THE DUAL DIAGNOSIS CAPABILITY OF THE STATE OF CONNECTICUT’S
ADDICTION TREATMENT SERVICES: PROCESSES & PROSPECTS

6 September 2006

Co-Occurring State Incentive Grant (#5 KD1 SM56579-02) from the Substance Abuse and Mental Health Services Administration (SAMHSA) to the State of Connecticut
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Addiction treatment providers and patients
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State of Connecticut
1. Co-occurring disorders in addiction treatment: Models for patients and services
2. Stagewise process of enhancing services for persons with co-occurring disorders receiving addiction treatment services in Connecticut
   - **Stage I**: Provider Survey
   - **Stage II Phase I**: DDCAT method
   - **Stage II Phase II**: Assessing change in dual diagnosis capability
   - **Stage III**: Mapping and enhancing the dual diagnosis capability of the system
3. Implications and prospects
CO-OCCURRING DISORDERS IN ADDICTION TREATMENT: MODELS FOR PATIENTS AND SERVICES
QUADRANT MODEL FOR CO-OCCURRING DISORDERS

<table>
<thead>
<tr>
<th>Substance Use Severity</th>
<th>HI</th>
<th>LO</th>
</tr>
</thead>
<tbody>
<tr>
<td>HI</td>
<td>III</td>
<td>IV</td>
</tr>
<tr>
<td>LO</td>
<td>I</td>
<td>II</td>
</tr>
</tbody>
</table>

Psychiatric Problem Severity
Service coordination by Severity

III  Locus of care: Substance abuse system

IV  Locus of care: State hospitals, jails/prisons, emergency rooms, etc.

I  Locus of care: Primary health care settings

II  Locus of care: Mental health system

Consultation  Collaboration  Integrated Services
IS THERE A CONCEPTUAL MODEL THAT COULD GUIDE POLICY AND PRACTICE FOR ADDICTION TREATMENT SERVICES?

• The American Society of Addiction Medicine (ASAM) Patient Placement Criteria Second Edition Revised (PPC-2R) outlined the framework for a model

• The ASAM-PPC-2R is designed for addiction treatment services

• The ASAM-PPC-2R patient placement criteria have been widely adopted in public and private community addiction treatment (CCPC)
THE AMERICAN SOCIETY OF ADDICTION MEDICINE’S TAXONOMY (ASAM, 2001)

- ADDICTION ONLY SERVICES (AOS)
- DUAL DIAGNOSIS CAPABLE (DDC)
- DUAL DIAGNOSIS ENHANCED (DDE)
• Practices for co-occurring disorders in addiction treatment settings are presently guided more so by conceptual models and clinical guidelines, less so research-based evidence (QIII, QIV).
• The evidence base is not as advanced as in MH settings (QII, QIV).
• Clinicians, programs, agencies and systems are motivated, internally and externally, to improve services for persons with co-occurring psychiatric disorders in their programs, but lack guidance on specific and objective approaches.
STAGES I, II AND III

I. To objectively determine the dual diagnosis capability of addiction treatment services.

II. To develop practical operational benchmarks or guidelines for enhancing dual diagnosis capability and implementing evidence-based practices, and examine if positive changes in program services can be detected.

III. To obtain a representative sample of the system of care, provide practical guidance for enhancement, and begin to link capability with outcomes.
STAGE I:
PROVIDER SURVEY
<table>
<thead>
<tr>
<th>Substance Use Severity</th>
<th>HI</th>
<th>LO</th>
</tr>
</thead>
<tbody>
<tr>
<td>III (n=456) (McGovern et al, 2006a)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>50.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>II</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>III</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.8%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

STAGE I: ADDICTION TREATMENT PROVIDER ESTIMATES BY QUADRANT

Psychiatric Problem Severity

HI

LO

Substance Use Severity

HI

LO

(n=456) (McGovern et al, 2006a)
## STAGE I:
**DETERMINING DUAL DIAGNOSIS CAPABILITY BY ADDICTION TREATMENT PROVIDER SURVEY**

<table>
<thead>
<tr>
<th>Service Type</th>
<th>Count (Percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Addiction Only Services (AOS)</td>
<td>97 (23.0%)</td>
</tr>
<tr>
<td>Dual Diagnosis Capable (DDC)</td>
<td>275 (65.3%)</td>
</tr>
<tr>
<td>Dual Diagnosis Enhanced (DDE)</td>
<td>49 (11.6%)</td>
</tr>
</tbody>
</table>

(n=456) (McGovern et al, 2006b)
ASAM DUAL-DIAGNOSIS TAXONOMY SURVEY IS USEFUL BUT MAY HAVE PROBLEMS WITH ACCURACY

• 92.9% of sample responded to item (421/453)
• No differences in categories by professional role: Agency Directors vs. Clinical Supervisors vs. Clinicians
• Survey method is rapid and economical: Provides initial data (screening)
• Modest agreement among staff within programs: 47.3%
• Survey method may have bias and error (ambiguity)
### The Need for a More Objective Assessment of Addiction Treatment Services’ Dual Diagnosis Capability

