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Elizabeth A. Hale

*University of New Hampshire*

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## IMPROVING PATIENT ENGAGEMENT

Engaging persons with mental illness and/or substance use disorder in care coordination services:  
an improvement project at a federally qualified community health center

Elizabeth A. Hale RN, MSN, CENP

University of New Hampshire

Faculty Advisor: Dr. Joanne Samuels

Practice Advisor(s): Dr. Donald Miller & Karen Peugh

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### **Abstract**

*Background:* Mental health and substance use disorders seldom occur in isolation. They frequently accompany each other, as well as a substantial number of chronic general medical illnesses. Consequently, mental health conditions, substance-use disorders, and general health conditions are frequently co-occurring, and coordination of all of these types of health care is essential to improved health outcomes (Institute of Medicine, 2006). The U.S. system of healthcare is failing to identify, engage, and effectively treat people who are suffering from behavioral health conditions (Blanco, Coye, Knickman, Krishnan, Krystal, Pincus, Rauch, Simon, Vitiello, 2016). Because of poor coordination and lack of engagement, people often experience disrupted care and an over-reliance on emergency department and hospital care. At Lowell Community Health Center where this project takes place persons with a primary behavioral health diagnosis contribute to the highest utilization of emergency and inpatient hospital services. In July of 2018, Lowell CHC collaborated with Lowell House, Inc. to form a care coordination program to outreach and engage individuals identified as high utilizers of inpatient and emergency hospital services.

*Aim:* The aim of this project is to describe the attributes of the population of patients who successfully engaged into care for the first six months of this new program, with recommendations for improvement to inform future program design.

*Method:* The population of patients who successfully engaged in care in the first 6 months of the program described by independent variables consisting of age, gender, race, and preferred language. Dependent variable consisting of type of outreach. Data was evaluated to determine

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attributes of patients who successfully engaged in care and if correlations exist between variables and successful engagement.

*Results:* The first six months of the program implementation demonstrated successful engagement and activation of 17.5% of patients. The average patient is described as low-income, 50-64 years of age, non-English speaking female with dual-diagnosis residing in the greater Lowell area. Themes regarding successful outreach type included telephonic and face-to-face being the most successful method of engagement. Although successful engagement was noted, longer-term efforts and analysis should focus on successful outreach and engagement strategies, emergency room utilization, treatment adherence and service adherence.

*Conclusions:* The findings of this project indicate that having a team-based, multidisciplinary and multi-cultural approach to care coordination has led to successful engagement of 186 individuals within the first 6 months of this new program.

*Keywords:* behavioral health, substance use disorder, serious mental illness, primary care, patient engagement, federally qualified health center, person centered care, outreach.

## Introduction

### Problem Description

Engaging individuals into the healthcare system, screening and treating mental health and substance use disorders is required for the improvement of health care outcomes. Statistics show that approximately 29% of adults with medical conditions have mental health disorders (MHD), while another 68% of adults with MHD have medical conditions (Druss & Walker, 2011). Chronic medical conditions can worsen when associated with mental health illnesses.

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Disorders are also two and half times as likely to occur in those living below the poverty level and are higher in minority populations.

In its 2006 report, *Improving the Quality of Health Care for Mental and Substance-Use Conditions*, the Institute of Medicine (IOM) emphasized the need for coordination of care services for substance use disorder, mental health, and general health care delivery in order to improve not only the quality of mental health and addiction care but also the quality of general medical care. Previously omitted from traditional medical care, behavioral health problems such as depression, anxiety, alcohol or substance use are among the most common and disabling health conditions worldwide. One in five citizens of Massachusetts will experience a mental illness in their lifetime, and 50% will be identifiable by age 14 and 75% by age 24. Individuals with serious mental illness have a life expectancy of 25 years less than the general population, and for individuals with co-occurring disorders, the life expectancy is 35 years or less (National Association of State Mental Health Program Directors, 2015). Rates of depression have been estimated to be 20 percent in the Medicaid population and 23 percent in the population eligible for both Medicare and Medicaid.

Given the health and social impact of substance use disorders and mental illness and the low number of persons receiving treatment, many potential benefits could be gained from the coordination of medical, mental health, and addiction care. Better care coordination via integration of mental health and primary care has been shown to improve patient access, outcomes and reduce cost (Fernandez, Hahm, Quinn, Rubinsky, & Samet, 2017).

