Addiction Treatment Outcomes, Process, Change, and Related Studies and Initiatives

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2. Treatment Process

We Know That:

Treatment Works
But How?

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)

Changes in Drug Use Patterns Alters Treatment Systems

<table>
<thead>
<tr>
<th>Year</th>
<th>% Using Op/Tob</th>
<th>% Using Cocaine</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970s (DARP)</td>
<td>85</td>
<td>33</td>
</tr>
<tr>
<td>1990s (DATOS)</td>
<td>39</td>
<td>82</td>
</tr>
</tbody>
</table>

5-Year Outcomes for Cocaine Sample Changes from Before to After Treatment

- Intake
- Year 1
- Year 5

Changes from Before to After Treatment

- Cocaine (Weekly)
- Heroin (Weekly)
- Alcohol (Daily)
- Illegal Activity
- Any Arrests

% of DATOS Adult Sample (N=708)

Simpson, J., & Broome, 2003 (Arch Gen Psychiatry)
“Black Box” of Treatment

Changes in –
• Cognitive
• Behavioral
• Psychological
• Social functioning

Posttreatment

Sufficient Retention

Improve the Process & Increase Retention

TCU Treatment Process Model

TCU Treatment Process Model
(Stage-based assessments & interventions)

Based on Simpson, 2004; Simpson & Joe, 2004 (JSAT)

Node Link Mapping: Graphical/Visual Representations
(Basis for Manualized Interventions)

Cognitive science provides foundations for using visual tools (e.g., “node-link mapping”) for communication & decision-making
Dansereau, Dunn, & Simpson, 1994 (JCP)
Dansereau & Simpson, 2009 (PPRP)

TCU Mapping: A Visual Representation Strategy

Over 50 studies have supported its effectiveness

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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.


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

Funded by the NIDA

Dual-Process Model of JDM

<table>
<thead>
<tr>
<th>Experiential System</th>
<th>Analytical System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intuition</td>
<td>Analytical</td>
</tr>
<tr>
<td>Quick processing</td>
<td>Slower, more deliberate processing</td>
</tr>
<tr>
<td>Automatic</td>
<td>Intentional</td>
</tr>
<tr>
<td>Unconscious</td>
<td>Conscious</td>
</tr>
</tbody>
</table>

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
**TRIP GOALS AND THEORETICAL FRAMEWORK**

- **GOALS**
  - Engagement
  - Motivation
  - Self-efficacy
- **READINESS**
  - Perspective Taking
  - Self-regulation
  - Planning
- **COMPLEX SKILLS**
  - Judgment & Decision-making Processes
- **BASE SKILLS**
  - Experience/Planning
  - Memory
  - Motivation

**Assessment Domains**

- **Background**
  - Adolescent Risk & S
  - Drug Screen
  - HIV Risk
  - Family & Friends
- **Thinking**
  - Cognitive Control
  - Conceptual Knowledge
  - Metacognition
  - Working Memory
- **Psycho/Social Functioning**
  - Depression
  - Anxiety
  - Self Esteem
  - Decision Making

**What does TRIP entail?**

- **TRIP**
  - Treatment Readiness & Induction Program
  - Primary Goal: To increase motivation and engagement
  - Secondary Goals:
    - Improved self-efficacy for dealing with obstacles
    - Clearer thinking
    - Perspective-taking
    - Self-regulation
    - Planning/Problem solving

**Phase 2: Widespread Implementation**

- **Aim:** Examine the effectiveness of implementing TRIP in varying treatment systems

**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

**Integrated Model of Judgment & Decision Making**

- **Fast, Preconscious, Heuristic Thinking**
- **Slow, Conscious, Systematic Thinking**
- Metacognition: Monitoring & controlling one's thought processes

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*Addiction Treatment
Patrick M. Flynn, Ph.D., IBR Director
UT Southwestern Medical Center
September 3, 2014 Dallas, TX*
**PROJECT IMPACT**  
*Individuals Motivated to Participate in Adherence, Care and Treatment*

Patrick Flynn & Kevin Knight  
TCU Institute of Behavioral Research

David Wohl & Carol Golin  
UNC Center for AIDS Research

A collaboration between UNC & TCU

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**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 dx
  - 53% incarcerated >1 year
  - 95% released to metro areas

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


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**imPACT Intervention**

- Link Coordinator
- Needs Assessment
- Connect to Care
- Exclid

**Research Protocol**

-/prison release
- Face to Face MI with Cognitive Mapping
- Telephone MI
- Daily Text Reminders

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**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:

- a) 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
- b) imPACT

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**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?

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**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.

Funded by the NIDA JJ-TRIALS

JJ-TRIALS

Geographic Locations

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)

Pt: 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)

Funded by the NIDA Sustainable Disease Risk Reduction Strategies

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

- CCTN Common Assessment Battery
- Genetics Consortium
- Seek, Test, and Treat Grantee Harmonization
- Task Force on Recommended Alcohol Questions

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