

# Designing for Post-Trial Implementation

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American Society of Nephrology Kidney Week  
November 8, 2019

# Disclosures

- I have no financial relationships to disclose.
- Opinions are mine, not official positions of the National Cancer Institute, the National Institutes of Health, or the U.S. federal government.

# Learning Goals

- Learn methods for designing ePCTs so findings can be easily implemented.
- Build in sustainability from the beginning.
- Identify considerations for dissemination of study results.

# Important Things to Know

- D&I science provides key insight into how best to disseminate and implement findings from research studies.
- Developing interventions with stakeholder input is critical for future dissemination and implementation of study findings.

# What is D&I Science?

What can we learn from D&I science to inform  
D&I practice of ePCT research?

# Evidence-Based Interventions, Practices, Programs, Guidelines



Research-Tested  
**Intervention Programs (RTIPs)** <http://rtips.cancer.gov/rtips/>

■ RTIPs – Moving Science into Programs for People



# KDOQI

**Effective Interventions**  
HIV PREVENTION THAT WORKS



**Negative results**

**Original research**

**“PUBLICATION PATHWAY”**

**18%**

Dickersin, 1987

**variable**

**Submission**

It takes 17 years to turn 14% of original research to the benefit of patient care



**Inconsistent indexing**

Poynard, 1985

**Reviews, guidelines, textbook**

**9.3 years**

**Implementation**

Balas & Boren, 2000

Sometimes, the step from best evidence to best practice is simple; however, most of the time it is not, and we need various strategies targeting obstacles to change at different levels...

Grol & Grimshaw, 2003



# Dissemination Research

- “Scientific study of targeted distribution of information and intervention materials to a specific public health or clinical practice audience. The intent is to understand how best to communicate and integrate knowledge and the associated evidence-based interventions.”
- How, when, by whom, and under what circumstances does evidence spread?
- How do we package and share evidence to increase adoption and use?

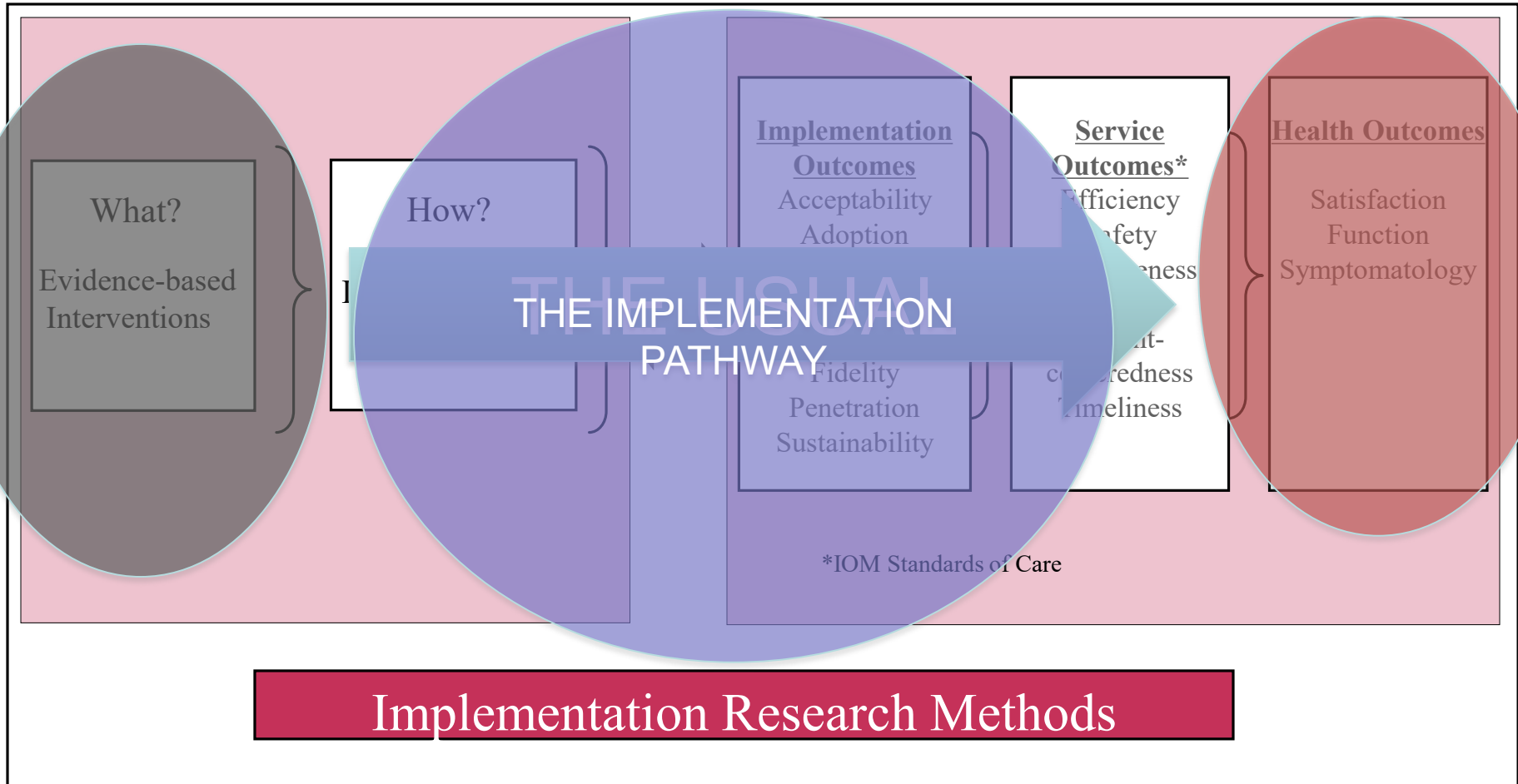
Dissemination and Implementation Research in Health PAR, NIH, 2019