- ASAM offered the road map, but no operational definitions for services
- **Fidelity**: Adherence to an evidence-based practice or model
- **Fidelity scales**: Objective ratings of adherence
- **Observational ratings**: Adherence to consensus clinical guidelines or principles
- **“Triangulation”** of data
STAGE II: ASSESSING AND MEASURING CHANGE IN DUAL DIAGNOSIS CAPABILITY
APPLYING THE FIDELITY SCALE METHODOLOGY FOR A MORE OBJECTIVE ASSESSMENT OF DUAL DIAGNOSIS CAPABILITY

- Site visit (yields data beyond self-report)
- Multiple sources: Chart, brochure & program manual review; Observation of clinical process, team meeting, & supervision session; Interview with agency director, clinicians & clients.
- Objective ratings on operational definitions using a 5-point scale (ordinal)
DDCAT INDEX RATINGS

1 - Addiction only (AOS)
2 -
3 - Dual Diagnosis Capable (DDC)
4 -
5 - Dual Diagnosis Enhanced (DDE)
<table>
<thead>
<tr>
<th>I.</th>
<th>PROGRAM STRUCTURE (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>II.</td>
<td>PROGRAM MILIEU (2)</td>
</tr>
<tr>
<td>III.</td>
<td>CLINICAL PROCESS: ASSESSMENT (7)</td>
</tr>
<tr>
<td>IV.</td>
<td>CLINICAL PROCESS: TREATMENT (10)</td>
</tr>
<tr>
<td>V.</td>
<td>CONTINUITY OF CARE (5)</td>
</tr>
<tr>
<td>VI.</td>
<td>STAFFING (5)</td>
</tr>
<tr>
<td>VII.</td>
<td>TRAINING (2)</td>
</tr>
</tbody>
</table>

Total number of items: 35
STAGE II PHASE I: Dual Diagnosis Capability in Addiction Treatment (DDCAT) Index Development & Feasibility

- Index (instrument) construction
- Feedback from experts in dual-diagnosis treatment and research, state agency administrators, addiction treatment providers, and fidelity measure experts
- Field testing the DDCAT index 1.0
- Site visits and self-assessments
- Key questions were:
  1) Is it doable?
  2) Does it provide useful information and for whom?
  3) How does the index hold up?
## STAGE II PHASE I: DDCAT distribution of ASAM program type (CT & MO)

<table>
<thead>
<tr>
<th>ASAM CATEGORY</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Addiction Only Services</td>
<td>19</td>
<td>68</td>
</tr>
<tr>
<td>Dual Diagnosis Capable</td>
<td>9</td>
<td>32</td>
</tr>
<tr>
<td>Dual Diagnosis Enhanced</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
STAGE II PHASE I: CORRESPONDANCE BETWEEN ESTIMATE OF DUAL DIAGNOSIS CAPABILITY BY SURVEY vs. DDCAT ASSESSMENT

- 28.6% agreement about program’s dual diagnosis capability (2/7)
- Differences were always in dual diagnosis capability being rated higher in self-report survey (5/7)
STAGE II PHASE I:
DDCAT PSYCHOMETRIC PROPERTIES

• Median alpha = .81 (Range .73 to .93)

• Inter-rater reliability: % agreement = 76%

• Kappa = .67 (median)

• Validity: Correlation with Integrated Dual Disorder Treatment Fidelity Scale: .69 (.38 to .82)

(Gotham et al, 2004)
DDCAT PROFILE:
PRACTICAL GUIDANCE FOR PROVIDERS

I. Program Structure
II. Program Milieu
III. Clinical Process: Assessment
IV. Clinical Process: Treatment
V. Continuity of Care
VI. Staffing
VII. Training
STAGE II PHASE I: SUMMARY OF FINDINGS

• 20 programs in NH: Self-assessment
• 7 programs in CT & 7 in MO: Site surveys
• Demonstrated feasibility in:
  - DDCAT ratings feasible using both formats
  - Useful process for providers and state agency: User-friendly, concrete, self-assessment, identifies specific avenues for change
• Acceptable psychometric properties

(McGovern et al, 2006c)
STAGE II PHASE II: DETECTION OF CHANGE IN PROGRAM SERVICES

- DDCAT
  - Baseline Assessment and feedback
- Training: DDCAT and Advanced
- Training: Basic and Advanced
- 6 months Consultation Supervision
- DDCAT Follow-up Assessment
  - All agencies

