



Multi-Level Models of Implementation in the Department of Veterans Affairs

Brian S. Mittman, PhD

Director, VA Center for Implementation Practice
and Research Support (CIPRS)
VA Greater Los Angeles Healthcare System

January 28, 2009



The implementation (quality improvement) paradox in healthcare delivery

- National data show (modest) increases in adoption of evidence-based clinical practices
- Anecdotal reports, case studies, and uncontrolled evaluations show success
- Comparative/controlled studies show less success
- Rigorous research trials show little or no success

The *multi-level hypothesis*

- Quality problems have multiple causes
- Each solution is necessary, but none is sufficient
- Improvement requires coordinated, mutually reinforcing efforts at multiple levels (patient, point-of-care, organization, national policy)

Multiple causes of quality problems

- Most healthcare practices are highly stable and embedded in a dense network of influences related to knowledge, beliefs, attitudes, norms, habits, systems, incentives, expectations, etc.
- Eliminating one or two constraints eliminates one or two constraints, leaving (typically) many others

Necessary but not sufficient conditions

- Some QI initiatives address multiple constraints, but most ignore many or most
- The result: considerable effort, occasional impact (on mediating factors), but little or no practice change
- The classic case: “intervention physicians displayed improved knowledge and attitudes but no change in clinical practices”

Requirements for quality improvement

1. Valid, legitimate (accepted) evidence
2. Evidence of deviations
3. External expectations, interest (monitoring), pressure
4. Etiology of practices, deviations
5. Information, evidence, education
6. Professional norms
7. Feasible methods/systems

Condition 1. Evidence-based practice standards, guidelines or clinical recommendations

- legitimate, accepted (acceptable)
- appropriately developed, sponsored
- fully endorsed, supported
- not easily dismissed

Condition 2. Evidence of deviations from recommended, appropriate clinical practices

- valid, accurate (casemix adjusted)
- credible
- accepted (acceptable)
- timely
- relevant
- appropriate benchmark

Condition 3. External pressure, incentives and expectations for improvement

- “external” includes leadership/senior management and other credible, relevant entities
- adequate to overcome competing demands and to focus attention/interest
- meaningful consequences
- requires measurement, reporting
- broad, comprehensive, pervasive (peer-to-patient)

Condition 4. Etiology of deviations (causes/influences, barriers, facilitators)

- provides guidance in addressing deviations
- thorough diagnosis of multifaceted influences on current practices, leading to causes of deviations
- note: reliable broad spectrum interventions do not exist

Condition 5. Information, evidence and education

- needed to achieve clinician understanding of the desired practices (and their advantages over current practices), to facilitate acceptance, action

Condition 6. Professional norms and peer influence

- adherence is appropriate, legitimate, expected, “normative”
- non-adherence is improper, unacceptable, counter-normative

Condition 7. Feasible, operational methods

- logistical arrangements/processes to implement and utilize recommended practices
- elimination of financial, organizational and operational constraints (staffing, time, technology)
- examples: collaborative care models (Chronic Care Model), reminders, group visits, re-engineering

Implications and recommendations

- Acknowledge and explicitly address the problem's magnitude and need for comprehensive, coordinated solutions
- Align existing QI elements, fill in gaps
 - guidelines
 - performance indicators
 - care models
- Provide “symbolic management”
- Stimulate and coordinate efforts by professional societies, government, business, voluntary health agencies, payors
- Conduct research to test, refine, elaborate the framework