Each year, approximately 3.5 million individuals in the United States experience homelessness (“Hunger and Homelessness,” n.d.). Patients experiencing homelessness have negative health outcomes in part due to decreased access to health care (Fitzpatrick et al., 2011). Additionally, the rate of behavioral health disorders (i.e., mental health and substance use disorders) in patients experiencing homelessness is about 66% (“HCH,” 2006; “National Coalition,” 2014). Follow-up rates for behavioral health services embedded within primary care are higher for transient patient populations when compared to specialty mental health services offered off-site: 16% no-show rate in primary care compared to a 35% no-show rate in specialty mental health settings (Reynolds, Chesney, & Capobianco, 2006). This suggests the need for improved primary care behavioral health integration efforts with this population (Miller et al., 2014; Reynolds et al., 2006). Behavioral health providers have varying roles on the primary care team (Collins et al., 2010; “HCH,” 2006; Heath et al., 2013; Miller-Matero et al., 2014; Robinson & Strosahl, 2009) but the Primary Care Behavioral Health (PCBH) consultation role has not been described with this special population as well as quality improvement efforts with practice change.

**Patient and Clinic Population**

Healthcare for the Homeless – Houston (HHH) is a federally qualified health center with three locations in Houston, Texas. The clinics provide medical, behavioral health, dental, and social services to patients experiencing homelessness regardless of their ability to pay. Services at HHH are offered seven days per week. In 2013, there were 9,343 unique patients and 21,765 patient visits. Characteristics of the patient population are found in Table 1. This clinic implemented the PCBH consultation model (Robinson & Reiter, 2016) in 2014 during the inaugural year of behavioral health integration into primary care. The PCBH model is a population-based approach to health care delivery within the primary care setting. A tenet of this model is embedding a “Behavioral Health Consultant” (BHC) into primary care to provide same-day access to patients seeking assistance for the management of behavioral health conditions (e.g., depression, anxiety,
Type II Diabetes, high blood pressure, chronic pain). A goal of the PCBH model is to improve and promote overall health and wellness within the primary care population of the clinic.

**Development of the PCBH Service**

A needs assessment used the Plan-Do-Study-Act (PDSA) approach to determine the logistics of how behavioral health and primary care integration (van Eeghen et al., 2016). The PDSA process for PCBH implementation for HHH is presented in Figure 1. We determined successful implementation would include identifying workspace and clinicians with the skills to thrive in a fast-paced setting with a challenging patient population. We sought clinicians who demonstrated flexibility, confidence, the ability to work effectively on a team, with an understanding of the local patient population, generalist training, the primary care setting knowledge of the PCBH consultation model, and knowledge of brief, behaviorally-focused interventions (Collins et al., 2010; Robinson & Strosahl, 2009).

The Practice Integration Profile (PIP), validated measure of integration designed for both quality improvement and research applications (Kessler et al., 2015), was administered to the lead behavioral health consultant, medical director, and executive director in November 2014 – four months after PCBH implementation and again in April 2015 to measure the behavioral health integration progress. Figures 2 and 3 display the PIP data during these two time points in the inaugural year of implementation. We generated an initial median total score of 57.5 (scores range from 0 to 100 with higher scores indicating higher levels of behavioral health integration in primary care settings). Based on that data our team implemented the following changes:

1. We altered the treatment approach of the BHC to be more responsive to the patient population (e.g., transient, homeless). Maslow (1970) states that all human beings have five basic needs (physiological, safety, belongingness and love, esteem, and self-actualization, in hierarchical order) which ultimately lead to fulfillment. The Behavioral Health Consultants in this clinic used Maslow’s theory as a treatment lens through which to set appropriate treatment goals (Gibson, Mitchell, & Basile, 1993). This was specifically connected to the scores on the “Identification of Need” sub-scale on the PIP.

2. It is common in the PCBH model for the BHC to be connected with a patient through the process of a warm-handoff. The warm-handoff can be defined as “…the physician introduction of the behavioral health [consultant] directly to the patient…” (Collins et al., 2010, p. 39). While this approach can work well with a traditional primary care population, this is not generally the case for transient populations. Based on PIP patient engagement and follow-up subscales of the PIP. With longer primary care visits, time is “of the essence” for patients who have competing demands such as: shelter, transitional living, and treatment program curfews, other medical appointments, case management appointments, social service appointments, transportation via the bus system, weather (extreme heat, extreme cold, rain storms; Reust, Thomlinson, & Lattie, 1999).

We decided to implement the “PCP preparation” or “PCP prep” which can be described as the BHC consulting with a patient “cold” without a referral question from the PCP (Robinson & Reiter, 2016; Figure 4). In this workflow, the BHC would approach the patient waiting to see a provider
and present the role of the BHC. Since there is no referral question, the BHC can start with any of the following example topics: reviewing health and behavior screening tool information, addressing health behavior change, assisting the patient with agenda setting for their primary care visit, or assistance with care coordination. Once the consult is complete, the BHC then provides the PCP with a summary of the consult to “prep” the PCP for the visit. Baker, Bauman, and Beachy (2014) found PCPs viewed the use of PCP prep as positive in practice and encourage continued use an integrated primary care setting.

We subsequently administered the PIP 16 weeks after initial administration. Retest generated a total score of 67.1. There was a 20% change in pre/post scores with the PIP. There were additional score changes with the PIP in the domains of identification of need, patient engagement, and follow-up – the areas where we had initiated changes.

Conclusions and Future Directions

There is literature that documents the effectiveness of the PCBH model and the use of BHCs in primary care settings with adults, children, and special populations such as veterans and military service personnel (Bryan, Morrow, & Kanzler, 2009; Bryan et al., 2012; Miller-Matero et al., 2014). More studies are needed to document the clinical effectiveness (e.g., Quadruple Aim: clinical outcomes, patient and provider satisfaction, cost-effectiveness) of the PCBH model with homeless and transient patient populations. Overall, it seems that the PCBH model for transient populations can be an important resource to patients to receive “on-demand” behavioral health services in a setting that is most comfortable to them.

References


### Table 1

<table>
<thead>
<tr>
<th>Patient Demographics</th>
<th>Percentage (%)</th>
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<tbody>
<tr>
<td>Gender</td>
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<tr>
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<td>-----------</td>
<td>------------</td>
</tr>
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</tr>
<tr>
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<tr>
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Note: This is the most recent data from 2013.

Figure 1
PDSA Cycle – HHH

- Plan:
  - Needs assessment for organization to determine feasibility of the PCBH model
  - Use of an external PCBH consultant (for training primary care team and BHCs for PCBH implementation)

- Do:
  - BHC placed in homeless clinic to begin practice
  - Ongoing PCBH model training of primary care team (e.g., 1-on-1, group, phone consultation)

- Study:
  - Measuring behavioral health implementation with the PIP

- Act:
  - Modification made based on PIP initial scores (e.g., "PCP Prep" and modifying BHC treatment approach for patients)
  - Re-administering PIP to measure process after changes were implemented
Figure 2
**PIP Scores – November 2014**

![PIP Scores Chart for November 2014](image)

Figure 3
**PIP Scores – April 2015**

![PIP Scores Chart for April 2015](image)
Figure 4

PCP Prep Process

Step 1
- BHC initiates visit with patient (while PCP is with another patient)
- Visit focus options: reviewing health and behavior screening tool information, health behavior change, agenda setting for the primary care visit, assistance with care coordination

Step 2
- BHC completes patient visit (15-30-minute visit)

Step 3
- BHC "prep"s PCP with plan developed with patient (30-60 seconds)

Step 4
- BHC repeats cycle with next patient if warm hand off not taking place