

# Redesign and Implementation

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# Outline

## Part A.

- Importance of implementation and implementation research

## Part B.

- Implementation Pipeline
- VA QUERI Six Step Process

# Why do we care?

Q: How will Implementation help us with safe opioid prescribing behavior?

Answer:

- Implementing evidence-based interventions in a healthcare provider organization requires **changes in attitudes, beliefs and behavior.**
- Help identify if we are doing what we “should” be doing when treating pain and using opioids as part of the treatment plan.

# What is the problem?

- Adopting evidence-based research (clinical or health services) takes a long time
- Research programs are rolled out without planning for maximum effectiveness
  - Do not address barriers to implementation
  - Use “one size fits all” approach to manage patients treated for pain, including opioids

# Role of System Redesign?

- Who is the customer?
  - One? Multiple?
  - Is this important for safe opioid prescribing patterns
- Identify/engage the customer through the process
  - Requirements
  - Expectations
  - Adaptations
  - Recommendations for improvement

# Outline

## Part B.

- Implementation Pipeline
- VA QUERI Six Step Process

# Features of implementation trials (vs. clinical/health services research)

- Heterogeneity of settings, interventions
- Context dependence, weak main effects
- Process and mechanism (vs. outcome/impact) focus
- Protocol-driven intervention adaptation
- External validity vs. internal validity
- Sustainability, scale-up/spread potential, economic evaluation

## 2. The *Classic* Six-Step QUERI Process

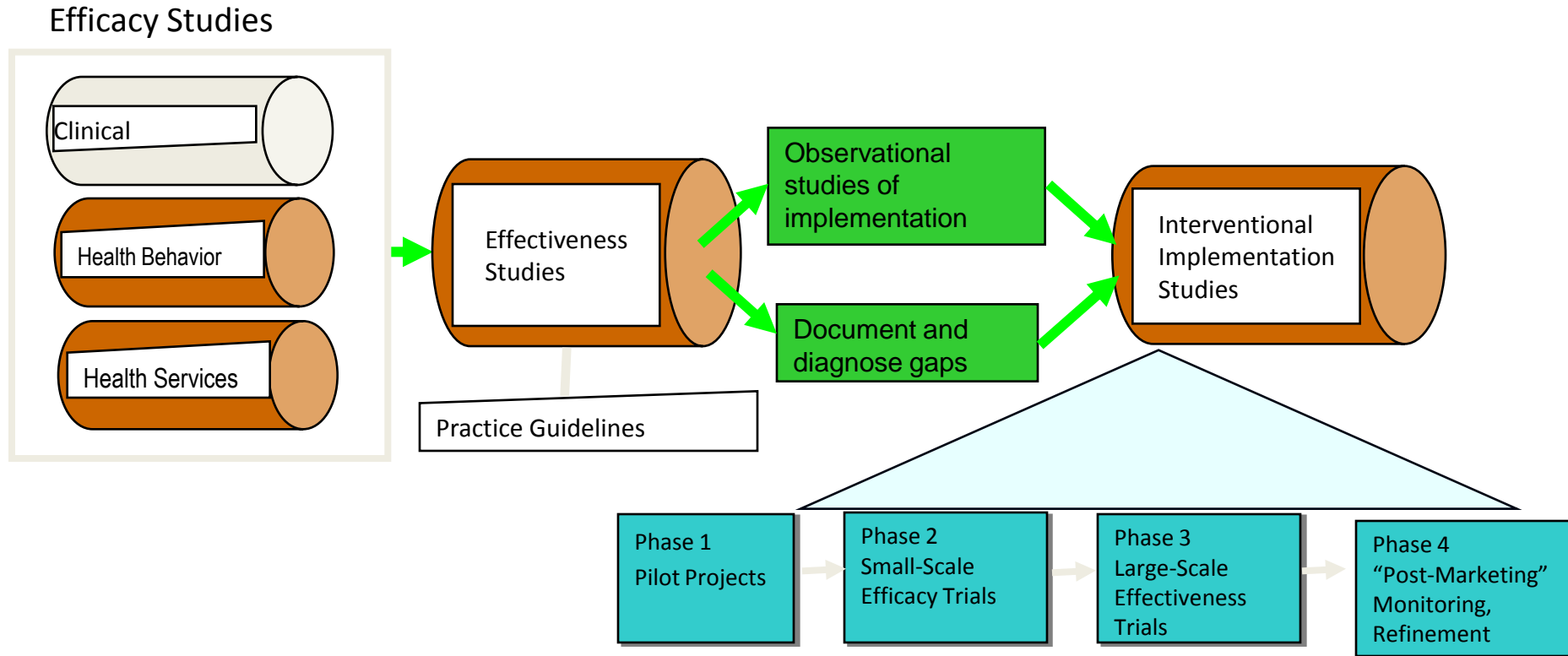
1. Identify high risk/high burden conditions
2. Identify best practices
3. Define existing practice patterns in VA and variations from best practices
4. A. Identify...
4. B. Develop...
4. C. Implement... programs to promote best practices
5. Document outcome and system improvements
6. Document improvements in health related quality of life

