

A New Screening Procedure to Identify Co-Occurring Psychiatric and Substance Use Disorders

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Acknowledgements

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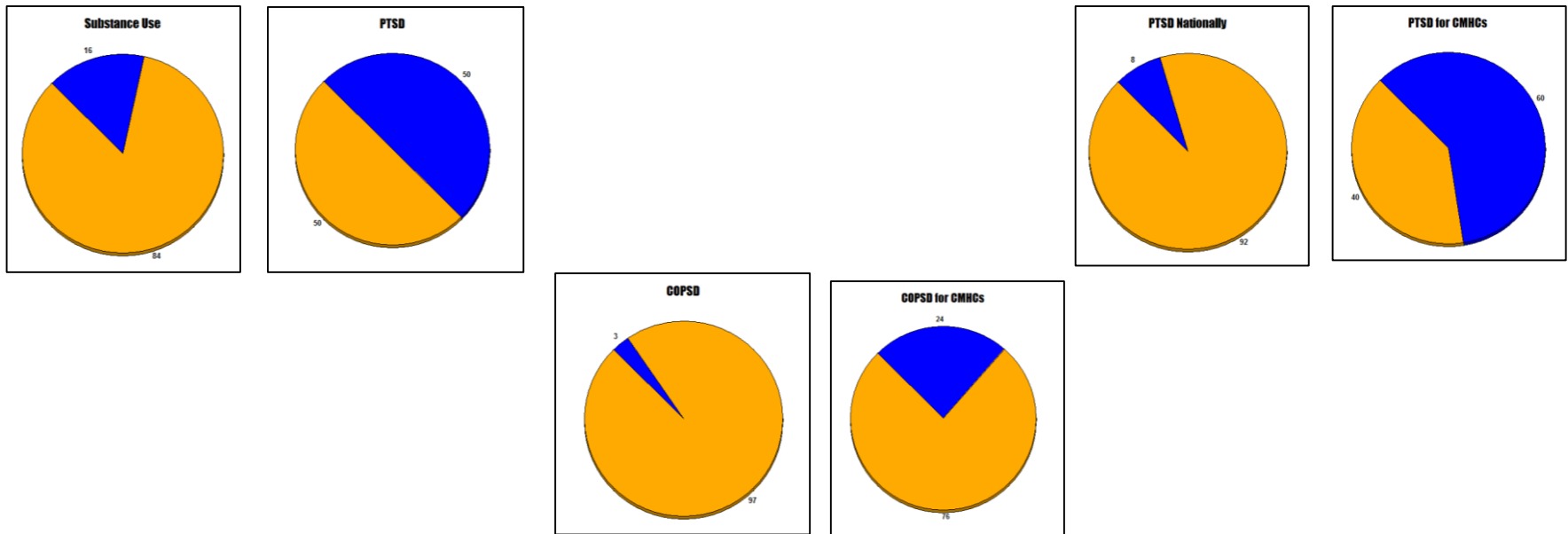
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The Clinical Problem

Co-occurring psychiatric and substance use disorders (COPSDs) are **often unrecognized** in community-based mental health care.



Atkins, 2014; Berenz & Coffey, 2012; Gotham, 2014; Guerrero et al., 2015; Hazelden, 2013; Nash et al., 2011

The Clinical Problem

Individuals with **PTSD, COPSDs, & particularly co/PTSD**, experience significant **health disparity** and **inequity**.

- Vulnerability towards self-harm and self-destruction;
- Lower quality of life, worse physical health, and poorer treatment outcomes;
- High prevalence in CMHC patient populations, recognized or not.

Atkins, 2014; Berenz & Coffey, 2012; McDonald et al., 2014; Nash et al., 2011;; Patitz et al., 2015; SAMSHA, 2008 & 2014

Gap Analysis

Multiple challenges **limit identification** of PTSD and COPSDs in community mental health care—

- State-mandated requirements of public CMHCs;
- An attitude of exception, not expectation;
- Non-integration of mental health and substance abuse services;
- Differential diagnosis

Atkins, 2014; Larrison et al., 2011; McDonald et al., 2014; Minkoff & Cline, 2004; SAMSHA, 2008, 2011, & 2015; Subica et al., 2015; Tiet et al., 2013; van Dam et al., 2013

Gap Analysis

= Failure to recognize **PTSD**, trauma exposure and responses, substance use, **COPSDs**, and **co/PTSD** by community mental health centers (CMHCs).

