

"Implementation Research for Mental Health Services: A Path to Improving Care"

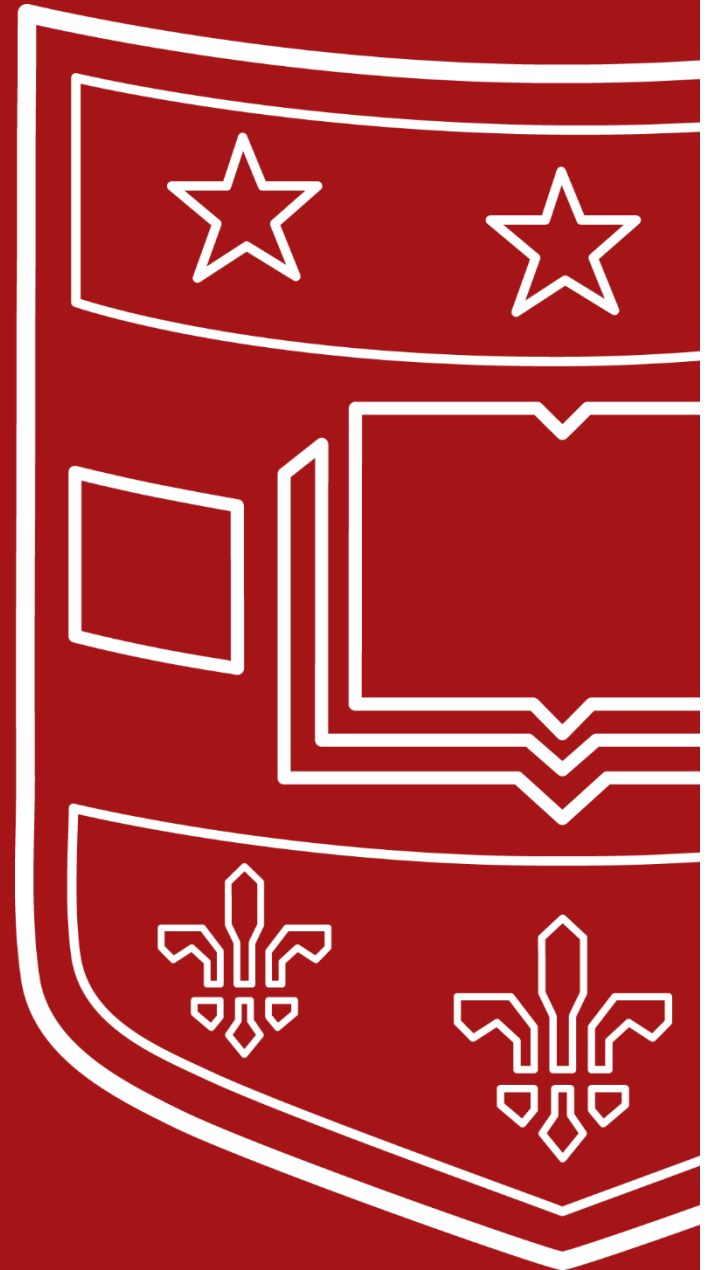
Enola Proctor, Ph.D.

iSPARC

University of Massachusetts

October 23, 2019

 Washington University in St. Louis



Disclosure

Enola Proctor

Shanti K. Khinduka Emeritus Distinguished

Professor



Relevant Financial Relationships:

Salaried professor emeritus at Washington University in St. Louis

Research funded by the NIMH, NHLBI, NCATS

Co-author of and receives royalties for a text, *Dissemination and Implementation Research in Health*, second edition, Oxford University Press based on sales

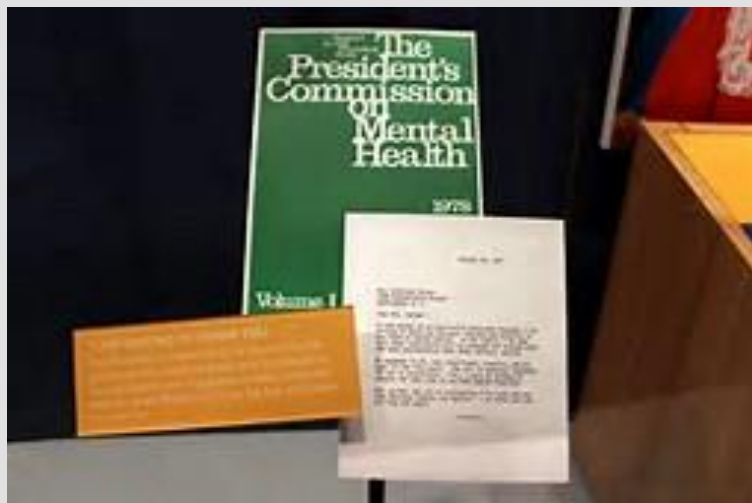
Occasional speaker fees from Universities and scientific/professional societies

Nonfinancial

Reviewer for several peer-reviewed journals



**How adequate is our nation's
mental health care?**



[HTTP://WWW.JIMMYCARTERLIBRARY.GOV/LIBRARY/FINDINGAIDS/PRES_MENTAL_HEALTH.PDF](http://www.jimmycarterlibrary.gov/library/findingaids/pres_mental_health.pdf)



ROUTES TO IMPROVING MENTAL HEALTH SERVICES

Routes to improving mental health services



- Improving access
- Improving system coordination
- Co-location of mental health services
- Implementation of evidence-based interventions

Improving access



Primary Care

- First presentation of psychosis in primary care or other outpatient general medical patients
 - 33% of those aged 15-29
 - 42% of those aged 30-59*

