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Signature:

Mark Lamb 8/19/2017

Approval Sheet

Integrating Behavioral Health

Into Primary Care

For Homeless & Uninsured Individuals

in Atlanta:

A Program Evaluation

By

Mark Lamb

Degree to be awarded: MPH

Global Health Department

Dr. Dabney Evans

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Integrating Behavioral Health Into Primary Care For Homeless & Uninsured Individuals in Atlanta: A Program Evaluation

By

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BA, Loyola University New Orleans, 2006

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An abstract of

A thesis submitted to the Faculty of the

Rollins School of Public Health of Emory University

in partial fulfillment of the requirements for the degree of

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Abstract

Mercy Care is a grant and donation-funded federally qualified health center and patient-centered medical home. In 2015, the organization provided health and social services for 11,965 patients in Fulton, DeKalb, and Chamblee counties of Atlanta, Georgia. 9,100 patient visits were for mental health. 66% of patients were homeless. 95.5% were uninsured.

Integrated Behavioral Health (IBH) involves screening all primary care patients for depression. Primary care providers (PCP) treat patients screening positive for depression or refer them to a specialist. In 2012, Mercy Care piloted a grant-funded IBH program that since expanded to all its health centers.

From May to August, 2016, the author interviewed clinical and administrative staff at Mercy Care's five, fixed site clinics. Chart reviews of around 1,000 patients yielded variables assessing various aspects of IBH at each location. The author used structured observations and informal conversations with staff to supplement findings from interviews and chart reviews.

This report presents: organizational background on Mercy Care; a literature review of the integrated behavioral health and health services for homeless and uninsured individuals; the program evaluation's methodology; a summary of key findings; conclusions; limitations of the data; and recommendations for Mercy Care.

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Integrating Behavioral Health Into Primary Care For Homeless & Uninsured Individuals in Atlanta: A Program Evaluation (2016)

Section 1 – Introduction

The purpose of this program evaluation is to identify the strengths and limitations of the following aspects of Mercy Care's Integrated Behavioral Health (IBH) program:

1. Interdisciplinary communication.
2. Referrals.
3. Consultations.
4. Processes, protocols, and workflow.
5. Documenting, tracking, and using patient metrics to improve and inform treatment.

This assessment is not intended to determine the fidelity of Mercy Care's IBH program to the Collaborative Care model. However, the five core principles of Collaborative Care (University of Washington's AIMS Center – Evidence-based depression care 2016) and the recommendations of the Kennedy Forum brief (Fortney, Sladek, & Unützer 2015) influenced the development of the five aspects considered in evaluating Mercy Care's IBH.

This Executive Summary outlines major findings from the author's program evaluation and a literature review focused on integrating behavioral health into primary care services for a homeless, uninsured, and culturally diverse urban population. For additional information, please reference the full report.

Section 2 – Literature Review: Conclusions

A lack of mental health providers, barriers in access to mental health services, the stigma surrounding mental illness, and limited training for providers result in behavioral health conditions often going untreated (Osborn 2001). Untreated behavioral health issues represent a major concern for providers and patients. If not addressed, patients with these issues will experience worse physical and mental health outcomes (Osborn 2001; Cohen, Edmondson, & Kronish 2015). For healthcare organizations, untreated behavioral health issues may result in clogged waiting rooms and multiple visits from patients with vague or seemingly untreatable somatic concerns (Fortney, Sladek, & Unützer 2015; Ward et al 2015).

Patients who are homeless, uninsured or underinsured, and/or members of a minority group may be more vulnerable to the negative health outcomes associated with untreated behavioral health issues (Aubry, Nelson, Tsemberis 2015; Georgia Department of Community Affairs 2015; Herman et al 2011; Olfson et al 2016; Stergiopoulos et al 2015). Homelessness, poverty, and trauma experienced during youth can cause irreversible damage. Youthful tendencies towards impulsive decisions and risky behaviors further increases physical and mental health risks (Edidin, Ganim, Hunter, & Karnik 2011). Clinicians should be mindful of the sociocontextual circumstances surrounding any patient. Considering patients' lived experiences may help clinicians anticipate health risks and better understand their help-seeking behaviors and expressions of mental distress (Dovidio et al 2008; Hwang et al 2007; McGuire et al 2006; Mustanski et al 2016; Reinschmidt & Chong 2007; Smedley, Stith, Nelson, & Institute of Medicine 2003). Clinicians should also recognize that expressions of mental distress and help-seeking behaviors vary within cultures as much as across cultures (Hwang et al 2007). Presently, research on the effectiveness of cultural competency trainings is limited (Butler et al 2016).

Linking patients to needed social resources such as housing, case management, vocational training, and substance abuse treatment may improve quality of life and clinical outcomes (Aubry, Nelson, Tsemberis 2015; Fitzpatrick-Lewis et al 2011; Slesnick & Erdem 2012).

There are national and local shortages of psychiatric specialists (Fortney, Sladek, & Unützer 2015; Olfson et al 2016; Walker et al 2015). Behavioral health conditions (including substance use issues) are often unrecognized or untreated (Fortney, Sladek, & Unützer 2015; Olfson et al 2016; Weiss, Guidi, & Fava 2009). While most behavioral health conditions are treated in primary care, primary care providers report feeling unprepared to identify and manage many mental health issues (Fortney, Sladek, & Unützer 2015; Kearney et al 2015; Post et al 2009). Primary care providers also vary in their comfort level in prescribing psychotropic medications (Sansone et al 2006).

Integrating behavioral health into primary care can facilitate early identification and treatment of behavioral health conditions (Fortney, Sladek, & Unützer 2015; Kearney et al 2015; Thota et al 2012). With the proper resources, training, referral networks, and staff buy-in, organizations implementing an IBH program may improve the physical and mental health of their patients (Kearney et al 2015; Thota et al 2012). Organizations struggle in recruiting and retaining clinicians with the skills, experience, and adaptability necessary to work effectively in IBH. Administrators in IBH practices often underestimate the time and resources necessary to adequately prepare IBH clinicians (Hall et al 2015). Resources and guidance for providing initial and ongoing education and training are available through the University of Washington's AIMS Center Resource Library (University of Washington…Resource Library 2016).

Clinic layout invariably facilitates or inhibits interdisciplinary collaboration and warm hand-offs. Shared workspaces facilitate warm hand-offs, while separated workspaces prevent

them. Ideally, BHSs and PCPs share workspaces in clinics that also offer neutral spaces for private work or meetings (Gunn et al 2015).

For IBH to be effective, organizations should adopt a shared registry of patient information that will guide treatment (Fortney, Sladek, & Unützer 2015; Kearney et al 2015; Thota et al 2012; University of Washington…Principles of Collaborative Care 2016; Unützer et al n.d.). Ideally, the registry is integrated in the electronic health record, allows real-time communication, and aggregates data for efficient generation of population-level reports (Cifuentes et al 2015; Kearney et al 2015). These reports can guide clinician supervision and facilitate modifications of ineffective clinic processes (ibid).

Organizations should also monitor how BHS to PCP staffing ratios and the length of BHS appointment times facilitate or inhibit warm hand-offs. To help ensure BHS are available for consultation, the literature supports staffing multiple BHSs on-site, having a higher BHS to PCP ratio, and limiting pre-scheduled BHS appointment times to 30 minutes. Organizations will likely need to monitor and adjust staffing and scheduling according to resources, outcomes, and staff buy-in (Davis et al 2015).

The use of personal health records for low-income, low literacy patients is feasible, and may increase self-efficacy and reception of preventive care services. To maximize effectiveness, organizations must devote considerable time and resources to training and supporting patients in their use of these electronic records (Druss, Glick, Ji, & von Esenwein 2014).

IBH is a work in progress. Organizations will need to consistently monitor patient outcomes and adjust their staffing, scheduling, and policies to match what proves most effective for their patient population (Gunn et al 2015; Kearney et al 2015; Thota et al 2012). Many practices will need to modify existing infrastructure and resources (including EHRs) to provide

more effective integrated care (Cifuentes et al 2015; Gunn et al 2015). Conducting a needs assessment, involving clinicians and patients in quality improvement measures, and providing ongoing education for staff are steps on the path to improvement (Kearney et al 2015).

Section 3 – IBH Program Evaluation: Methods

IRB Approval

Emory University's Institutional Review Board (IRB) determined the project did not meet the definition of "research" and "human subjects" and thus did not require IRB approval.