Recognition begins with identification.

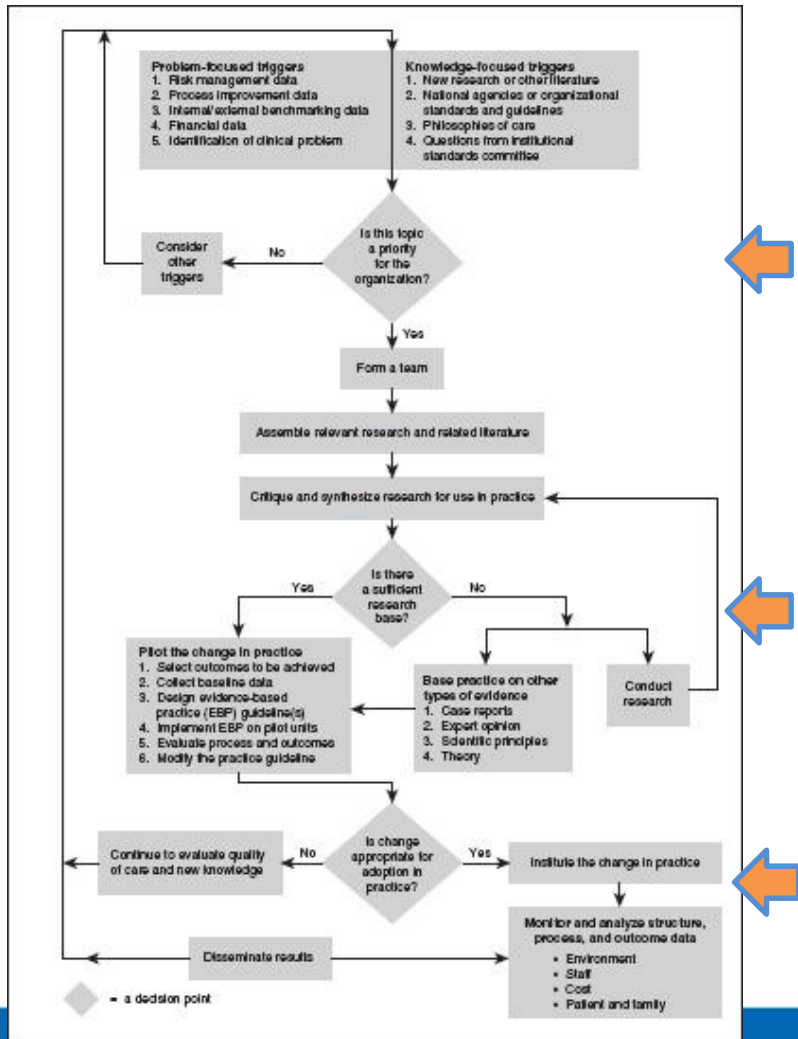
Literature Review

Screening tools can **improve identification** through measurement-based care, using evidence-based practice.

- Facilitate **early identification**, appropriate treatment matching, and timely care coordination;
- Context of **brief** intervention and treatment;
- Tools that are **valid, standardized, and efficient**;
- Screening must be **comprehensive and pan-diagnostic**;
- Maximized within the context of **treatment protocols and procedures**.

Boscarino et al., 2012; SAMHSA, 2011; SAMHSA, 2015; van Dam et al., 2013; Wood & Gupta, 2017

Framework— Iowa Model of Evidence-Based Practice



DECISION POINTS:

1) **Organizational Priority?**

2) **Sufficient Research Base?**

(Piloting of program)

3) **Change Appropriate for Practice?**

Inquiry Question

In new adult clients initiating outpatient mental health services (P), does implementing a **new open intake screening procedure** (I), compared to the current screening process (C), affect the identification and provisional diagnosis of persons with PTSD and/or co-occurring disorders (COPSD) (O)?

