

Using the Network to Develop a Successful  
Implementation Science Proposal:  
*Working with HIV Clinics to adopt Addiction  
Treatments using Implementation Facilitation  
(WHAT-IF?)*

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# Outline

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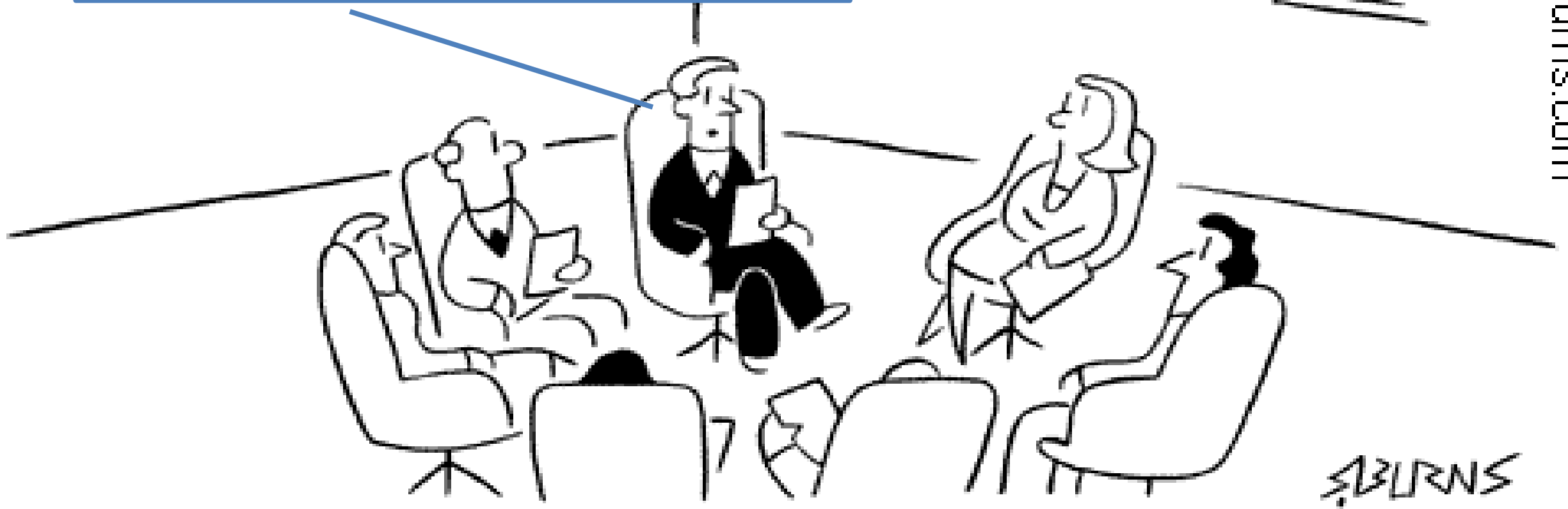
- Why Implementation Science?
- Using the Network to respond to an RFA
- What is *WHAT-IF*?

# Outline

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- Why Implementation Science?
- Using the Network to respond to an RFA
- What is *WHAT-IF?*

The latest research shows that we really should do something with all this research



S. BURNS

# Need for Implementation Science

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graph LR; A[Efficacy Studies] --> B[Effectiveness Studies]; B --> C[Implementation Science];
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Efficacy  
Studies

Effectiveness  
Studies

Implementation  
Science

How do we change  
practice?

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# Implementation Science

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- The study of methods to promote the integration of research findings and evidence into healthcare policy and practice.
- Seeks to understand the behavior of healthcare professionals and other stakeholders as a key variable in the sustainable uptake, adoption, and implementation of evidence-based interventions

# Implementation Research Outcomes

Implementation Outcomes	Service Outcomes	Patient Outcomes
Acceptability	Efficiency	Satisfaction
Adoption	Safety	Function
Appropriateness	Effectiveness (hybrid designs)	Symptomatology
Costs	Equity	
Feasibility	Patient-centeredness	
Fidelity	Timeliness	
Penetration		
Sustainability		