Clinic Sites

Dr. Liz Frye, Mercy Care psychiatrist and the author's site supervisor, recommended an evaluation of Mercy Care's Decatur (MCD), North (MCN), City of Refuge (COR), Gateway, and St. Luke's clinic sites. Table 1 and Table 2 provides characteristics of each site.

Shadowing

The author shadowed 34 consenting staff members from the five clinic locations (Table 3).

In-Depth Interviews

Table 3 illustrates the number of interviews conducted, clinicians shadowed, and hours and days spent at each location. Table 3 also reviews the roles of staff members interviewed by location. Figure 1 shows how long interviewed clinicians worked at Mercy Care. On average, interviewed staff had 5.3 years of experience at Mercy Care (range 2 months – 25 years). Figure 2 displays the roles of interviewed staff members.

Chart Reviews

The author conducted over 1,000 chart reviews of patients visiting any of the five participating Mercy Care sites. While reviewing charts, the author developed and maintained a

double password protected Excel spreadsheet stored on a personal laptop. The spreadsheet contained de-identified information of each primary care patient encounter occurring over unique ten-day periods at each of the five clinics. Each patient was assigned a unique identifier to prevent double-counting of patients with multiple visits to a single clinic during a ten-day period. This also allowed tracking of patients who visited multiple clinics during the assessment period. Due to an error, data is not available on the number of MCD patients with multiple clinic visits during the 10-day evaluation period.

Chart Review Variables

Variables collected for for each patient included age, gender, date of visit, clinic location, evidence of a behavioral health issue, and documentation of a behavioral health screen. The author also reviewed all medication lists for psychotropics such as anxiolytics, antidepressants, antiepileptics, and antipsychotics. Each psychotropic prescribed to a patient was noted on the spreadsheet.

Behavioral Health Referrals

For patients whose behavioral health screen was positive, the author noted the presence or absence of a behavioral health referral documented in the patient's chart. For those referred, the author calculated the number of calendar days between the referral and the patient being seen. Same day consults or meeting documented by both provider and BHS counted as zero days. Due to small sample sizes, the estimated average length of time between referral and appointment at the population and clinic levels should be considered as rough estimates.

Trending PHQ-9 & GAD-7 Scores

For patients with a positive BH screen, the author documented each PHQ-9, GAD-7, MDQ, and/or PTSD score. For patients scoring ≥8 on the PHQ-9 or GAD-7, the author noted the

date and severity of each score, the time span between the initial and most recent screen, and any improvement or worsening of symptoms. For the PHQ-9 and GAD-7, scores worsened if they increased by 5 or more points and improved if they decreased by 5 or more points. The author deemed scores staying within a +/- 4-point range as unchanged.

Averages calculated based on serial GAD-7 and PHQ-9 scores are based on the small subset of patients that had multiple scores documented. The small sample size exaggerates the effect of those patients with a drastic score increase or reduction, thus skewing the average for that clinic. Larger samples of serial symptom severity scores from each clinic might produce different results. Consequently, averages based on serial PHQ-9 and GAD-7 scores should be considered as rough estimates.

Behavioral Health Diagnoses

For patients with evidence of a behavioral health issue[1], the author noted the diagnosis or diagnoses documented by the clinician. For patients with multiple diagnoses, each issue was noted.

When one of the above criteria suggested a behavioral health issue but no diagnosis was documented, the author listed the issue as depression, anxiety, psychosis, mood disorder, and/or

[1] While reviewing charts, the author determined that a patient had evidence of a behavioral health issue based on:

- Documentation of a psychiatric diagnosis in clinical notes or ICD-codes;
- Documentation of patient self-reporting a history of behavioral health issues;
- Documentation of a patient's present or past substance use, only if it obviously interfered with the patient's ability to function (based on self-report or clinician's note);
- Documentation of a positive behavioral health screen, unless the patient denied symptoms, a more thorough screen (e.g. PHQ-9 or GAD-7) tested negative, follow-up screens consistently scored negative, and/or other reasonable documentation ruling out a behavioral health issue;
- Documentation of obvious behavioral health symptoms, such as hearing voices;
- Documentation of patient self-report of needing a specific medication for behavioral health reasons (e.g. an anti-epileptic as a mood stabilizer);
- Documentation of a hospitalization or Emergency Room visit for behavioral health reasons.
- Documentation of a positive MDQ or PTSD score, or PHQ-9 or GAD-7 score ≥8.

substance use. This determination was based on clinical notes. In some instances, clinical documentation did not clearly suggest any specific behavioral health issue. In this case, the author cited the behavioral health issue as unclear. The most common reason a behavioral health issue was labelled unclear was a positive behavioral health screen not being followed up with a BHS clinical note, documentation of symptoms by the provider, or a PHQ-9, GAD-7, or other screening tool.

Descriptive Statistics

The author hand-calculated or used Excel to generate descriptive statistics using data collected during chart reviews. Tables 4 – 7 and Figures 5 - 15 summarize key findings.

Section 4 – Chart Review Findings

Screening Rates

Compared to other clinics, MCD has the lowest BH screening rate (64.8% compared 81.5% average). Observation, chart reviews, and staff interviews suggest this may be due to the hectic nature of the clinic and a possibly different process for documenting the BH screening results of EIC patients. Low screening rates at COR (73.8%) are likely due to new staff and unclear clinic processes. Higher screening rates at St. Luke's (98.6% patients), MCN (95.9%), and Gateway (95.7%) likely result from the smaller clinic size, more controlled patient flow, and clear and consistent clinic processes.

Mercy Care Decatur (MCD)

MCD is the busiest clinic, averaging 35.6 patient encounters/day. Compared to other clinics, MCD has the lowest BH screening rate (64.8% compared to a 81.5% average). (Possible

reasons for this are discussed above.) Despite low screening rates, 61.9% of screened MCD patients tested positive (compared to 53% patients across all clinics).

Mercy Care North (MCN)

Despite having one of the highest screening rates, MCN patients have the lowest prevalence of positive screens (38%, compared to the average 53%). Only 47.9% have documented evidence of a behavioral health issue (compared to 58.8% average). When they do have BH issues, MCN patients present with the fewest documented mental health conditions. Staff interviews and the review of literature suggest this is likely due to underreporting, stigma, denial, or BH issues presenting as somatic complaints. Likely a result of patient resistance to medications and low adherence, MCN patients with BH issues had the lowest prevalence of psychotropics documented in their EHR medication list. The prevalence of substance use is lowest at MCN (1.9%, compared to an all clinic average of 27.3%), suggesting a patient population that doesn't use substances, doesn't report substance use, or a combination of both. A relatively high prevalence of anxiety may result from patient distress related to familial relationships, living apart from family members, or past or present immigration issues. Though not reflected in chart reviews, staff interviews suggest signs and symptoms of PTSD, intimate partner violence or domestic abuse, and co-dependency are also common.

City of Refuge (COR)

While COR had relatively low BH screening rates, the clinic had the highest prevalence of patients screening positive. COR also had a higher estimated prevalence of patients with BH issues compared to the cross-clinic average (58.8%). This suggests the true prevalence of patients with behavioral health issues at COR is higher than the 69.3% estimated from chart reviews.

Compared to patients at other clinics, anxiety was highly prevalent in COR patients. COR also had the second highest prevalence of patients with three or more BH issues, suggesting that patients may have a longer history of BH issues. Limited data on referrals suggests COR patients referred to BH may be less likely to have same-day or any contact with a BHS. However, this information is based on a small sample size and may be effected by the COR hiring a new BHS during data collection. Data may also reflect the separate BHS workspace and confusion regarding the screening process.

68.6% of COR's BH patients have a psychotropic documented on their EHR medication list. This is 40% higher than the cross-clinic average (48.8%). COR's BH patients more commonly have two or more medications documented. COR patients receiving initial PHQ-9 scores more commonly receive follow-up PHQ-9 testing. They also have the longest time period from initial to most recent PHQ-9 testing, suggesting they remain in care longer.

Based on observation, chart reviews, and staff interviews, these findings may reflect the clinic's proximity to its primary patient population, the administration and documentation of PHQ-9 tests during day groups, and one or two psychiatric providers on-site some days of the week. Data suggest COR behavioral health clinicians have large case loads, diagnose patients clearly, administer and document MBC tests, and prescribe and document medications, but that more patients than are recognized may benefit from behavioral health services. Improving the screening process, increasing the number of same-day BH contacts for patients screening positive, and decreasing the number of referred patients who receive no contact may further address the behavioral health needs of the clinic's target population.

