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

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Presenter Disclosures

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No relationships to disclose

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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

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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.

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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.

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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.

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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.

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Key Evaluation Benchmarks

Type of Measure or Input:	Implemented as of:
Consumer Suggestion Box	Nov. 2009
CIWA, COWS, Fagerstrom	Nov. 2009
Demographics and Utilization	Nov. 2009
BASIS-24®	April 2010
Perceptions of Care	April 2010
DDCAT* Evaluation	Sept. 2010

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*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

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CLINICAL INSITUTUE WITHDRAWAL ASSESSMENT OF ALCOHOL SCALE, REVISED (CIWA-AR)

Patient:_____ Date: _____ Time: _____ (24 hour clock, midnight = 00:00)

Pulse or heart rate, taken for one minute:_____ Blood pressure:_____

NAUSEA AND VOMITING — Ask "Do you feel sick to your stomach? Have you vomited?" Observation.
0 no nausea and no vomiting
1 mild nausea with no vomiting
2
3
4 intermittent nausea with dry heaves
5
6
7 constant nausea, frequent dry heaves and vomiting

TREMOR — Arms extended and fingers spread apart. Observation.
0 no tremor
1 not visible, but can be felt fingertip to fingertip
2
3
4 moderate, with patient's arms extended
5
6
7 severe, even with arms not extended

PAROXYSMAL SWEATS — Observation.
0 no sweat visible
1 barely perceptible sweating, palms moist
2
3
4 beads of sweat obvious on forehead
5
6
7 drenching sweats

ANXIETY — Ask "Do you feel nervous?" Observation.
0 no anxiety, at ease
1 mild anxious
2
3
4 moderately anxious, or guarded, so anxiety is inferred
5
6
7 equivalent to acute panic states as seen in severe delirium or acute schizophrenic reactions

AGITATION — Observation.
0 normal activity
1 somewhat more than normal activity
2
3
4 moderately fidgety and restless
5
6
7 paces back and forth during most of the interview, or constantly thrashes about

TACTILE DISTURBANCES — Ask "Have you any itching, pins and needles sensations, any burning, any numbness, or do you feel bugs crawling on or under your skin?" Observation.
0 none
1 very mild itching, pins and needles, burning or numbness
2 mild itching, pins and needles, burning or numbness
3 moderate itching, pins and needles, burning ornumbness
4 moderately severe hallucinations
5 severe hallucinations
6 extremely severe hallucinations
7 continuous hallucinations

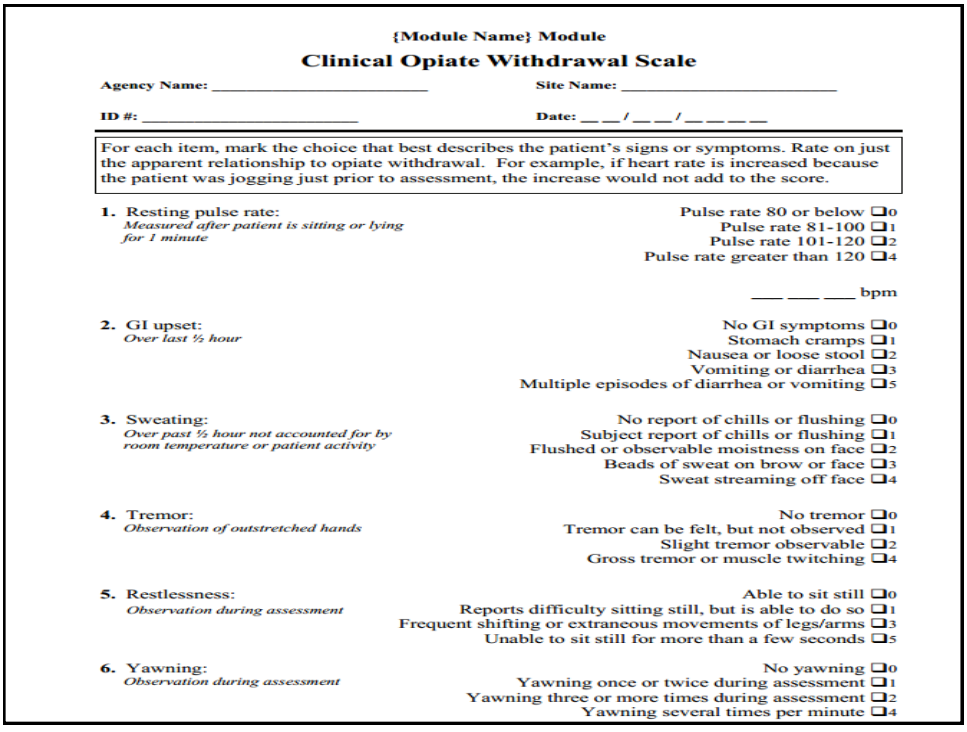
AUDITORY DISTURBANCES — Ask "Are you more aware of sounds around you? Are they harsh? Do they frighten you? Are you hearing anything that is disturbing to you? Are you hearing things you know are not there?" Observation.
0 not present
1 very mild harshness or ability to frighten
2 mild harshness or ability to frighten
3 moderate harshness or ability to frighten
4 moderately severe hallucinations
5 severe hallucinations
6 extremely severe hallucinations
7 continuous hallucinations

