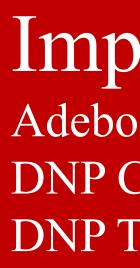
RUTGERS School of Nursing



Introduction

- Schizophrenia = profound disruptions in thinking, perception of reality, sense of self. emotions, etc. ^{2, 11}
- The pathophysiology of schizophrenia remains poorly understood²

- This project will explore the impact of substance abuse screening, brief intervention, and referrals for treatment (SBIRT) on healthcare utilization in schizophrenia patients with active substance use
 - healthcare utilization = hospitalizations and ED visits

Background & Significance

- Patients with schizophrenia and substance use disorder (SUD) are 2-3x more likely to be hospitalized in comparison to patients with only schizophrenia ¹⁰
- Substance abuse worsens positive symptoms of the disease, discouraging progress of treatment course ⁴
- From 1990 to 2017, the comorbidity rate of schizophrenia with SUD in the U.S. has resided at a steady 42.7% ⁴
- Schizophrenia management is mainly pharmacotherapy. Residual symptoms can persist. Thus, consideration of nonpharmacological treatments is necessary ⁹
- SBIRT is a comprehensive, integrative and earlyintervention public health approach to substance use disorder management

Needs Assessment

- ✤ Global: There are no current globally set standards of schizophrenic treatment.
- * National: Schizophrenia is one of the top 15 mental illness; average potential life lost is 28.5 years ⁷.



✤ Local: Local statistics on schizophrenia are hard to find. Using data from my private mental health outpatient practice, 30% are being treated for schizophrenia.

Impact of SBIRT on Hospitalization Rates

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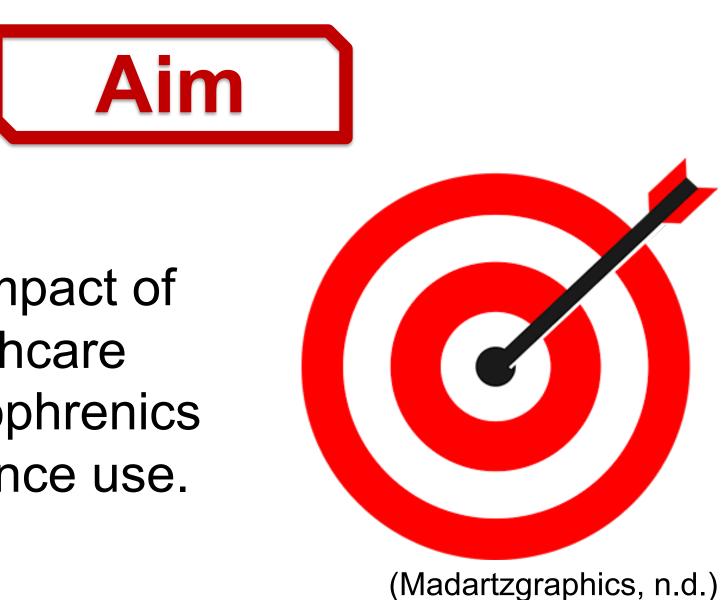
(Alan Cleaver, n.d.)



(Ksayer, n.d.)

Problem Statement

- Evidence is clear on high rates of SUD among schizophrenic patients¹⁰
- **Research** has shown that SBIRT "increases the utilization of low-cost outpatient services and decreases utilization of high-cost inpatient and emergency services"⁸



To examine the impact of SBIRT on healthcare utilization in schizophrenics with active substance use.

Methodology **Design:** Pre/Post Intervention-Design **Quality**

Improvement Project

Setting: Urban mental health private facility in NJ **Sample:** 48 patients with both schizophrenia and ASU Limits: Time Constraints & COVID-19 protocol transition

Intervention: SBIRT guidelines **Duration:** 3 months

Outcome Measures:

- (AUDIT-C) Plus 2 screening tool is recommended by the National Council⁴
- Data was analyzed by Wilcoxon Signed-Ranks test, using IBM's SPSS.
- ✤ P < 0.05 considered statistically significant.</p>

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Results

Alcohol Use Cannabis Use Other Drug Use Healthcare Utilization



healthcare utilization cannabis use, and other drug use

Significant reduction in healthcare utilization may be due to **COVID pandemic** as people were encouraged to avoid hospitals unless absolutely necessary. Future studies after the pandemic has resolved will be necessary.

Future studies should also be done with larger sample size and diverse outpatient settings.



Quality & Safety:

SBIRT intervention may help curb the comorbidity of SUD and schizophrenia, translating into better overall treatment.

Policy:

Intended effect of this project is to help standardize healthcare practices and to reduce illogical variation in treatment.

Economic:

In the U.S., the annual cost incurred from the management of the schizophrenia ranged from \$94b to \$102b¹¹ Findings from this project may help reduce such costs by maximizing efficiency.

bulls-eye-bullseye-2070972/ FINAL.pdf?daf=375ateTbd56 Peer-Reviewed Journal for Formulary Management, 39(9), 638–645. 495-500. http://doi.org/10.1016/j.schres.2017.09.026

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Mean Rank			
e Rank	Negative Rank	Z-Value	P-Value
75	0	0.1164038	0.9073326
44	0	0.8465727	0.3972333
7.5	-2	0.4603239	0.6452838
21	-2	2.7196148	0.0065358*

Conclusions

When comparing pre-SBIRT data to post-SBIRT data: there is a statistically significant decrease in there are observed decreases in alcohol use.



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