Currently, health centers funded with Medicaid dollars provide an access point for patients. Federally Qualified Health Centers (FQHCs) are intended to increase the provision of primary care services in underserved communities. Individuals receiving care from FQHCs are

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mostly low-income and uninsured or covered by Medicaid. Increasing access to healthcare services in underserved communities via FQHCs is aimed at decreasing use of costly healthcare services, such as emergency room visits and hospitalizations, and result in savings to state Medicaid programs.

At Lowell Community Health Center, the site of this project emergency room visits and inpatient psychiatric care account for 30.6% and 15.6% respectively of the total percent of spend. Many of these patients have not seen a primary care provider in 12-18 months. In March of 2018, Lowell CHC entered into an Accountable Care Organization (ACO) with Wellforce Inc., this risk sharing arrangement covers patients of Lowell CHC who are on Medicaid. Seventy five percent of Lowell CHC patients are part of this ACO.

### **Available Knowledge**

Patient engagement in health care has been considered as a “blockbuster drug of the century”, with the potential to achieve the triple aim of improved health outcomes, better patient care, and lower costs (Chen, Mullins, Thomas, 2016). Engaging patients to actively participate in their care has become a priority for policy makers, with the goal of improving health care delivery system quality and efficacy (Hibbard, Mahoney, Stock, Tusler, 2007). In 2016, the National Alliance on Mental Illness reported that engagement has multiple dimensions and must embrace the whole person in the context of family, language, culture and community. Engagement goes beyond traditional medical goals of symptom reduction and functioning to include wellness and connection to family, friends, community, faith, school and work and is defined as a strengths-based process through which individuals with mental health conditions form a healing connection with people that support their recovery and wellness within the context of family, culture and community.



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Federally qualified community health centers, which have traditionally focused on the medical conditions, are continuing to grow as providers of mental health treatment services. Benefits for treating both conditions simultaneously include improved coordination and communication between treatment teams and reduced stigma for patients receiving treatment (Bornemann, Druss, Fry-Johnson, McCombs, Politzer, Rust, 2008).

Mental health systems of care are often designed in ways that fail to meet the needs of the people being served. Directly or indirectly, policies, procedures and practices are barriers that create a wall between individuals with mental health conditions and their families and disregard opportunities for engagement (National Alliance on Mental Illness NAMI, 2016). When people first experience psychosis or other serious mental illness, there is a critical opportunity to engage them in recovery.

The failure to effectively engage a person early can cause the person to turn away from the mental health services and supports. Lack of effective engagement can have serious consequences such as; hospitalization, incarceration, homelessness and mortality when mental health conditions progress. System barriers such as inability or unwillingness to use creative and innovative approaches to engagement, lack of respect for individuals and families and inability to work effectively within and across diverse cultures have been documented as reasons individuals do not engage in mental health care (Fernandez, Hahm, Quinn, Rubinsky, Samet, 2017).

Individuals with serious mental illness often experience ongoing psychiatric symptoms and functional impairment. Additionally, they have high rates of medical comorbidities and are at greater risk for early mortality (Druss, Marcus, Morrato, Von Esenwein, Zhao, 2011). Substance use is a leading cause of death and disability in the United States, yet only 20.3% of those who needed treatment for drug use disorders and 8.9% of those who needed treatment for

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alcohol use disorders received it in 2014 ( Fernandez, Hahm, Quinn, Rubinsky, & Samet, 2017).

Up to one-third of individuals with mental illness, inconsistently engage in mental health treatment or are lost to such care altogether (Dixon, Kreyenbuhl, Nossel, 2009). Cultural stigmas associated with obtaining mental health and substance use services serve as a barrier to seeking out treatment for some in need. Therefore, ongoing engagement in a culturally informed manner in both medical and mental health care is imperative for this population.

Engagement in mental health happens when consumers, caregivers, and clinicians work together to promote recovery and independence. This is achieved by developing trusting partnerships with clients to achieve their goals, encouraging empowerment, communication and self-development (Cleary, Escott, Lees, Sayers, 2016). Designing culturally sensitive personalized interventions is essential to sustain patients' involvement in their treatment and encourage patients to take an active role in their own health and health care (Chen, Mullins, Thomas, 2016). Patient engagement levels differ by race and ethnicity (Hibbard, Green, Overton, 2013), with African Americans and Latinos demonstrating lower engagement levels compared to Whites. Evidence suggests that culturally tailored community-based programs targeted to reduce language barriers can effectively engage minorities in their own care, and eventually improve population health of underserved minorities (Flores, 2006).