# Outline

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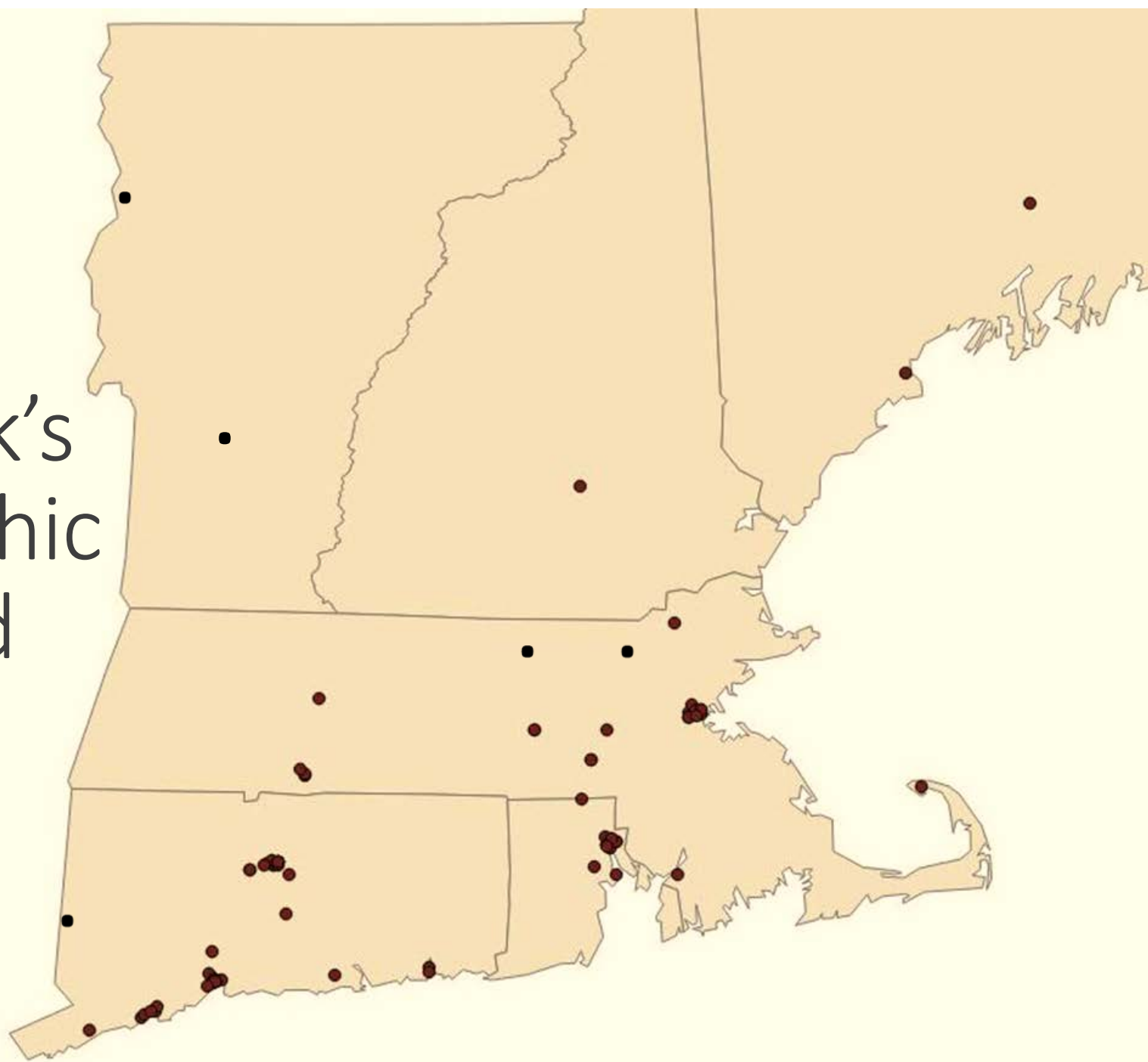
- What is Implementation Science?
- Using the Network to respond to an RFA
- What is *WHAT-IF?*

