Implementation Science and the Adoption of Practice in Addiction Treatment

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Outline

• Why should we care about Implementation Science?
• 2006 expert workshop on implementation research
• New NIH program announcements on dissemination research
• Activities in the NIDA Clinical Trials Network
What’s the Problem Here?

- Years of addiction research have yielded few sustainable benefits for patients
- **99%** of NIH research budget spent on uncovering etiology and developing clinical treatments
- Only **1%** goes toward learning how to actually make use of those findings
In fact, we seem to be...

...Addicted to Discovery
Proving the effectiveness of an evidence-based program is good …

… but it is only the first step
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What is Implementation Science?

- Study of *principles* and *methods* to promote the *systematic* adoption and implementation of scientific advances into real-world practice.
- Examines both *individual* behaviors and organizational *systems of care*.
- Aims to reduce *haphazard* uptake of research findings across healthcare practice.
So when the going gets tough, the tough get going, and ... 

... organize a workshop!
January 2006 Workshop

• Organized by NIAAA, NIDA & CSAT
• 25 experts across spectrum of health care
  – Substance abuse, mental health, cancer, quality improvement, service system operations
• Goals:
  – Explore “state-of-the-science” in implementation research
  – Develop research agenda & future directions for AOD
• Thematic presentations and facilitated discussion
• Key presenters:
  – Brian Mittman, Dean Fixsen, Larry Green, Jon Kerner, Dennis McCarty
Implementation Science Today

- Insufficient volume of robust, relevant findings
  - Few studies on issues critical to real-world practice
- Inadequate theories and models…(mis)applied
- Inappropriate methods asking incorrect questions
- Insufficient relations between key stakeholders
  - Practitioner involvement in setting research agenda
  - Researcher involvement in practice
- Insufficient human resources
  - Too few committed researchers
  - Lack of training and infrastructure support

Mittman 2006 Literature Review
Creating New Bridges

• If we want more evidence-based practice, we need more *practice-based evidence*

• Provider organizations and practitioners must *help shape research questions*

• Train people to develop *true partnerships* between researchers and practitioners
  – Best to start at junior level

• *Reward* investigators who commit to implementation science careers
  – Academic promotions, journal venues
Getting Practice-Based Evidence

- *Internal validity* does not demonstrate *feasibility, sustainability, or value*
- *External validity* reflects *generalizability* but may not say much about *practicality*
- True *participatory research* is critical for *credibility*
  - With those who would *do the work*
  - With those who would *pay for it*
Getting Practice-Based Evidence

Practitioners read research findings and ask:

- Do I have the same resources as they?
- How different is my situation of practice?
- Are such lofty goals necessary or realistic?
- Can I afford to do this?
- Will my clients (and staff) be better off?

Only relevant and credible research can answer these questions.
Impact in the Addiction Field

• *Unique relationships* between treatment programs and investigators
• Many practitioners *eager for better tools*
• State agencies (and others) seeking *quality improvement*
• Opportunity to answer *practical and relevant* questions
• *Inadequate service delivery infrastructure* limits use of Evidence Based Practices
• *Lean budgets* at local clinics may curtail optimal implementation activities
Putting Evidence to Work

Starts at the organizational level:

• Define specific need
• Identify sufficient resources
• Commit to change
  – Top level managers
  – Field level staff
• Training strengthened by ongoing supervision and feedback
Putting Evidence to Work

• On-the-ground *Change Agent*  
  – Knowledge Broker, Champion, Purveyor
• An individual who *actively works* to catalyze good implementation
• **Access** to staff, operations & infrastructure
• Engages in long-term and **sustained** effort
• *Learns* from each successive **experience**
• Changes the behaviors of **organizations** and **individuals**
System Facilitates Organization in Supporting Practitioners

Organization Supports Effective Practitioner Behaviors

Improve Practitioner Effectiveness
Things That *Don’t* Work

- **Dissemination of information by itself**
  - Research literature
  - Mailings
  - Practice guidelines
  - APA symposia

- **Training alone**
  - Without ongoing coaching and feedback
  - When not focused explicitly on behavior change
NIH Program Announcements

• Dissemination and Implementation Research in Health
  – PAR-06-039 – PAR 06-071 – PAR-06-072
  – Special review panel

• First round (June 2006): 39 applications

• Most proposed implementation of specific intervention

• Few focused on science of implementation
  – We hope to educate applicants and reviewers
National Drug Abuse Treatment Clinical Trials Network (CTN)

- **Cooperative Agreement** among treatment researchers, community providers, & NIDA
  - Study treatment effectiveness in *diverse community-based settings (CTP)*
  - *Transfer* research results to clinicians
- Core principle of *bidirectionality*
- CTN CTPs *more likely to use* EBPs
- Research Utilization Committee
  - Researchers and practitioners
  - Workgroups to help CTPs adopt CTN findings
    - Motivational Enhancement/Motivational Interviewing
    - Contingency Management
    - Buprenorphine
National Drug Abuse Treatment Clinical Trials Network (CTN)
Blending Addiction Science & Practice: Bridges to the Future

October 16 & 17, 2006
Washington State Convention & Trade Center • Seattle, Washington

As in other fields of medicine, a gap exists in the drug abuse treatment field between clinical practice and scientific research. This unique two-day conference provides an opportunity for clinicians and researchers to examine cutting-edge scientific findings about drug abuse and addiction and their application to clinical practice.

www.sei2003.com/blendingseattle
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Study protocol Open Access
Defining the effect and mediators of two knowledge translation strategies designed to alter knowledge, intent and clinical utilization of rehabilitation outcome measures: a study protocol [NCT00298727]

Joy C MacDermid, Patty Solomon, Mary Law, Dianne Russell, Paul Stratford
[Abstract] [Provisional PDF] [PubMed] [Related articles]

Research article Open Access
Innovations in mental health services implementation: a report on state-level data from the U.S. Evidence-Based Practices Project

Jennifer L Magnabosco
Implementation Science 2006, 1:13 (30 May 2006)
[Abstract] [Provisional PDF] [PubMed] [Related articles]

Latest news

(Date posted: 17 July 2006)

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(Date posted: 27 June 2006)

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