Disclosure

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Speaker Disclosures
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- Chief, Services Research and Clinical Epidemiology Branch, NIMH
- ASHFoundation: travel/expense reimbursement

Non-financial:
- None
Advancing Implementation Science: A View from NIMH

David Chambers, DPhil
Associate Director, Dissemination and Implementation Research, NIMH
ASHFoundation Implementation Science Summit
March 22, 2014
Presentation Outline

- Conceptualizing the Challenge
- Current Progress (NIH efforts)
- Building a Better System
Underscoring the Need (Case Example: Mental Health)

~60 million people in the US with any Disorder; 11-17 million “severe”

Sources:
NSDUH (2009); Kessler, Chiu, Demler, & Walters (2005); Wang, Lane, Olfson, Pincus, Wells & Kessler (2005); Merikangas, He, Burstein, Swendsen, Avenevoli, Case, Georgiades, Heaton, Swanson, Olfson (2011)
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How Far Have We Come?
Challenges of Dissemination and Implementation Research (c 2001)

- Variability in terms
- Little awareness of research questions
- Minimal capacity within the field
- No shared vision
- Few opportunities to present/publish
- Commentaries outpace studies
- Not clear part of research agenda
Dissemination and Implementation Research

- **Dissemination is** “the targeted distribution of information and intervention materials to a specific public health or clinical practice audience.”

- **Implementation is** “the use of strategies to adopt and integrate evidence-based health interventions and change practice patterns within specific settings.”

NIH PAR-13-055; Adapted from Lomas (1993)
Studying Implementation

What?
- QIs
- ESTs

How?
- Implementation Strategies

Implementation Outcomes
- Feasibility
- Fidelity
- Penetration
- Acceptability
- Sustainability
- Uptake
- Costs

Service Outcomes*
- Efficiency
- Safety
- Effectiveness
- Equity
- Patient-centeredness
- Timeliness

Health Outcomes
- Satisfaction
- Function
- Health status/symptoms

* IOM Standards of Care

Implementation Research Methods

Proctor et al 2009 Admin. & Pol. in Mental Health & Mental Health Services Research
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Implementation Research Methods
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The Usual

Service Outcomes*
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Safety
Effectiveness
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Patient-centeredness
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* IOM Standards of Care
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What?
QIs
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How?
Implementation Strategies
Implementation Outcomes
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Acceptability
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THE CORE OF IMPLEMENTATION SCIENCE

Service Outcomes*
Efficiency
Safety
Effectiveness
Equity
Patient-centeredness
Timeliness

Health Outcomes
Satisfaction
Function
Health status/symptoms

Implementation Research Methods

* IOM Standards of Care

Proctor et al 2009 Admin. & Pol. in Mental Health & Mental Health Services Research
The First NIH PAR(s) Portfolio (‘06-’09)

- 24 R01s, 3 R03s, 13 R21s
- Primarily focused on implementation of specific EBPs
- Continuum of Intervention Types (Tx, Prevention, Screening, etc.)
- Clinical and Community Settings
- Most studies are prospective

(Ref: Tinkle et al, Nursing Research and Practice, 2013)
The Second NIH PAR(s) Portfolio (‘09-'12)

- 25 R01s, 3 R03s, 12 R21s (2 rounds to go)
- Enhanced focus on sustainability, improved measurements
- Continuum of Intervention Types (Tx, Prevention, Screening, etc.)
- Expansion of clinical topics (e.g. Dental, CAM, Complex patients)
- Experimental, Quasi-experimental, observational designs

(Ref: Tinkle et al, Nursing Research and Practice, 2013)
Dissemination and Implementation Studies

• Effectiveness of implementation approach
  • Quality Improvement Interventions
  • Organizational change
  • Provider Training and Supervision
  • Financing/policy change

• Emerging approaches
  • Learning Collaboratives
  • Technology support system
...and more to come
The Current Program Announcements

- PAR-13-054; 13-055;13-056
- NIMH, NCI, NIDA, NIA, NHGRI, NIAAA, NIAID, NHLBI, NINR, NIDDK, NINDS, NIDCD, NIDCR, NCCAM, FIC, OBSSR
- 2010 CSR standing review committee
- Every round Submission
Selected D&I Research Themes

- Strategies to improve sustainability/ongoing improvement of ITVs
- “Scaffolding” of multiple ITVs within Care System
- Development/Use of innovative designs and measures
- Systems science approaches (e.g. simulation modeling) to D&I
- IS in the global health context

(See PAR 13-055, for more examples)
The DIRH Study Section (Review Committee)

- “The (DIRH) Study Section reviews applications intending to bridge gaps between public health, clinical research, and everyday practice. The focus of the studies reviewed is on the transmission and implementation of knowledge from scientific discovery to transform healthcare delivery, improve health outcomes, and manage acute and chronic illness.

- SRO: Martha Hare, Ph.D.

D and I Resources (NIH and beyond)

- Funded Grants (e.g. NIH, AHRQ, CDC, VA, Foundations)
- Research Centers, CTSA cores, Networks
- Implementation Research Institute (NIMH-funded R25)
- Implementation Science
- Recent Book: Brownson, Colditz, Proctor, 2012 *Dissemination and Implementation Research in Health*
Annual NIH/VA D and I Meetings

• “First meeting: September 2007: “Showcase”, ~350 participants

• Second meeting: “Building Capacity” January 2009, > 500 registrants

• Third meeting: “Methods and measures” March 2010, 900 people registered

• Fourth meeting: “Policy and Practice” March 2011, 1200 registrants

• Fifth meeting: “D and I at the crossroads”, March 19-20, 2012, 1200 registrants

• “Sixth” meeting(s): Working groups on Training (Sept ‘13), Measurement (Oct ‘13), Research Design (Jan ‘14)

http://obssr.od.nih.gov/scientific_areas/translation/dissemination_and_implementation/index.aspx