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 Medical Center



The Ken Altschuler M.D. Grand
 Rounds in Psychiatry Series
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Addiction Treatment Outcomes, Process, Change, and Related Studies and Initiatives

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NIDA NATIONAL INSTITUTE ON DRUG ABUSE
Research supported by NIDA grants. The content is solely the responsibility of the author and does not necessarily represent the official views of the National Institute on Drug Abuse or the National Institutes of Health.

Treatment Research

- **Clinical Trials**
 - Efficacy
 - Confirmatory/Deductive
 - Treatment-focused
 - Experimental
 - Small samples
- **Health Services**
 - Effectiveness
 - Exploratory/Inductive
 - Patient-focused
 - Naturalistic
 - Large samples

Donenberg, Lyons, & Howard, 1999 (J Clin Psy)

Today's Menu

1. **Treatment Outcomes**
NIDA's National Evaluations of Treatment
2. **Treatment process**
*Treatment Process Model
 Node Link Mapping
 Manuals & Assessments*
3. **Practice to Research & Implementation Studies**
Several Current Institute Projects
4. **NIH Common Measures**
*PhenX—genetics & epidemiologic research
 Harmonization—NIDA*

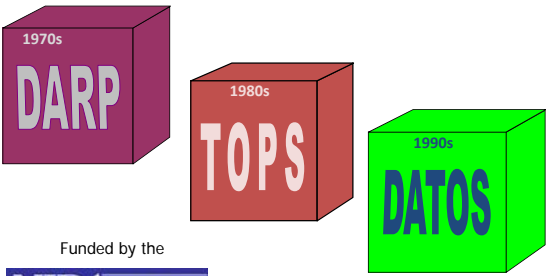
1. Treatment Outcomes

Let's Take a Look in our Rear-View Mirror



And See Where We've Been!

NIDA's National Evaluations of Tx




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DARP

Drug Abuse Reporting Program
 First National Evaluation of Treatment Effectiveness

Funded by the
NIDA NATIONAL INSTITUTE ON DRUG ABUSE




1969-73
 35 Cities
 139 Programs
 ~44,000 Patients
 All treatment types
 Follow-ups: 1,3,6,12 Yrs


OMT, TC, ODF, OP Detox

Sells, Simpson, Demaree, & Joe
 6 books & 150 papers published (funded 1970-1990)

TOPS

Treatment Outcome Prospective Study
Second National Evaluation of Treatment Effectiveness

Funded by the  NATIONAL INSTITUTES ON DRUG ABUSE




1979-81
10 Cities
37 Programs
~11,000 Patients
All treatment types
Follow-up: 1 year
2 year
3-5 year


OMT, ODF, RES

Hubbard, Marsden et al. *Drug abuse treatment: A national study of effectiveness* (1989)

DATOS

Drug Abuse Treatment Outcome Studies
Third National Evaluation of Treatment Effectiveness

Funded by the  NATIONAL INSTITUTES ON DRUG ABUSE



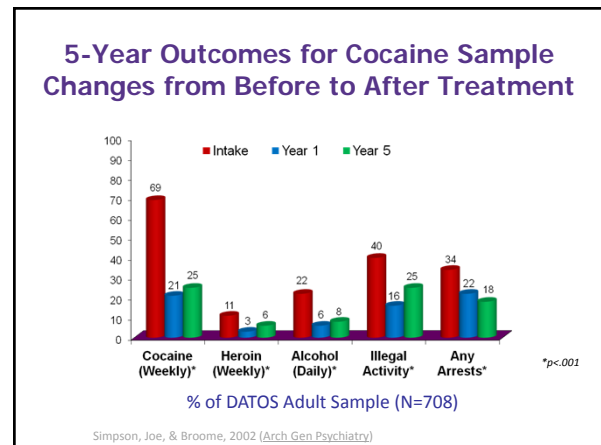
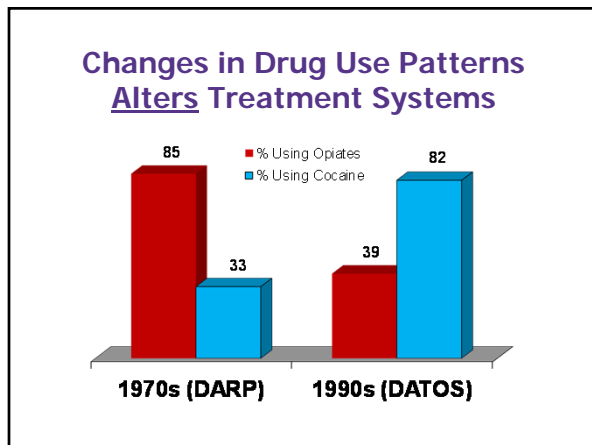
1991-1993
10,000 Adults
96 Programs
11 Cities