# New England HIV Implementation Science Network (The “Network”)

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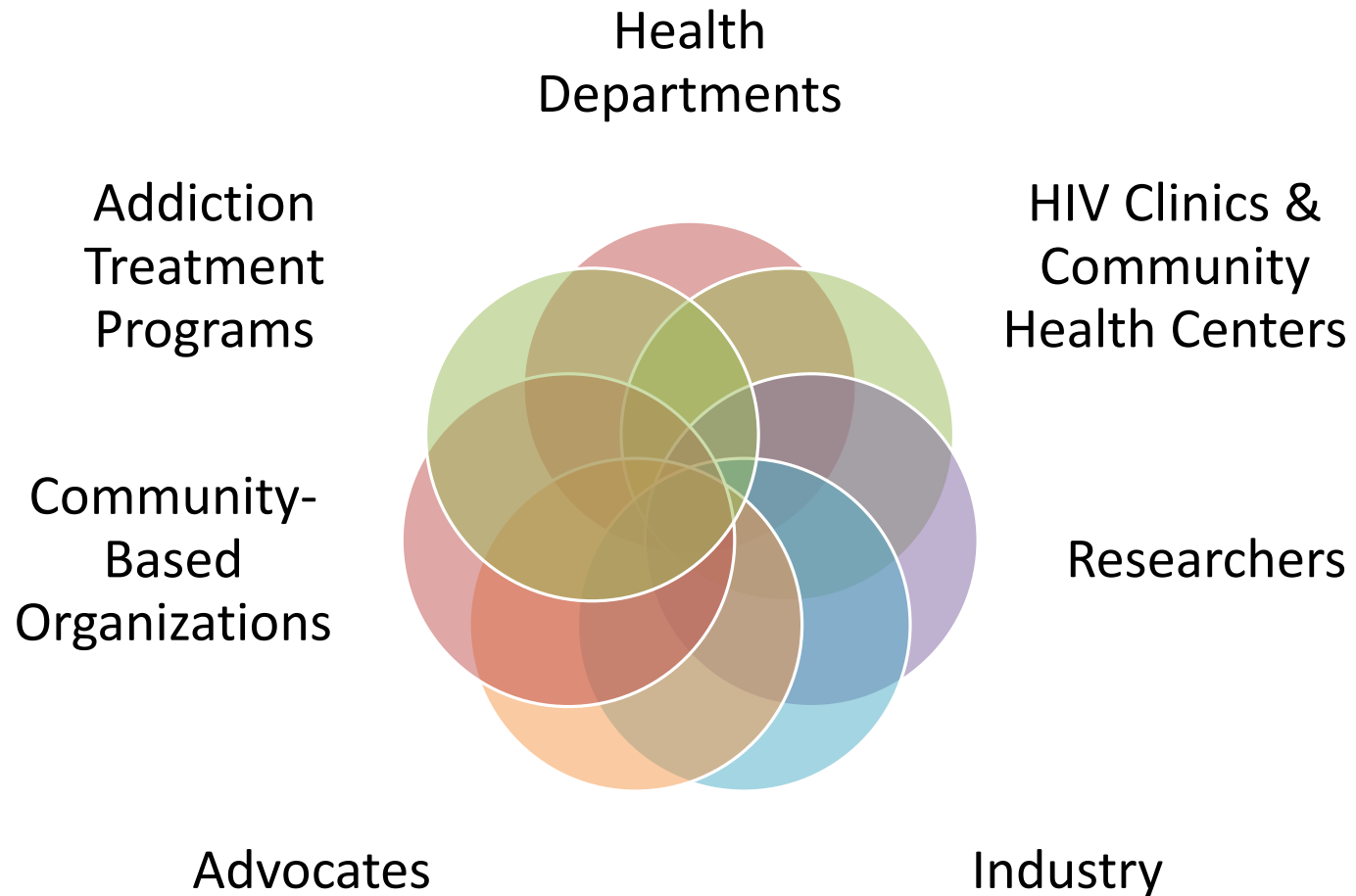
- Aims to improve HIV prevention and treatment in small urban areas with a high prevalence of HIV by:
  - Stimulating and supporting research and evaluation collaborations across New England
  - Fostering partnerships among agencies, stakeholders, and researchers
  - Focusing on implementation science in small urban areas with a high prevalence of HIV

# The Network's Geographic Spread



# The Network is Diverse

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**Funding Opportunity Title** Integration of Infectious Diseases and Substance Abuse Intervention Services for Individuals Living with HIV (R01)

**Activity Code** R01 Research Project Grant

**Announcement Type** New

- Related Notices**
- [December 7, 2015](#) - This RFA has been reissued as [RFA-DA-16-011](#).

**Funding Opportunity Announcement (FOA) Number** RFA-DA-15-013

**Companion Funding Opportunity** None

**Number of Applications** See [Section III. 3. Additional Information on Eligibility](#).

**Catalog of Federal Domestic Assistance (CFDA) Number(s)** 93.279

**Funding Opportunity Purpose**

The goal of this FOA is to develop and test organizational and systems level interventions to determine how best to provide comprehensive, high quality, integrated, sustainable, cost-effective interventions to improve the health outcomes of PLWH with substance use disorders and other comorbid conditions. This FOA will support: 1) multidisciplinary research to enhance the adoption and integration of evidence-based screening and treatment of substance abuse in HIV centers and closely related medical settings; and 2) multidisciplinary research to increase the adoption and integration of HIV testing and linkage to HIV care in addiction treatment settings. In both HIV and addiction treatment settings, research to enhance the adoption and integration of treatment services for comorbid conditions (e.g. coinfections, psychiatric disorders) is encouraged.