Social Services

- 20-50% evidenced mental health need

* Simon et al., 2017, Psychiatric Services

Improved systems



- Integrated care



- Traditional care
 - Primary care
 - Behavioral care
 - Substance use service





57.4% no TX

Could not afford cost

Did not have time

Could handle on own

Didn't know where to go
for Tx

*2017 NSDUH



**How to improve
quality?**

Implementation Science & Practice
Advances Research Center



iSPARC

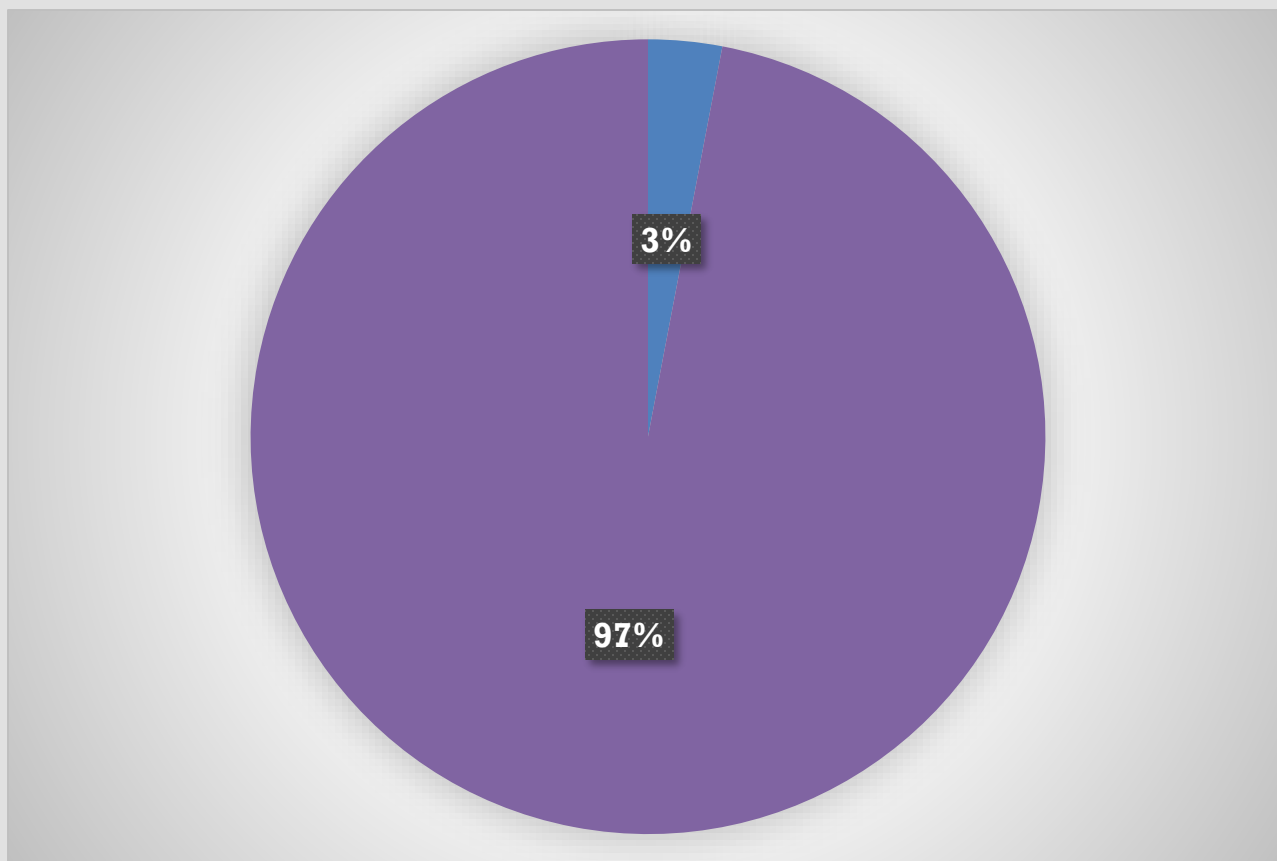
*Improving Mental and Behavioral Health Services for
Better Lives and Stronger Communities*



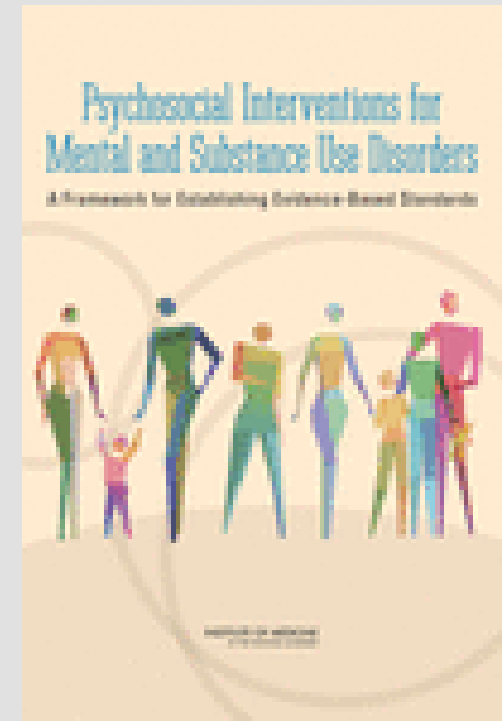
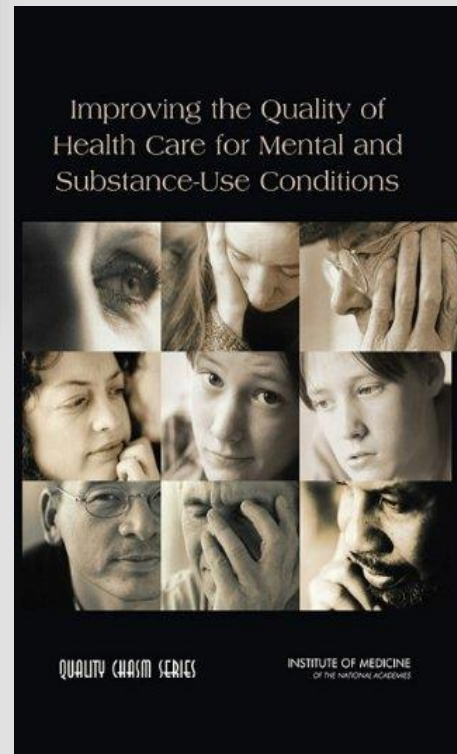
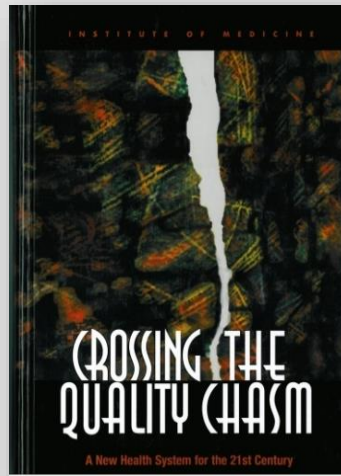
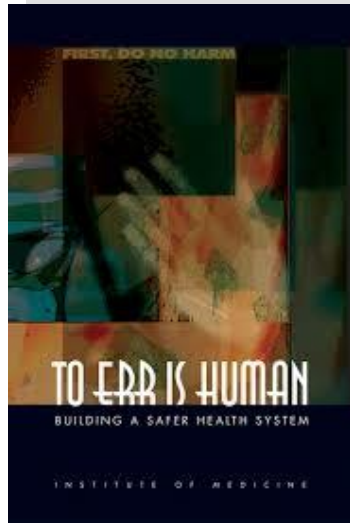
iSPARC Mission

- To conduct, disseminate, and support the use of research in the public mental health system
- To enhance services for people with behavioral health conditions that promote their recovery and improve their quality of life.

Receipt of evidence-based mental health treatment among those with need



The Care that “Could Be” vs. the Care that “Is”





How to implement evidence-based care in real world settings

NIMH strategic plan 2020-2025



Strategic Objective 4:

Strengthen the public health impact of NIMH-supported research.

Establish research-practice partnerships to *expedite adoption, sustained **implementation***, and continuous improvement of evidence-based mental health services

Strategy 4.2.A Strengthening partnerships with key stakeholders to develop and validate strategies for implementing, sustaining, and continuously improving evidence-based practices

Strategy 4.2.B Building models to scale-up evidence-based practices for use in public and private primary care, specialty care and other settings

Strategy 4.2.C Developing decision-support tools and technologies that increase the effectiveness and continuous improvement of mental health interventions in public and private primary care, specialty care, and other settings

PAR 19-274

RO1: Dissemination and Implementation Research in Health



Participating Organization(s)

National Institutes of Health (NIH)

Components of Participating Organizations

National Cancer Institute (NCI)
National Heart, Lung, and Blood Institute (NHLBI)
National Human Genome Research Institute (NHGRI)
National Institute on Aging (NIA)
National Institute on Alcohol Abuse and Alcoholism (NIAAA)
National Institute of Allergy and Infectious Diseases (NIAID)
Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD)
National Institute on Deafness and Other Communication Disorders (NIDCD)
National Institute of Dental and Craniofacial Research (NIDCR)
National Institute on Drug Abuse (NIDA)
National Institute of Environmental Health Sciences (NIEHS)
National Institute of Mental Health (NIMH)
National Institute of Neurological Disorders and Stroke (NINDS)
National Institute of Nursing Research (NINR)
National Institute on Minority Health and Health Disparities (NIMHD)
National Center for Complementary and Integrative Health (NCCIH)

Division of Program Coordination, Planning and Strategic Initiatives, Office of Disease Prevention (ODP)
Office of Behavioral and Social Sciences Research (OBSSR)

Funding Opportunity Title

Dissemination and Implementation Research in Health (R01)

Purpose: D&I Research in Health



- Support innovative approaches to
- Identifying, understanding and developing
- **Strategies** for overcoming barriers to the
- **Adoption, adaptation, integration, scale-up and sustainability** of
- **Evidence-based** interventions, tools, policies, and guidelines

Purpose: D&I Research in Health...



