



**Mechanics of Improvement**  
**CIIS - Quality & Patient Safety Educational Series**

<b>Session Title</b>	“Studying and Acting on Results”
<b>Presentation Date</b>	May 9, 2019
<b>Learning Objectives</b>	<ul style="list-style-type: none"> <li>• Discuss tradeoffs when selecting a study design</li> <li>• Consider different approaches to acting on measured results</li> <li>• Discuss planning for sustainability</li> </ul>

**Session Resources - Introductions to IIS & QI Approaches**

[An Introduction to Implementation Science for the Non-Specialist](#)

Bauer MS, Damschroder L, Hagedorn H, Smith K, Kilbourne AM. *BMC Psychol.* 2015;3(1),32.

- This review provides a broad overview of what implementation science is, how it differs from QI and dissemination. This article provides a useful starting point for individuals new to the field.

[The Improvement Guide: A Practical Approach to Enhancing Organizational Performance](#)

Langley GL, Moen R, Nolan KM, Nolan TW, Norman CL, Provost LP. *The Improvement Guide: A Practical Approach to Enhancing Organizational Performance* (2nd edition). San Francisco: Jossey-Bass Publishers; 2009.

- This book describes the Model for Improvement, a guiding approach for QI initiatives, with clear steps for accelerating change in diverse healthcare settings.

**Session Resources - Study Design**

[Study Design Toolkit](#)

Evans Center for Implementation and Improvement Sciences. 2018.

- This toolkit provides a 4-step process for selecting an appropriate study design. Descriptions of different observational, quasi-experimental and experimental designs are provided. We’ve also included a brief overview of the strengths and weaknesses of each design.

[Designs for Dissemination and Implementation Strategies](#)

Brown CH, Curran G, Palinas L, et al. An overview of research and evaluation designs for dissemination and Implementation. *Annual Review of Public Health.* 2017;38:1-22.

- Members of a National Institutes of Health study design workgroup integrated their multidisciplinary knowledge on dissemination and implementation designs as well as

evaluation strategies in this article. Eight types of study designs for testing implementation strategies are identified and described.

#### [Study Designs for PDSA Quality Improvement Research](#)

Speroff T, O'Connor GT. Quality Management in Health Care. 2004;13:1.

- This article describes the strengths and weakness of study designs used in health care quality improvement research. The authors have targeted their recommendations for investigators employing PDSA cycles and aim to conduct rigorous, publishable research.

#### Session Resources - Sustainability, Initiative Scale Up and Spread Resources

#### [“Scaling-Out” Evidence-Based Interventions to New Populations or New Health Care Delivery Systems](#)

Aarons GA, Sklar M, Mustanski B, Benbow N, Brown CH. “Scaling-out” evidence-based interventions to new populations or new health care delivery systems. Implementation Science. 2017; 12:11.

- This paper describes a process for scaling out, or adapting evidence-based practices to new populations or settings. Approaches for evaluating scaling-out outcomes are also addressed.

#### [Exploring Scale-Up, Spread, and Sustainability: An Instrumental Case Study Tracing an Innovation to Enhance Dysphagia Care](#)

Ilott I, Gerrish K, Pownall S, Eltringham S, Booth A. Exploring scale-up, spread, and sustainability: An instrumental case study tracing an innovation to enhance dysphagia care. Implementation Science. 2013.

- This paper provides useful definitions for spread, scale-up, sustainability and adaptation. A case study is used to illustrate each concept.

#### [Accelerate Quality Improvement in Your Practice](#)

Hall LL. AMA Steps Forward. 2016.

- This interactive module walks through the steps of planning and implementing a quality improvement initiative. The final section outlines steps for adjusting the quality improvement initiative based on measured results.

#### [The Spread and Sustainability of Quality Improvement in Healthcare](#)

NHSScotland Quality Improvement Hub. 2014.

- This toolkit describes key factors for sustaining and spreading large-scale changes in healthcare systems. The document includes helpful sections on change management, translating knowledge into action, and evaluating change.