**Funding Opportunity Title** Integration of Infectious Diseases and Substance Abuse Intervention Services for Individuals Living with HIV (R01)

**Activity Code** R01 Research Project Grant

**Announcement Type** New

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- Organizational and systems level interventions
- Evidence-based practices (screening & treatment)
- Adoption
- Sustainable

# RFA-DA-15-013

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Applicants are encouraged to develop projects that address the National HIV/AIDS Strategy goal of Increasing Access to Care and Improving Health Outcomes for People Living with HIV, **especially implementation research on the integration of services and maintenance of people in clinical care.**

**Examples of possible research topics include (but are not restricted to):**

**Developing and testing implementation strategies to disseminate, adopt, and sustain evidence based practices to address substance use disorders in HIV care settings and HIV care in addiction treatment settings;**

Testing the implementation of elements of a medical home model or other integrated service delivery models consistent with the provisions of the Affordable Care Act.

# Pulling a grant together

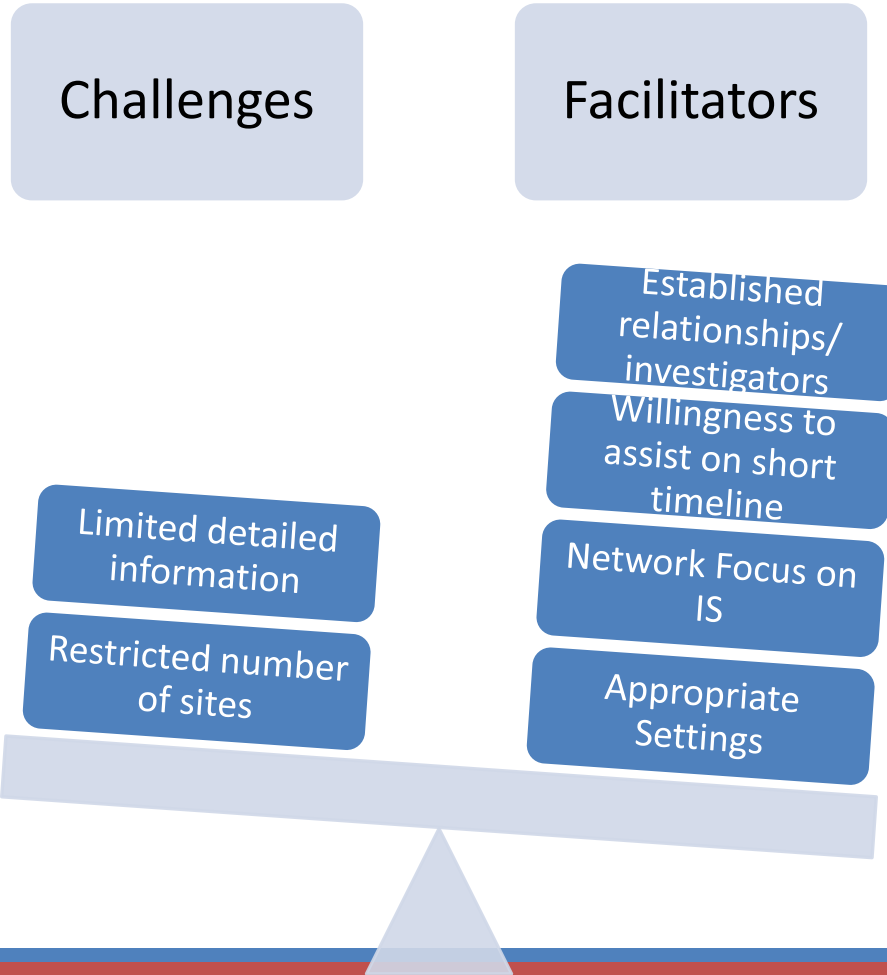
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- The science
- The partners
- The logistics
- The budget
- The timeline
- The details