- Understanding circumstances that create need to
- **Stop or reduce (“de-implement”)**
- Use of interventions that are
- **Ineffective, unproven, low-value, or harmful**

Dissemination and Implementation Research (NIH)



- Dissemination research: “The scientific study of targeted distribution of information and intervention materials to a specific public health or clinical practice audience.”
- Implementation research: “The scientific study of the use of strategies to adopt and integrate evidence-based health interventions into clinical and community settings in order to improve patient outcomes and benefit population”

Definitions of Implementation Science

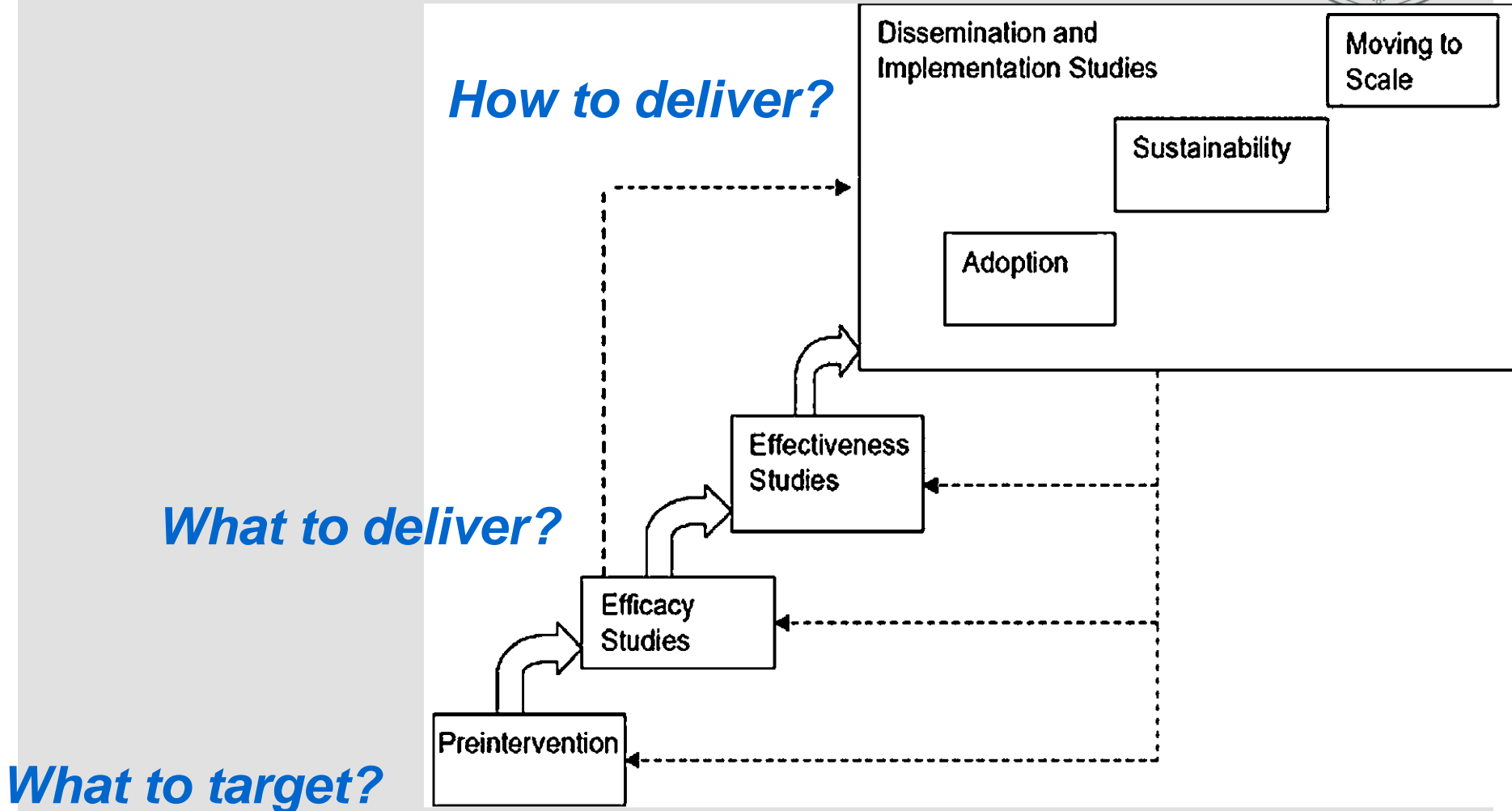


***Making “the right thing to do,
the easy thing to do.”***

- Carolyn Clancy, Former Director of AHRQ



Phases of Clinical Research

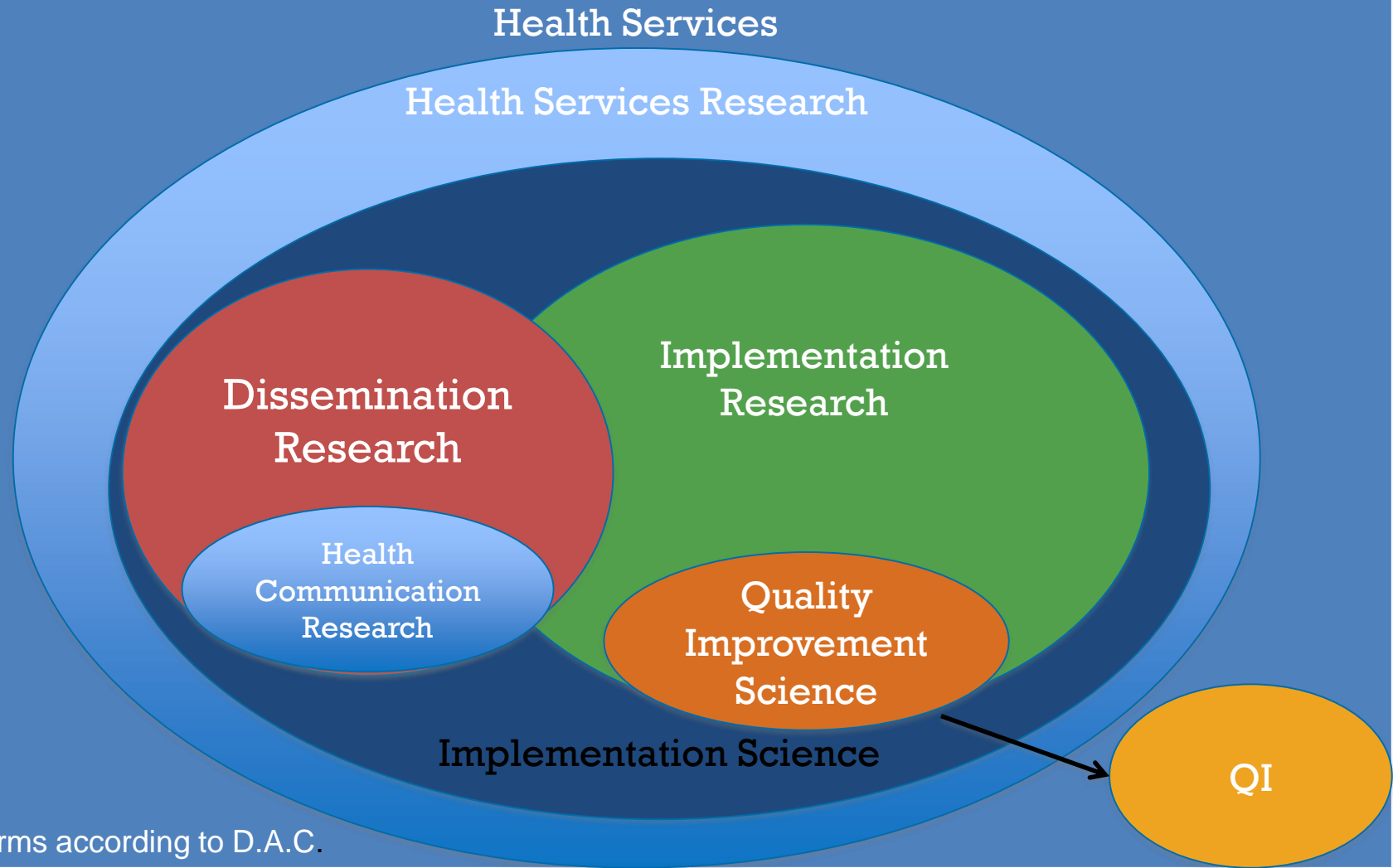


What gets in the way? Barriers and facilitators

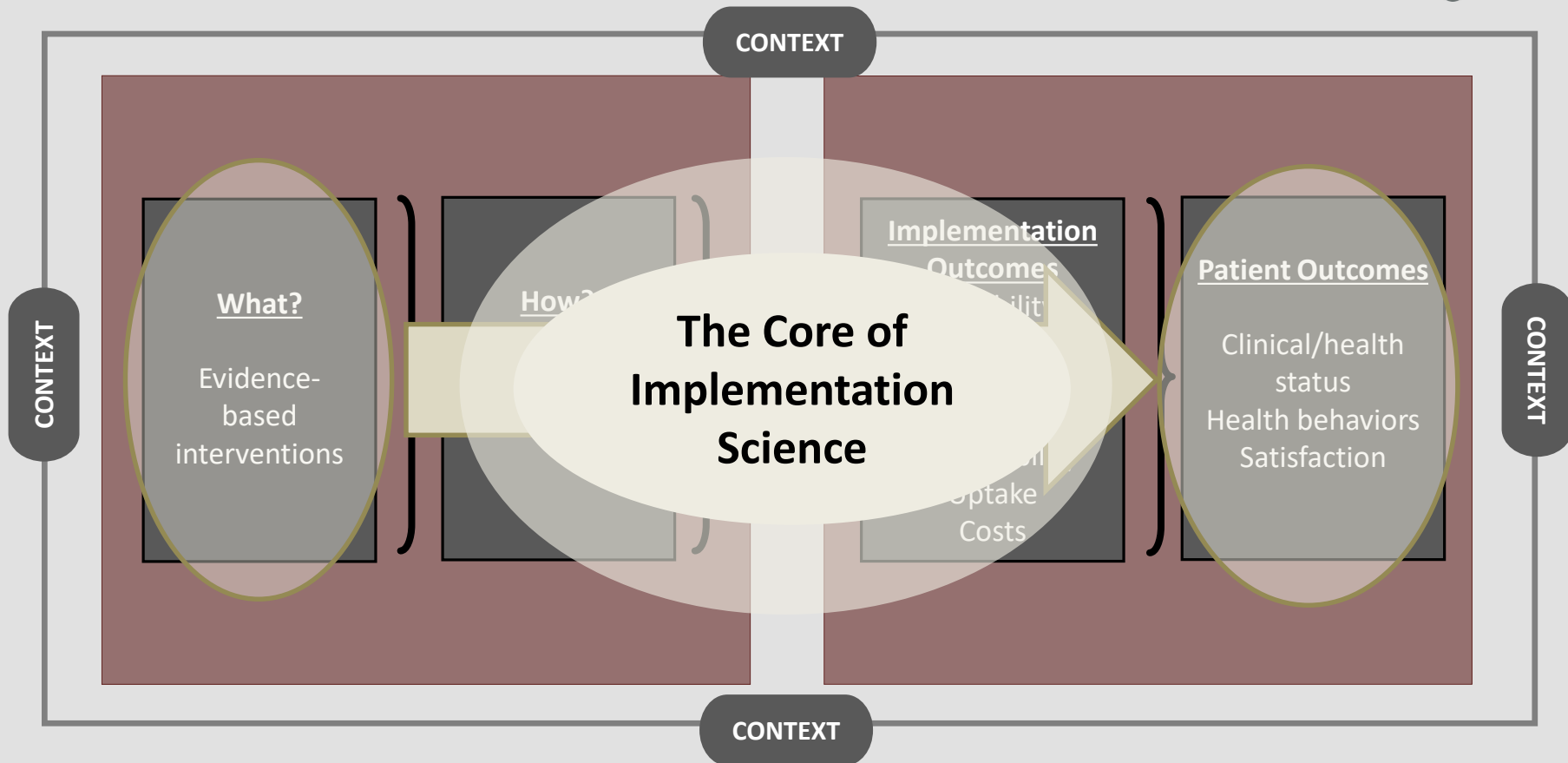


resources
feasibility
systems awareness
habit behavior policies
knowledge inertia
agreement attitudes preferences
patients bias time self-efficacy
rigidity guidelines
routines money

A Big Tent of Terms (and Circles)*



* The terms according to D.A.C.



Proctor, Enola K., et al. "Implementation research in mental health services: an emerging science with conceptual, methodological, and training challenges." *Administration and Policy in Mental Health and Mental Health Services Research* 36.1 (2009): 24-34. June 8, 2016



PRINCIPLES OF IMPLEMENTATION SCIENCE

1. Map the quality gap, measure services provided



Common concerns of health services research and from practice:

Desire to improve services