Dixon et al (2015) conducted a study of clients' reports of factors that facilitated or impeded engagement in services offered by the Recovery after an Initial Schizophrenia Episode (RAISE) Connection Program. Semi-structured interviews with 32 clients and thematic qualitative analyses were used to examine participants' experiences of program services, staff practices, their own engagement behaviors, and related factors such as expectations, family, illness, and setting. Clients' indicated that key engagement factors included: services and staff interactions

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that are highly individualized, respectful, warm, and flexible; clients' life goals being the center of services; family member engagement; personal attributes and program location and setting factors. Clients further described the multi-services team approach to be highly engaging. Knowing there was a team available and every team member had their own specific role to help with their care was important.

The program model also stresses active ongoing outreach. One third of the interviewees commented on the positive relationship active outreach had on their willingness to participate in the program. They found staff outreach to be persistent, individualized, sometimes surprising, and highly effective in keeping them involved. The clients further described that the calls, visits, and offers of assistance also increased their desire to engage because the outreach conveyed that the staff cared.

The results of the (Dixon et al.) study add to understanding engagement of this population and has implications for designing like services although there were some study limitations. Limitations to this study included a small sample size of individuals who did engage and what worked, however, the study failed to capture data from those who did not engage. Additionally, it was a somewhat heterogeneous group of young adults and demographics such as language, gender and ethnic background was not indicated. The results do suggest that to maximize engagement, services should provide staff interactions that are highly individualized, respectful, war, and flexible, giving prominence to clients' life goals and preferences and family member engagement. The applicability of this study's results to other settings and clients are not clear.

Abraham et al (2018) evaluated factors associated with successful outreach contact with veterans with serious mental illness who had been lost to follow up care for a year or more. As

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part of the Re-Engage program the names and last known contact information for a sample of 4,241 veterans with either bipolar disorder or schizophrenia who had not been seen in VHA care for at least 12 months were identified using a registry. The local clinicians attempted to outreach to the patients via telephone or letter. The study evaluated whether the efforts to reengage the patient resulted in actually speaking with the patient via phone, meeting in person (either at the office or in the community) or engaging in bidirectional written correspondence via mail. Chi-square tests and independent *t* tests were used to evaluate the association of demographic/clinical variables with the dependent variable of whether or not the patient was contacted. The results found that the 1300 patients who successfully re-engaged were on average 50.3 years of age, majority male, white, unmarried. Factors associated with lower likelihood of contact included being younger, unmarried, diagnosed with schizophrenia, having a history of homelessness, and having had a hospitalization during the last year of care. The study demonstrates an effective, low cost outreach intervention to enhance access for patients who may need additional outreach efforts or otherwise enhanced outreach for successful contact. Although the program did successfully re-engage those patients lost to follow up it is unclear if this can be generalizable to a diverse population of non-VHA patients. Additional limitation of the study includes no consideration whether outreach contact resulted in health care appointment attendance.