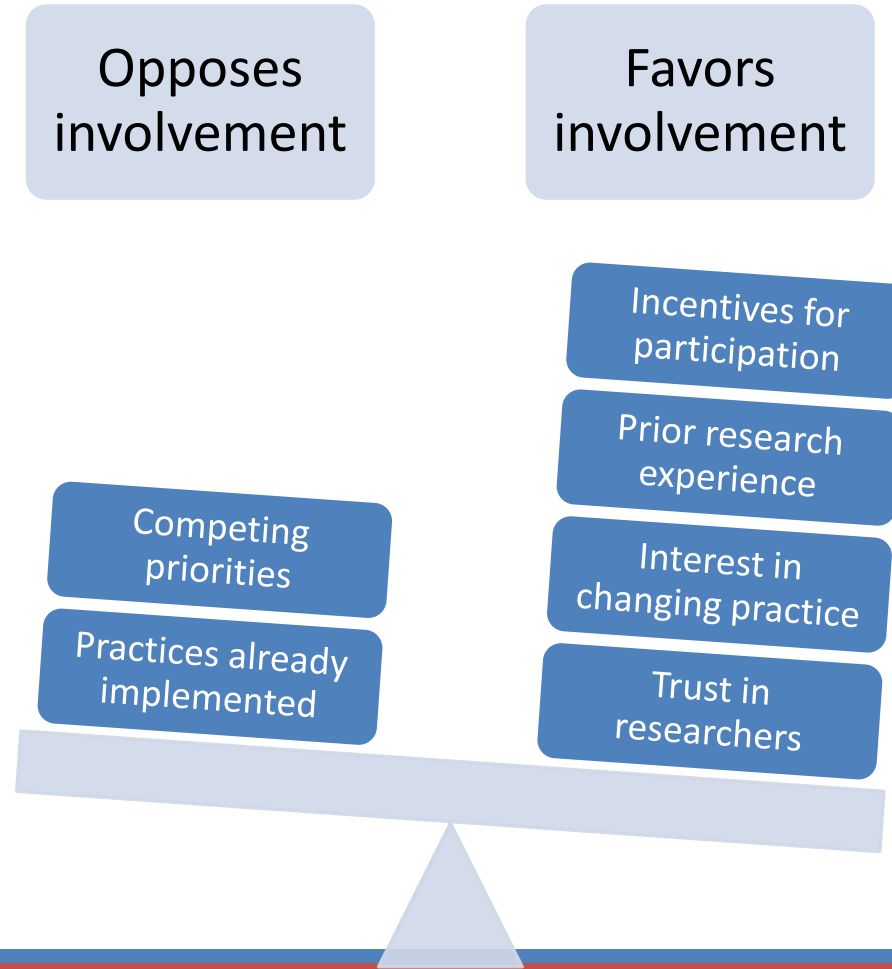
# Using the Network

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# Engaging HIV Clinics

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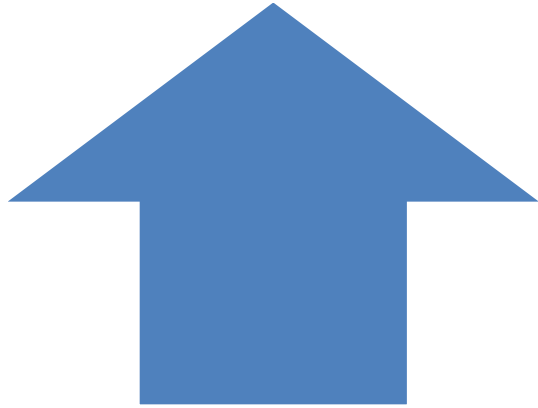
# Key Facilitators

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- Site PIs and Co-Is
- Jen Edelman
- William Becker
- Peter Friedmann
- Jim Pettinelli
- Tassos Kyriakides

# Implementation Science and Site Number

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-Increased Power

-Generalizability



-Resource-Intensive  
Intervention

# Outline

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- What is Implementation Science?
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WHAT-IF?