Primary Objective(s):

Does disorder symptom identification through **self-report** and **observer-rated** screening(s) lead to its provisional diagnosis by licensed clinical staff?

Method

Project Design: **Quality Improvement**

Setting: A **rural CMHC**, composed of two outpatient clinics that serve the Anderson and Cherokee Counties of Texas.

Target Population: **Adults** seeking new mental health services via the **open intake** process.

Sample Size: One-hundred, fifty-one (**n = 151**) persons meeting inclusion criteria who completed an open intake screening between August 1 and December 1, 2017.

Variables:

- **Traumatic stress response symptoms**, that may be indicative of *PTSD*;
- **Substance use**, and the current level of use (*Substance Use Disorder*);

Method—SIIP Intervention

This **Screening-into-Intake-Procedure (SIIP)** intervention utilized multiple screening instruments applied in a staged process.

(to reduce subjectivity in determining qualification)

Measurement Tools:

Stage One: **Client Self-Assessment (CSA)**, a self-report completed by the potential client.

Stage Two: **Needs Assessment Screening (NAS)**, completed by staff, usually Qualified Mental Health Professionals (QMHPs), using additional screening tools.

Intake Process

Part One= The **Screening-Into-Intake-Procedure (SIIP)**
Intervention

Stage One—**The Client Self-Assessment (CSA)**

THE INTERVENTION	PART ONE: SCREENING INTO INTAKE PROCEEDURE (SIIP)	
STAGE ONE: SELF-ASSESSMENT BY POTENTIAL CLIENT		Paper-Based Screening tools used: (See Appendix A3: Composition Breakdown of the CSA)
<u>Task(s):</u> -Complete the CLIENT SELF ASSESSMENT (CSA) . See Appendix A2 . -A paper-based form completed by the person before the screening process starts.	<u>Domains Assessed:</u> -Depression -Bipolar Disorder -Schizophrenia -PTSD -Substance Use -Change Motivation	<u>3-Questions</u> from the Patient Health Questionnaire (PHQ-9). <u>3-Questions:</u> One from the Mental Health Screening Form (MHSF-III), Two from the DSM-5 Adult Level 1 Cross Cutting Measure (A1CCM). <u>3-Questions:</u> Two from the MHSF-III. One from the DSM-5 A1CCM. <u>3-Questions:</u> Two from the Primary Care PTSD Screen (PC-PTSD), One from the Jellinek adapted version of the PC-PTSD (J-PC-PTSD). <u>3-Questions</u> from the DSM-5 A1CCM. <u>24-Questions</u> from the University of Rhode Island Change Assessment (URICA).
		Move to STAGE TWO

Intake Process

Part One = The **Screening-Into-Intake-Procedure (SIIP)**
Intervention

Stage Two—**The Needs Assessment Screening (NAS)**

THE INTERVENTION **PART ONE: SCREENING INTO INTAKE PROCEDURE (SIIP)**

STAGE TWO: NEEDS ASSESSMENT SCREENING BY QMHP

Task(s):

- Score the CSA
- Complete the **NEEDS ASSESSMENT SCREENING (NAS)** electronically. **See Appendix B1.**
- Determine if Additional Screenings should be administered to rule-in or out a disorder. **See Appendix B2: Evaluating Domains I-V of the Client Self-Assessment (CSA).**

Domains Assessed:

- Depression
- Bipolar Disorder
- Schizophrenia
- PTSD
- Substance Use

Electronic Additional Screening tools used in Anasazi (the EHR):

- Patient Health Questionnaire (PHQ-9), remaining 7-questions. **See Appendix B4.**
- Mood Disorder Questionnaire (MDQ), 14-Questions. **See Appendix B5.**
- Prevention through Risk Identification, Management, and Education early psychosis screening (Labeled PRIME Schizophrenia Screening in EHR), 12-Questions. **See Appendix B6.**
- PTSD Checklist, 6-Item (PCL-6; Labeled Trauma Exposure in EHR), 7-Questions. **See Appendix B7.**
- Texas Christian University (TCU) Drug Screen-V (TCUDS-V; Labeled ACCTCU in EHR). **See Appendix B8.**
- SCORE the DRICA. **See Appendix B9.**

