



# 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 Improvement and Implementation Science

- 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 Applied LeaRRning Case

## Deploying Strategies to Promote Standardized Assessment Implementation in Stroke Rehabilitation

Standardized assessments of the post-stroke upper extremity are used to objectively measure levels of function and impairment in the stroke survivor population. Though occupational therapy practitioners are frequently tasked with assessing upper extremity function, seldom are standardized assessments used to quantify function in real-world practice. In response to this knowledge-to-practice gap, rehabilitation researchers and clinicians teamed up to optimize the implementation of standardized assessments – the Fugl-Meyer Assessment and Action Research Arm Test – with stroke survivors in the acute, inpatient, and outpatient stroke rehabilitation settings at The Ohio State University Wexner Medical Center.

## Learning Resources to Advance Your Competencies in Improvement and Implementation Science

### Introduction to Improvement Science and Implementation

- [Orientation to D&I Science Video](#)

### Readings

- [Consolidated Framework for Implementation Research](#) (CFIR; original 2009 article)
- [Selecting implementation strategies](#)

### Other Resources

- [CFIR technical assistance website](#)

### Tools

- [Needs assessments in implementation research and practice](#)
- **[CFIR-ERIC matching tool](#)**
- **[ERIC taxonomy of strategies](#)** (see additional file #6 for detailed strategy descriptions)
- [Systematic Review Management](#)
- [Reporting of implementation studies](#)
- Informatics in Rehabilitation Research

\*Tools in **bold** are highlighted in this Applied LeaRRning Case

To continue learning about Improvement and Implementation Science visit the [LeaRRn Resource Database](#)