**Working with HIV Clinics to Adopt Addiction  
Treatment Using Implementation  
Facilitation**

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Grant# R01 DA041067-01

# Need for addiction treatment in HIV clinics

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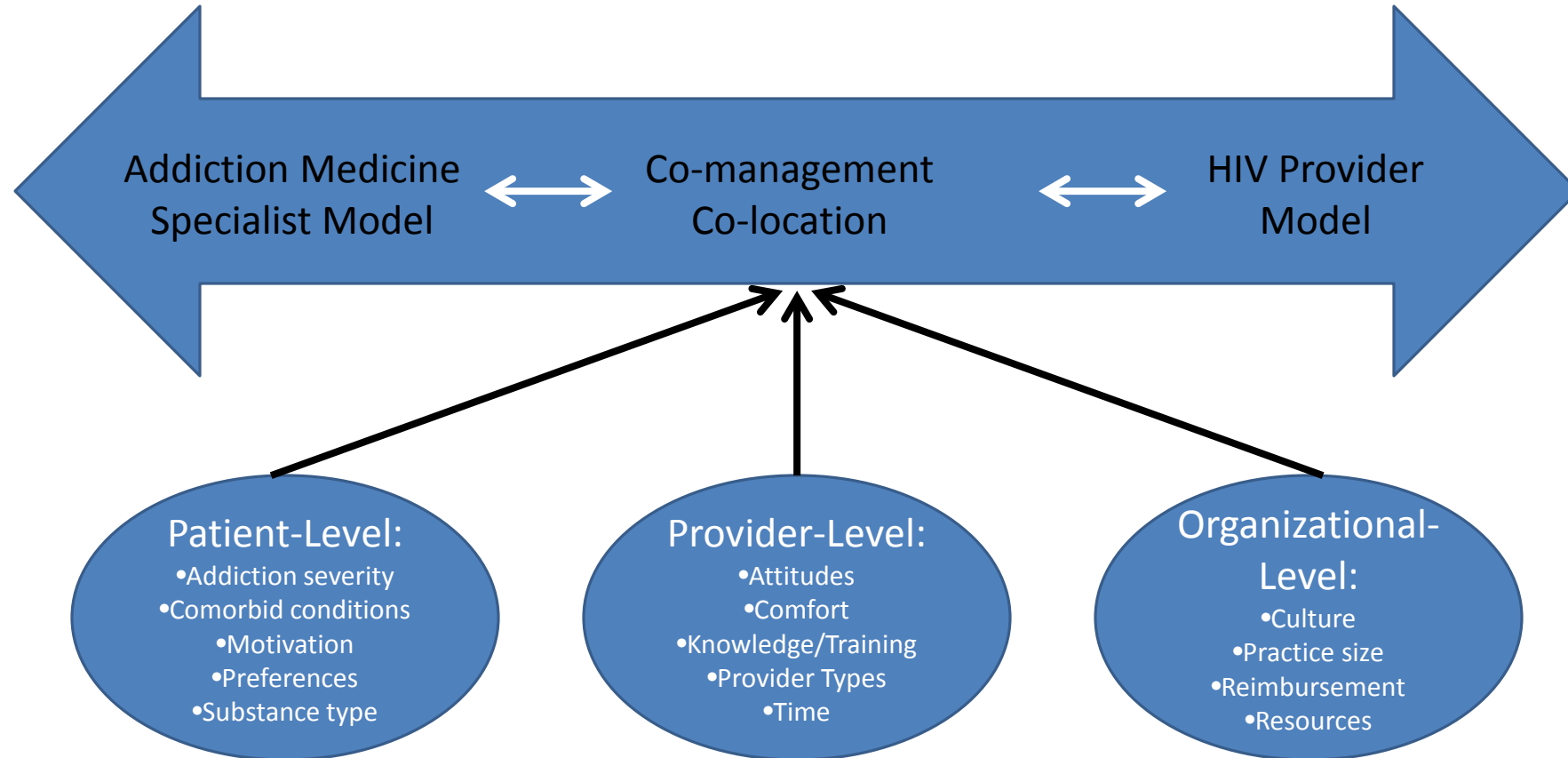
- Among HIV-infected patients, substance use is highly prevalent and associated with significant morbidity and mortality
- Effective and safe treatments exist, yet are inconsistently offered in HIV clinics
- Outcomes are better with integrated approaches to treatment

# Evidence-Based Treatments Suitable for HIV Clinics

Substance	Medication	Counseling
<b>Tobacco</b>	<ul style="list-style-type: none"><li>• Bupropion</li><li>• Nicotine replacement therapy</li><li>• Varenicline</li></ul>	<ul style="list-style-type: none"><li>• Brief intervention</li></ul>
<b>Alcohol</b>	<ul style="list-style-type: none"><li>• Acamprosate</li><li>• Disulfiram</li><li>• Naltrexone (oral and injectable)</li></ul>	<ul style="list-style-type: none"><li>• Brief intervention (at-risk drinkers only)</li><li>• Cognitive behavioral therapy</li><li>• Motivational enhancement therapy</li></ul>
<b>Opioid</b>	<ul style="list-style-type: none"><li>• Buprenorphine</li><li>• Naltrexone (oral and injectable)</li></ul>	<ul style="list-style-type: none"><li>• Cognitive behavioral therapy</li><li>• Contingency management</li><li>• Motivational enhancement therapy</li><li>• Drug counseling</li></ul>



# Model for optimal integration of addiction treatment within HIV clinics may vary





# Implementation Facilitation

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Component	Description
External facilitator	Outside content expert who assists site
Local champion	Local site stakeholder who promotes change
Provider education and academic detailing	Provision of unbiased peer education
Stakeholder engagement	Aligning goals of implementation effort and those impacted
Tailor program to site	Addressing site specific needs
Performance monitoring and feedback	Assess implementation of screening and treatment efforts to inform site of results
Formative evaluation	Quantitative and qualitative determination of impact
Establish a learning collaborative	Shared learning opportunities tailored to stakeholders
Program marketing	Efforts designed to increase attention to availability of on-site addiction treatment services



# WHAT-IF?

## Working with HIV Clinics to Adopt Addiction Treatment Using Implementation Facilitation

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Gabriel Rebick, MD  
STAR Program, SUNY Downstate