Gateway

Gateway had by far the shortest wait time, with patients waiting on average 0.7 days for a BH appointment. Only 12.5% of Gateway patients referred to BH had no documented BH contact. This is nearly half the prevalence of referred patients with no documented contact estimated at other clinics. Fewer BH patients at Gateway had a documented psychotropic compared to all other clinics, with the exception of MCN. This may suggest a reluctance to initiate medication therapy for BH patients at Gateway and/or patients not following up for medication management.

Gateway also had a relatively high prevalence of BH patients whose BH issue was unclear. This likely is due to Gateway's having the fewest initial and follow-up PHQ-9 scores documented during the ten days of data collection. The data collection period may have been a slow couple of weeks for the clinic. Construction on the building's first floor and the clinic's location on the second floor may have limited patient access. The small sample size of patients with documented PHQ-9 scores may account for the relatively high percentage of patients whose PHQ-9 scores worsened by 5 or more points.

St. Luke's

St. Luke's by far sees the most patients with any behavioral health issue, the most patients with 3 or more behavioral health issues, and the highest overall patients with depression, anxiety, and/or substance use issues. Perhaps due to a common need for drug rehabilitation, a relatively high percentage of St. Luke's patients see an outside provider for behavioral health. St. Luke's clinicians documented the most initial and follow-up PHQ-9 scores for patients. Compared to other clinics, a higher percentage of St. Luke's patients with serial PHQ-9s also showed an improvement of 5 points or greater (63.6% compared to 48.6% average across

clinics). On average, St. Luke's patients showed the highest point reduction in most recent PHQ-9 scores (-7.6 points compared to -5.5 point average across clinics).

Section 5 – Findings from Interviews & Observations

Shared Mission

Mercy Care staff shares a common mission to do what's right for patients. Staff have mutual respect and feel they understand their patient population. They believe Mercy Care's IBH program provides necessary services and improves patient outcomes. Despite financial challenges, leadership expressed commitment to maintaining and strengthening IBH.

Challenging Patient Population

Staff discussed the challenges of treating a primarily homeless and uninsured patient population. Patients often present in crisis mode with multiple acute and/or chronic conditions. Their lack of reliable housing, finances, transportation, and access to health services complicates treatment and follow-up. Exposure to the elements, violence, infectious disease, and prejudice often exacerbate their illnesses. Attempting to address the many issues faced by patients requires teamwork, but can be exhausting for clinicians.

Some patients are suspicious of or resistant to behavioral health services. This results from cultural stigma or a misunderstanding of what behavioral health services entail. Clinicians address this by describing the role of the BHS in neutral terms and by reframing behavioral health issues.

Some staff identified high no-show rates of BH patients, a high volume of patients, and the inability to anticipate the needs of patients that present to primary care on walk-in days as barriers to proactive management and follow-up of behavioral health issues.

Expectations, Orientation, & Training

Staff reported there is currently no formal orientation for new employees regarding what IBH is and how it should operate. Some felt uncertain which behavioral health conditions Mercy Care expects providers to treat. Nearly all interviewed clinicians wanted more training about how to identify and treat common behavioral health conditions. Some providers felt that decision trees or protocols to guide when to treat, when to refer, when to increase a medication, switch to a different medication, or other such guidelines would help their practice.

Tension seems to derive from some staff wanting to ensure that all providers have a clear understanding of their role and expectations in IBH, while others want a secure support system in place before clearly and directly telling providers how to practice. Several providers felt that regardless of Mercy Care's expectations of providers, they often face situations in which they feel pressured to refill or prescribe psychiatric medications with which they are neither familiar nor comfortable.

Staffing & Clinic Roles

Mercy Care administrative staff reported difficulties securing funding and recruiting talented people as two major challenges for its IBH program.

Several clinicians felt nurses could be better utilized in IBH. Mercy Care nurses might be able to educate BHSs on common medical conditions, or work closely with BHSs to help patients manage chronic conditions.

Based on clinical notes and observation, the need to expand substance abuse services seems under-recognized. Clinical notes suggest substance dependence or abuse represents a major barrier to remaining in care.

Several staff felt case managers and care coordinators are currently underutilized in IBH. Many clinicians wanted to know how they could use case managers to better serve their patients.

As the first point-of-contact, MOSs represent the first opportunity to screen patients for behavioral health. MOSs may offer valuable insight in improving Mercy Care screening, or other IBH work flow processes. Mercy Care should should consider involving MOSs in IBH-related education and process improvement.

A few clinicians felt that increasing the number of chaplains to offer support for patients may be an opportunity to improve patient outcomes. Mercy Care might also consider providing basic training to chaplains regarding common psychiatric conditions, symptoms, and treatment.

Most staff wanted a directory that displays the names, roles, job duties, and contact information of all staff members.

Clinic Processes

Nearly everyone interviewed expressed frustration with MCD's scheduling and walk-in process. Inefficient scheduling and registration likely represents a barrier to integrated behavioral health. Perhaps easier access to information for patients might help streamline the registration process. For patients lacking internet access, an automated phone system could provide callers with the hours for dental, vision, PPD reading, medication refills, and other services, and could include an option for information about paperwork patients should bring for their first appointment. Employing a nurse to triage patients might ensure urgent cases secure appointments or, if appropriate, receive prompt referral to the Emergency Department or Urgent Care.

For patients who don't want or need to see medical, a policy requiring them to see a medical provider before a BHS may create an additional barrier to behavioral health services that

some patients may not tolerate. If this is a Mercy Care policy and can be revised, leadership should consider allowing BH appointments prior to seeing a medical provider.

Tension Between Behavioral Health & Primary Care

While the clinicians mutually respect one another, the author identified tension underlying the relationship between behavioral health and primary care. The tension seems to result from the stress of managing patients with difficult to treat behavioral health issues. For medical providers, the stress is exacerbated by uncertainty regarding organizational expectations and/or the feeling of not being fully supported. Walk-in days and new patients are particularly stressful. For behavioral health specialists, stress results from having limited options for referring or managing patients whose behavioral health conditions exceed the scope of the medical provider's training. For psychiatric specialists, the stress seems to result from managing a large caseload of complex patients, being available for consultation, and occasionally providing behavioral health education to staff.

Potential Solutions

Developing a protocol to guide medical providers in deciding when to refer and when to treat and training providers on the medications and conditions they're expected to manage with consultation may reduce anxiety and promote confidence in medical clinicians. Such a protocol might address a medical provider's encounters with:

- new and unstable behavioral health patients with schizophrenia, bipolar, or psychosis;
- patients whose behavioral health issue do not respond to the medical provider's treatment;
- patients previously seen by psychiatry who ran out of psychotropics or were lost to follow up; and

- patients with bipolar or schizophrenia stabilized by treatment prescribed by a Mercy Care psychiatric specialist.

Hiring additional psychiatric staff to expedite referrals may also alleviate tension.

Section 6 – Limitations

Patients Lost to Follow-Up

The author was unable to track the symptom severity of patients lost to follow up. Interviews with staff and a review of literature suggest reasons patients fall out of care, but does not offer insight into these patients' outcomes over time. Comparing outcomes for patients falling out of care with patients who remain in care would prove useful in suggesting the effectiveness of interventions. However, patients falling out care seem likely to differ significantly from patients remaining in care, making a comparison of the two groups problematic.

Limited Time-Period

Data from this evaluation derives from chart reviews of patients attending Mercy Care's fixed-location clinics between the end of May to the end of July 2016. The author shadowed and interviewed clinicians during the same period. Consequently, report findings only reflect Mercy Care's IBH program during the summer of 2016.

Lack of Counterfactual or Control Group

For improving behavioral health patients, determining whether Mercy Care interventions are responsible for symptom reduction is limited by the lack of a counterfactual. Since patients' symptoms could improve without intervention or due to other factors, causation cannot be established.

Lack of Pre-Implementation Data

To the author's knowledge, no data shows outcomes of Mercy Care's behavioral health patients prior to IBH implementation. Such data would help demonstrate patient status before and after IBH implementation.

Inability to Determine Which Interventions Are Most Effective

Chart reviews suggest the typical patient's GAD-7 and/or PHQ-9 scores move up and down, alternatively improving and deteriorating. Highs and lows seem to correlate with events beyond Mercy Care's control. Traumatic events, substance use relapse, an injury, or loss of a job or housing may cause a spike in symptom severity.

Mercy Care patients receive wrap-around services. Over the course of a year, a patient may interact with a case manager, medical doctor or nurse practitioner, substance abuse counselor, BHS, psychiatric specialist, dentist, and ophthalmologist. Medication adjustments likely help with behavioral health symptom management, but are potentiated by case management, therapy, and other social assistance. Multiple interventions targeting different stressors likely improve patient outcomes.