# Implementation Research

- “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 health.”
- How do we best implement evidence-based interventions, practices, and programs in routine, real-world settings?
- What approaches are needed to facilitate integration, adaptation, and sustainability of evidence in delivery settings?

Dissemination and Implementation Research in Health PAR, NIH, 2019

# Implementation Pathway



Proctor et al., 2009

# Implementation Strategies

## 1. Evaluation and iterative strategies

- Assess readiness
- Identify barriers and facilitators

## 2. Interactive assistance

- Facilitation
- Technical assistance

## 3. Adapting and tailoring to context

- Tailor strategies
- Promote adaptability

## 4. Develop stakeholder relationships

- Identify local opinion leaders
- Build coalitions

## 5. Train/educate stakeholders

- Conduct training
- Develop educational materials

## 6. Supporting clinicians

- Audit and feedback
- Revise professional roles

## 7. Engage consumers

- Involve end-users
- Use mass media

## 8. Use financial strategies

- Alter incentive structures
- Develop disincentives

## 9. Change infrastructure

- Mandate change
- Change physical structures

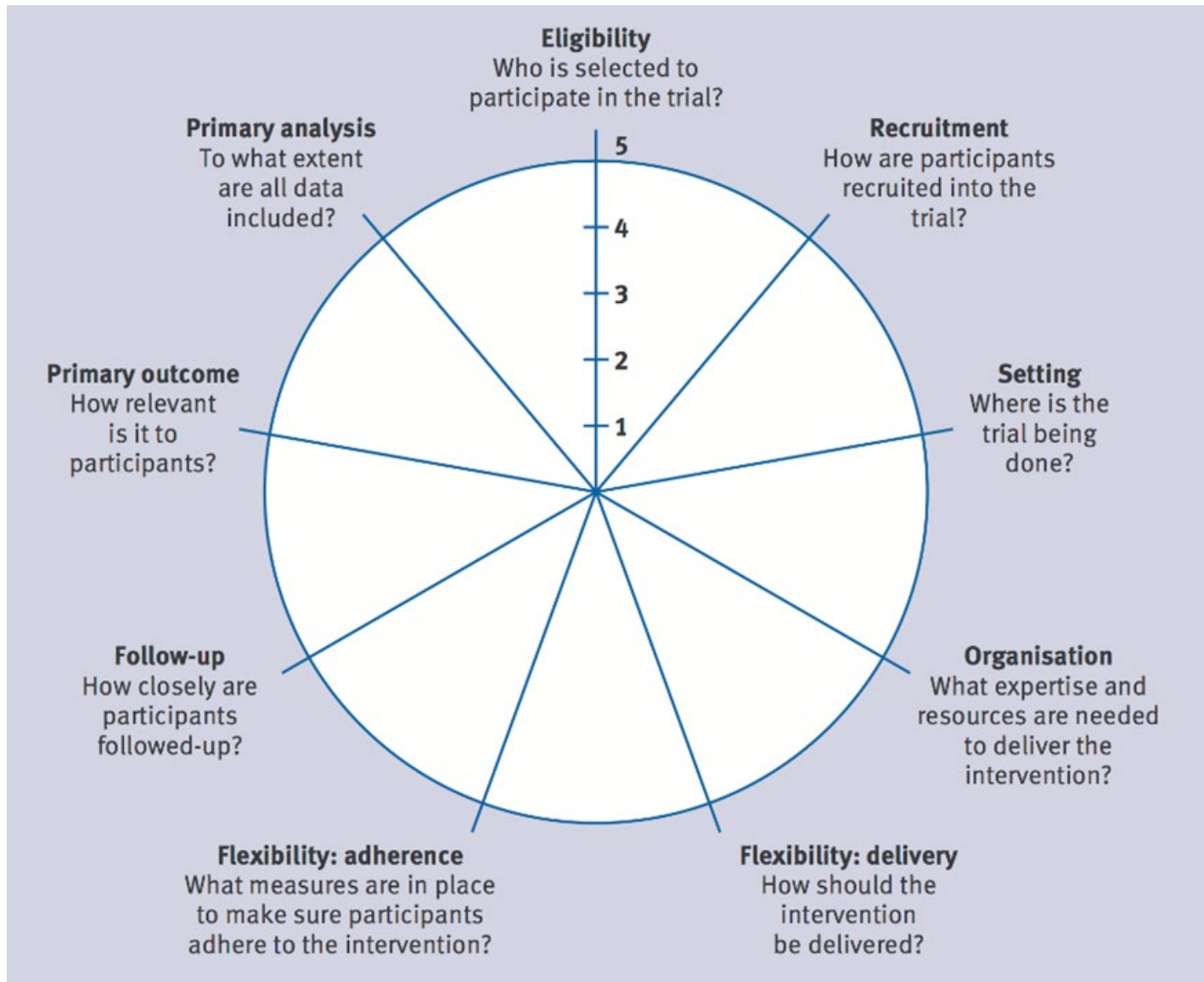
Powell et al., 2012; Waltz, et al., 2015