VISUAL DISTURBANCES — Ask "Does the light appear to be too bright? Is its color different? Does it hurt your eyes? Are you seeing anything that is disturbing to you? Are you seeing things you know are not there?" Observation.
0 not present
1 very mild sensitivity
2 mild sensitivity
3 moderate sensitivity
4 moderately severe hallucinations
5 severe hallucinations
6 extremely severe hallucinations
7 continuous hallucinations

HEADACHE, FULLNESS IN HEAD — Ask "Does your head feel different? Does it feel like there is a band around your head?" Do not rate for dizziness or lightheadedness. Otherwise, rate severity.
0 no present
1 very mild
2 mild
3 moderate
4 moderately severe
5 severe
6 very severe
7 extremely severe

ORIENTATION AND CLOUDING OF SENSORIUM — Ask "What day is this? Where are you? Who am I?"
0 oriented and can do serial additions
1 cannot do serial additions or is uncertain about date
2 disoriented for date by no more than 2 calendar days
3 disoriented for date by more than 2 calendar days
4 disoriented for place/or person

Total CIWA-Ar Score



{Module Name} Module

Clinical Opiate Withdrawal Scale

Agency Name: _____ Site Name: _____

ID #: _____ Date: __ __ / __ __ / __ __ __ __

For each item, mark the choice that best describes the patient's signs or symptoms. Rate on just the apparent relationship to opiate withdrawal. For example, if heart rate is increased because the patient was jogging just prior to assessment, the increase would not add to the score.

1. Resting pulse rate:
Measured after patient is sitting or lying for 1 minute

Pulse rate 80 or below ❑0
Pulse rate 81-100 ❑1
Pulse rate 101-120 ❑2
Pulse rate greater than 120 ❑4

___ ___ ___ bpm

2. GI upset:
Over last ½ hour

No GI symptoms ❑0
Stomach cramps ❑1
Nausea or loose stool ❑2
Vomiting or diarrhea ❑3
Multiple episodes of diarrhea or vomiting ❑5

3. Sweating:
Over past ½ hour not accounted for by room temperature or patient activity

No report of chills or flushing ❑0
Subject report of chills or flushing ❑1
Flushed or observable moistness on face ❑2
Beads of sweat on brow or face ❑3
Sweat streaming off face ❑4

4. Tremor:
Observation of outstretched hands

No tremor ❑0
Tremor can be felt, but not observed ❑1
Slight tremor observable ❑2
Gross tremor or muscle twitching ❑4