Patients whose symptoms improve can best explain which interventions they found most effective. Future evaluations might survey or interview such patients.

Inability to Link Patients with Primary Clinicians

Due to staff turnover and patients seeing multiple providers, the author did not attempt to link patients to clinicians. Doing so would make new providers and BHSs responsible for patients previously on the caseload of a former employee, and would not accurately reflect current clinicians.

Linking patient outcomes to clinicians would be useful for professional development. Administratively, it would help demonstrate the effectiveness of trainings. In the future, Mercy Care should consider how it can accurately collect and use such information.

Limitations of Interviews

The author attempted to interview clinical and administrative staff representative of a variety of roles and experience levels. (Characteristics of interviewed staff are outlined in Table 2.) Interview findings summarized in this document only represent interviewed staff. Additionally, one interviewed staff person did not consent to being audio-recorded. Notes from that interview summarize the conversation, but are less thorough then audio-recorded and transcribed interviews.

Interviews occurred during a clinician's downtime during work hours. Interviewees were provided the opportunity to speak about other issues effecting IBH at Mercy Care not asked about by the author. Interview fatigue and competing work demands may have influenced respondent's answers. While the author assured confidentiality, participants may have been reluctant to speak negatively about their organization. Social desirability bias may have also been present.

Limitations of Chart Reviews

During the first two weeks of data collection at MCD, the criteria were tested and refined. Initially, the author did not collect a patient's name and birthdate and so was unable to determine if a patient had multiple visits. Upon realizing this error, the author began collecting this information. Because of the initial mistake, data is not available on the number of MCD patients with multiple clinic visits during the 10-day evaluation period.

Possible Errors in Data Collection, Entry, or Analysis

The author intended for structured observations and staff interviews and shadowing to explain the descriptive statistics calculated from data collected during chart reviews. Findings documented in this report reflect that assumption. However, proposed explanations of findings may be inaccurate due to errors in data collection, entering, or analysis. Efforts to minimize these errors include audio-recording and transcribing interviews, repeating observations, asking staff for clarification, writing detailed field notes, and multiple quality checks at various stages of data entry and calculation. Ideally, multiple members of a research team could check one another's work for errors. One person conducting this evaluation likely increased the risk that errors occurred.

Section 7 – Conclusions

Mercy Care provides primary care and behavioral health services to a population of mostly homeless and uninsured patients in Atlanta. During the time of data collection, interviewed staff felt the organization's three-year old IBH program ensured highly needed services to vulnerable patients. Staff felt confident IBH improves patient outcomes. Despite challenges related to funding, staffing, and managing complex patients, Mercy Care staff demonstrated a commitment to continue behavioral health services.

Mercy Care patients have complex medical, social, and psychiatric needs. Their lack of consistent and reliable transportation, housing, finances, and access to health services complicates treatment plans.

Chart reviews revealed that some clinics had higher screening rates than others. The prevalence of patients with behavioral health issues also varied by clinic. Clinics with the highest

screening rates tended to be smaller and have more controlled patient flow. Clinics with lower screening rates had unclear screening processes and recent staff turn-over. Co-locating BHSs and primary care providers did not effect screening rates, but did increase collaboration.

Interviewed clinicians expressed a desire to learn more about managing behavioral health conditions in primary care. Staff felt a formal, IBH-specific orientation would help clinicians understand how IBH ideally functions. Several clinicians expressed confusion about various aspects of IBH, including how patients are screened, which conditions medical providers are expected to treat, when to refill psychotropics prescribed by other providers, when to initiate a psychotropic or adjust dosage, and how to manage psychiatrically unstable patients when an internal referral to psychiatry did not seem possible.

Staff commonly referenced processes that they felt inhibited or facilitated IBH at different clinics. Walk-in days at MCD were widely considered stressful and chaotic. Some clinicians felt requiring patients who seek behavioral health services to see a medical provider first was a barrier to prompt treatment.

Medical providers wanted more training about psychotropics and common psychiatric conditions. They appreciated BHSs and felt a BHS should always be on-site when patients are being seen. They felt consultation with the psychiatric specialist was helpful, but were frustrated that psychiatry was no longer seeing new patients. Several providers wanted guidelines, protocols, or clinical prompts to aid them in managing patients with behavioral health conditions.

The unspoken tension between behavioral health and primary care seems to result from lack of formal orientation and ongoing training and support for medical providers, and unrealistic workloads for psychiatric specialists.

Section 8 – Recommendations

The following recommendations are based on interview results and observations. After developing a list of recommendations, the author identified those recommendations most commonly cited by staff. Commonly cited recommendations that aligned with issues identified during chart reviews were deemed most urgent. According to chart reviews and staff interviews, the most urgent recommendations are:

1. Develop a formal, IBH-specific orientation for new staff. Clearly communicate expectations to medical providers.
2. Increase the number of psychiatric specialists. Reserve one psychiatric specialist to be available for consultations and to educate providers on behavioral health issues.
3. Ensure clinicians receive ongoing education and training on identifying and treating behavioral health conditions.
4. Develop a protocol to clarify the management of new patients who were previously prescribed psychotropics that medical providers do not feel comfortable managing.
5. Reserve time each week for interdisciplinary consultation on difficult-to-manage patients.
6. Identify a means for tracking individual behavioral health patient outcomes.
7. Ensure daily BHS coverage at each clinic location.
8. Use morning huddles as an opportunity for medical and BH staff to identify mutual patients and anticipate issues that may develop during the day.
9. At clinics with lower screening rates, consider adopting screening strategies employed by clinics with higher screening rates.
10. Explore options for improving the walk-in process at MCD.
11. Hire another SAC and offer SAC services at St. Luke's.

Additional Recommendations

During interviews, all staff spoke of the stress associated with walk-in days at MCD. Interviews, personal communication with staff, and observation of the registration process and clinic flow on walk-in days inspired recommendations regarding the registration and scheduling process. Walk-in days impact IBH to the extent that walk-in days at MCD are stressful for patients and clinicians and seem to be a barrier to smooth clinic processes. Addressing this may help prevent staff burnout and turnover and alleviate patients of an additional source of stress. Additional recommendations regarding walk-in days and a range of other issues are listed in Appendix 2.

Table 1 – Site Characteristics: Summary description of participating clinic sites.

	Decatur	North	City of Refuge	Gateway	St. Luke's
Primary Population Served	Mostly homeless, unemployed	Mostly Hispanic, housed, working	Mostly women	Mostly homeless men	Mostly homeless, high prevalence drug-use & BH issues
Site Assets	Various services, case mgt, spacious lobby, mult BHSs on-site, proximity public transit & public hospital, work pods & consult rooms, space for meetings & groups, mobile coach parking, SAC & psych services	Culturally competent care, various services, proximity to farmers market, Good Will, controlled clinic flow, pediatrics offered	Modern building, spacious halls, exam rooms, & lobby; proximity to shelter and other services, gated compound, groups available, peer support specialist on-site, psychiatric services, pediatrics offered	Multiple other services on-site, controlled clinic flow, referrals from other services, recuperative care on-site	Proximity to shelter, high demand for services, controlled clinic flow
Site Challenges	Maze-like halls make it easy to lose patients, clinicians; limited workspace, walk-in days are hectic, can seem overly crowded, lack of shelter for patients lining up early, many staff roles can be confusing	Small work space, crowded provider room, limited consult room, strong population stigma against BH, patients feel vulnerable outside in morning	Crowded provider room, BHS room separated from provider room, some patients don't like traveling there, clinic not obviously accessible from the street, high-crime area	Limited workspace, no groups, clinic not obvious from street	Limited workspace, no groups, clinic not obvious from street, high-crime area, BH office separated from clinic, limited services, BHS not on-site daily
Providers on-site	~3-6	3-4	2-3	1	1
BHSs on-site	2-3	1	~1-3	1	0-1
Psychiatric Consultant	Sometimes on-site, available by phone	Available by phone	Sometimes on-site, available by phone	Sometimes on-site, available by phone	Available by phone
Shared/Separate Workspace	Shared	Shared	Mixed (BH office separate; psych shared w/ PCPs)	Shared	Separate
Morning Huddles	Consistent, work-related & prayer	Consistent, work-related & prayer	Inconsistent, mostly prayer/reflection	Consistent, mostly prayer/reflection	Consistent, work-related & prayer

Key: BH=behavioral health; PCP=primary care provider; PEDS=pediatric services; psych= psychiatric; SAC=substance abuse counseling