Poor services or quality of care

Wide variation



Requires measurement

Challenge: data in many agencies don't capture quality, or practices that are delivered

Quality gaps



The quality chasm reflected by:

$$\% = \frac{\textit{number recieving EB care}}{\textit{total service recipients}}$$

$$\% = \frac{\textit{number recieving EB care}}{\textit{total number needing service}}$$

AHRQ quality reports

No change



- Adults with a major depressive episode in the last 12 months who received treatment for depression in the last 12 months 0.110.00.86NSDUH9 (2008-2016)
- Children ages 12-17 with a major depressive episode in the last 12 months who received treatment for depression in the last 12 months-0.890.00.02NSDUH9 (2008-2016)

Worsening



- Suicide deaths among persons age 12 and over per 100,000 population 1.900.00.0

Receipt of depression care: Children ages 12-17 w/ MDD



Agency for Healthcare Research and Quality
Advancing Excellence in Health Care

National Healthcare Quality and Disparities Reports

Your source for the Reports, State Snapshots, and QR/DRnet



Reports

Read and download the full reports

National View

National summary across quality measures

State View

State-level summaries and snapshots across measures

Data Query

Search data across specific measures

Opioids

Search for opioids measures the report

Resources

Resources to improve quality performance

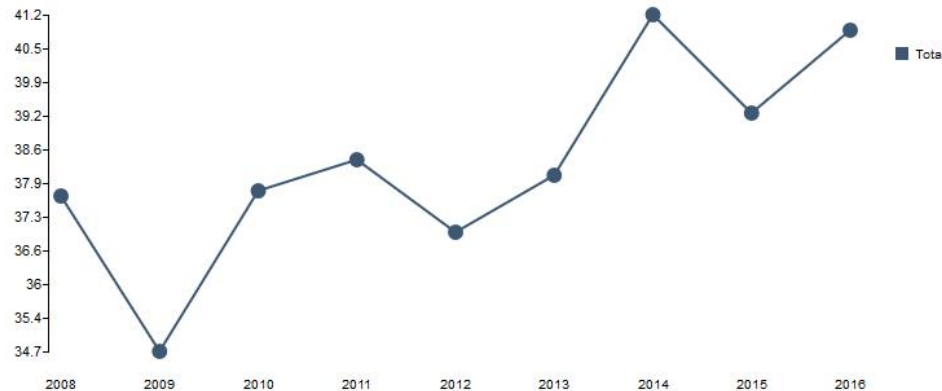
Data Query is an interactive tool that allows you to access national and State data from the National Healthcare Quality and Disparities Reports. You can search for data or trends based on particular subject areas, topics, or measures.

