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Advancing the Care Continuum for the Homeless: A Shelter-based Care Coordination Project Focused on Mental Health

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Abstract

The purpose is to implement a shelter-based, internal process to identify high-risk guests with serious mental illness (SMI) and increase their subsequent care coordination (CC) services. Schizophrenia is a leading cause of rehospitalization and disability, and it accounts for billions of dollars spent in the U.S. A prominent city shelter reports the prevalence of schizophrenia among its guests. The community also recognizes local homeless shelters as the greatest source of 911 calls, and their residents account for countless surrounding emergency department (ED) visits. The facility attributes a large portion of 911 calls to SMI, adding that only 1.8% are actual emergencies. Homeless individuals are subject to poor health outcomes due to the healthcare disparities of this population, necessitating greater support to overcome these barriers.

Research evidence supports that best practice is to implement frequent shelter-based CC contacts for the homeless resident with SMI and who requires frequent healthcare services. Follow-ups after hospitalization and ED visits are also recommended with subsequent bridging of hospital and shelter communication/services.

Prior to this project, there was no coordination process for shelter guests with SMI following hospitalizations or ED visits. Stakeholders include the shelter's care coordination manager, shelter employees, and mentally ill guests. Identifying guests with SMI and recent, frequent hospitalizations or ED visits begins at the intake process. Once identified, regular contacts are recommended as well as updating the individual's database information for communication sharing among staff. A process for CC follow-ups with each guest returning from behavioral health (BH) hospitalization is implemented, and 911 calls are monitored for ED follow-up contacts.

Outcomes measured are facility 911 calls related to mental health, as well as each participant's pre and post-implementation BH hospitalizations, ED visit counts, and shelter-based CC contacts.

This project advances the continuum of care to include homeless shelters, providing shelter-based CC contacts ensuing healthcare usage for greater support for these individuals while implicating community cost savings. Outcomes reflect individual benefits with increased shelter-based CC contacts and a facility-wide significant decrease in overall 911 calls with no change in the percentage of mental health 911 calls. Further descriptive results indicate the value of post-hospitalization guest follow-ups in regard to diminishing healthcare disparities.

The future implications of this project include prevention of excessive healthcare usage, community cost savings, and better mental health outcomes.

Objectives

The goals of this project are:

1) To improve communication and information sharing between the local homeless shelter and behavioral health hospital.
2) Increase the shelter identification of their high-risk guests.
3) Decrease the number of hospital readmissions and emergency service usage by the specified population.

The aim of this project is a 50% increase in care coordination contacts by shelter staff to high-risk individuals by the end of 3 months.

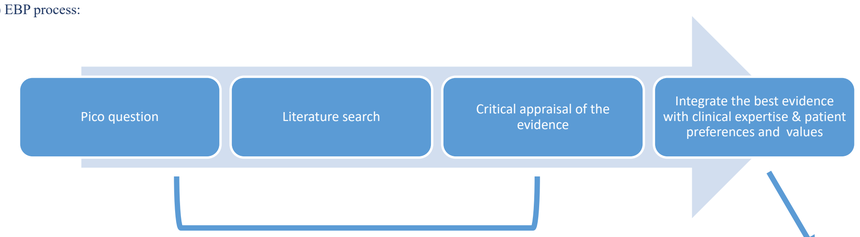
Material & Methods

Framework

Spradley's (1980) change theory:

"Recognize the Symptoms, diagnose the problem, analyze alternative solutions, select the change, plan the change, implement the change, evaluate the change, & stabilize the change."

Melnyk and Fineout-Overholt's (2019) EBP process:



Recommendations:

1. Implement frequent shelter-based care coordination (CC) for the homeless resident who requires frequent healthcare services with serious mental illness.
2. There should be bridging of hospital to shelter communication and services for post-discharge care of homeless residents with serious mental illness.

Patient Preferences:

-Barker's Tidal Model (2016)
-Motivational Interviewing

Implementation

20 homeless shelter guests with serious mental illness were identified as frequent healthcare users during intake and other services provided by frontline shelter workers. Those 20 were interviewed for baseline information including gathering information on clinical diagnosis, recent ED visits and behavioral health hospitalizations.

All 20 were monitored throughout implementation for outgoing 911 calls recorded by the facility. Each 911 call by a participant was followed up with by the designated shelter care coordinator.

Facility protocol was changed to require behavioral health hospitals to send notification of shelter guests discharging to the facility. Upon arrival, they were to meet with designated shelter care coordinator for a post-hospitalization follow up.

All contacts with the participants were logged in the facility database as well as all the discharge contacts, including those that were not pre-selected. Pertinent mental health advisements were documented with guest approval for constructive information-sharing about individual needs.

Results

911 Calls, Facility Results:

Facility-wide 911 calls are categorized with a reason for the call, under which "mental health" is one categorization. The outgoing 911 calls were recorded monthly and grouped with the 3 months prior to the project implementation compared to the 3 months of post-implementation. There was a significant decrease in overall 911 calls from the shelter facility between pre and post-implementation ($p=0.013$). The percentage of calls for mental health reasons stayed relatively the same with 18.1% prior to implementation and 18% post-implementation. Overall mental health related 911 calls also decreased, but since the overall 911 calls also declined, this may or may not be clinically significant.