All agencies
<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Addiction Only Services (AOS)</td>
<td>12 (75%)</td>
<td></td>
</tr>
<tr>
<td>Dual Diagnosis Capable (DDC)</td>
<td>4 (25%)</td>
<td></td>
</tr>
<tr>
<td>Dual Diagnosis Enhanced (DDE)</td>
<td>0 (0%)</td>
<td></td>
</tr>
</tbody>
</table>

* Baseline DDCAT Assessment (Version 2.0)
STAGE II PHASE II: MEAN CHANGE IN DDCAT PROFILE SCORES BY CONDITION

0 0.5 1 1.5 2 2.5 3 3.5 4 4.5 5

A Change
n = 8

A+T Change
n = 4

A+T+S Change
n = 4

Training*

Staffing

Continuity of Care

Clinical Process: Treatment

Clinical Process: Assessment*

Program Milieu

Program Structure

*Kruskal-Wallis non-parametric test p<.05
DDCAT PROFILE: CASE STUDY OF ONE WATERBURY PROGRAM OVER TIME

- Feb-05
- Aug-05
- Mar-06
STAGE III: MAPPING AND ENHANCING THE DUAL DIAGNOSIS CAPABILITY OF THE ADDICTION TREATMENT SYSTEM
STAGE III: OBJECTIVES

1. Larger (in number) and broader (in levels of care and stage of motivation) sampling of CT programs’ dual diagnosis capability*

2. Map the representative sampling of providers’ capability by level of care and region

3. Develop a toolkit to provide practical guidance to providers in moving from AOS to DDC and DDC to DDE services.

4. Link DDCAT assessments with other data: Program, client, financial.

5. Make suggestions for enhancing services and traction for change.

*DDCAT version 2.4
# SAMPLE CHARACTERISTICS

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOTAL</strong></td>
<td>150</td>
<td>53</td>
<td>35.3</td>
</tr>
<tr>
<td>Detoxification</td>
<td>13</td>
<td>5</td>
<td>38.5</td>
</tr>
<tr>
<td>Outpatient/ IOP</td>
<td>78</td>
<td>22</td>
<td>28.2</td>
</tr>
<tr>
<td>Methadone Maintenance</td>
<td>18</td>
<td>5</td>
<td>27.8</td>
</tr>
<tr>
<td>Residential</td>
<td>41</td>
<td>21</td>
<td>51.2</td>
</tr>
</tbody>
</table>
Total Number of Addiction Treatment Programs
(N=150)

- Detox: 9%
- Residential: 27%
- Methadone: 12%
- Outpatient: 52%
STAGE III: DISTRIBUTION OF SAMPLE BY LEVEL OF CARE

DDCAT Sample
n=53

- Detox: 9%
- Residential: 40%
- Outpatient: 42%
- Methadone: 9%
# SAMPLE CHARACTERISTICS

<table>
<thead>
<tr>
<th>Type of Programs:</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private/Non-Profit</td>
<td>47</td>
<td>88.7</td>
</tr>
<tr>
<td>State-operated</td>
<td>6</td>
<td>11.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Location:</th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Rural</td>
<td>14</td>
<td>26.4</td>
</tr>
<tr>
<td>Urban</td>
<td>39</td>
<td>73.6</td>
</tr>
</tbody>
</table>
## SAMPLE CHARACTERISTICS

<table>
<thead>
<tr>
<th>Region</th>
<th>N</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>27</td>
<td>8</td>
<td>29.6</td>
</tr>
<tr>
<td>II</td>
<td>25</td>
<td>14</td>
<td>56.0</td>
</tr>
<tr>
<td>III</td>
<td>34</td>
<td>12</td>
<td>35.3</td>
</tr>
<tr>
<td>IV</td>
<td>37</td>
<td>12</td>
<td>32.4</td>
</tr>
<tr>
<td>V</td>
<td>22</td>
<td>7</td>
<td>31.8</td>
</tr>
</tbody>
</table>
Dual diagnosis capability of Stage III programs (n=53):
AOS=31 (58.5%); DDC= 22 (41.5%)
DISTRIBUTION OF PROGRAM TYPE ACROSS FOUR STUDIES: All stages to date

<table>
<thead>
<tr>
<th></th>
<th>Stage I</th>
<th>Stage II Phase I</th>
<th>Stage II Phase II</th>
<th>Stage III</th>
</tr>
</thead>
<tbody>
<tr>
<td>n</td>
<td>456</td>
<td>28</td>
<td>16</td>
<td>53</td>
</tr>
<tr>
<td>AOS</td>
<td>23.0%</td>
<td>68.0%</td>
<td>75.0%</td>
<td>58.5%</td>
</tr>
<tr>
<td>DDC</td>
<td>65.4%</td>
<td>32.0%</td>
<td>25.0%</td>
<td>41.5%</td>
</tr>
<tr>
<td>DDE</td>
<td>11.6%</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
STAGE III FINDINGS:
PROGRAM TYPE BY REGION