1993-1995
1,200 Adolescents
37 Programs
6 Cities

Adult—OMT, ODF, LTR, STI
Adolescent—LTR, STI, ODF

85 Studies Published (Special Issues)—
Psychology of Addictive Behaviors (Dec 97)
Drug and Alcohol Dependence (Dec 99)
Journal of Adolescent Research (Dec 01 for DATOS-A)
Journal of Substance Abuse Treatment (2003)
Articles in Archives of General Psychiatry (99, 01, & 02)

Follow-up:
Adults 1 & 5 Years
Adolescents 1 Year



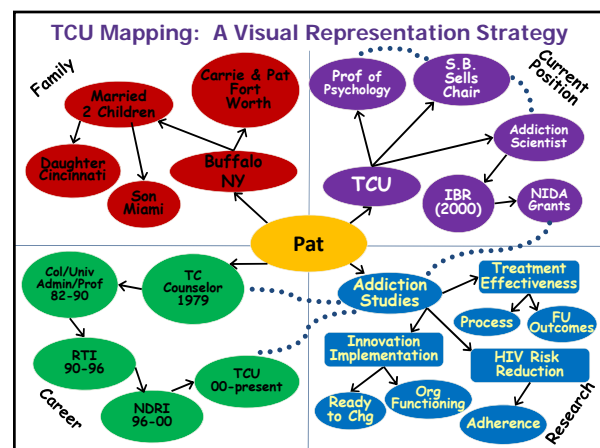
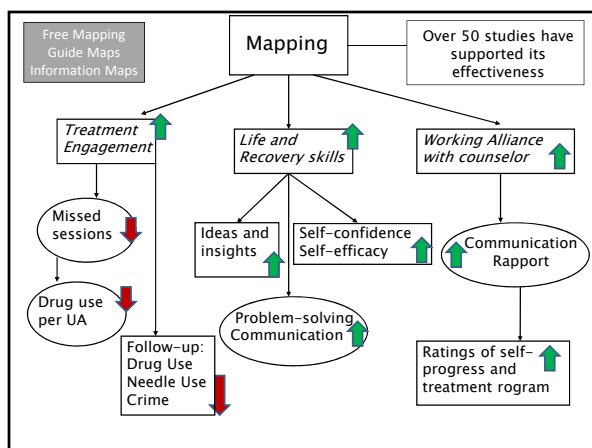
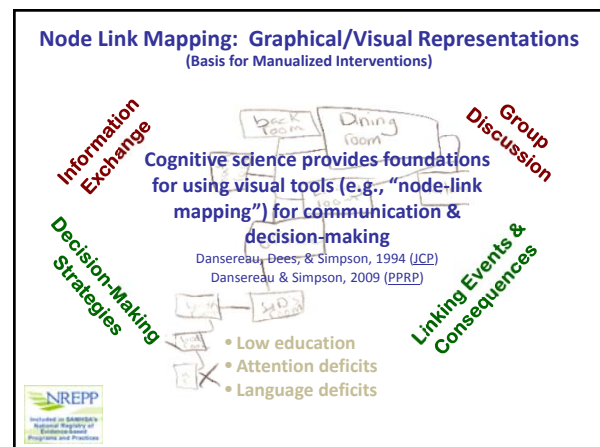
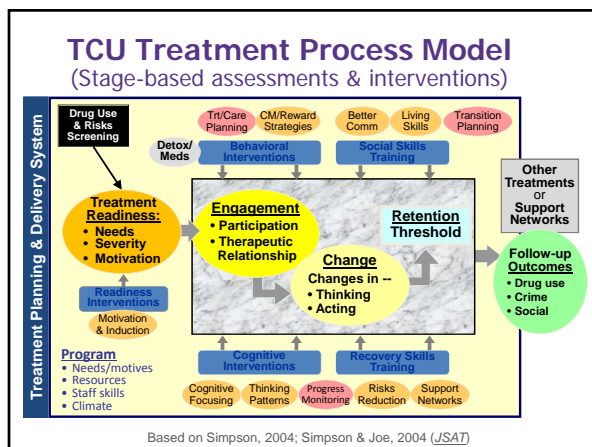
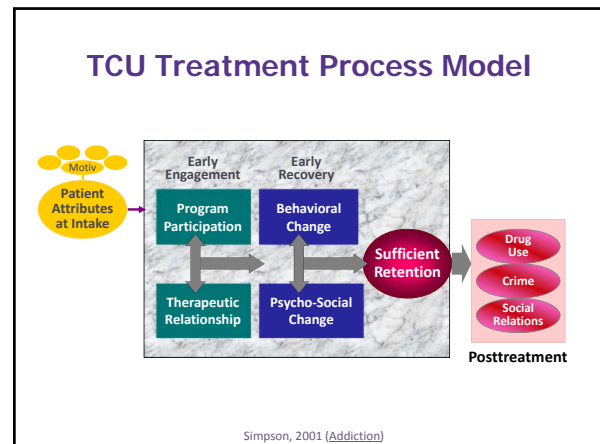
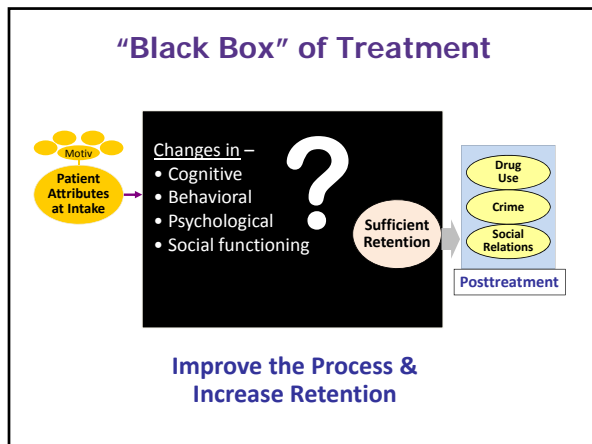
Retention Predicts Outcomes