DECISION POINT:

- Determine if the person a) may **QUALIFY** for services and b) should be **REQUIRED** for Intake Assessment.* **See Appendix B3.**

Intake Process

Part Two = Provisional Diagnosing

Stage(s) Three and Four—Intake Assessment (by LPC) and Psychiatric Evaluation (by NP)

TREATMENT AS USUAL

PART TWO: PROVISIONAL DIAGNOSING

STAGE THREE: INTAKE ASSESSMENT BY LPC

Task(s):

- The Licensed Professional Counselor (LPC) reviews the QMHP's NAS recommendation.
- The LPC determines if the person has a qualifying diagnosis using the Diagnostic and Statistical Manual, 5th edition (DSM-5) diagnostic criteria. If a qualifying diagnosis is confirmed, the person is deemed eligible for services. If eligible, a **PROVISIONAL, QUALIFYING DIAGNOSIS** is made.
- If determined to be eligible, an **INTAKE ASSESSMENT (IA)** is completed and a TREATMENT PLAN is initiated.
- The person is then referred and scheduled for a **PSYCHIATRIC EVALUATION (PE)**, if agrees to medication management.

QUALIFYING DIAGNOSES: (MUST BE PRESENT):

- Major Depressive Disorder
- Bipolar Disorder
- Schizophrenia

ADDITIONAL, ADD-ON DIAGNOSES (CANNOT BE THE ONLY DIAGNOSIS PRESENT)

- PTSD
- Substance Use

STAGE FOUR: PSYCHIATRIC EVALUATION BY NP

Task(s):

- The Psychiatric Nurse Practitioner (PMHNP) or Psychiatrist reviews the **INTAKE ASSESSMENT (IA)**.
- The PMHNP or Psychiatrist determines if the person has a qualifying diagnosis using DSM-5 diagnostic criteria. If eligible, the **PROVISIONAL, QUALIFYING DIAGNOSIS** is either confirmed or a new diagnosis made.
- A **PSYCHIATRIC EVALUATION (PE)** is completed and treatment is initiated. This appointment is designated as **APPOINTMENT ONE**.
- A **FOLLOW UP** appointment for treatment and diagnosis re-evaluation is scheduled. This appointment is designated as **APPOINTMENT TWO**.

Domains assessed:

QUALIFYING DIAGNOSES: (MUST BE PRESENT):

- Major Depressive Disorder
- Bipolar Disorder
- Schizophrenia

ADDITIONAL, ADD-ON DIAGNOSES (CANNOT BE THE ONLY DIAGNOSIS PRESENT)

- PTSD
- Substance Use

Data Analysis/Results—Sociodemographics

- **Previous clients** (those who had already had some contact with ACCESS in the past);
- **Female;**
- between the ages of **20 and 39;**
- **White, non-Hispano/Latino;**
- living in **Palestine or Jacksonville;** and
- **without health insurance.**

Characteristic	n	% of Total
Client Status		
New	71	47%
Previous	80	53%
Age		
18-19	5	3%
20-29	55	36.5%
30-39	46	30.5%
40-49	22	15%
50-59	14	9%
60-69	8	5%
70+	1	1%
Race		
Black	31	21%
White	107	71%
Mixed	2	1%
Other	2	1%
Unspecified	9	6%
Ethnicity		
Hispano/Latino	12	8%
Non-Hispano/Latino	121	80%
Unspecified	18	12%
Gender		
Male	63	42%
Female	88	58%
Health Insurance Status		
Medicaid	23	15%
Medicare	15	10%
No Information	24	16%
Private/Commercial	12	8%
Self-Pay	64	42%
Unspecified	13	9%
Resident City		
Frankston	3	2%
Jacksonville	51	34%
Palestine	67	44%
Other	30	20%

Note. Total number (n) of persons for each category is 151 (n = 151).