Table 2: Clinic Characteristics

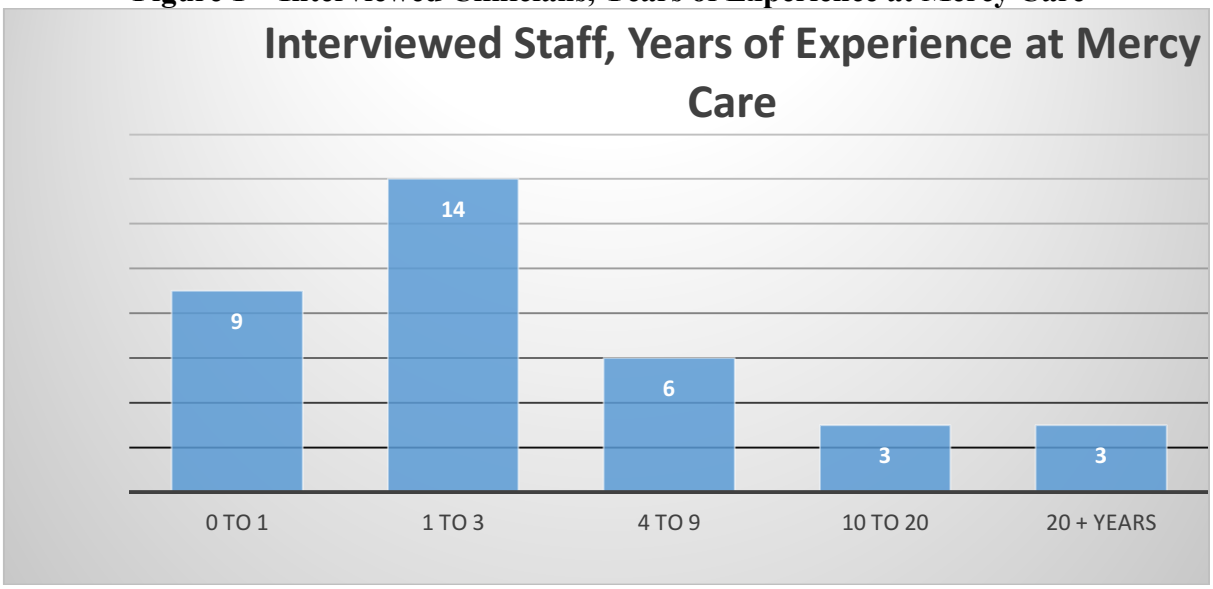
	Decatur	North	City of Refuge	Gateway	St. Luke's	All Clinics
# Primary Care Encounters in 10 days (average encounter/day)	**356 (35.6)**	**328 (32.8)**	**113 (11.3)**	**76 (7.6)**	**90 (9)**	**963 (96.3)**
# Individual Pts (in 10 days)	**354**	**311**	**101**	**67**	**72**	**905**
# Pts w/ multiple encounters (% all pt encounters)	**data n/a**	**17 (5.5)**	**12 (11.9)**	**9 (11.8)**	**18 (20)**	**Excluding MCD 56 (9.2)**
% Female (% Male)	36.6 (63.3)	79.5 (20.5)	77 (23)	19.7 (80.3)	45.5 (54.5)	58.2 (41.8)
Average Age (range)	47 (19 - 69)	48 (19 - 91)	46.6 (20 – 66)	45.9 (21 - 63)	45.3 (21 - 68)	47 (19 - 91)

Table 3 – Summary of time allocation and evaluation activities at each Mercy Care site.

	Decatur	North	City of Refuge	Gateway	St. Luke's	Total
# Days On-Site	**24**	**10**	**8**	**6**	**2**	**50**
Hours On-Site (Hours/day)	**170.75 (7.1)**	**67 (6.7)**	**54.75 (6.8)**	**35.5 (5.9)**	**14 (7)**	**342 (6.8)**
# Clinicians Shadowed (Roles Shadowed)	**15** (3 BHSs, 1 CM, 2 MAs, 2 MDs (*1 PCP, 1 Psych*), 3 MORs, 2 NPs, 1 RN, 1 SAC)	**6** (1 BHS, 1 MA, 1 MD, & 3 MORs)	**6** (1 BHS, 1 MA, 1 MD, 1 Psych NP, 1 PSS, 1 RN)	**5** (1 BHS, 1 MA, 1 MOR, 1 NP, 1 RN)	**2** (1 NP, 1 MA)	**34 (6 BHSs, 1 CM, 6 MAs, 4 MDs, 7 MORs, 5 NPs, 1 PSS, 3 RNs, 1 SAC)**
# Staff Formally Interviewed (Roles Interviewed)	**19** (4 Admin, 3 BHSs, 1 CM, 4 MDs (*2 PCPs, 1 Psych, 1 OD*); 3 NPs, 4 RNs)	**5** (1 Admin, 1 BHS, 1 MD, 1 NP, 1 RN)	**8** (2 BHSs, 1 MA, 2 MDs (*1 MD & 1 Peds*), 1 NP, 1 PSS, 1 RN)	**3** (1 BHS, 2 NPs (*Psych NP & FNP*))	**1** (1 NP)	**35 (4 Admin, 7 BHSs, 1 CM, 1 MA, 7 MDs, 8 NPs, 1 PSS, & 6 RNs)**
# Individual Medical Pt Chart Reviews	**356**	**312**	**102**	**67**	**76**	**907**
# Medical Pt Encounters (Encounters/Day (10 day period))	**354 (35.4)**	**328 (32.8)**	**113 (11.3)**	**76 (7.6)**	**90 (9)**	**963 (96.3)**

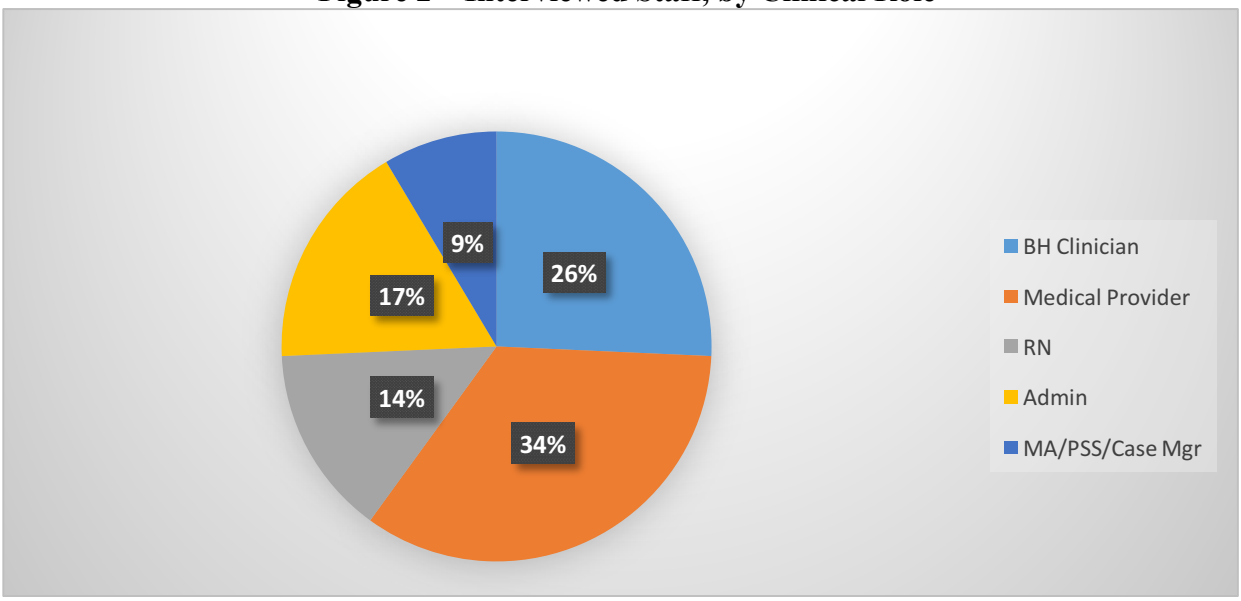
Key: Admin=Administrative positions, including leadership positions; BHS=Behavioral Health Specialists, including supervisory BHSs; CM=Case Manager, including CMs for housing and HIV patients; MA=Medical Assistant; MD=Medical Doctor, including primary care providers, opthalmologists (OD), pediatricians (Peds), and psychiatrists (Psych); MOR=Medical Office Receptionist; NP=Nurse practitioner, including family (FNP) and psychiatric NPs (Psych NP); PSS=Peer Support Specialist; RN=Registered Nurse, including RN case managers and psychiatrics RNs; SAC=Substance Abuse Counselor.

