Chronic Medical and Substance Use Conditions of Patients at a Community-based, Residential Crisis Stabilization Unit

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Presenter Disclosures

The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:

No relationships to disclose
Crisis Stabilization Unit (CSU) Presentation Outline

- Mission and Overview of CSU
- Clinical and Evaluation Measures
- Utilization Summary and Client Demographics
- Medical Needs, Withdrawal, and Smoking
- Future Medical Integration and Evaluation Efforts

Richmond Behavioral Health Authority

- Statutorily established local authority responsible for providing Mental Health, Intellectual Disability/Mental Retardation, Substance Abuse, and Prevention Services in the City of Richmond, Virginia.

- Services provided directly to the citizens of Richmond City by professionally trained, board certified staff and contracts with private, licensed entities.
CSU Mission

- Providing a safe, less restrictive residential environment for adults in crisis to divert inpatient hospitalization.
- Increasing access to recovery based services for consumers with mental illness, co-occurring substance use and mental health disorders, or intellectual disabilities.
- Promoting wellness and recovery through evidence-based treatment modalities.
- Providing integrated mental health, substance use and medical services.
- Collaborating with community partners to facilitate a successful transition back to the community.

CSU Program Overview

- Sub-acute, unlocked residential setting in a downtown urban location.
- Voluntary admissions 24/7 with temporary detention order (TDO) capability in the future.
- 16 beds (7 double and 2 single).
- Utilized by multiple cities and counties in Central Virginia.
- Over 1600 admissions since opening in Nov. 2009.
- 70% of admissions are uninsured.
CSU Program Overview (cont.)

- Recovery programming 7 days/week.
- Daily psychiatric evaluations for medication management and medical evaluations as needed.
- Medical detoxification from alcohol, opiates and benzodiazepines as an adjunct service (added in February 2010).
- 23 FTE staff: Peer specialists, QMHPs, LMHPs, Nurses (RN & LPN), Nurse Practitioner, Psychiatrist and Internist.

Key Evaluation Benchmarks

<table>
<thead>
<tr>
<th>Type of Measure or Input</th>
<th>Implemented as of</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer Suggestion Box</td>
<td>Nov. 2009</td>
</tr>
<tr>
<td>CIWA, COWS, Fagerstrom</td>
<td>Nov. 2009</td>
</tr>
<tr>
<td>Demographics and Utilization</td>
<td>Nov. 2009</td>
</tr>
<tr>
<td>BASIS-24®</td>
<td>April 2010</td>
</tr>
<tr>
<td>Perceptions of Care</td>
<td>April 2010</td>
</tr>
<tr>
<td>DDCAT* Evaluation</td>
<td>Sept. 2010</td>
</tr>
</tbody>
</table>

*Dual Diagnosis Capability in Addiction Treatment
Measurements of Withdrawal

- **Clinical Institute Withdrawal Scale**: Measures 10 withdrawal symptoms to create a global summed score.
  - 0–(8-10) = minimal to mild withdrawal
  - 8-14 = moderate withdrawal (marked autonomic arousal)
  - ≥15 = severe withdrawal

- **Clinical Opiate Withdrawal Scale**: Clinician-administered instrument that measures 11 common opiate withdrawal signs and symptoms.
  - 5-12 = mild; 13-24 = moderate; 25-36 = moderately severe; >36 = severe
Smoking Status and Dependence

- Fagerstrom Test for Nicotine Dependence: 6-item self-administered, self-report measure of dependency on nicotine or heaviness of smoking.
  - 0-2 = Very low dependence
  - 3-4 = Low dependence
  - 5 = Medium dependence
  - 6-7 = High dependence
  - 8-10 = Very high dependence
Fagerstrom Test for Nicotine Dependence *

Is smoking "just a habit" or are you addicted? Take this test and find out your level of dependence on nicotine.

1. How soon after you wake up do you smoke your first cigarette?
   - After 60 minutes  (0)
   - 31-60 minutes    (1)
   - 6-30 minutes     (2)
   - Within 5 minutes (3)

2. Do you find it difficult to refrain from smoking in places where it is forbidden?
   - No  (0)
   - Yes (1)

3. Which cigarette would you hate most to give up?
   - The first in the morning (1)
   - Any other              (0)

4. How many cigarettes per day do you smoke?
   - 10 or less            (0)
   - 11-20                 (1)
   - 21-30                 (2)
   - 31 or more            (3)

5. Do you smoke more frequently during the first hours after awakening than during the rest of the day?
   - No  (0)
   - Yes (1)