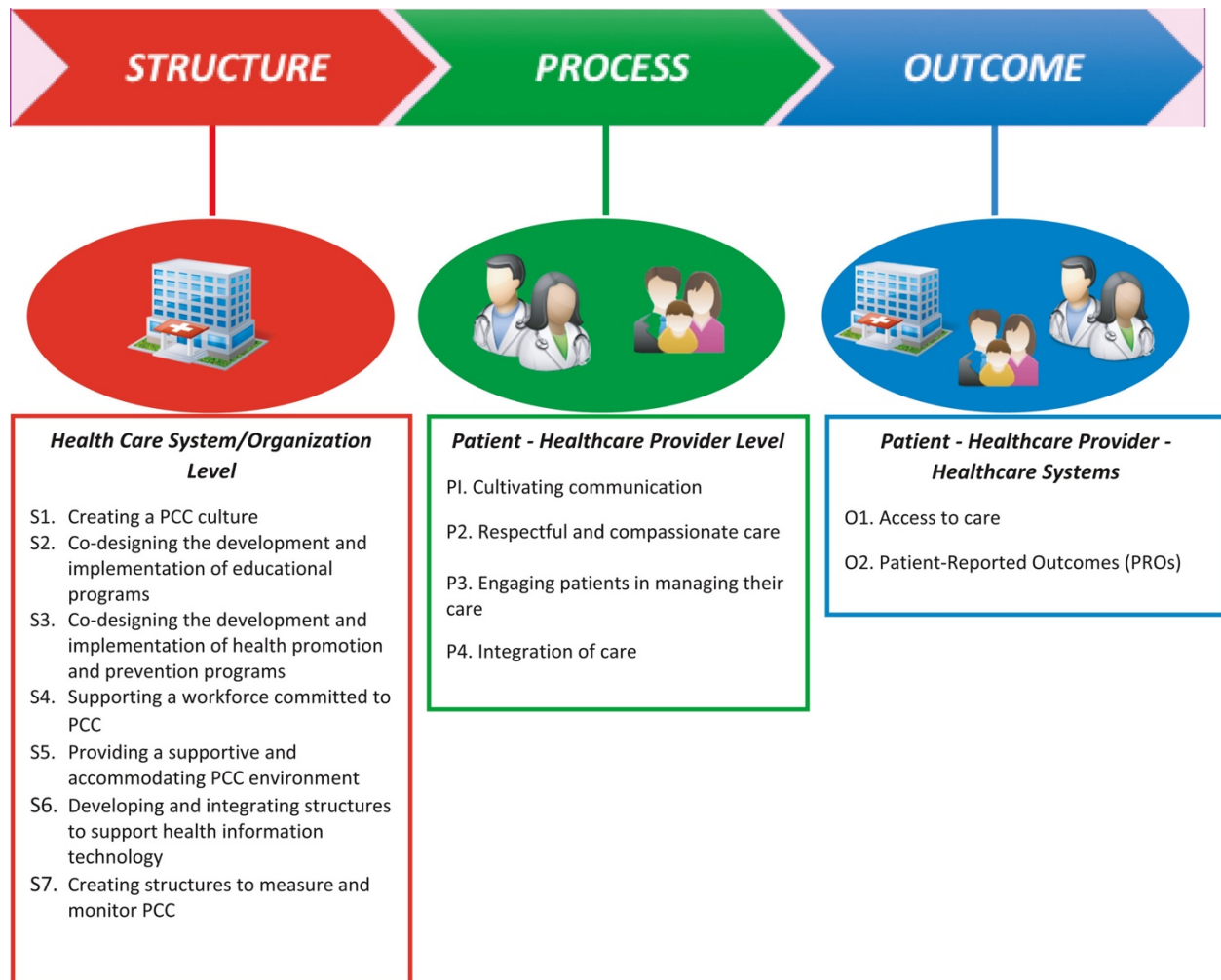
### **Rationale**

The concept of person-centered care (PCC) is based on the original concept of patient centered care, originally depicted by Edith Balian in 1969 as “understanding the patient as a unique human being”. Person centered care is described as a more holistic approach to care that incorporates the various dimensions to whole well-being including a person’s context and individual expression, preferences and beliefs (Brink, Carlsson, Dahlin-Ivanoff, Ekman,

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Johansson, Kjellgren, Liden, Lindseth, Ohlen, Olsson, Rosen, Rydmark, Sunnerhagen, Swedberg, Taft, 2011). Additionally, person centered care is not limited to only the client but also includes families and caregivers who are involved, those who are not living with illness, as well as prevention and promotion activities (Jolley, Lu, Manalili, Quan, Santana, Zelinsky, 2017).

In our program, we view the person-centered treatment plan as an essential component of the first steps in actively engaging the individual into care to include those individuals the client wishes to be part of their plan. Conceptually, PCC is a model in which health-care providers are encouraged to collaborate with clients to co-design and deliver personalized care that provides people with the high-quality care they need to ultimately improve health care delivery effectiveness. In a person-centered care model, the client is highly engaged and involved in designing their plan of care, which reflects what really matters and is important from the client's perspective. The framework for implementing PCC includes structure-the PCC domains related to the context in which care is delivered, process-the domains associated with the client and care providers and the outcomes-the value of the PCC model relating to the results from the interaction with the health-care system.

**Figure A:** Framework for person-centered care

Source: Jolley et al. (2017). How to practice person-centered care: A conceptual framework.