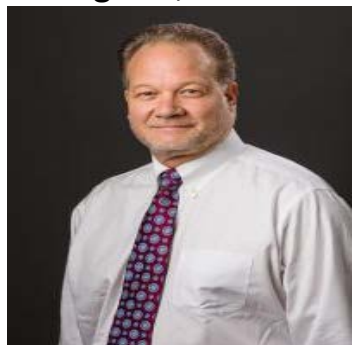
Philip Chan, MD; Jacob Vandenberg, PhD; and Ashley Robinette, MPH  
Miriam Immunology Center



Deborah Cornman, PhD  
UConn/Hartford Hospital



Michael Virata, MD  
Haelen Center, YNHH



David Fiellin, MD (PI)



Jeanette Tetrault, MD



Lynn Fiellin, MD



Evangelia Louizos



Jim Dziura, MPH, PhD



Denise Esserman, PhD



Laura Simone



# WHAT-IF?

**W**orking with **H**IV Clinics to **A**dopt Addiction **T**reatment Using **I**mplementation **F**acilitation

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**Aim 1**-To use mixed methods to identify evidence, context, and facilitation-related barriers and facilitators to the integration of addiction treatments to help tailor an Implementation Facilitation for each clinic

**Aim 2**-To assess the impact of Implementation Facilitation on:

- a) organizational and provider readiness to deliver addiction treatments,
- b) the provision of addiction treatments,
- c) changes in organizational models used to deliver addiction treatments

**Aim 3**- To evaluate the impact of Implementation Facilitation on antiretroviral receipt, viral suppression and retention in HIV care among patients eligible for addiction treatment

# WHAT-IF?

## Working with HIV Clinics to Adopt Addiction Treatment Using Implementation Facilitation

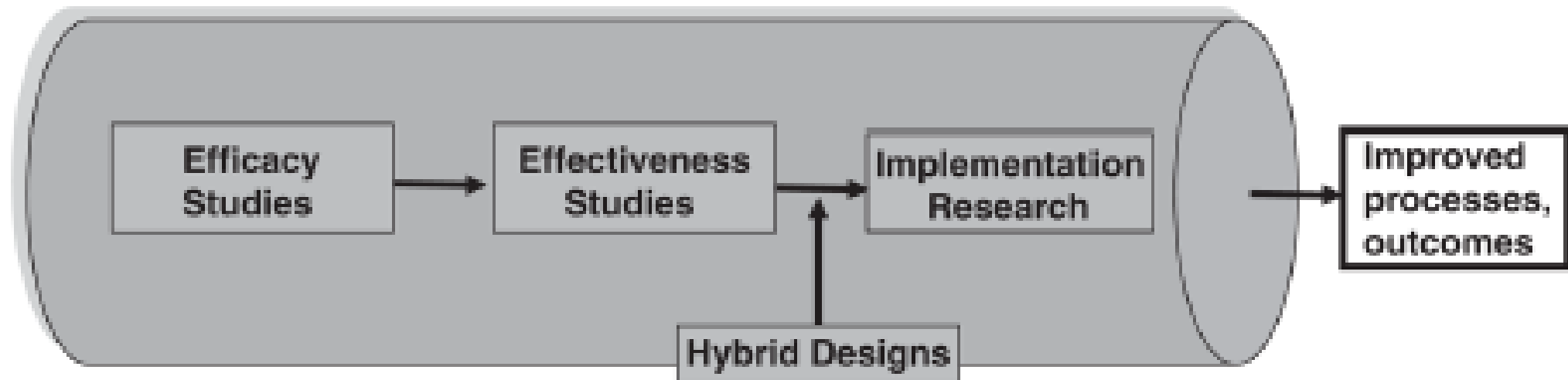
- Four sites:
  - SUNY Downstate Medical Center
  - Yale-New Haven Hospital Haelen Center
  - Hartford Hospital
  - Miriam Hospital Immunology Center
- Stepped wedge design:

<b>Clinic 1</b>	Control	Control	Control	Control	IF	Evaluation	Maintenance
<b>Clinic 2</b>	Control	Control	Control	IF	Evaluation	Maintenance	Maintenance
<b>Clinic 3</b>	Control	Control	IF	Evaluation	Maintenance	Maintenance	Maintenance
<b>Clinic 4</b>	Control	IF	Evaluation	Maintenance	Maintenance	Maintenance	Maintenance
<b>Time Point</b>	<b>Baseline</b>	<b>6 months</b>	<b>12 months</b>	<b>18 months</b>	<b>24 months</b>	<b>36 months</b>	<b>48 months</b>