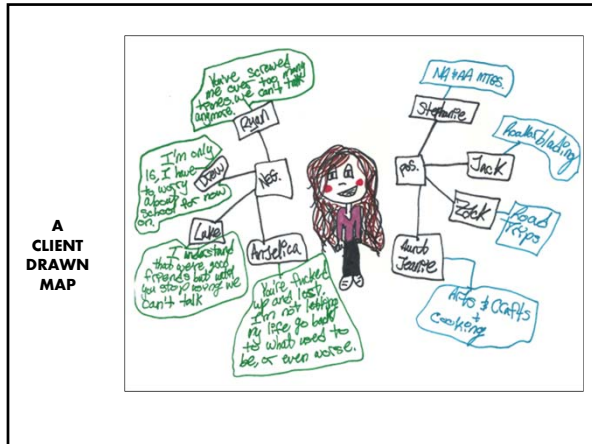
- **Findings Consistent from National Studies**
 - ✓ 1970s (44,000 admissions in DARP)
 - ✓ 1980s (11,000 admissions in TOPS)
 - ✓ 1990s (10,000 admissions in DATOS)
 - ➔ Also in England's NTORS (1990s)!
- **Conclusions from Major Reviews**
 - ✓ Institute of Medicine ('90, '96, & '98)

2. Treatment Process

We Know That:
Treatment Works
But How?







Manuals
(Over 20 Manuals Available)

Based on TCU Mapping-Enhanced Counseling Manuals for Addictive Treatment as included in NREPP

Mapping-Enhanced Counseling: An Introduction

An overview with case examples of ways to incorporate mapping-enhanced counseling into your practice.

N. G. Berkhout and D. F. Connerney
Texas Institute of Behavioral Research at TCU
© 2009, 2005

ASSESSMENTS
(Over 50 Assessments Available)

Based on TCU Mapping-Enhanced Counseling Manuals for Addictive Treatment

USING CLIENT ASSESSMENTS TO PLAN AND MONITOR TREATMENT (USING CEST GUIDE)

A guide for using the TCU Client Evaluations of Self and Treatment (CEST) in individual or group counseling settings.