Figure 1 – Interviewed Clinicians, Years of Experience at Mercy Care



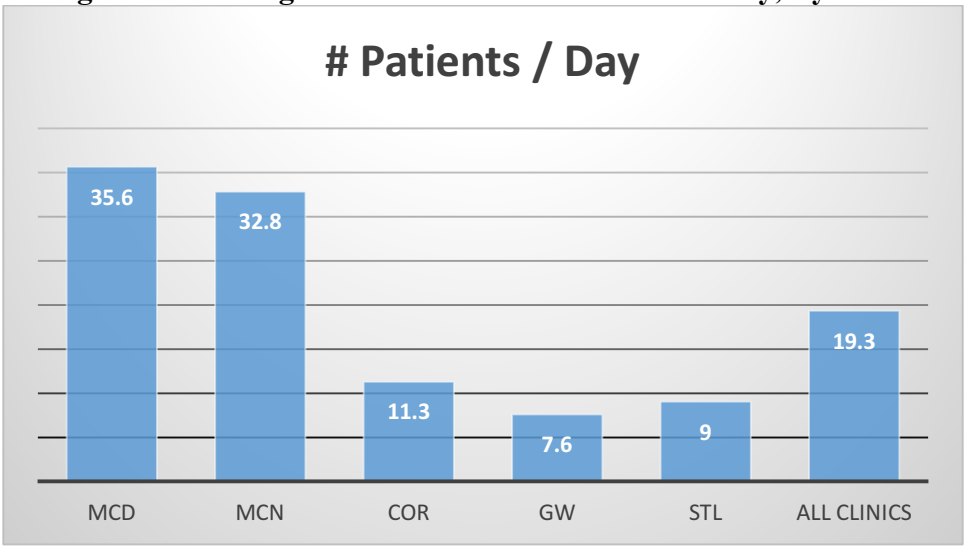
Above: One-third of interviewees worked for the organization between 2-3 years. Eight worked a year or less. Ten worked fewer than 2 years, seven of whom worked less than a year. Six worked more than ten years, three of whom had been there greater than twenty years.

Figure 2 – Interviewed Staff, by Clinical Role



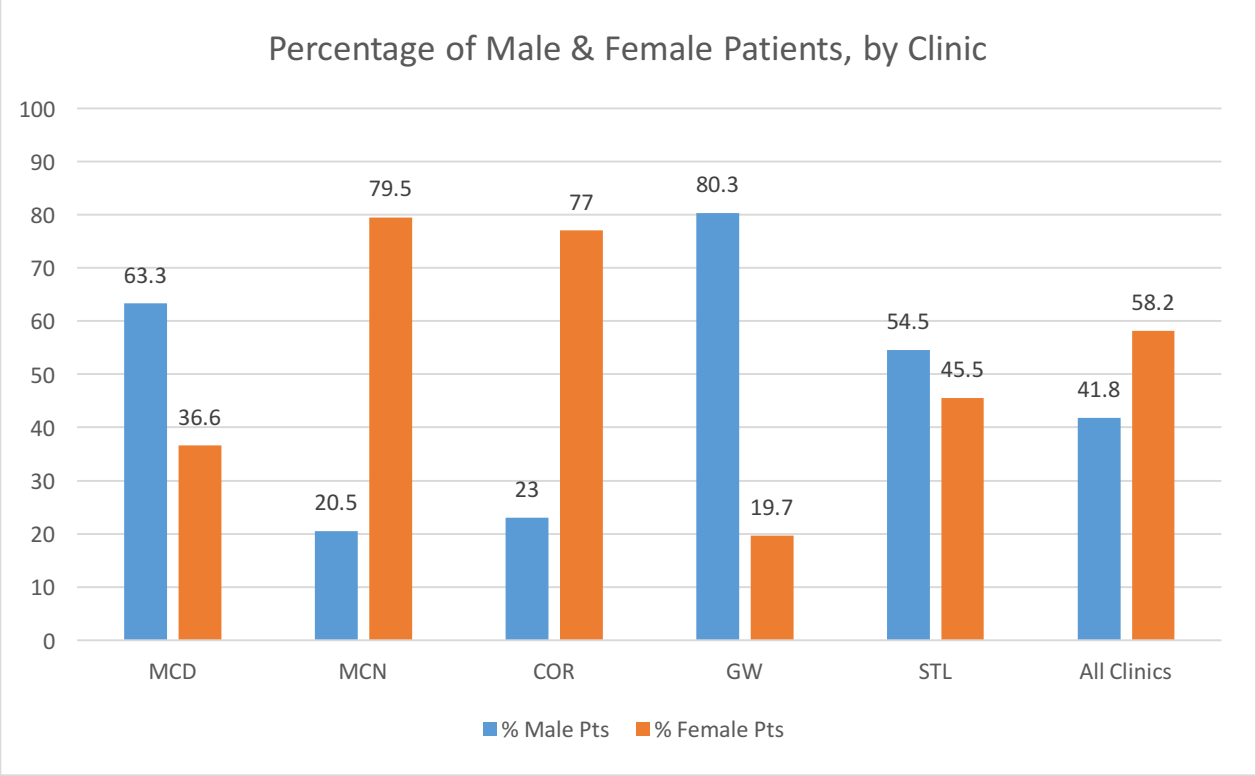
BH Clinician= BHS, psychiatrist, or psychiatric nurse practitioner; Medical Provider= MD or Nurse Practitioner; RN= Registered Nurse (RN) Case Mgr or Clinic RN; Admin=Administration, including Director of Behavioral Health, Clinic Manager, Medical Director, and President; MA/PSS/Case Mgr= Medical Assistant, Peer Support Specialist, & non-RN case managers.
Above: The largest percentage of interviewed staff were medical providers, followed by behavioral health clinicians. Interviews were fairly evenly distributed between medical providers (34%), behavioral health clinicians (26%), and ancillary or administrative staff (40%).

Figure 3 – Average Number of Patients Seen Per Day, By Clinic



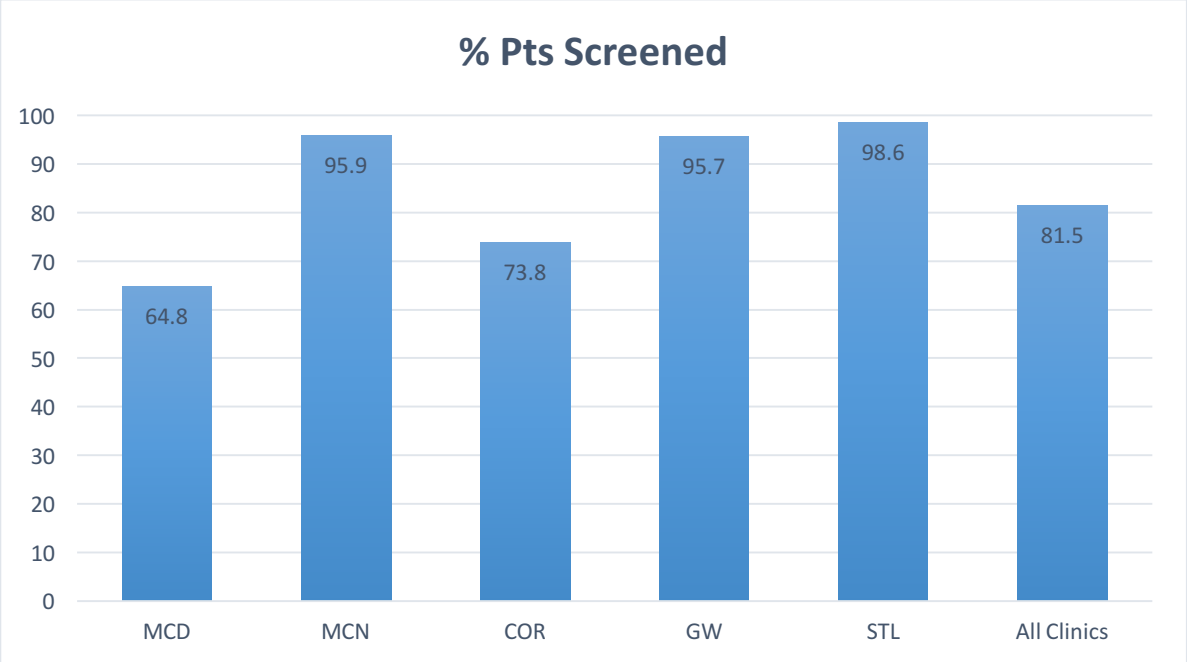
Above: During data collection, providers at MCD and MCN saw the most patients per day. Providers at Gateway, St. Luke's, and City of Refuge saw the least. This mostly correlates with the number of providers on site for each clinic. City of Refuge generally had two medical providers on-site, compared to one provider at Gateway, and one at St. Luke's.

