Addiction Treatment and the Adoption of Best Practices: Opportunities and Barriers

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Presentation Goals

• Identify structural characteristics of community-based treatment programs in the US
• Identify the use of “best practices” and treatment innovations across these programs
• Using statistical analyses, identify some of the predictors of use of innovations
• Using several different indicators, identify counselors’ training needs
“Best Practices” and the Research-To-Practice Gap

- Substantial resources devoted to development and validation of new treatment techniques, yet adoption in real-world settings is slow
- Commonly known as the “research-to-practice gap”
- Multiple ongoing initiatives to reduce this “gap”
  - NIDA’s Clinical Trials Network
  - SAMHSA’s “Science-to-Services” activities
- UGA’s National Treatment Center Study monitors adoption of “best practices” & predictors of innovation
Conceptualizing “Best Practices”

• “Best practices” covers four domains:
  – Use of validated, standardized criteria
    ▪ (e.g. ASAM, ASI)
  – Provision of comprehensive services
  – Pharmacological innovations
  – Behavioral Treatment innovations

• “Innovations” include evidence-based practices described in NIDA’s Principles of Drug Addiction Treatment and peer-reviewed research literature
The National Treatment Center Study

- Monitoring the organization, management, delivery, and content of addiction treatment in the U.S.
- Includes public and private community-based treatment programs (representative national samples)
- Data collected from both administrators and counseling staff
- Today’s presentation focuses on data collected between late 2002 and early 2004.
NTCS Components

• Privately-funded treatment programs (N=400)
  – Receive <50% annual revenues from public grants & contracts

• Publicly-funded treatment programs (N=400)
  – Receive 50%+ annual revenues from public grants & contracts

• Therapeutic communities (N=400)
  – Any program that self-identifies as a TC

• CTN-affiliated treatment programs (N=130)
  – All programs in NIDA’s Clinical Trials Network

• Today’s presentation limited to public and private samples only

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NTCS Sample Design

- All participating programs:
  - Offer a level of care for addiction treatment at least equivalent to structured outpatient as defined by ASAM
    - Excludes: methadone maintenance-only facilities, clinicians in private practice, DUI-only programs, halfway houses
  - Are available to serve the general public
    - Excludes: VA programs, correctional facilities

- Sample is stratified geographically
  - Includes rural, suburban, and urban programs

- Sample includes a variety of program types:
  - for-profit, nonprofit, and government
  - hospital-based and freestanding
  - Inpatient and outpatient
NTCS Instrument Design

• Multiple data collection methods used:
  – Detailed on-site interviews with program administrator
    ▪ Focuses on organizational characteristics, services offered, and use of innovations
  – Mail questionnaire from program administrator
    ▪ Focuses on leadership and management practices
  – Mail questionnaire from counselors
    ▪ Focuses on services received by clients and attitudes toward innovations
  – Brief telephone follow-ups w/ program administrator at six month intervals
    ▪ Focuses on major changes within the center
Data Sources for these Analyses

- Pooled interview data from:
  - 389 public-funded centers (80% response rate)
  - 332 private-funded centers (88% response rate)

- Pooled questionnaire data from:
  - 1323 public center counselors (61% response rate)
  - 848 private center counselors (62% response rate)

- Data collection continues; findings are preliminary
Organizational Structure, Management, and Staffing: An Overview
Program Ownership / Funding

Gov't
Nonprofit: Public $
Nonprofit: Private $
For profit
The average age of all centers was 24 years.
Only 5% of all centers were in the "start-up" phase (<6 years old).
For Profits are significantly younger (mean=18 yrs).
About 20% of all centers were based in hospitals

Most of these are privately-funded nonprofits
Levels of Care Available

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Treatment Programs Offered

in addition to substance abuse tx

Gambling  Eating  Internet  Smoking  Dual Dx

All Centers  Gov't  NP-Public  NP-Private  ForProfit

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Program Staff: Counselors

<table>
<thead>
<tr>
<th>Category</th>
<th>% Masters</th>
<th>% Certified</th>
<th># Employed</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Centers</td>
<td>43.4</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Gov't</td>
<td>41.5</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>NP-Pub</td>
<td>39.5</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>NP-Priv</td>
<td>50.8</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>ForProfit</td>
<td>44.7</td>
<td>11</td>
<td></td>
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</tbody>
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Clients’ Primary Diagnoses

- Alcohol
- Cocaine
- Opiates

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The Use of “Best Practices” in Substance Abuse Treatment
Private centers significantly less use of ASI, $p<.01$

IP + OP centers significantly more use of ASAM, $p<.05$
Collection of Performance Data

- All Centers
- Gov’t
- NP Public
- NP Private
- For Profit

Categories: Outcomes, Referral/Payors, Client Sat.
Provision of Wraparound and Supportive Services

- Program administrators rated on a 0 to 5 scale the extent to which their program ensures clients with following problems receive appropriate services:
  - Medical problems
  - Dental problems
  - Psychological problems
  - Legal problems
  - Family/social problems
  - Employment problems
  - Financial problems

- Also reported availability of transportation and child care services.
Comprehensiveness of Services by Center Type

Average Number of Services Provided

Private sector = significantly fewer, p<.01

Centers using ASI = significantly more, p<.05
Use of Pharmacotherapies

- Administrators reported whether the center currently uses any of a variety of medications in its substance abuse program:
  - Antabuse
  - Methadone
  - Buprenorphine
  - Naltrexone
  - SSRIs
  - Clonidine
  - Gabapentin
  - Bupropion
Pharmacotherapy Adoption by Center Type (% indicating use)

All NP/Public vs NP/Private differences significant at p<.01
Reasons for **not** Adopting Meds

(% citing as significant reason)