*Health Expectations.*

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Jolley et al (2017) further describe that person-centered care respects individuals' beliefs and values and promotes dignity and anti-discriminatory care. The need to be explicit in ensuring that diversity, to include race, ethnicity, and gender, sexual identity, religion, age, socio-economic status and disability, is addressed and incorporated into the plan of care. Given the diverse community of Lowell a core component of our program design was ensuring a diverse workforce whom skills in culturally informed care was required.

### Study Purpose and Aims

The purpose of this Doctor of Nursing Practice (DNP) project is to design a quality improvement program to engage high risk individuals with mental health and or substance use disorder conditions to participate in a comprehensive care coordination service that include screening, assessment, development of culturally informed person centered treatment plan and integration of physical and behavioral health using a team based care model. The program will test an interdisciplinary culturally diverse care team intervention utilizing the principles of person-centered care to engage individuals in care coordination. Analysis will include evaluating whether correlations exist between client demographics including age, ethnicity, language, outreach types including number of outreach attempts and successful client engagement.

### Specific Aims

1. To locate, outreach and engage assigned individuals who have not otherwise been engaged in services.
2. Identify, engage, and facilitate member's care team, including PCP, BH provider and other providers and individuals identified by the member.

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3. Twenty percent of those contacted will have a comprehensive assessment and person centered treatment plan completed by six months.
4. Describe the patients who agreed to participate in the program in terms of age, gender, race, and primary language spoken
5. Summarize the first six months of this new program to inform further program development and growth

## Methods

CONTEXT: Lowell Community Health Center is located in the northeast, 30 miles north of Boston and is the only community health care center located in the city of Lowell. The center serves approximately 40,000 individuals, which represents almost half of the city's population. The clinic was established in 1970 to provide care for the uninsured and underserved population in this area. As a Federally qualified health center (FQHC), the majority of those served are of low income, one third are best served in a language other than English and reside in public housing.

In 2017 Lowell CHC became part of a newly formed Accountable Care Organization (ACO) in partnership with Fallon health, and Wellforce Inc. This newly formed accountable care organization goals are to emphasize value in care delivery and better meet members' needs through more integrated and coordinated care. ACO's are provider-led organizations that are held contractually responsible for the quality, coordination and total cost of members' care. A gap identified by Lowell CHC was the lack of coordinated, integrated behavioral health services to support members with high behavioral health needs and to help said members navigate the system of health care in Lowell.



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Lowell CHC was awarded a five-year grant to create a behavioral health community partner program with the goals of supporting members with high behavioral health needs helping them navigate the complex system of healthcare. Additional goals of the program include; improving collaborations across community organizations to address the social determinants of health, and the physical health delivery systems by breaking down silos and deliver integrated care and improving member experience, continuity and quality of care for members by holistically engaging members with behavioral health needs. The first phase of this program is to design a care team model, hire and train staff to perform outreach and social and medical care coordination services to individuals who agree to participate in the program.

In this program, we consider engagement as a process that occurs when the client and staff have developed a trusting relationship and the client has agreed to participate in the program and has participated in designing a culturally designed person-centered treatment plan. The population of interest includes adults age 18 years to 65 years of age, residing in the greater Lowell area, receiving MassHealth Medicaid, identified by state claims data to have a behavioral health and or substance use disorder diagnosis, have high utilization and high cost of health care dollars. Clients will be assigned to the program via a registry supplied by the state based on above criteria. The independent variables will include age, gender, race, ethnicity, and preferred language. The dependent variables will include number of and type of outreach. Positive engagement will include number of clients who have completed a comprehensive health assessment and development of person-centered treatment plan.

### **Facilitators**

The organization and the Wellforce partners are supportive of the Behavioral Health Community Partner program. Improving engagement of hard to reach populations coupled with

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improving access to and quality of care aligns with the goals of the newly formed accountable care organization. The primary care and behavioral health providers highly support the program that will enable them to help them with the difficulties they have engaging and keeping track of this hard to reach population.

### **Barriers**

Recruiting and retaining a workforce to work with this patient population is challenging. The rollout and implementation of similar programs in our community creates a competitive market place within the greater Lowell area. Additionally, Lowell CHC's wage and benefit packages are far below those of hospitals and larger health care institutions adding an additional barrier to recruitment and retention of a skilled workforce.

