

# ***Implementation Science and the Adoption of Practice in Addiction Treatment***

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***US Department of Health and Human Services***

**American Psychological Association Convention**

**New Orleans, LA**

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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*





# IMPLEMENTATION

## INTERVENTION

		EFFECTIVE	NOT EFFECTIVE
INTERVENTION	EFFECTIVE		
	NOT EFFECTIVE		

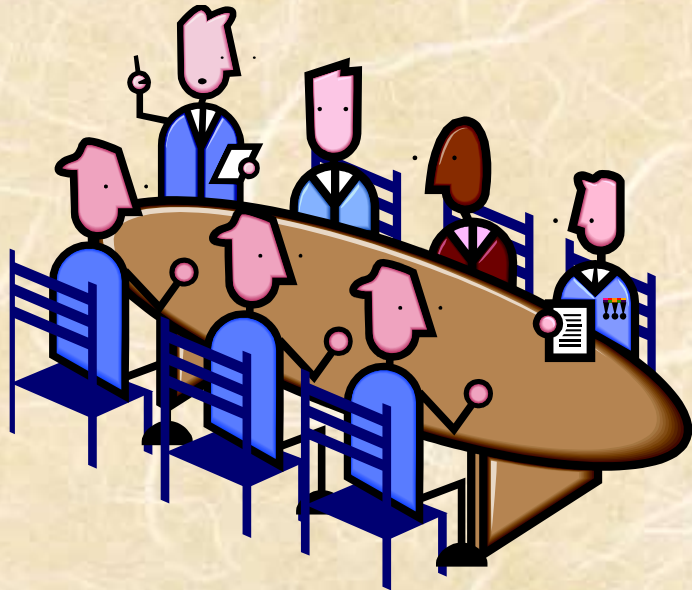
# What is Implementation Science?

- 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



# 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***





**Improve  
Practitioner  
Effectiveness**

**Organization  
Supports Effective  
Practitioner Behaviors**

**System Facilitates  
Organization in  
Supporting Practitioners**

# 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

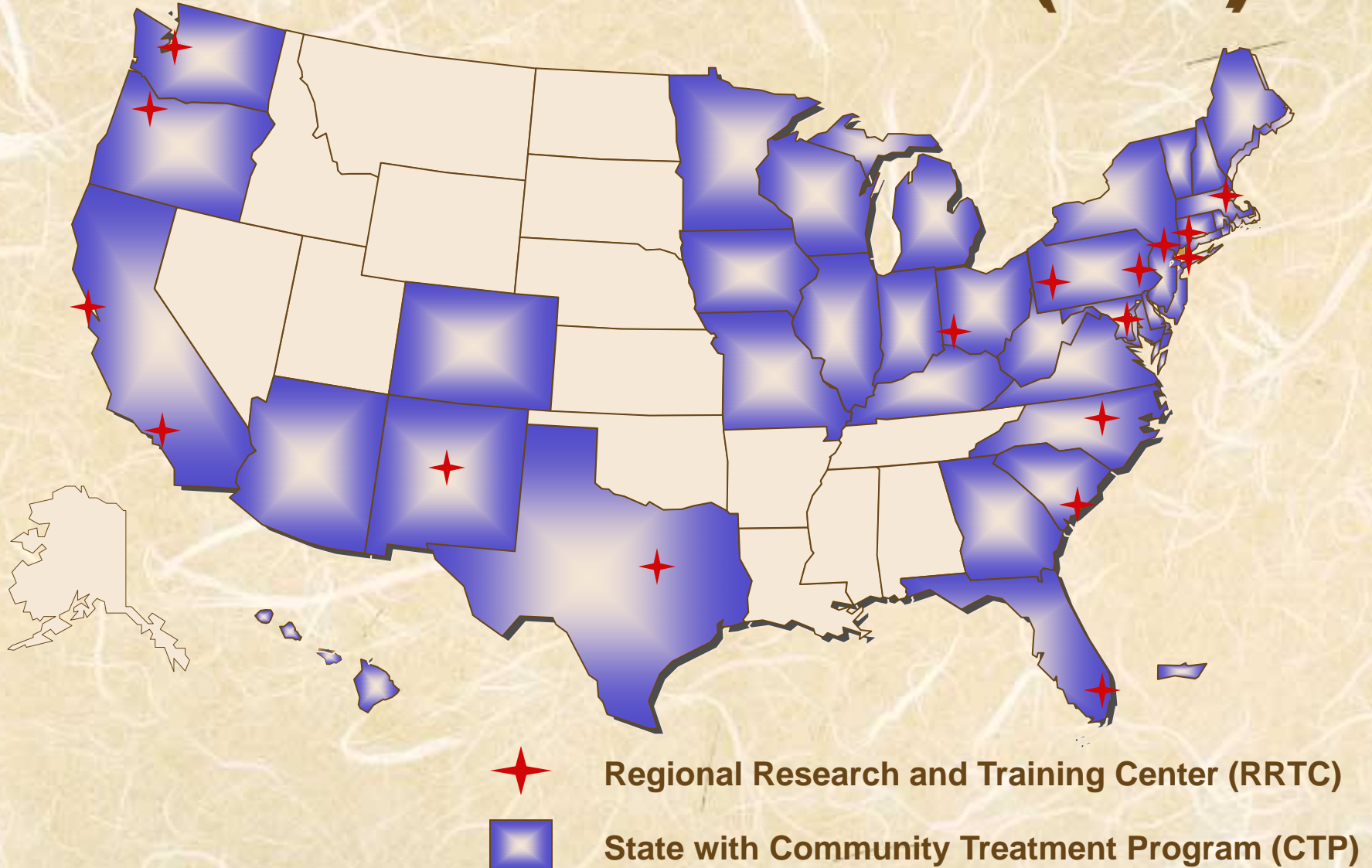
- **Dissemination and Implementation Research in Health**
  - PAR-06-039 – PAR 06-071 – PAR-06-072
  - Special review panel
- First round (June 2006): **39** applications
- Most proposed implementation of specific intervention
- Few focused on **science** of implementation
  - *We hope to educate applicants 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.

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ON DRUG ABUSE

National Institute on Drug Abuse  
National Institutes of Health  
U.S. Department of Health and Human Services

**OHSU**

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## Latest news

**The newly-established Academy for Healthcare Improvement has issued a Call for Abstracts for the 12th Annual International Scientific Symposium on Improving the Quality and Value of Health Care, 11 Dec 2006, Orlando Florida. Abstracts due 8 Sep 2006.**  
(Date posted: 17 July 2006)

**Implementation Science article processing charges of £750 start in late August.**  
(Date posted: 27 June 2006)

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