Choose Data

Data Table

Graphic

Table 6_7_1_2_1.1 Children ages 12-17 with a major depressive episode in the last 12 months who received treatment, United States, 2008-2016 [Excel - Open/Save File](#)



Suicide deaths persons age 12+



Agency for Healthcare Research and Quality
Advancing Excellence in Health Care

National Healthcare Quality and Disparities Reports

Your source for the Reports, State Snapshots, and QR/DRnet



Reports

Read and download the full reports

National View

National summary across quality measures

State View

State-level summaries and snapshots across measures

Data Query

Search data across specific measures

Opioids

Search for opioids measures the report

Resources

Resources to improve quality performance

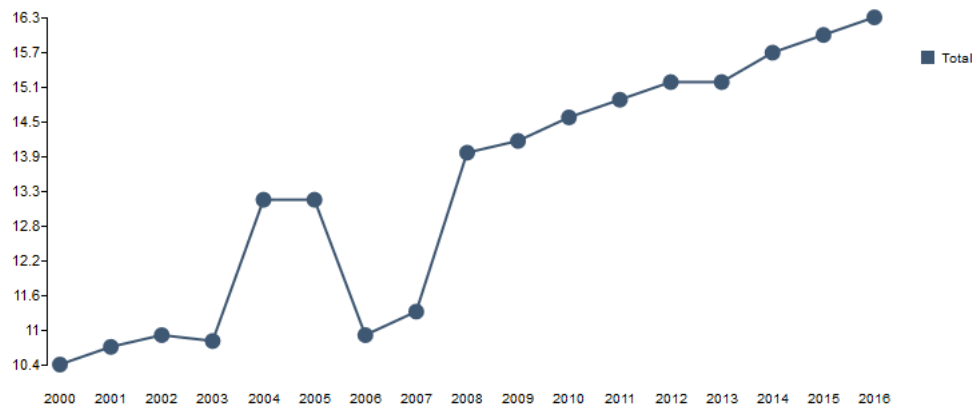
Data Query is an interactive tool that allows you to access national and State data from the National Healthcare Quality and Disparities Reports. You can search for data or trends based on particular subject areas, topics, or measures.

Choose Data

Data Table

Graphic

Table 6_7_1_4_1.1 Suicide deaths among persons age 12 and over per 100,000 population, United States, 2000-2016 [Excel - Open/Save File](#)



Receipt of depression care Adults



Agency for Healthcare Research and Quality
Advancing Excellence in Health Care

National Healthcare Quality and Disparities Reports

Your source for the Reports, State Snapshots, and QR/DRnet



Reports

Read and download the full reports

National View

National summary across quality measures

State View

State-level summaries and snapshots across measures

Data Query

Search data across specific measures

Opioids

Search for opioids measures the report

Resources

Resources to improve quality performance

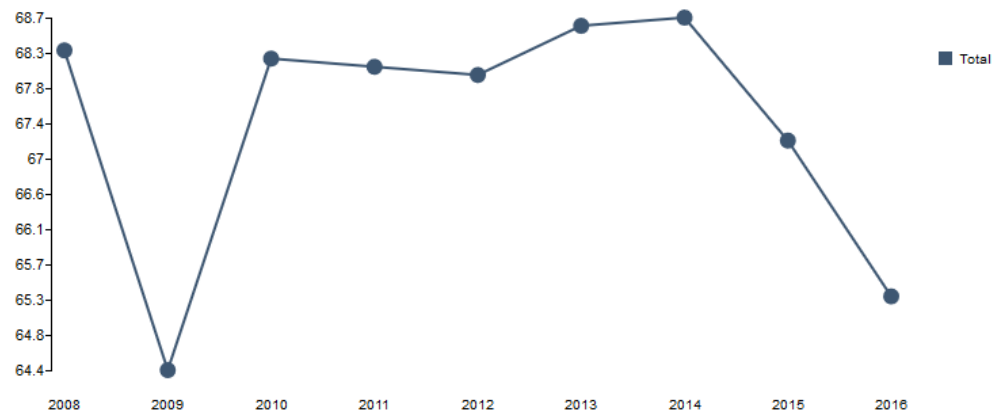
Data Query is an interactive tool that allows you to access national and State data from the National Healthcare Quality and Disparities Reports. You can search for data or trends based on particular subject areas, topics, or measures.

Choose Data

Data Table

Graphic

Table 6_7_1_1_1.1 Adults with a major depressive episode in the last 12 months who received treatment, United States, 2008-2016 [Excel - Open/Save File](#)





2. Select intervention that can improve care, reduce the quality gap

Evidence-based intervention to be implemented

Issues:

Where to find?

How to assess appropriateness for setting

Strong evidence for potential to impact outcomes
clinical, implementation *

Ready for implementation

Acceptability, demand for EBP's in agency

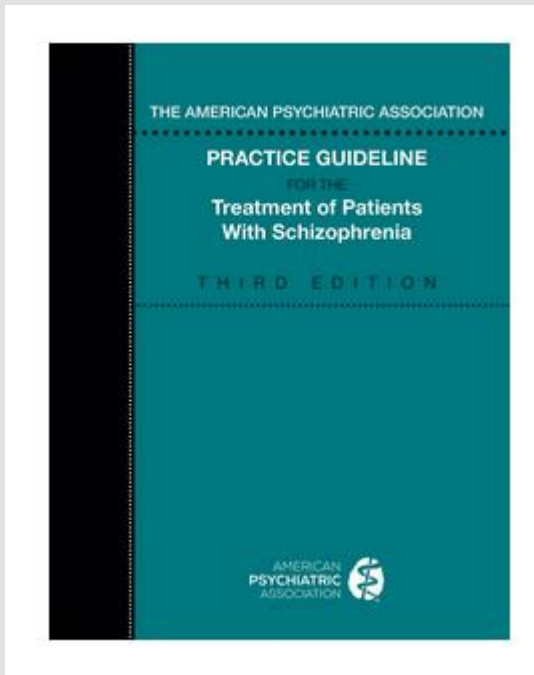
*

Proctor et al. (2011), Outcomes for implementation research...Admin Pol MH Servs 38:65-

Evidence Based Interventions: Reviews & guidelines



- The Cochrane Collaboration (standard setter)
- Guideline Central
 - <https://www.guidelinecentral.com/?s=rehabilitation>
- AHRQ Clinical Guidelines & Recommendations
 - <https://www.ahrq.gov/prevention/guidelines/index.html>
- US Preventive Services Task Force (clinical)
- The Community Preventive Services Task Force (community “guides”)



AMERICAN PSYCHOLOGICAL ASSOCIATION

MEMBERS TOPICS PUBLICATIONS & DATABASES PSYCHOLOGY HELP CENTER NEWS & EVENTS SCIENCE

Home // APA Search Results

Results 1–10 of 3396 for "guidelines" x

Refine Your Search

Topic

- Therapy (309)
- Education (297)
- Law & psychology (167)
- Ethics (153)
- Lesbian/gay/bisexual/transgender (131)
- 57 more... [+]

« Previous Next » Sort by: Relevance v

- APA-Approved Standards and Guidelines**
The following standards and **guidelines** have been reviewed following the procedures detailed in Association Rule 30-8 and approved by the APA Council of Representatives as APA policy.
Guidelines (June 2014)
- Guidelines for Practitioners**
APA has approved practice **guidelines** and related criteria in such areas as multicultural practice, child custody evaluations, PTSD and treatment of gay, lesbian and bisexual clients.