Data Analysis/Results—PTSD

Using Chi-Square Crosstabulation:

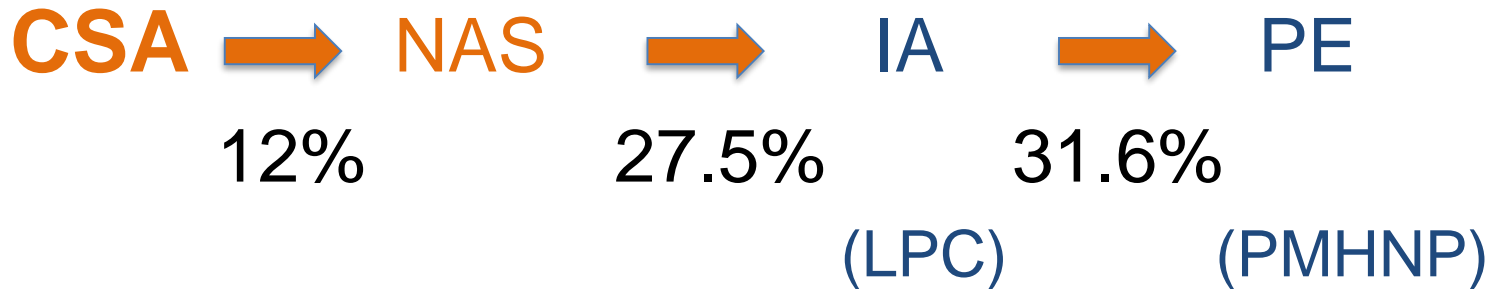
Increasing disagreement through intake process' stage progression, leading to an overall **absence in disorder diagnosis** for PTSD.

Data Analysis/Results—PTSD

PTSD Identification with the **CSA**

- Increasing disagreement between a **person's self-reported** PTSD symptoms and the **clinician's determination** of PTSD as a diagnosis.

(Self-report) (QMHP)



- Inconclusive (29.5%) v. Diagnosed (21%)

Discussion—PTSD Identification

With the **CSA**:

- A discrepancy between **presenting symptoms** (what is self-reported) and provisional PTSD **diagnosis** (meeting DSM-5 criteria).

WHICH SUGGESTS

- ICMHC staff and clinicians **failing to identify** a portion of its clients with PTSD.

Discrepancy? 30/70

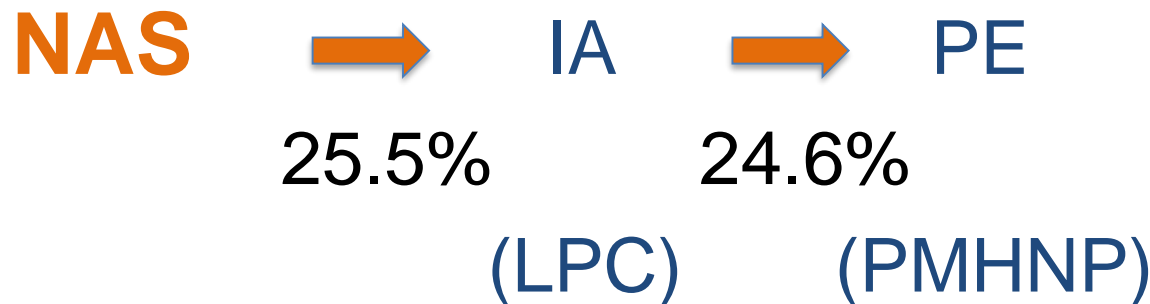
Reducing subjectivity? 30/70

Data Analysis/Results—PTSD

PTSD Identification with the **NAS**

- Ongoing disagreement between the **QMHP's identification** of PTSD symptoms using observer-rated assessment and the **clinician's determination** of PTSD as a diagnosis.

(QMHP)



- Inconclusive (25%) v. Diagnosed (21%)

Discussion—PTSD Identification

With the **NAS**:

- A discrepancy between observer-rated **screening results** and PTSD provisional **diagnosis** (meeting DSM-5 criteria).