Another major barrier is lack of integrated electronic health records. Patient notes created by the care coordination team as well as notes from other providers of care are not integrated into the PCP's or Psychiatrists systems. The inability to fully integrate into a computer system is a major barrier to effective communication and coordination of care.

Data integrity and thus the ability to locate members is a challenge as many of these clients frequently change phone numbers and addresses and some move in and out of homelessness.

### **Intervention**

On July 1, 2018, Lowell CHC implemented the Behavioral Health Community Partner Program after receiving an initial assignment of 450 members to locate and attempt engagement. A monthly assignment continued to arrive through 12-1-2018. Members assigned to the program were loaded into our care management electronic health record Care Navigator. Demographic information was reviewed for completeness and accuracy and matched against Lowell CHC

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electronic health record (ECW) to determine if the member had an active relationship with the PCP listed. Many members were auto assigned a PCP and in fact had no relationship with the PCP of record. Information that was missing from the enrollment file was extracted from the ECW system and updated into Care Navigator. Workflows were created for staff to follow as well as documentation requirements. The list of patients was divided up amongst the staff and outreach began utilizing various strategies.

Health care is local in Lowell, given geographic boundaries imposed by the Merrimack and Concord rivers and highways. Lowell CHC shares responsibility with many community-based organizations for delivering care to Lowell residents. As part of this project, Lowell CHC actively collaborated with other community-based organizations including the Alliance of Portuguese Speakers, and the African Assistance Center to outreach and attempt to engage members who are attributed to or assigned by the state to the behavioral health community partner program between 07/01/2018 and 12/31/2018. The above relationships reflect the cultural and linguistic diversity of the population served by the behavioral health community partner program. Additionally, we worked with other local community advocacy groups to assist in reaching the enrollees who receive services there. These agencies include Community Teamwork, Family Resource Center, Lowell Transitional Living Center, Lowell Adult Education Center, Center for Hope and Healing and area Police, Fire, and Health departments and the local EMS. Collaboration with housing/shelter providers to identify and support our shared homeless enrollees is another a key strategy we utilized for engaging the population. Expanding such connections and leveraging our shared goals to enhance access, integration and continuity for clients. The greater Lowell BHCP subscribes to Substance Abuse and Mental Health Service Administration's (SAMSHA) philosophy and approach to locate outreach and engage assigned

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individuals who have not otherwise been engaged in services. This begins with learning about the client's current behavioral health provider relationships. As we initiate contact with the clients, we begin building rapport and trust, focusing on strategies to connect them to services without making them feel uncomfortable, judged or threatened. To meet this objective interdisciplinary nurse lead care teams delegated outreach attempts and strategies among the team members by identifying attributes of the clients and matching with like staff when possible. For example, matching client's language to the staff member(s) who speak the same language. Various outreach methods and multiple attempts were utilized including e-mail, postal mail, other electronic including text messaging, fact-to-face, and telephonic.

Key outreach strategies include:

- Meeting the client at any available location in the community where the individual is most comfortable, which may include their home, neighborhood locations, tent cities, motels, shelters, or congregate meal sites among other locales. Truly connecting with the client and building trust is the first step in the process. Empowering the client by asking them where they would like to meet is an important first step in building the clients confidence and trust in the program.
- Building a relationship with the client is another strategy and is done so by being highly respectful toward the client and family. Creating an open, safe, friendly environment that is sensitive to any trauma the client may have experienced. Immediately assessing and meeting the client's basic needs.
- Direct community outreach for those individuals who are homeless including direct community outreach in areas where homeless individuals congregate and live, including

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tent cities, under bridges, in downtown areas, outside of the shelters and at the local drop-in center.

- Hired qualified, skilled individuals who are trained in motivational interviewing and are skilled at engaging and interacting with individuals who have behavioral health and or substance use disorders. Additional qualifications of staff include experience serving the culturally diverse, underserved target population and understand their needs and preferences that go well beyond cultural and linguistic needs. At the initial meeting, staff provided clients with introductory materials including information regarding the benefits and the design and purpose of the program. The information was offered in written and verbal formats and is available in the clients' primary preferred language. During the first in-person contact, the staff employed motivational interviewing to understand the client's health status, their needs and preferences and their aspirations and/or frustrations with barriers to care that require attention. We then performed a comprehensive social and medical assessment and formulated a person-centered treatment plan including shared goals with the clients and family when appropriate.