# Implications of D&I Research for Practice

# Designing with Dissemination in Mind

- Is this a priority question or issue among end-users?
- To whom would the results apply? Will there be a demand for the study results or intervention?
- Are stakeholders involved in identifying the research question, selecting the appropriate research design, collecting priority outcome data, and sharing results?
- Could this intervention be delivered within the existing structure of the delivery system? What would need to change? Is that type of change feasible, realistic, affordable?

# PRECIS-2: Pragmatic-Explanatory Continuum Indicator Summary



Loudon et al., 2015; 1 = Very explanatory, 5 = Very pragmatic

# Planning with Implementation in Mind

- Opportunity to collect data on implementation barriers, facilitators, and processes during pragmatic RCTs to anticipate challenges and guide future efforts.
- Qualitative data (e.g., interviews, focus groups)
  - Assess barriers toward using practice during trial.
- Quantitative data (e.g., surveys)
  - Measure providers' attitudes toward using practice post-trial.



# Disseminating Study Findings

- **Go beyond traditional academic publication outlets**
  - Newsletters, listservs, webinars, press releases, policy briefs for patient, practitioner, professional society groups.
  - Tailor format and content to target audience.
- **Presentations at non-traditional conferences**
  - Practice (*vs.* academic/research) meetings, community health partners, health departments.
- **Leverage social networks, social media, and online platforms**
  - Twitter, trusted peer-to-peer networks, online platforms.

# Implementing Study Findings

- **Implementation manuals**
  - Make manuals for interventions readily available and in user-friendly format to end-users.
- **Partnerships, collaborations, C-suite executives**
  - Continue partnerships developed during trial.
  - Share ‘best practices’ of implementing study findings.
  - Collaborate with C-suite executives throughout trial, measure ROI, cost-effectiveness of intervention, cost-effectiveness of implementation.
  - User-friendly version of CONSORT extension for pragmatic trials (Zwarenstein et al., 2008).

# Sustaining Study Findings

- **Planning for sustainability of intervention from trial.**
  - What resources are needed to sustain the intervention post-trial?
- **Clinical Sustainability Assessment Tool (CSAT):**

## Develop a Sustainability Action Plan

1. Assemble the planning team.
2. Review your practice's goals.
3. Review your Clinical Sustainability Assessment Tool results.
4. Determine which practice elements need to be maintained, eliminated, or adapted.
5. Prioritize the areas of sustainability capacity to address first.
6. Write a Sustainability Action Plan with specific action steps.

[www.sustaintool.org/csat](http://www.sustaintool.org/csat); Washington University in St. Louis, 2019

# Select D&I Research Resources

# Training Programs, Webinars



## Advanced Topics in Implementation Science Webinars

Listen in as leaders in the field discuss advanced dissemination and implementation research topics and answer questions from the community.