Dual Diagnosis Capability by Region

<table>
<thead>
<tr>
<th>Region</th>
<th>Percentage of Programs Meeting DDC Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Region 1</td>
<td>30%</td>
</tr>
<tr>
<td>Region 2</td>
<td>50%</td>
</tr>
<tr>
<td>Region 3</td>
<td>20%</td>
</tr>
<tr>
<td>Region 4</td>
<td>60%</td>
</tr>
<tr>
<td>Region 5</td>
<td>40%</td>
</tr>
</tbody>
</table>
STAGE III FINDINGS: PROGRAM TYPE BY LEVELS OF CARE

Dual Diagnosis Capability by Level of Care

- Detox
- Outpatient
- Methadone Maintenance
- Residential

Percentage of Programs Meeting DDC Criteria

Level of Care

0% 10% 20% 30% 40% 50% 60%
DDCAT PROFILES BY REGION

Region 1
Region 2
Region 3
Region 4
Region 5

DDE
DDC
AOS

I. Program Structure
II. Program Milieu
III. Clinical Process: Assessment
IV. Clinical Process: Treatment
V. Continuity of Care
VI. Staffing
VII. Training

Region 1
Region 2
Region 3
Region 4
Region 5
DDCAT ITEMS: ADDITIONAL DETAILED LEVEL OF ANALYSIS

DDCAT Item Scores: Range from lowest to highest

- DDCAT Item Scores
- Average Rating
- Stagewise TX
- COD lit/materials
- Family ed/support
- COD training plan
- Access: Severity
- Milieu: Welcoming
- Med eval/mgmt

DDCAT Item
<table>
<thead>
<tr>
<th></th>
<th>AOS % Change</th>
<th>DDC % Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Employed</td>
<td>-2.4</td>
<td>-0.8</td>
</tr>
<tr>
<td>% Homeless</td>
<td>-10.0</td>
<td>-11.9</td>
</tr>
<tr>
<td>% w/Social Support</td>
<td>+71.4</td>
<td>+66.0</td>
</tr>
<tr>
<td>% Arrested</td>
<td>-5.6</td>
<td>-4.5</td>
</tr>
<tr>
<td>% Abstinent: Alcohol</td>
<td>41.0</td>
<td>26.8</td>
</tr>
<tr>
<td>% Abstinent: Drugs</td>
<td>35.2</td>
<td>16.7</td>
</tr>
</tbody>
</table>
NEXT STEPS: ONGOING ASSESSMENT AND MONITORING OF PROGRAMS

- DDCAT assessments over time: State or regional authority (LA); COSIG (MO); services research (TX)
- Use profiles to highlight strengths and opportunities: Provider interest, consumer benefit (LA)
- Caution about self-report DDCAT assessments: Balancing accuracy with effort (IN, VT)
- Clinical management information system monitoring: access, acceptance, & retention (CT)
- “Walk-thru”: Ethnographic methods (IA)
NEXT STEPS: IMPLEMENTATION SUPPORT STRATEGIES

- RFP/RFA for programs interested in enhancement and implementation support
- Centers of Excellence: Statewide conference/workshops
- Identify needs based on profiles: Staffing, structural, and/or intervention resources
- Availability of toolkit (AOS to DDC; DDC to DDE)
- Regional and local MH/AT networks developing protocols, staff sharing & exchange, consumer advisors
- Implementation supports: Medications, MI/CBT, services for families, & peer recovery networks
NEXT STEPS: UTILIZATION OF CLINICAL MANAGEMENT INFORMATION SYSTEMS

• Create or use existing mechanisms to identify persons with co-occurring disorders (diagnosis, quadrant, severity, acuity)
• Integrate self-report measures
• Add to consumer satisfaction survey: Were addiction and mental health needs met? How? Where?
• Monitor process and outcomes
• Simple proxies for outcome: Access, acceptance, retention, and linkage
• Report cards and agency profiles
NEXT STEPS: RESOURCE ALLOCATION AND REGULATORY STANDARDS

• Some aspects of service enhancement are not cost-related: Stagewise treatment, COD literature & materials, family services (COD), structured staff training plan
• Some aspects are cost related: Staffing
• Examine potential to incentivize DDC or DDE services (medication is only one component)
• Monitoring by site review (DDCAT), client level data (client satisfaction survey) and program outcomes (SATIS; NOMS)
RATIONAL SERVICE
SYSTEM DESIGN?

• Variation in health care is ubiquitous
• Independent of disease prevalence or needs of consumers (demand side)
• Typically driven by supply-side of providers: From surgical procedures to dentistry
• What should the configuration/ratio of levels of care and co-occurring capability be by region, and by state?
  LOCs I/II/III: 50/30/20 or 50/40/10
  DDE/DDC/AOS: 15/70/15
• Services matched to patient acute need, and with a plan for illness self-management and ongoing recovery
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