### **Study of the Intervention**

Utilizing JMP software to analyze the capture rate of the data was performed to understand if age, gender, number of outreach attempts, or language contributed towards whether or not the person-centered treatment plan was completed indicating successful engagement. Mixed-methods approach was used to explain attributes of the new program to inform subsequent phases. This is useful in helping to understand unexpected results that arise in the initial phase of the new program.

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### Measures

While demographic information like age, gender, race, and language spoken were collected, the outcome of interest was the completion of the person centered treatment plan. The completion of the treatment plan for each subject was identified as either complete or not complete as evidenced by final sign off by the primary care provider. The completion rate was then calculated using the total number of subjects identified in the report from the state as the denominator and the number of completed assessments as the numerator.

The population of patients assigned to the program are described in terms of:

- Age
- Gender
- Race
- Language Spoken

The population of patients defined as successful engagement included those patients whom a comprehensive assessment and treatment plan completion.

The outcome measure is defined as the number of patients who successfully completed the comprehensive assessment and person centered treatment plan.

### Analysis

Data for analysis were taken from the State report and exported to an excel database file and described. In addition, a correlation was completed to determine any associations among the demographic information and the outcome variable and number of outreach attempts.

Descriptive statistical methods were utilized categorizing demographic information and counting

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the number of clients who we successfully engaged by age category, gender, race, language spoken, and outreach type.

The outcomes of this DNP project were evaluated based on meeting the aims of this project and answering the stated clinical question. Final de-identified data assessed included a secondary data analysis of total number of patients assigned between 7/1/2018-12/31/2018, demographics; including age, gender, race, language, outreach type and number of outreach attempts. Additionally, the number of patients who completed and a person-centered treatment plan was evaluated. was complete, no correlation was identified. Additional analysis included whether the number of outreach attempts had anything to do with activation and again, no correlation identified. For all analysis, statistical significance will be defined as  $P < 0.05$ .

Analysis using JMP software was completed to determine if age, gender, number of outreach attempts, or language contributed towards whether or not the person-centered treatment plan was completed no correlation was identified. Additional analysis included whether the number of outreach attempts had anything to do with engagement and again, no correlation identified. For all analysis, statistical significance will be defined as  $P < 0.05$ .

### **Ethical Considerations/Protection of Human Subjects**

An application for this project was submitted to the University Of New Hampshire Department of Nursing Quality Review Committee and based on the SQUIRE 2.0 guidelines for determination of quality improvement and research activities, the proposal met the standards for a quality improvement project. The committee determined that the project does not constitute research and does not need review by the University Institutional Review Board. An application

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was also submitted to Lowell Community Health Center Research Ethics Committee and was approved as a quality improvement project and data collaboration agreement.

### **Results**

#### **Quantitative Data**

##### **Demographics**

The total sample size evaluated was 1061 clients who were assigned to the program between 7/1/2018 through 12/31/2018. Of the clients assigned during this timeframe, we successfully engaged and activated 186. Of the 186 client's we successfully engaged slightly more were female (54%). Forty-five (45%) were aged 50-64, forty-three (43%), listed language as other, followed by twenty-eight (28%) listed as unknown. Fifty-eight (58%) had an unknown race followed by thirty (30%) listed race as white.



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Table 1

*Characteristics of the engaged clients N=186*

Variable	M	SD	Range	Frequency	%
	46.3		Range 22-64		
	0				
Age (years)		11.2			
		4			
Language					
Cambodian	1				
English	28				
Spanish	26				
Other	81				
Unknown	50				
Outreach Attempts	7.34	4.38	Range 1-29		
Gender					
Male				88	47.31%
Female				98	52.69%
Race					
American Indian or Alaska				3	2%
Asian				11	7%
Black or African American				11	6%
White				55	30%
Unknown				106	58%

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Seven different types of outreach were performed in order to engage clients and telephonic (64%) of outreach was the most successful method of initial contact with the client, followed by face to face contact at twenty two (22%).

We were successful in engaging 186/1061 (17.5%) clients in the first six months of program implementation as evidenced by completion of the comprehensive assessment and person centered treatment plan. Among the clients, we engaged we were not successful in obtaining complete language data due to the limitation of the fields in that demographic section, which were limited to English, Spanish and Other, or Unknown as the only categories to select from. As a result, it is unclear if our strategies can be generalized to this population.