U.S. Department of Health & Human Services



[Home](#) | [Site Map](#) | [Contact Us](#)

Search SAMHSA.gov

[Find Treatment](#) [Practitioner Training](#) [Public Messages](#) [Grants](#) [Data](#) [Programs](#) [Newsroom](#) [About Us](#) [Publications](#)



Evidence-Based Practices Resource Center

SAMHSA is committed to improving prevention, treatment, and recovery support services for mental and substance use disorders.

The Evidence-Based Practices Resource Center provides communities, clinicians, policy-makers and others with the information and tools to incorporate evidence-based practices into their communities or clinical settings.

[Learn more about EBP Resource Center](#)



Search Results

All

Videos

Journals

Podcasts

17,106 results returned for *evidence based interventions*

[HPV | Quality Improvement and Evidence Based Interventions | CDC](https://www.cdc.gov/hpv/partners/outreach-hcp/quality-improvement.html)

<https://www.cdc.gov/hpv/partners/outreach-hcp/quality-improvement.html>

Human Papillomavirus (HPV) quality improvement and **evidence based interventions** can lead to higher HPV vaccination coverage. Learn what quality improvement projects are available.

3. Assess Context & Engage Stakeholders



- What is the setting's experience with change?
- What else is going on in the setting?

Stakeholders: those who are invested in practice and who will care about change



Who are they?

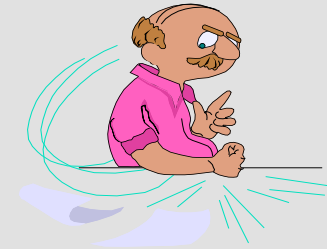
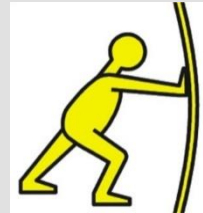
- Service users
- families
- providers
- administrators
- funders
- government agencies/ officials

How will they react to change?

Who wants to improve services?



Is there a demand to implement?



Is there a push out?



Is there a pull?



Is there infrastructure?

4. Plan for change



Change is a process

Conceptual models/ theoretical framework

Contribution:

- Points to action
 - What needs to be changed, where?
- Map for “when to do what”
 - Phase models
- Enhances generalizability
- Reduces haphazardness



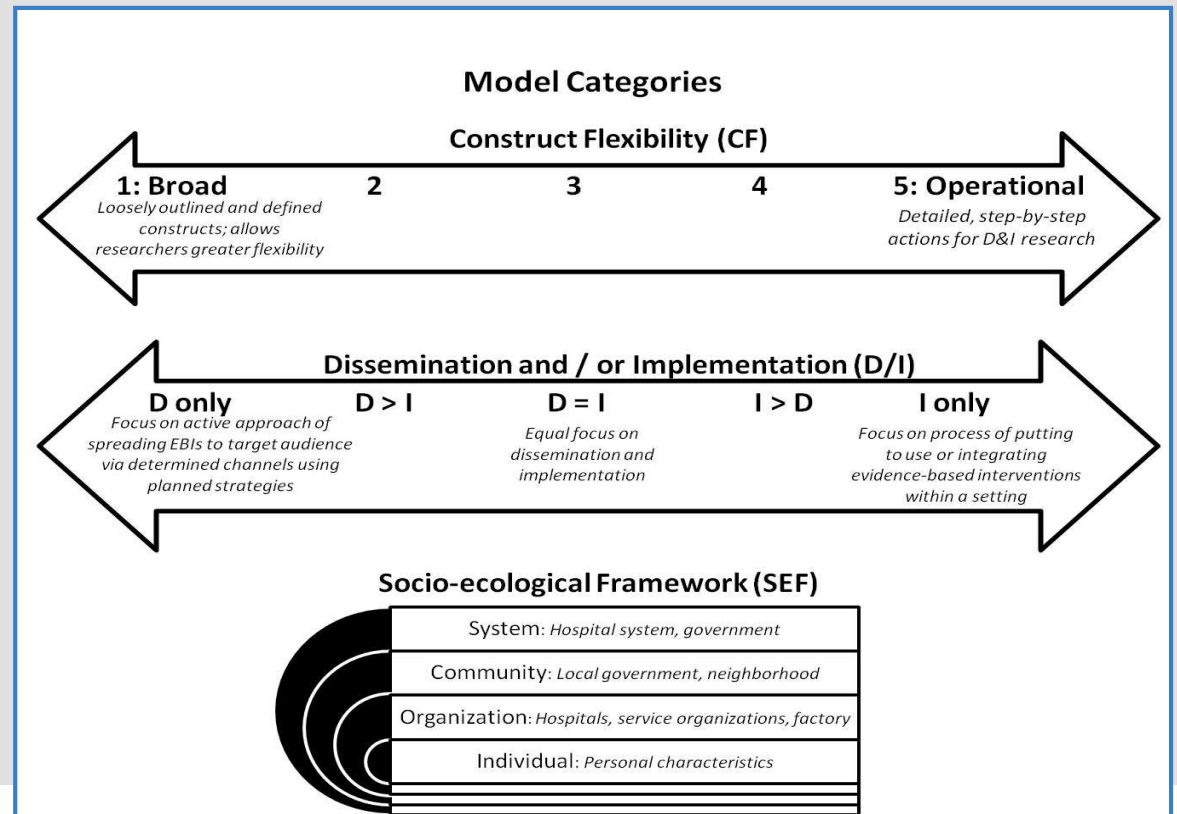
Tabak et al.'s (2012) Review of D&I Frameworks



Bridging Research and Practice Models for Dissemination and Implementation Research

Rachel G. Tabak, PhD, Elaine C. Khoong, BS, David A. Chambers, DPhil,
Ross C. Brownson, PhD

Review of 61 frameworks



5. Select Implementation Strategies



*Systematic intervention process to adopt and integrate evidence-based healthcare innovations into usual care **

Active ingredient in processes for moving EST's and QI's into usual care

* Powell, McMillen, Proctor et al., Medical Care Research and Review, 2012



Implementation *Strategies*

.....the **‘how to’** component of
changing healthcare practice.

.....*Key:*

How to make the “right thing to do”
the “easy thing to do...Carolyn Clancy

Dissemination and Implementation Research in Health PAR # 19-274



Primary purpose: identify, understand, & develop

- **Strategies**
for the
- **Adoption, adaptation, integration, scale-up, & sustainability**
- Of **EB** interventions, tools, policies, & guidelines

Strategies Compilation

68 “discrete” strategies in 6 categories:

- Plan
- Educate
- Finance
- Restructure
- Manage quality
- Attend to policy context

Review

A Compilation of Strategies for Implementing Clinical Innovations in Health and Mental Health



Byron J. Powell¹, J. Curtis McMillen², Enola K. Proctor¹, Christopher R. Carpenter³, Richard T. Griffey³, Alicia C. Bunger⁴, Joseph E. Glass¹, and Jennifer L. York³

Abstract

Efforts to identify, develop, refine, and test strategies to disseminate and implement evidence-based treatments have been prioritized in order to improve the quality of health and mental health care delivery. However, this task is complicated by an implementation science literature characterized by inconsistent language use and inadequate descriptions of implementation strategies. This article brings more depth and clarity to implementation research and practice by presenting a consolidated compilation of discrete implementation strategies, based on a review of 205 sources published between 1995 and 2011. The resulting compilation includes 68 implementation strategies and definitions, which are grouped according to six key implementation processes: planning, educating, financing, restructuring, managing quality, and attending to the policy context. This consolidated compilation can serve as a reference to stakeholders who wish to implement clinical innovations in health and mental health care and can facilitate the development of multifaceted, multilevel implementation plans that are tailored to local contexts.

This article, submitted to *Medical Care Research and Review* on July 11, 2011, was revised and accepted for publication on October 20, 2011.