6. Do you smoke even if you are so ill that you are in bed most of the day?
   - No  (0)
   - Yes (1)

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Utilization Summary

<table>
<thead>
<tr>
<th>Year</th>
<th>ADM (n)</th>
<th>Consumers (n)</th>
<th>Completing Treatment (%)</th>
<th>TDO %</th>
<th>APA %</th>
<th>LOS</th>
<th>AVG Daily Census (n)</th>
<th>Utilization Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009-2010</td>
<td>295</td>
<td>257</td>
<td>88%</td>
<td>6%</td>
<td>6%</td>
<td>6</td>
<td>8</td>
<td>43%</td>
</tr>
<tr>
<td>2010-2011</td>
<td>606</td>
<td>484</td>
<td>86%</td>
<td>7%</td>
<td>7%</td>
<td>6</td>
<td>11</td>
<td>64%</td>
</tr>
<tr>
<td>2011-2012</td>
<td>685</td>
<td>442</td>
<td>85%</td>
<td>6%</td>
<td>9%</td>
<td>7</td>
<td>12</td>
<td>76%</td>
</tr>
</tbody>
</table>
Client Demographics: Gender* and Race

<table>
<thead>
<tr>
<th>Participant Race/Ethnicity</th>
<th>Valid %; N = 1768</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black or African American</td>
<td>43.72</td>
</tr>
<tr>
<td>White Caucasian</td>
<td>46.83</td>
</tr>
<tr>
<td>American Indian</td>
<td>2.83</td>
</tr>
<tr>
<td>Asian</td>
<td>1.92</td>
</tr>
<tr>
<td>Native Hawaiian</td>
<td>.57</td>
</tr>
<tr>
<td>Multiracial or Other</td>
<td>4.13</td>
</tr>
</tbody>
</table>

Women (48.93%)  Men (51.07%)

*N=1543; valid percent reported

General Outcomes

RBHA CSU evaluation shows:

- Comparable BASIS-24® and Perceptions of Care scores across all domains when compared to the McLean Benchmark Study Results
- Decreased burden scores from admission to discharge across all BASIS-24® domains (depression/ functioning, interpersonal problems, self-harm, emotional labiality, psychosis, substance abuse)
- Individuals with a co-occurring disorder (COD) have higher burden scores at intake for relationship and substance abuse BASIS-24® domains than those individuals without a COD
### CSU Client Demographics: Primary Mental Health Diagnoses

<table>
<thead>
<tr>
<th>Diagnostic Category</th>
<th>Valid Percent*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychotic</td>
<td>36.8</td>
</tr>
<tr>
<td>Depressive</td>
<td>32.9</td>
</tr>
<tr>
<td>Bipolar</td>
<td>21.5</td>
</tr>
<tr>
<td>Other</td>
<td>8.8</td>
</tr>
</tbody>
</table>

* N = 1,222

### CSU Client Demographics: Secondary Diagnoses (where present)

<table>
<thead>
<tr>
<th>Diagnostic Category</th>
<th>Valid Percent*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polysubstance</td>
<td>42.9</td>
</tr>
<tr>
<td>Alcohol</td>
<td>26.6</td>
</tr>
<tr>
<td>Opioid</td>
<td>5.6</td>
</tr>
<tr>
<td>Cocaine</td>
<td>4.9</td>
</tr>
<tr>
<td>ID</td>
<td>4.2</td>
</tr>
<tr>
<td>Other MH</td>
<td>3.5</td>
</tr>
<tr>
<td>Other SUD</td>
<td>12.3</td>
</tr>
</tbody>
</table>

* N = 659
Most Prevalent Medical Diagnostic Categories

Withdrawal, Dependence and Smoking Status

<table>
<thead>
<tr>
<th>Test</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIWA</td>
<td>129</td>
<td>4.22</td>
<td>4.537</td>
</tr>
<tr>
<td>COWS</td>
<td>130</td>
<td>2.64</td>
<td>2.600</td>
</tr>
<tr>
<td>Fagerstrom*</td>
<td>129</td>
<td>2.93</td>
<td>3.267</td>
</tr>
</tbody>
</table>

* 61.8 percent self-report smoking
Future CSU Primary Care/Medical Integration Efforts

- Daily medical assessment and teaching.
- Medical screening on all admissions (VS, BMI, Labs, TB, & HIV, based on history).
- Internist on staff for physicals/management of chronic conditions.
- Referral to and collaboration with primary care providers.
- Integration into overall RBHA integration efforts*

* Presented at earlier session. Mind & Body: The case for integrating community mental health and primary medical healthcare services; see slide 26

Select Future Evaluation Efforts

- Use evaluation data to plan service improvements.
- Use evaluation data to assess impact of planned program improvements.
- Determine how and which service components are more or less effective for different types of consumers.
- Determine how consumers’ perceptions of care may be related to severity of presenting symptoms, diagnoses, presence or absence of co-occurring substance use disorders or physical health disorders.
- Compare relative cost-effectiveness and sensitivity to measure desired behaviors, symptoms or perceptions of different instruments.
Bibliography


Recommended Readings


Questions?

For a copy of the Mind & Body presentation scan this code with your smartphone: