

# **ACCESS-SMI: Advancing Collaborative Care to Ensure Systematic Screening in Severe Mental Illness**

#### Background

- The life expectancy of those with severe mental illness (SMI) is 10-25 years lower than the general population<sup>1</sup>.
- Existing collaborative care models do not specifically address working with people with SMI in primary care settings.<sup>2</sup>
- Although many people with SMI are seen in community mental health clinics, a number of SMI patients are solely treated in primary care.
- Studies have shown screening rates for this population to be about 30% for metabolic abnormalities, 7% for HIV, and 5% for Hepatitis C.

#### Project Goal

• To implement a modified collaborative care model<sup>3</sup> for people with SMI being treated in a community primary care clinic

# Methods

- Prospective cohort study to evaluate the feasibility of implementation of an SMI registry in an urban primary care clinic
- Full registry population included psychotic spectrum disorder and borderline personality disorder.
  - The study population included a subset of patients with a diagnosis of schizophrenia, schizoaffective disorder, or other psychosis (see Table 1).
- A population management tool was used to create the registry list from the electronic health record.
- We evaluated metabolic and infectious disease monitoring and postimplementation study populations (see Table 2).
- Outcome measures were based on RE-AIM framework<sup>4</sup>:
  - **Reach**: Was the registry created? Were patients needing labs identified?
  - **Effectiveness**: Were more patients screened overall?
  - **Adoption:** Was patient-centered team utilized? Were patients needing labs discussed at meetings?
  - **Implementation**: Was outreach to patients in cohort performed?
  - **Maintenance:** Were protocols maintained after the study period?



Variable

Age, mean (S

18-32

33-48

49-63

64-78

#### Race/Ethnic

White

Black/Afric American

Asian

American Indian/Alas

Other

Gender

Female

**Psychiatric** 

Schizophre

Other Psyc

Schizoaffeo

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### Tables and Figures

#### Table 1: Demographic Information

	Pre Intervention % (n) (N=34)	Post Intervention % (n) (N=49)		
SD)	45.7 (13.2)	47.3 (13.1)		
	18% (6)	16% (8)		
	32% (11)	31% (15)		
	41% (14)	43% (21)		
	9% (3)	10% (5)		
ity				
	41% (14)	55% (27)		
an	35% (12)	25% (12)		
	6% (2)	4% (2)		
ka Native	9% (3)	2% (1)		
	9% (3)	14% (7)		
	12% (4)	16% (8)		
Diagnosis				

enia	100% (34)	39% (19)
hosis	0% (0)	43% (21)
ctive	0% (0)	18% (9)

Table 2: Laboratory Screening Rates						
Laboratory Test	Pre Intervention % (n) (N=34)	Post Intervention % (n) (N=49)	P- Value			
Low-Density Lipoprotein (LDL)	38% (13)	57% (28)	.09			
Hemoglobin A1c	47% (16)	51% (25)	.72			
Hepatitis C	21% (7)	47% (23)	.01			
HIV	24% (8)	51% (25)	.01			

#### Figure 1: Essential Components of Collaborative Care



Colton, C. W., & Manderscheid, R. W. (2006). Congruencies in increased mortality rates, years of potential life lost, and causes of death among public mental health clients in eight states. Prev Chronic Dis, 3(2), A42.

2. Druss, B. G., Bradford, D. W., Rosenheck, R. A., Radford, M. J., & Krumholz, H. M. (2000). Mental disorders and use of cardiovascular procedures after myocardial infarction. Jama, 283(4), 506-511.

Unützer, J., Harbin, H., Schoenbaum, M., & Druss, B. (2013). The collaborative care model: An approach for integrating physical and mental health care in Medicaid health homes. HEALTH HOME, Information Resource Center, 1-13.

Dzewaltowski, D. A., Glasgow, R. E., Klesges, L. M., Estabrooks, P. A., & Brock, E. (2004). RE-AIM: evidence-based standards and a Web resource to improve translation of research into practice. Annals of Behavioral Medicine, 28(2), 75-80.











# Results

- For the purposes of this study, SMI was defined as a diagnosis of schizophrenia, schizoaffective disorder, or psychosis<sup>2</sup>.
- A collaborative care model for SMI based in primary care was feasible to implement at a primary care clinic, and the populationbased approach demonstrated a significant increase in screening labs post-intervention (see Table 2).
- Outcome measures were collected per the RE-AIM framework<sup>4</sup>:
  - **Reach**: The registry was created. Patients needing labs were identified. Barriers to screening included lack of provider ordering and patient refusal/no-show despite an onsite phlebotomist.
  - Effectiveness: Screening rates increased overall, especially among HIV and Hepatitis C (see Table 2).
  - **Adoption**: The patient-centered team was utilized. Patients needing labs were discussed at meetings. Labs were scheduled.
  - Implementation: Patient outreach was performed.
  - Maintenance: Protocols were preliminarily maintained after the study period. Given demonstrated improvement in screening rates, the clinic will continue to use the registry for these patients.

# Discussion

- A collaborative care model for SMI based in primary care was feasible to implement at a primary care clinic.
- The collaborative care model for SMI had early evidence of success, including improved screening for HIV and Hepatitis C.
- Limitations included:
  - Challenges surrounding manually updating the registry may impact sustainability.
- Future directions include:
  - Need for a larger study examining patient-level outcomes (e.g., improved mental or physical health) with a model such as this
  - If feasible, this registry model could be implemented at other clinic locations.

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