D. D. Simpson and N. G. Berkhout
Texas Institute of Behavioral Research at TCU
© 2009

Available Free for Download from WWW.IBR.TCU.EDU

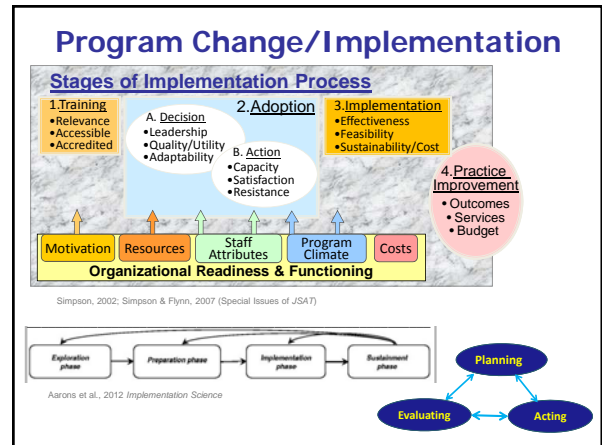
3. Practice to Research & Implementation Studies

Current Concepts

Research to Practice	Technology Transfer
Science to Services	Knowledge Utilization
Knowledge Application	Diffusion of Innovations
Translational Research	Bench to Bedside

61 Models for Dissemination and Implementation Research were reviewed by Tabak et al.

Tabak, R.G., Khoang, E.C., Chambers, D., & Brownson, R.C. (2012). Bridging research and practice: Models for dissemination and implementation research. Am J Prev Med. 43(3), 337-350.



The TCU Adolescent Project

Treatment Readiness and Induction Program (TRIP)

Phase 1: TRIP Effectiveness:

- 8 community based residential settings and 2 corrections-based settings
- Compare Standard Practice VS Standard + TRIP
- Client Assessments/Data Collection began Jan 2011
- TRIP began Jan 2012

Phase 2: TRIP Implementation:

- Study of TRIP adoption and use in 40 programs across the US
- Staff Assessments/Data collection began Feb 2013

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Dual-Process Model of JDM

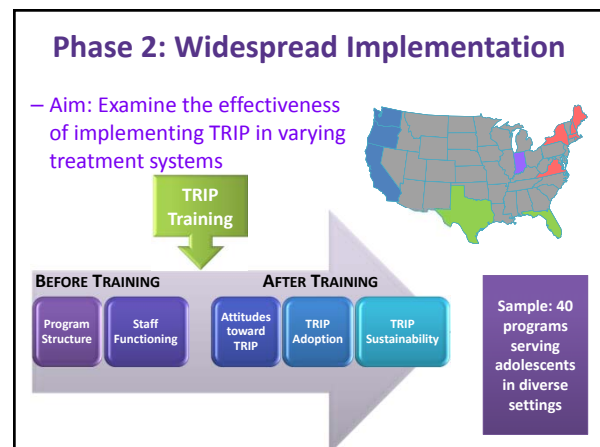
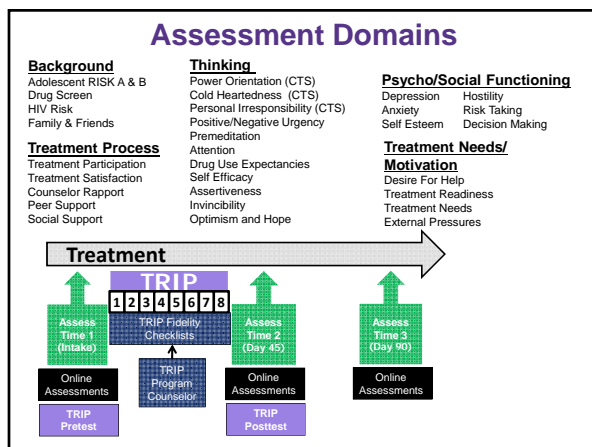
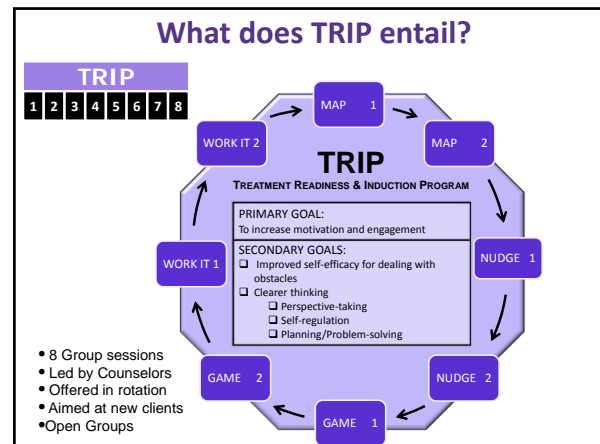
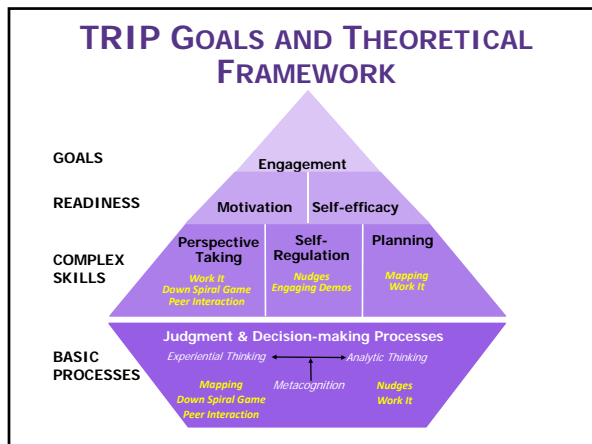
Experiential System (Gist)	Analytical System (Verbatim-based analysis)
Intuition	Analysis
Quick processing	Slower, more deliberate processing
Automatic	Intentional
Unconscious	Conscious