- **Medical staff**
- **Payment**
- **Resistance**
- **Philosophy**

- Antabuse
- Methadone
- Bupe
- Naltrexone
- SSRIs
Use of Behavioral Therapies

- Administrators reported whether the center currently uses any of a variety of behavioral therapies in its substance abuse program:
  - Motivational Enhancement Therapy
  - Supportive Expressive Psychotherapy
  - Dual-focus schema therapy
  - Multi-systemic therapy
  - Community Reinforcement Approach
  - Vouchers/Motivational Incentives
Measurement Issues to Consider

- Measures do not account for formal staff training or fidelity of approach
- Therapy names are often ambiguous
- Data may reflect over-reporting of actual use
Use of Behavioral Treatment Innovations

MET, SEP, DFST, MST, CRA, Vouchers
Use of Behavioral Tx Innovations by Center Type

Gov't  NP Public  NP Private  For Profit

MET  SEP  DFST  MST  CRA  Vouchers
Predicting the Use of Innovations

- Model 1 - Additive index of 7 medications (range: 0-7)
- Model 2 – Additive index of 6 behavioral tx (range: 0-6)
- Possible Predictors:
  - Organizational characteristics
    - Primary funding source (1=primarily private)
    - Startup (age < 6 years)
    - Size (full-time equivalents)
  - Staffing
    - Physician(s) on staff (1 = at least one physician)
    - % counselors with Master’s degree or higher
  - Environmental scanning
    - Collect satisfaction data from payors or referral sources
  - Treatment comprehensiveness
    - Number of wraparound services offered (0 to 7)
    - Special population tracks offered (1=offers special tracks)
  - Case Mix control variable
    - % clients with primary drug = opiates
Predictors of Pharmacotherapy Adoption

- <6 yrs old
- Private NP/FP
- Accredited
- # FTEs
- % Master’s
- Any Docs
- % opiate
- Tx tracks
- Wraparounds
- Survey payors

Number of meds used (0-7)

Arrows indicate positive association (p<.05); \( R^2 = 0.25 \)
Predictors of Behavioral Tx Innovations

- <6 yrs old
- Private NP/FP
- Accredited
- # FTEs
- % Master’s
- Any Docs
- % opiate
- Tx tracks
- Wraparounds
- Survey payors

Number of behavioral therapies used (0-6)

Arrows indicate positive association (p<.05); $R^2 = 0.069$
Identifying Additional Best Practices

- What other factors might predict adoption of these innovations?
- What are other barriers to adoption?
- Aside from the evidence-based practices identified earlier what are some other “best practices” that are of interest to the field?
The Need for Counselor Training on “Best Practices”

- Rating Effectiveness of Innovations
  - Option: “Don’t Know”
- Provision of training for current job skills, promotion, medications, behavioral therapies
- Training dollars per FTE (program administrator)
- Formal training within/outside program
- Provision of and use of computers
Percent Responding “Don’t Know”: Pharmacological Innovations

Antabuse Bupe Naltrexone Clonidine Bupropion Gabapentin SSRIs
Percent Responding “Don’t Know”: Behavioral Tx Innovations

- MET
- SEP
- DFST
- MST
- CRA
- Vouchers
% Reporting “Moderate” to “Strong” Effectiveness: Pharmacological Innovations

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% Reporting “Moderate” to “Strong” Effectiveness: Behavioral Innovations

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Counselor Training:
% Reporting ‘Extensive’ Training for . . .

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% Reporting ‘Moderate’ to ‘Extensive’ Training: Pharmacological Innovations

- Antabuse
- Bupe
- Naltrexone
- Clonidine
- Bupropion
- Gabapentin
- SSRIs

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% Reporting ‘Moderate’ to ‘Extensive’ Training: Behavioral Innovations

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Training Dollars per Employee

- All Centers: $538.55
- Gov't: $487.53
- NP-Public: $379.89
- NP-Private: $881.72
- ForProfit: $535.81
Hours of Training: Within and Outside Program

Within

Outside

Private

Public

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What patient information is computerized?
Computerization: % Counselors Reporting Center Provides Computer

<table>
<thead>
<tr>
<th>Public</th>
<th>Private</th>
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Use of Internet for Learning:
% Reporting ‘Extensive Use’

- **Internet**
  - Private
  - Public

- **NIDA Web**
  - Private
  - Public
Conclusions

- Private NFP and Private For profit more likely to offer mixture of levels of care, but less likely to offer comprehensive wraparound services (use of ASI in public sector)
- Publicly funded programs more likely to offer separate tracks for special populations (targeted funding)
- Case mix varies across types of programs, but not as extensively as often assumed
Conclusions

- Use of medications appears high but is varied
  - Resources and Treatment philosophy are barriers
- Use of “innovative” behavioral therapies is comparatively low
- Adoption is related to:
  - Professional staff
  - Collecting performance data from payors/referral sources
  - Service comprehensiveness
  - Case mix
Conclusions

• Public/Private Gap in Innovation Adoption
  – Private centers - pharmacological focus
  – Public centers – behavioral focus

• Funding differences are critical to “best practices”

• Additional differences likely driven by insurance reimbursement, staffing, accreditation
Conclusions

- Counselors are frontline innovators
- Training funds and time devoted to training appear limited, internet is underutilized
- Training resources devoted more to “treatment as usual” instead of new methods
- Counselors who know about innovations have positive views of their effectiveness
- Staff receptivity to change promotes organizational innovativeness
Using Data to Assist the Treatment Provider

• Study includes data from over 1300 programs across the country (public, private, and TC).
• Data from approximately 4000 substance abuse treatment counselors
• What are questions that you’d like to see us address?
• How can we best use this information to address the issues that are important to you?
For more information...

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