Figure 4 – Comparison of Male and Female Patients, By Clinic



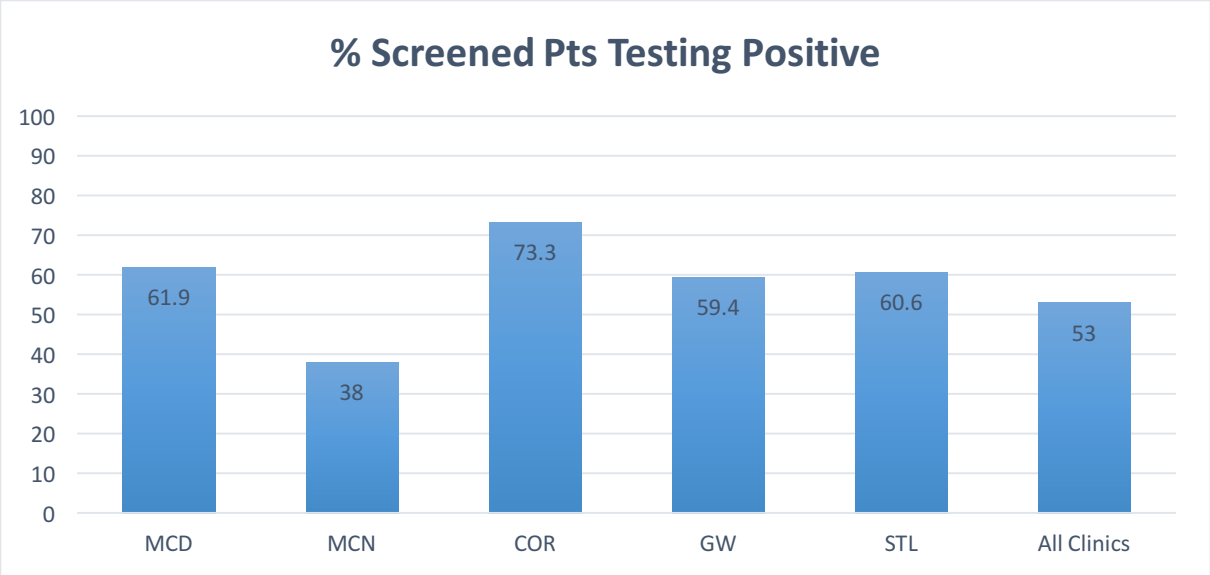
Above: The vast majority of patients at COR and MCN were female, while males accounted for most of the patients at Gateway and MCD. Only St. Luke's had a relatively even mix of male and female patients.

Figure 5 – Percentage of Eligible Patients Receiving a BH Screen, By Clinic



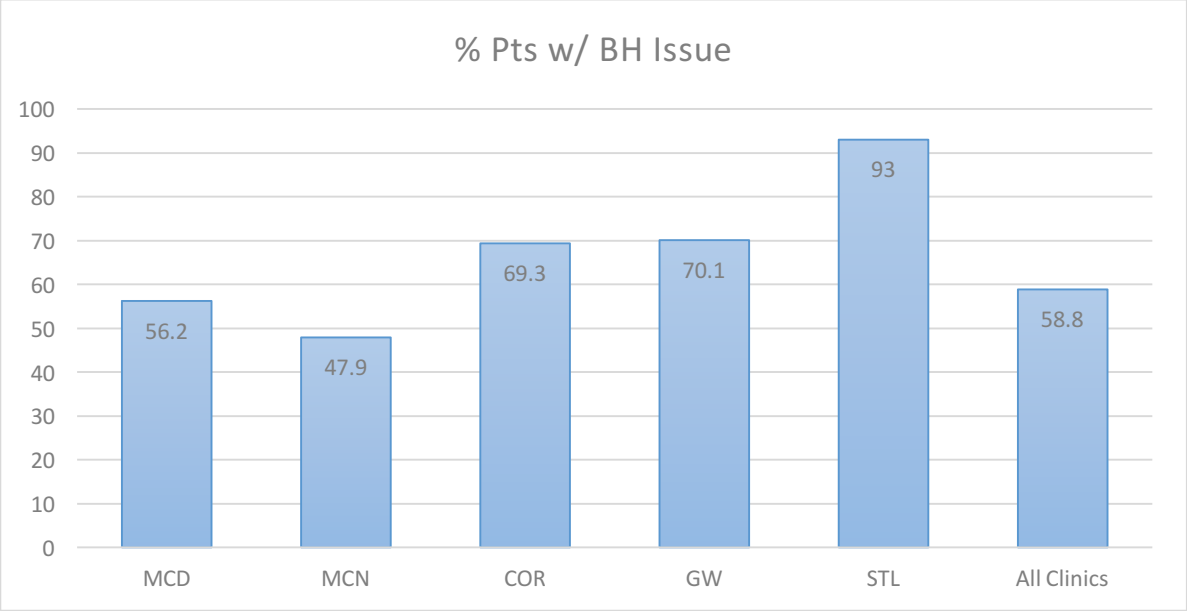
Above: Unclear clinic processes at COR likely accounts for the clinic's low screening rate. The relatively low rate at MCD is likely due to a difference in documenting BH issues for patient of Early Intervention Care (EIC). Smaller clinic sizes, clear clinic processes, and more controlled patient flow may explain the higher screening rates at MCN, Gateway, and St. Luke's.

Figure 6 – Percentage of Screened Patients Testing Positive, By Clinic



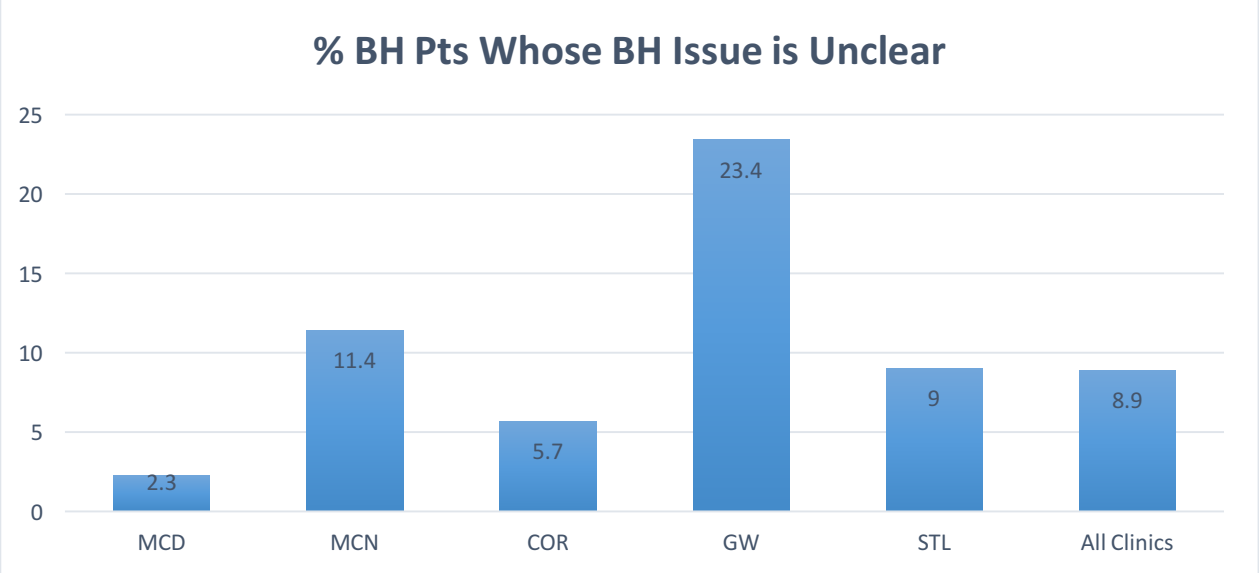
Above: Despite relatively low screening rates, screening at COR yields the highest percentage of patients with positive behavioral health screens. This suggests the actual prevalence of patients with behavioral health issues is higher than estimated. Cultural stigma and resistance to behavioral health likely explains the relatively low prevalence of positive screens at MCN.