Adolescents are capable of analysis but tend not to use it.

- Susceptible to bias
- Influenced by emotion, arousal, and rewards
- Promoted by social norms & values

Accurate "Gist" processing requires

- Retrieval of memories, schemas
- Integration of "what" is known with "how" to proceed



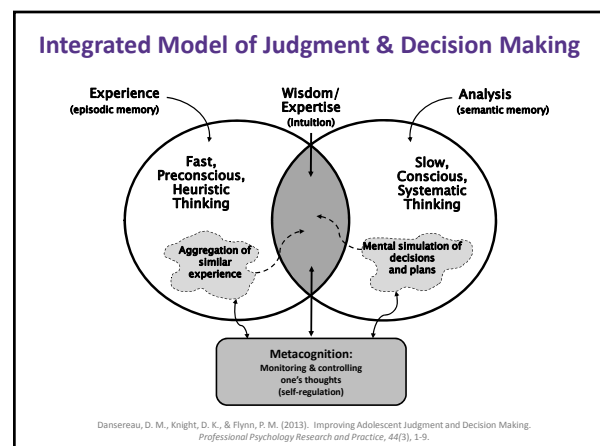
Findings

Phase 1: Effectiveness

- Improved decision making compared to SOP
- Improved problem recognition

Phase 2: Implementation (preliminary)

- TRIP is acceptable and easy to use/implement
- 95% intend to use TRIP in their programs
- Intention to adopt is correlated with favorable impressions of TRIP
- Females and outpatient staff report higher acceptability and support for adoption



PROJECT imPACT

Individuals Motivated to Participate in Adherence, Care and Treatment

Multiple PI Project

Patrick Flynn & Kevin Knight
TCU Institute of Behavioral Research


David Wohl & Carol Golin
UNC Center for AIDS Research

A collaboration between UNC & TCU

Funded by the   

An RCT of an augmented test, treat, link, & retain model for NC and TX prisoners

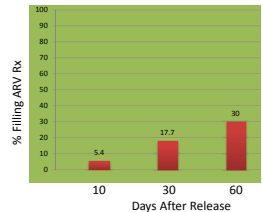
Sites – Two State Prison Systems
Texas Department of Criminal Justice (TDCJ)
North Carolina Department of Correction (NCDOC)



Can a comprehensive intervention supporting the maintenance of viral suppression achieved by HIV+ inmates during incarceration result in a significant reduction in the potential for these individuals to transmit their virus after release?