# Annual D&I Conference

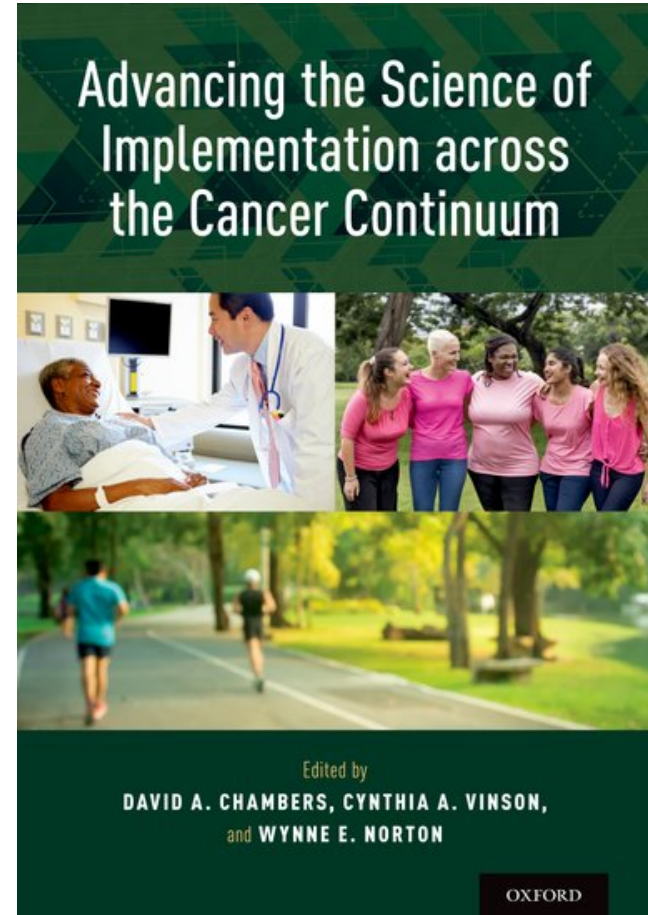
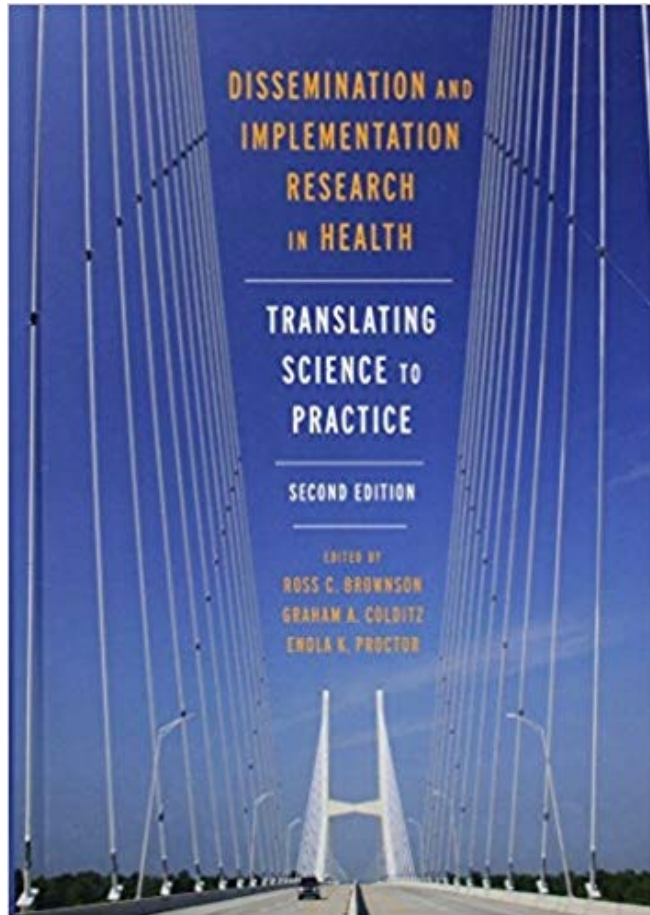
## 12th Annual Conference on the Science of Dissemination and Implementation in Health

- Learn about the latest innovations in the science of D&I;
- Explore new research findings and contribute to the next set of research priorities;
- Identify and understand challenges facing D&I research; and
- Network and collaborate with leading experts in the field.

**DATE & TIME** December 4-6, 2019    **LOCATION** Crystal Gateway Marriott, Arlington, VA

Supported by NIH, AcademyHealth, AHRQ, PCORI, RWJF, VA

# Textbooks, Journal



## Implementation Science

# Important Things To Do

- Think about designing your study in ways that can facilitate broader dissemination and implementation.
- Involve patients, providers, organizational leaders, and other key stakeholders in the design and conduct of the trial to increase applicability and relevance to other potential end-users.
- Create materials (e.g., manuals, training documents) that can be distributed after the study to help disseminate findings.
- Use a variety of outlets to share study findings with end-users.
- Plan for sustainability of study findings before the trial ends.



**Questions? Comments?**

**Thank You!**

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