\*IF= Implementation Facilitation

# Hybrid Designs

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# Hybrid Type 3

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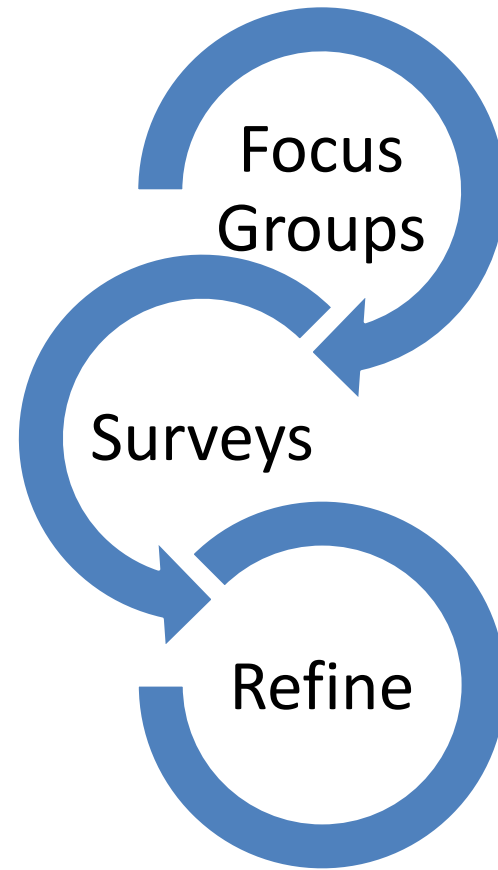
- Testing an implementation intervention/strategy while observing/gathering information on the intervention and related outcomes
  
- Implementation emphasized over effectiveness



# WHAT-IF?

**W**orking with **H**IV Clinics to **A**dopt Addiction **T**reatment Using **I**mplementation **F**acilitation

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# Promoting **A**ction on **R**esearch Implementation in **H**ealth Services framework (PARiHS)

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# Formative Evaluation

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- Grounded in PARIHS framework: context, evidence, facilitation
- Focus groups with patient and clinic staff/administrators
- Surveys with clinic staff/administrators:
  - organizational readiness to change assessment (ORCA)

Research article

Open Access

## **Organizational readiness to change assessment (ORCA): Development of an instrument based on the Promoting Action on Research in Health Services (PARIHS) framework**

Christian D Helfrich<sup>\*†1,2</sup>, Yu-Fang Li<sup>†1,3</sup>, Nancy D Sharp<sup>†1,2</sup> and  
Anne E Sales<sup>†4</sup>

Research article

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Anne E Sales<sup>†4</sup>

- May be used for: 1) prognosis, 2) diagnosis, and 3) evaluation
- Previously applied to integrating HCV care in addiction treatment settings
- We adapted to inquire about provision of medications and counseling for tobacco, alcohol and opioid use disorders
  - e.g., *In my opinion, increasing prescribing of medications to promote smoking cessation in my HIV clinic will improve outcomes among patients who smoke cigarettes*

# Assessments

Assessment	Data Source	Baseline Control	6 months Evaluation	12 month Maintenance
Organizational readiness to change assessment	Survey	X	X	X
Provider readiness to prescribe/refer for each medication and counseling	Survey	X	X	X
Screening for each condition	Electronic Medical Record	X	X	X
Use of each medication and counseling	Electronic Medical Record	X	X	X
Patient demographic information	Electronic Medical Record	X	X	X
Receipt of antiretroviral therapy	Electronic Medical Record	X	X	X
Tobacco, alcohol and opioid use disorders	Electronic Medical Record	X	X	X
Psychiatric diagnoses	Electronic Medical Record	X	X	X
Clinic visits	Electronic Medical Record	X	X	X
Lab values	Electronic Medical Record	X	X	X

# Behavioral Health Integration in Medical Care Instrument

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- Program structure
- Program milieu
- Clinical process: assessment
- Clinical process: treatment
- Continuity of care
- Staffing
- Training

# Initial Lessons

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- Determining baseline “denominator” of treatment-eligible patients is complicated by low screening practices
- Clinics vary in provision of treatments supporting the need for tailored evaluations
- Institutional review board and ClinicalTrials.gov not used to Implementation Science protocols
  - e.g. IRB approval needs to address multiple types of participants and data sources
- Streamlining data extraction from diverse electronic medical records requires validation and close partnership with information technology members

# Summary

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- Implementation science provides tools for systematically evaluating factors impacting use of evidence-based practices in clinical settings
- The New England HIV Implementation Science Network provides a platform for conducting implementation science-focused work
- The NIH (i.e. NIDA) offers funding opportunities for addressing HIV prevention and treatment



# Questions?

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