¹Washington University in St. Louis, St. Louis, MO, USA

²The University of Chicago, Chicago, IL, USA

³Washington University School of Medicine, St. Louis, MO, USA

⁴The University of North Carolina at Chapel Hill, Chapel Hill, NC, USA

Corresponding Author:

Byron J. Powell, George Warren Brown School of Social Work, Washington University in St. Louis, Campus Box 1196, One Brookings Drive, St. Louis, MO 63130, USA
Email: bjpowell@wustl.edu



Powell *et al.* *Implementation Science* (2015) 10:21

DOI 10.1186/s13012-015-0209-1



IMPLEMENTATION SCIENCE

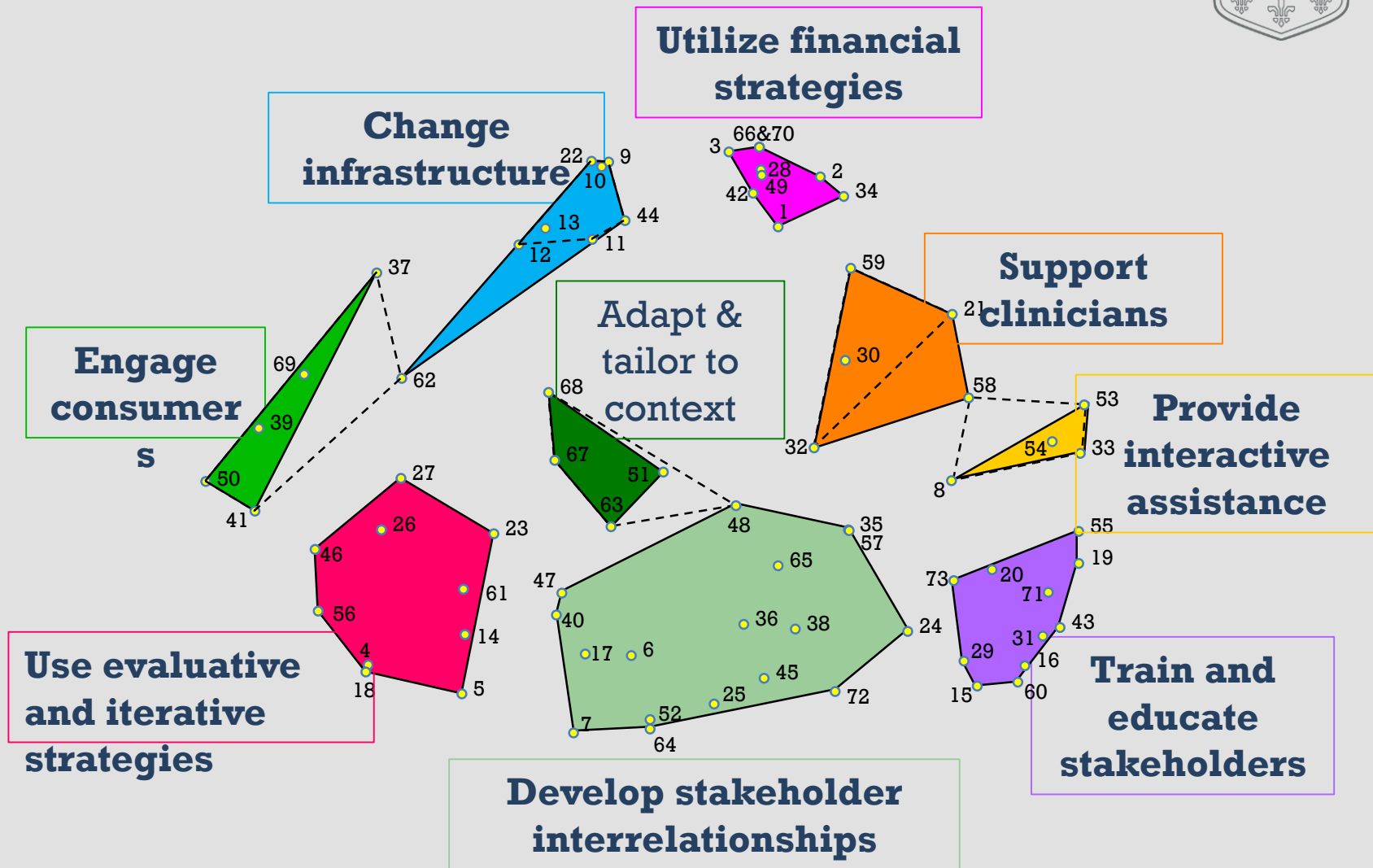
RESEARCH

Open Access

A refined compilation of implementation strategies: results from the Expert Recommendations for Implementing Change (ERIC) project

Byron J Powell^{1*}, Thomas J Waltz², Matthew J Chinman^{3,4}, Laura J Damschroder⁵, Jeffrey L Smith⁶,
Monica M Matthieu^{6,7}, Enola K Proctor⁸ and JoAnn E Kirchner^{6,9}

Identification of Implementation Strategies: ERIC Cluster Solution



More strategies



→ More Tx starts

- Clinics who implemented more ETS's used 33 strategies
- Clinics less successful used 15 strategies

6. Evaluate implementation success



- Implementation outcomes
 - Special kinds of outcomes are measured in implementation research
 - Examples:
 - Acceptability
 - Feasibility
 - Sustainability
- Research designs

Why Focus on Distinct Outcomes in Implementation Research?





Could have an effective intervention:

- Not adopted
- Poor penetration in health system
- Implemented but with poor fidelity
- Not sustained

What We Know About Implementation Outcomes



- Fidelity = most frequently measured outcome
- Provider attitudes frequently assessed
- Implementation outcomes are interactive:
 - Effectiveness  greater acceptability
 - Cost  feasibility
- We don't know much about:
 - Sustainability
 - Scale up and spread

Priority topics for advancing the field



- How do we accelerate translation of research to practice?
- How do we choose the right research methods?
 - Accommodate the complexity
 - Dynamism of change process, the myriad of factors associated with implementation
 - Provide rigor in measurement
 - Are relevant and feasible, given real world settings
- How do we identify mechanisms of implementation?
- How do we sustain and scale up implementation?
- How do we advance understanding of policy D&I?

How early do we start?
How do we move forward?



Hybrid Type 1 Designs

Test clinical/prevention intervention, observe/gather information on implementation

Clinical/prevention effectiveness trials with added process or other evaluations of implementation

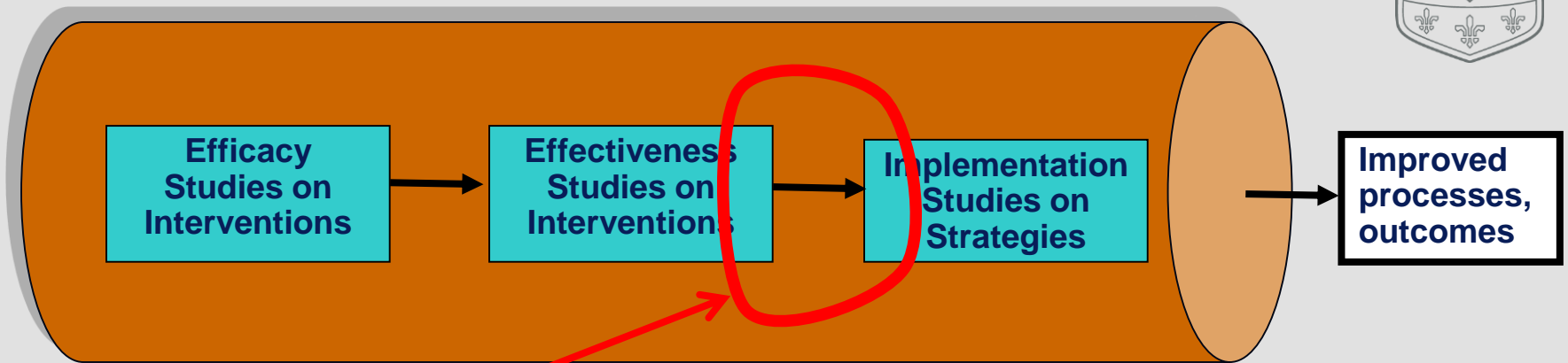
Other emerging approaches:

