Title: Methodology Issues in Implementation Science

Author: Robin Newhouse, Kathleen Bobay, Patricia C. Dykes, Kathleen R. Stevens, and Marita Titler

Purpose: To identify methodological problems in implementation science using four Interdisciplinary Nursing Quality Research Initiative (INQRI) projects as case studies and, based on findings, make recommendations for further methods development.

Background:
- Too often, health care providers do not use available evidence-based practices (EBPs) known to improve patient outcomes for a number of health conditions.
- Underutilizing EBPs adds to the proliferation of substantial unexplained and unjustified variations in practices.
- Implementation science holds promise for expanding what is known about improving health care delivery, outcomes, and value.

Methods:
- Challenges in the conduct of four INQRI studies were reviewed with particular attention to methodological problems researchers confronted when conducting implementation studies.

Key Findings:
- Based on findings, major recommendations to advance methods in implementation science include:
  1. Development of a core set of implementation concepts and metrics;
  2. Generation of standards for use of diverse implementation methods (e.g., pragmatic trials, mixed methods) and measurement of their outcomes;
  3. Endorsement of reporting standards for implementation studies;
  4. Implementation science as the link between effective interventions, practice, and patient outcomes;
  5. In order to strengthen implementation science so that health care providers have the knowledge they need to leverage change in the health system and improve health care, the methodological issues identified in these studies must be addressed.