WHICH SUGGESTS

- ICMHC staff and clinicians **failing to identify** a portion of its clients with PTSD.

Discrepancy? 25/75

Reducing subjectivity? 25/75

Data Analysis/Results—Retrospective Review

The number of **new PTSD diagnoses made decreased** from **11.6%** in 2016 (before the SIIP) to **9.0%** in 2017 (after the SIIP), averaging a **10.3%** rate of new PTSD diagnosis between 2016 and 2017.

Chi-square Crosstabulation of Retrospective New PTSD Diagnosis Data, 2016 and 2017

Year		PTSD		Total
		No	Yes	
2016	Count	405	53*	458
	% within Group	88.4%	11.6%	100%
2017	Count	417	41*	458
	% within Group	91%	9%	100%
Total	Count	822	94*	916
	% within Group	89.7%	10.3%	100%

Note. PTSD, Post-Traumatic Stress Disorder.

* $p > .05$. Analyzed using Fisher's Exact Test, 2-sided.



In Review—PTSD Identification

- Individual lifetime PTSD diagnosis is **about 8%**.
- PTSD prevalence in special populations served by CMHCs **approaches 60%**.
- Through new intake process, PTSD is provisionally diagnosed at an **average rate of 21%**.
- Through retrospective review, the number of new PTSD diagnosis in 2017 (after the SIIP intervention) **decreased** from **11.6%** to **9%** when compared to the same time-period in 2016. (result statistically insignificant) = **average rate of 10.3%**

(SAMHSA, 2008; Tiet et al., 2013)

Discussion—PTSD Identification

- Increased **sensitivity** and **specificity** in identification and provisional diagnosis.
(CSA-30/70 or NAS-25/75)

AND

- ICMHC staff and clinicians **failing to identify** a portion of its clients with PTSD.
(CSA-30/70 or NAS-25/75)

Identification—COPSD and co/PTSD

Most results were **statistically insignificant**:

(a) Comparisons of the **CSA** to PE results, (b) **all NAS** results to other stage results, (c) the IA to PE results for COPSD; and (d) **all staged results** for **co/PTSD**.

- ICMHC staff and clinicians are **failing to identify substance use**, and therefore COPSD and/or co/PTSD.

Limitations

- **Small sample size**
- Multiple **NAS incompletions** for unidentifiable reasons, limiting overall sample size.
- The need for improved and continual **staff training** about the SIIP process.
- A strict reliance on **cut-off scores** to determine if additional screening was needed.
- The failure to further **screen for substance use** although scored positive on the CSA.

Implications

Future project opportunities:

- Development of a SIIP **Training Protocol**.
- Determining the impact of **staff licensing** status on SIIP effectiveness.
- Determining **which qualifying diagnoses** are **more likely to co-occur** with PTSD and substance use.
- Developing a **logistical regression model** with increased sample size.

Conclusion

Did the SIIP affect the identification and provisional diagnosis of persons with PTSD and/or co-occurring disorders (COPSDs)?

YES:

- Served as a substantial aspect in overhauling the open intake process.
- **Measurement-based care** through validated screening.
- By **raising awareness** about the need for assessment, it assisted in the early recognition and identification of PTSD, substance use, and COPSDs.

Conclusion

Did the SIIP affect the identification and provisional diagnosis of persons with PTSD and/or co-occurring disorders (COPSDs)?

NO:

- Large portion of persons screened through the SIIP categorized as **'inconclusive,'** affecting care coordination in the early stages of treatment.
- **Further training** needed to improve screener competency and standardization of process.
- Although not identifying more PTSD after implementation, may have **improved the sensitivity and specificity** in identifying and provisionally diagnosing PTSD.

Conclusion

Incorporating measurement-based care:

Utilizing client self-report and observer-rated assessment by unlicensed personnel



On service delivery:

Treatment-matching of scarce resources



Better recognition of, and service to, the PTSD and COPSD population:

Will we 'see' this population and better meet its needs?



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Questions