Designing for dissemination/implementation

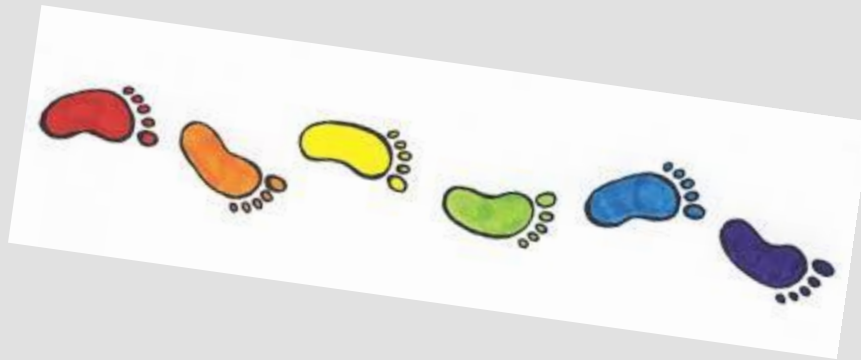
Early collection of data to inform implementation

Pragmatic/real world designs

Hybrid Effectiveness-Implementation Designs



Hybrid designs capitalize on strengths of effectiveness and implementation research. Spatially speaking, hybrids “fit” in here.



Paths to D&I

Establish your footprint toward the field through prior publications and studies

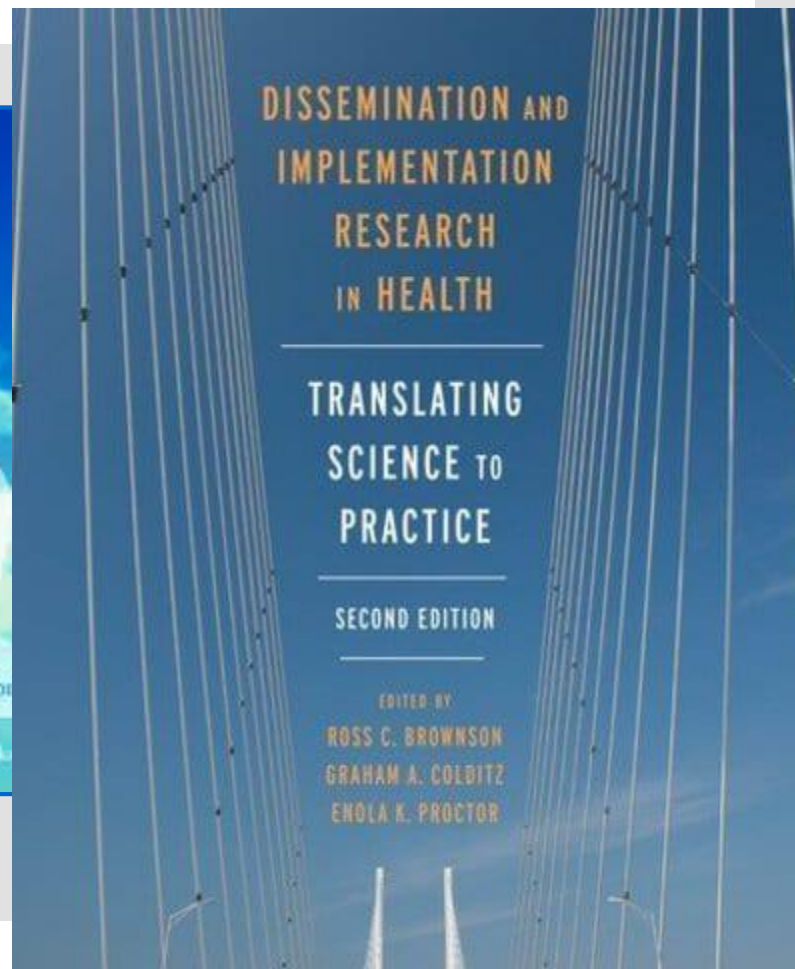
- The evidence-based “what” to be implemented
 - Intervention (policy research)
- The quality gap
- The population
- The setting

Growing number of D&I Books & Journal



IMPLEMENTATION SCIENCE

Implementation
Science



Implementation Science journals

<http://implementationscience.biomedcentral.com/>



BMC Part of Springer Nature

Implementation Science

[Home](#) [About](#) [Articles](#) [Collections](#) [Submission Guidelines](#)

BMC

Implementation Science Communications

biomedcentral.com Part of Springer Nature

Implementation Science

[ABOUT](#) | [ARTICLES](#) | [SUBMISSION GUIDELINES](#)

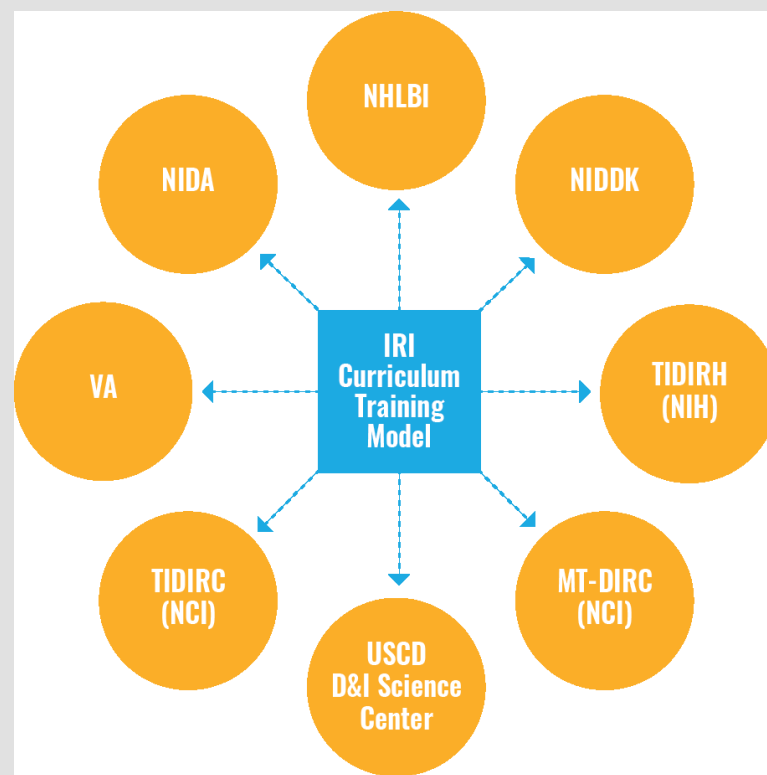
Collections
Supplements

Article List

[SEARCH BY KEYWORD](#) | [SEARCH BY CITATION](#)

748 Result(s) for 'study protocol'
within Implementation Science

Training Opportunities



Types of Influence:

- Adoption of curriculum & mentorship model
- IRI trainees become trainers
- Shared core faculty
- Use of evaluation metrics

Brown University expertise



Rani Elwy and Kathleen Kemp



EVENT

13th Annual Conference on the Science of Dissemination and Implementation in Health

Bridging the gap between research, practice, and policy.

[Online Registration](#) ↗

[Event Details](#)

DATE & TIME

December 15-17, 2020

We're Convening Virtually in December

As the global health workforce continues to respond to the COVID-19 pandemic, the dissemination and implementation (D&I) science community, perhaps now more than ever, will be called upon to bridge the gap between new research, practice, and policy and to ensure that evidence is used to inform decisions that will improve the health of individuals and communities.

13th Annual Conference on the Science of Dissemination and Implementation in Health

[Registration](#)

[Agenda](#)

[Adjunct Events](#)