Accessing HIV Meds After Prison Release

- Review of ADAP Rx records in Texas 2004-2007
- N = 2115 receiving ART at release
 - 83% male
 - 60% African-American
 - 18% with mental health d/o
 - 53% incarcerated >1 year
 - 95% released to metro areas



Days After Release	% Filling ARV Rx
10	5.4
30	17.7
60	30

- Factors associated with filling RX: parole, received prerelease assistance with ADAP application

Baillargeon J, et al. JAMA. 2009;301:848-857.

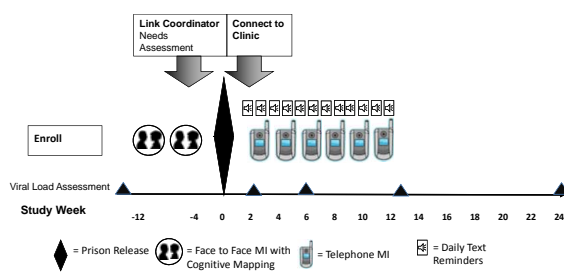
Study Aims

- Aim 1: Adapt and integrate our existing interventions to create imPACT to support the test and treat strategy objective: sustained HIV suppression after release.**
- Aim 2: Compare the effect of standard practice with the imPACT intervention on viral load 24 weeks following prison release.**

400 HIV+ inmates with HIV RNA levels <400 copies/mL on ART and who are 3 months prior to prison release in NC and TX randomized to either:

- standard practice*, where following HIV testing, infected inmates receive ART during incarceration with referral to community-based care and services by prison staff prior to release, or
- imPACT*

imPACT Intervention



Research Protocol

- ◆ = Prison Release
- 👤 = Face to Face MI with Cognitive Mapping
- 📞 = Telephone MI
- 📧 = Daily Text Reminders
- ▲ = Research Interviews and Blood Draws Post-Release
- 6 unannounced pill counts via cell phone post release

Next Steps

- Last study visit by Q1 2015
- Primary and a secondary analyses to follow including:
 - HIV suppression
 - Adherence to community HIV care and ART
 - Risk behavior
 - Modeling of transmission potential
 - ART resistance
- Qualitative studies of:
 - Participants who do and do not maintain suppressed VL
 - Participants who do and do not link into care

Juvenile Justice - Translational Research on Interventions for Adolescents in the Legal System (JJ-TRIALS) Cooperative Agreement

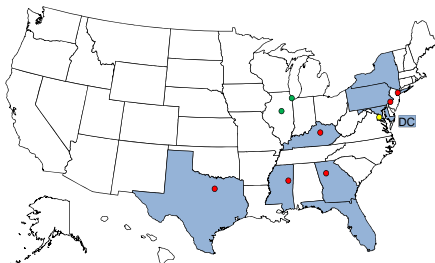
PI: Danica Knight, Ph.D.
Co-PI: Patrick Flynn, Ph.D.



JJ-TRIALS

- 5-year Cooperative Agreement
 - 6 Research Centers, 1 Coordinating Center
 - Began July 2013
- **Overarching philosophy:** Every adolescent in the juvenile justice system could benefit from evidence-based prevention and/or treatment interventions that target substance use and HIV risk behaviors.

JJ-TRIALS Geographic Locations



● JJ TRIALS Funder ● JJ-TRIALS Research Centers
■ JJ-TRIALS Coordinating Center ■ JJ-TRIALS Juvenile Justice Sites

JJ-TRIALS Study Components

National Survey of Juvenile Justice Prevention & Treatment

Pre-Implementation Assessment

Implementation Studies

Sustainable Disease Risk Reduction Strategies for CJ Systems (DRR 1 & 2)

PI: Wayne Lehman, PhD

First 5 years developed and tested interventions that...