5. Restlessness:
Observation during assessment

Able to sit still ❑0
Reports difficulty sitting still, but is able to do so ❑1
Frequent shifting or extraneous movements of legs/arms ❑3
Unable to sit still for more than a few seconds ❑5

6. Yawning:
Observation during assessment

No yawning ❑0
Yawning once or twice during assessment ❑1
Yawning three or more times during assessment ❑2
Yawning several times per minute ❑4

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

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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)

Utilization Summary

Year	ADM (n)	Consumers (n)	Completing Treatment (%)	TDO %	APA %	LOS	AVG Daily Census (n)	Utilization Rate (%)
2009-2010	295	257	88%	6%	6%	6	8	43%
2010-2011	606	484	86%	7%	7%	6	11	64%
2011-2012	685	442	85%	6%	9%	7	12	76%

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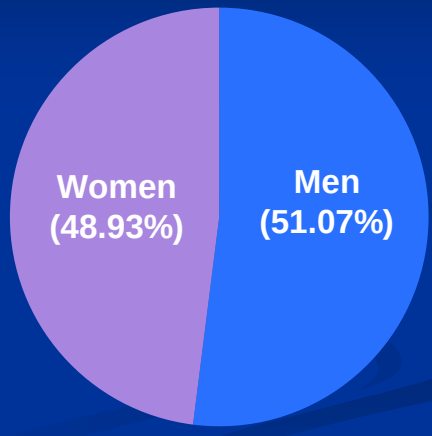
Client Demographics: Gender* and Race

Participant Race/Ethnicity	Valid %; N = 1768
Black or African American	43.72
White Caucasian	46.83
American Indian	2.83
Asian	1.92
Native Hawaiian	.57
Multiracial or Other	4.13



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*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

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CSU Client Demographics: Primary Mental Health Diagnoses

Diagnostic Category	Valid Percent*
Psychotic	36.8
Depressive	32.9
Bipolar	21.5
Other	8.8

* N = 1,222

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

Diagnostic Category	Valid Percent*
Polysubstance	42.9
Alcohol	26.6
Opioid	5.6
Cocaine	4.9
ID	4.2
Other MH	3.5
Other SUD	12.3

* N = 659

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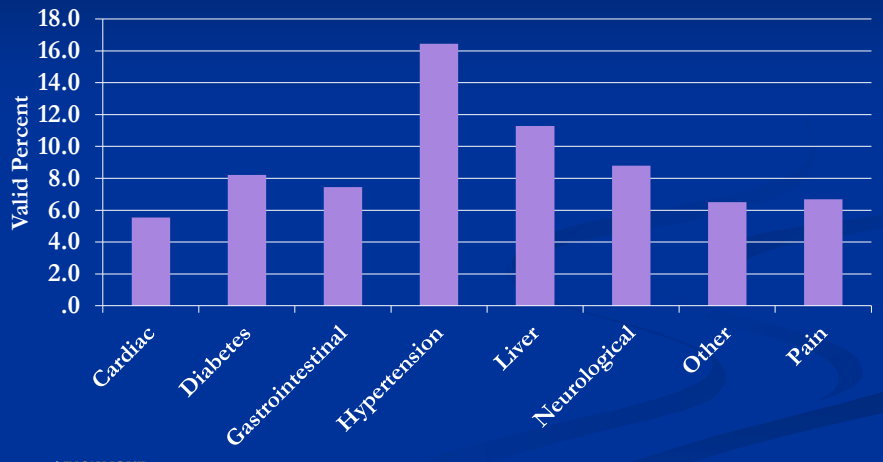
Most Prevalent Medical Diagnostic Categories



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Withdrawal, Dependence and Smoking Status

Test	N	Mean	SD
CIWA	129	4.22	4.537
COWS	130	2.64	2.600
Fagerstrom*	129	2.93	3.267

* 61.8 percent self-report smoking

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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*

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*** 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.

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Recommended Readings

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Questions?

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