aligning Improvement and Implementation Science](#)

### Other Resources

- Institute for Healthcare Improvement ([IHI](#))
  - [Open School](#)
  - [Model for Improvement](#)
- Agency for Healthcare Research and Quality ([AHRQ](#))
- National Quality Forum ([NQF](#))
- Quality and Safety Education for Nurses ([QSEN](#))

### Tools

- [Cause-and-Effect Diagram](#)
- [Check Sheet](#)
- [Control Chart](#)
- **[Flow Chart](#)**
- [Histogram](#)
- **[Pareto Chart](#)**
- [Scatter Diagram](#)
- [Stratification](#)
- [Plan-Do-Study-Act \(PDSA\) Worksheet](#)

\***Bolded** items were presented by Dr. Brennan.

[Click here](#) to continue learning about quality improvement and implementation science