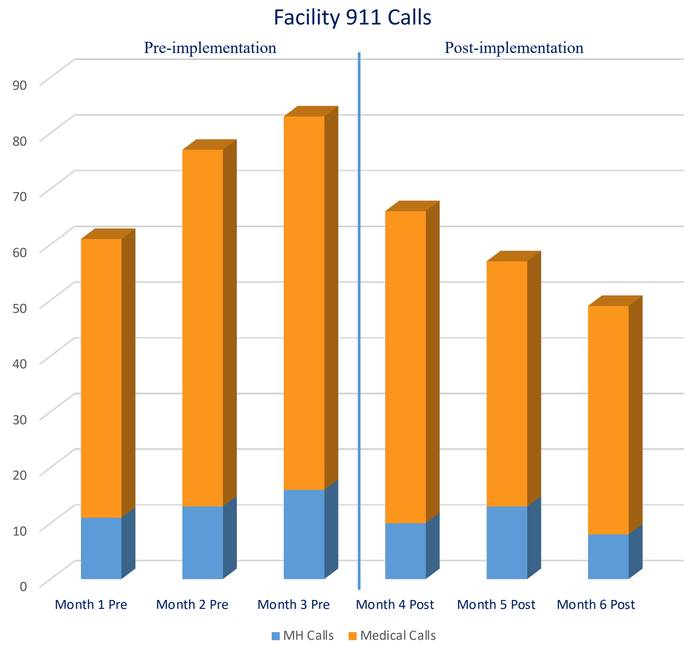
Individual Results:

The project started with 20 participants that were identified as shelter guests with SMI and frequent healthcare usage. Results for all 3 months of the post-implementation time period was available for 5 guests.

There was a marginally significant decrease in hospitalizations from 1 to 0, a marginally significant decrease in 911 calls from 2.5 to 0, and an increase in shelter-based contacts from 0 to 3.5.

Other results:

Starting in month 2 of implementation, the post-hospitalization contacts were recorded with detailed accounts for project analysis. During this month, 20 additional guests were provided shelter-based discharge follow ups. Of those 20, 35% were connected to resources that otherwise would not have been offered. This includes, medication resources, drug abuse programs, shelter-based programs, and additional resources for healthcare appointments. Guests that needed further hospital resources or medication help were connected to the local hospital's CC representative with weekly onsite appointments at the shelter.



Case note examples from discharge follow-ups:

"Guest was at the local hospital for two weeks and was dropped off here on 3/16/21. Guest had an alcohol addiction and is depressed and bipolar. Guest is confused and needs things to be explained to him. Guest was given an appointment with hospital representative to explain his medication. Has outpatient appointment at the clinic on 3/18/2021. Gave bus pass and Directions. Will continue to work with guest as he gets acclimated here."

"Per guest, she overdosed on nerve medications. Per guest, she's been addicted to drugs and alcohol for 21 years. She has asked for help with her addiction (resources given). Stated that she has been using anything she can get her hands on. She has been clean a few days and used suboxone, alcohol. Guest has mental health diagnosis, bipolar, manic depression, anxiety, paranoid schizophrenia; she's currently on her medications. She has been in the ED once for mental health this month. Guest stated that she's been addicted to drugs since she was 18 years old. She began stealing from her parents' store and has been in and out of jail since that time. Stated that her mental health is also the cause of being homeless. Resources given to guest, including shelter's residential program for women."
**Facility names and details have been removed for confidentiality.

Conclusions

The shelter facility now has a sustained process of following up with all behavioral health hospital discharges. The designated coordinator that provides the contacts explains that these meetings have been crucial for most guests and their future care. She reportedly asks about diagnosis, status, stability, medication, appointments, and any other issues. The facility may also be connected to the person guest's outside coordinators via the guest providing that information. This open communication allows for greater needs to be met and even crisis avoidance at times. The shelter coordinator practices transparency and employs motivational interviewing to meet other guest needs. She tells them to come to her with any mental health (MH) issues, giving them support that may diminish the need for emergency/acute healthcare usage.

While the results for individual participants were not considered statistically significant, a small increase in sample size would quantify significant results. Lessons learned include the transient nature of the population. Because of this, there was difficulty in retaining participants throughout the implementation process. Also, 5 of the original 20 participants (25%) were banned from the facility due to behavioral issues. One can argue that this is related to their MH struggles, reinforcing the idea that these individuals need greater services provided to them. Hospital and ED discharge follow-ups for these individuals proved beneficial for the individuals that continued to stay with the facility and is reflected by an inverse relationship between hospitalizations/911 calls and shelter-based contacts. The decrease in their healthcare usage also implicates community savings.

While the percentage of MH related 911 calls was relatively unchanged during implementation, the significant overall decline during may have greater MH implications. The staff reports that many guests state a medical chief complaint that turns into a MH complaint upon arrival to the ED. For instance, the guest tells the shift leader he wants an ambulance for "chest pain" but once at the ED he discloses suicidal ideations or hallucinations. In this case, an overall decline in 911 calls has greater clinical significance. The project data show that by providing more contacts to these vulnerable individuals, their resources were increased, reducing the need for frequent healthcare usage and allowing for better outcomes.

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