Health Services Research/  
Pre-Implementation Research

Implementation Research



# VA QUERI research-implementation pipeline: Phased implementation trials



# Phase 1: Single Site Pilot

- 12-18 months; Single clinic or facility
- To address quality gaps in evidence-based care
- Projects:
  - Identify incompatibilities between a new program and structure, operations and culture
  - Describe lessons learned for refinement
  - Produce information regarding program acceptance, impacts
  - Require evaluation to test barriers and facilitators and opportunity to export to multi-site evaluation

# Example: Translating Initiatives for Depression into Effective Solutions (TIDES)

TIDES, 1st generation : developed and demonstrated a safe, acceptable VA-adapted collaborative care model with high fidelity to published evidence

Realized:

- Change is most likely to occur if members' attitudes **and behaviors are concordant with desired change** and willing to behave accordingly
- Decisions must be LOCAL

# Phase 2: Small-Scale, Multi-Site Evaluation

- 4-8 facilities, within 1-2 VISNs (networks)
- Modified clinical trial-like design (e.g. quasi-experimental design)
- Formative evaluation component
- Develop/test measurement tools and evaluation methods
- Evaluation of cost and benefits to assess feasibility of continuing on to region-wide demonstration

# Example: Substance Use Disorder Clinics Implement Depression Guidelines

- 4 facilities, within 6 hours
- Sites had been involved with previous work
- Sites followed idealized conditions
  - Organizational support & commitment for projects
  - Leveraged established researcher-clinician relationships
  - Tiered approach to gain acceptance and adoption of depression management practices

# Phase 3: Region-Wide Demonstration

- Several facilities/VISNs (to prepare for national roll-out)
- Assess feasibility and acceptance with regional conditions to produce valid evidence of program performance and impacts
- Elements:
  - Implement program in regular clinical delivery system
  - Measure impacts on patient and caregiver outcomes (clinical, functional status, psychosocial)
  - Large investment of time & resources
  - Evaluation of program costs & cost effectiveness
  - Participation by leadership

# Example: Translating Initiatives for Depression into Effective Solutions (TIDES)

- Mental Health QUERI
- National funding initiative for primary care mental health in 2006;
- 3<sup>rd</sup> generation of implementation
  - Multiple facilities & VISNs
  - Data collected at implementation & control sites
  - Formative evaluation

# Phase 4: National Rollout

- Innovative implementation program is deployed system-wide
- Include:
  - Previously demonstrated efficacy, effectiveness, acceptability, relevance, and suitability of program interventions to enhance routine adoption of evidence-based guideline or recommendation
  - National scope
  - Ongoing monitoring and refinement



# Example: Translating Initiatives for Depression into Effective Solutions (TIDES)

- National policy in 2008
- Secure/continue funding for spread and evaluation of program
- Evaluation includes:
  - Organizational facilitators that may be leveraged (e.g. leadership support) and barriers that may be resolved

# Resources

# Websites

- The Center for Implementation Practice and Research Support (CIPRS) [www.ciprs.gov](http://www.ciprs.gov)
- Implementation Science [www.implementationscience.com](http://www.implementationscience.com)
- The National Implementation Research Network [www.fpg.unc.edu](http://www.fpg.unc.edu)

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