- ✓ focused on high-risk re-entry transition time
- ✓ increased positive decision-making skills among offenders for healthy living and for reducing disease risk behaviors, particularly those involving HIV and Hepatitis B & C

DRR 1 Included prison-based group curriculum (completed)

DRR 2 community corrections self-administered computerized tools (under development)



DRR 2: *StaySafe* for Community Corrections

StaySafe goal is to develop a sustainable, evidence-based intervention to help probationers make better decisions regarding health risk behaviors and one that:

- ✓ can be administered by probation departments with minimal staff training and time during first 6 months of probation;
- ✓ Includes 12, 15-20 minute engaging sessions easy to use by probationers;
- ✓ requires minimal maintenance; and
- ✓ is free to probation departments (other than the cost of the touch screen computers).

4. NIH Data Harmonization & Common Measures

NINDS Common Data Elements
harmonizing information. Streamlining research.

PhenX
consensus measures for Phenotypes and eXposures

NIDA NATIONAL INSTITUTE ON DRUG ABUSE
The Science of Drug Abuse & Addiction

- CCTN Common Assessment Battery
- Genetics Consortium
- Seek, Test, and Treat Grantees-Harmonization

NIAAA

- Task Force on Recommended Alcohol Questions

<https://www.phenx.org/>
<https://www.phenxtoolkit.org/>

PhenX Toolkit

Home Browse Search My Account References Help About

Browse Domains

There are a total of 237 measures in the PhenX Toolkit. Browse through Domains to view Measures and Protocols. You may also Browse Domains and Browse Collections.

- Alcohol, Tobacco and Other Substances (20)
- Substance Abuse and Addictions (20)
- Antipsychotics (20)
- Cancer (20)
- Cardiovascular (20)
- Demographics (20)
- Diseases (20)
- Environmental Exposures (20)
- Genetics (20)
- Infectious Diseases and Immunity (20)
- Neurology (20)
- Neuronal, Tissue and Other Substrates (20)
- Oral Health (20)
- Physical Activity and Physical Fitness (20)
- Psychiatrics (20)
- Respiratory (20)
- Sex, Sexes, Race and Ancestry (20)
- Social Determinants (20)
- Specialized Training (20)

“Browse Collections” page includes “Substance Abuse and Addiction Collections”

PhenX Toolkit

Home Browse Search My Account References Help About

Browse Collections

There are a total of 295 measures in the PhenX Toolkit. The Collections are an alternative to the research domains for browsing the PhenX Measures. Measures that are related by a specific topic are grouped together. Browse through Collections to view Measures and Protocols. You may also Browse Domains and Browse Measures.

- Health Conditions
- Risk Factors
- Substance Abuse and Addictions**

Substance Abuse and Addictions Collections Include Core Collection and 6 Specialties Collections

PhenX Toolkit

Home Browse Search My Account References Help About

Browse Collections

There are a total of 295 measures in the PhenX Toolkit. The Collections are an alternative to the research domains for browsing the PhenX Measures. Measures that are related by a specific topic are grouped together. Browse through Collections to view Measures and Protocols. You may also Browse Domains and Browse Measures.

Substance Abuse and Addictions

- Core
- Assessment of substance use and substance use disorders
- Substance-specific intermediate phenotypes
- Substance use-related neurobehavioral and cognitive risk factors
- Substance use-related psychosocial risk factors
- Substance use-related community factors
- Substance use-related co-morbidities and health-related outcomes

Seek, Test, Treat & Retain DATA Harmonization

- **Addressing HIV in the Criminal Justice System**
12 funded R01 applications that empirically test the “seek, test, treat, and retain” paradigm with drug abusers in criminal justice populations.
- **Addressing HIV among Vulnerable Populations**
10 funded R01 applications that empirically test the “seek, test, treat, and retain” paradigm among high-risk, drug abusing, vulnerable populations in domestic and international settings.

WHY HARMONIZE?

- Increase cross-study comparability, collaboration, scientific yield
- Multi-site pooling for integrative data analyses
- Cross-site replication/comparisons
- Meta analyses
- Secondary data analyses
- Maximizes gain while minimizing cost, risk, and time to payoff (leveraging)
- Promotes construct quantification through integrative data analysis

Curran & Hussong, 2009, *Psychological Methods*

What is Harmonization?

- Having commensurate measurement across independent studies
 - ✓ Constructs have the same theoretical meaning
 - ✓ Measures reflect the same construct
 - ✓ Variables are scored with identical values
 - ✓ Values must be scaled commensurately, and function equivalently

Curran et al., 2008, *Developmental Psychology*