### **Discussion**

#### **Summary**

A major objective of this project was to engage and activate clients aged 18 and older into the behavioral health community partner program. Various outreach methods and multiple attempts were utilized including e-mail, postal mail, other electronic including text messaging, fact-to-face, and telephonic. Telephonic outreach yielded the greatest result of contact and accounted for 64.6% of successful contact. There were 1061 clients assigned to the program between the timeframe of 7/1/2018-12/31/2018 during that time we were successful in engaging and activating 186 clients (17.5%).

Demographic data is used to describe the types of clients who agreed to participate in the care coordination activities during the first six months of the program. The type of patient most likely to agree to utilize this new program is described as a female aged 50-64 with unknown race and language other than English, or Spanish.

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To summarize the project, the outreach attempts yielded a 17.5% capture rate and a 17.5% comprehensive assessment and person centered treatment plan completion rate. Similar to Dixon et al., there was no way to collect data on the non-responders.

### **Interpretation**

The Behavioral Health Community Partner is a new program designed in response to the massive redesign of the state of Massachusetts Medicaid program. The program is unique in that it aims to coordinate various medical, behavioral and social services for this very high risk, culturally diverse population. This program differs from other programs described in the literature and serves as a baseline for designing a program aimed at engaging unengaged high-risk individuals. After the outreach interventions, the percentage of clients agreeing to enroll in this program was 17.5%, as this was a new program there was not a comparison group to look at so the 17.5% engagement rate for six months will serve as our baseline rate. Although the percentage of clients engaged might seem small, it represents a positive impact on that population and provides insights into further program design and improvements.

As the program evolved, we found it important to have access to data analysis to begin to analyze programmatic and outcomes data. The ability to identify date of first contact, date of last contact, if member had agreed to participate in the program, date of start of comprehensive assessment and date of completion of person centered treatment plan were all important process measures used for program planning and creation of strategies to prioritize the work. One of the challenges with data and analytics is reliance of claims data from the state, which lacks detail, is lagged and does not interface with any of the electronic health records of the members.

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We learned that the population needed assistance with health and wellness and some enrollees have a greater need for health and wellness education, coaching and intervention than others do. In some cases, general educational information was sufficient. In other situations, such as when an enrollee is significantly overweight, sedentary or struggling with tobacco use, more intensive interventions and time to usher members through the stages of change is necessary. In response to this assessment, we added a wellness coach to our team.

As a community health center and lead agency of the BHCP, we have an advantage and ability to integrate with PCP's, specialists, SUD providers, BHS clinicians and psychiatrists creating an effective and efficient system of care. Many of the assigned enrollees access some level of care at Lowell CHC allowing us to meet the client and coordinate services with the care team.

One central strength of the program is the team based multi-disciplinary and multi-cultural approach to care. This approach affords the various disciplines to collaborate and strategize with a colleague to facilitate effective outreach strategies, home visits and collaboration with external agencies. The nursing staff is able to provide a connection to internal and external primary care providers, hospitals, rehabilitation and substance use recovery facilities on behalf of the clients. The nurses have been able to build trusting relationships with the clients by accompanying them to medical appointments, inpatient facilities and accompanying clients to court. Creating a trusting relationship clients are more open to the team helping them understand what is happening in their bodies and opening the door to opportunities to influence health outcomes.

The team has observed that one of the significant strengths of the program is the ability to provide culturally competent care and resourcefulness. The team is flexible, open and accepting,

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taking time to learn about the clients and their “life stories” has been pivotal to the success of engagement and building trusting relationships with the clients.

### **Limitations**

This project had several limitations. The program is a new program and only data from six months was available for analysis. The intake forms did not have enough language fields to choose from leading to a high number of other or unknown categories. The study design only looked at attributes of those clients who engaged in care and did not look at the population who did not engage.

### **Conclusions**

The findings in the project provide information to determine future outreach strategies to reach and engage a population with co-occurring substance use disorders and mental illness. The findings demonstrate that engagement strategies for the underserved require a great deal of flexibility and sensitivity to the cultural, socio economic attributes of the population. The findings should not be generalizable to other programs, as the behavioral health community partner program is a new program and there are no other like programs in the literature.

It is unclear that the type and number of outreach attempts intervention is effective in reaching and engaging patients with SMI/SUD into care coordination services. Future work should focus on evaluation of length of engagement in treatment, as well as total cost of care and emergency department utilization.

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