Figure 7 – Percentage of All Patients with Documented Evidence of a BH Issue, By Clinic



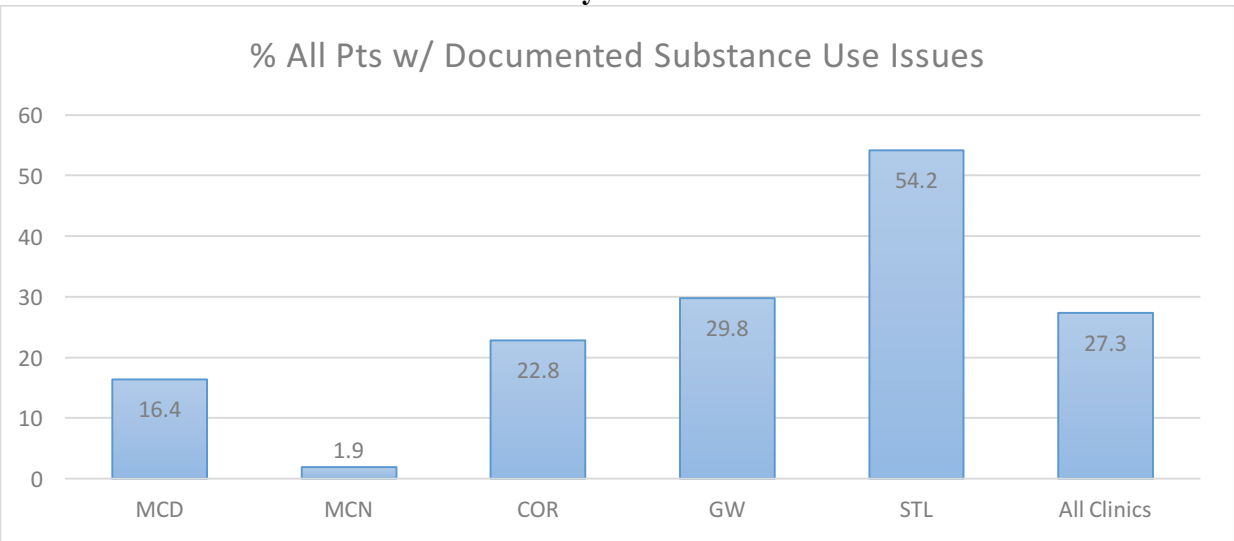
Above: The author determined patients had evidence of a behavioral health issue if their charts included on documentation of: a psychiatric diagnosis; a self-reported history of behavioral health issues; present or past substance use that obviously interfered with the patient's ability to; a positive behavioral health screen; obvious behavioral health symptoms, such as hearing voices; a self-report of needing a specific medication for behavioral health reasons; a hospitalization or Emergency Room visit for behavioral health reasons; a positive MDQ or PTSD score; or a PHQ-9 or GAD-7 score ≥8.

Figure 8 – Percentage of BH Patients Whose BH Issue is Unclear Per Documentation



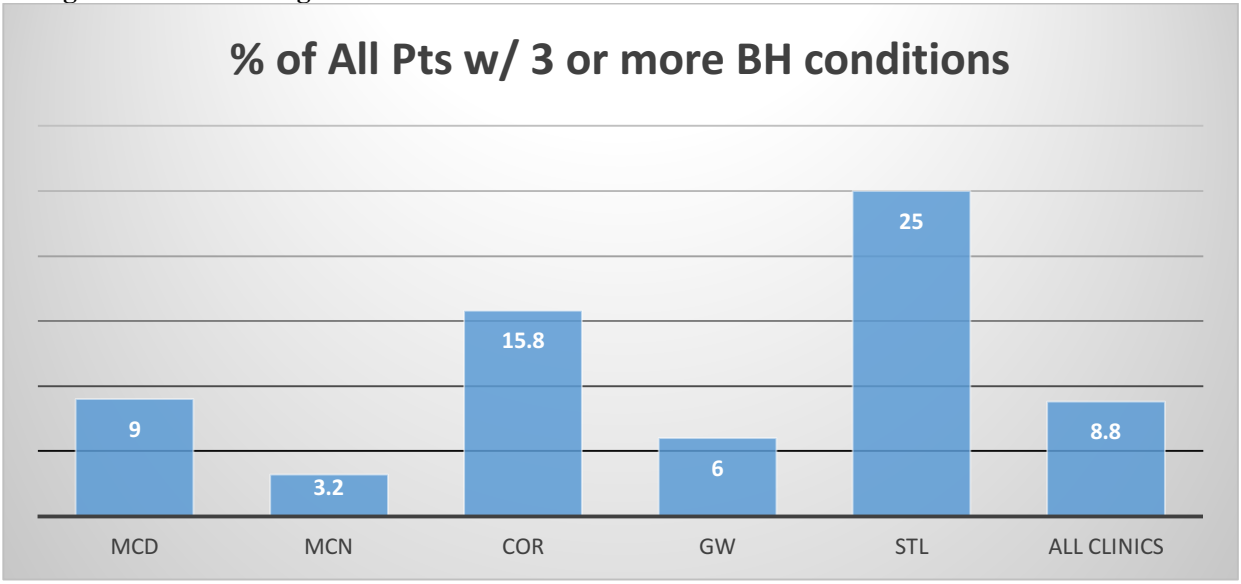
Above: Gateway had the highest percentage of BH patients whose BH issue was unclear, according to documentation. For most cases, unclear documentation meant the patient screened positive, but there was no psychiatric diagnosis, and follow-up PHQ-9 and GAD-7 scores were less than 8, and the MDQ scored negative.

Figure 9 – Percentage of All Patients with Documented Evidence of a Substance Use Issue, By Clinic



Above: The prevalence of patients with documented substance use issues is remarkably higher at St. Luke's compared to other clinics. This is likely explained by the clinic's proximity to a rehabilitation center and homeless shelter reputed for high drug use. Almost no MCN patients have evidence of a substance use issue documented, suggesting either minimal substance use by patients, low-reporting of substance use issues, patients not being asked about substance use issues, low documentation of substance use issues, or a combination of these reasons.

Figure 10 – Percentage of All Patients with Documented Evidence of 3 or More BH Conditions

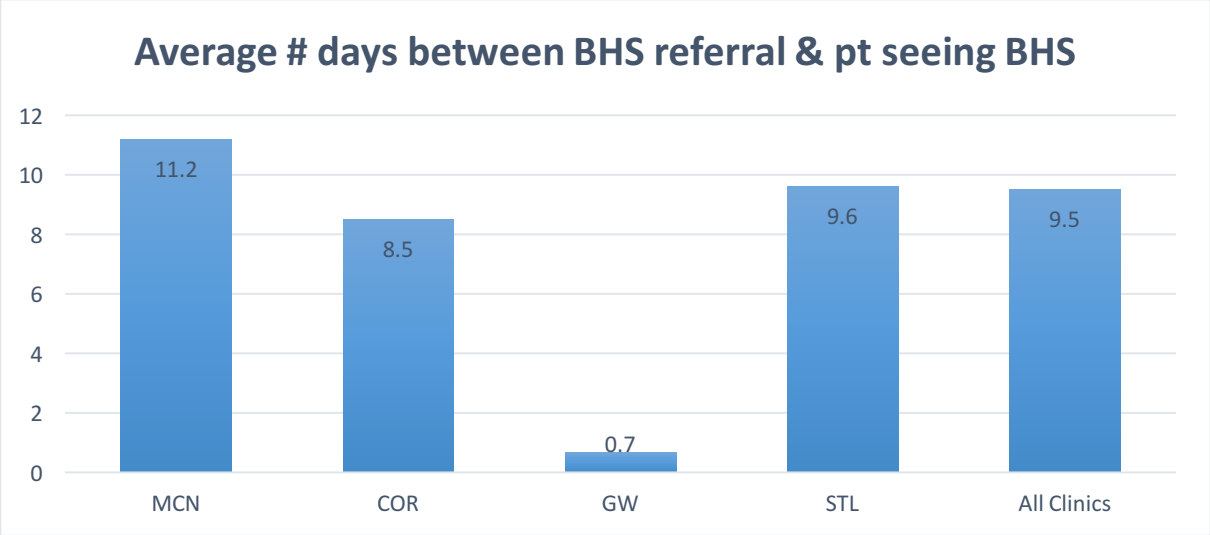


Above: One-quarter of all St. Luke's patients have documented evidence of three or more behavioral health conditions. This is greater than double the average seen across all clinics. Thorough documentation, a psychiatrically complex patient population, and the high prevalence of substance use issues are possible explanations for this disparity.

Table 4: BH Screens & Documented BH Issues, by Clinic

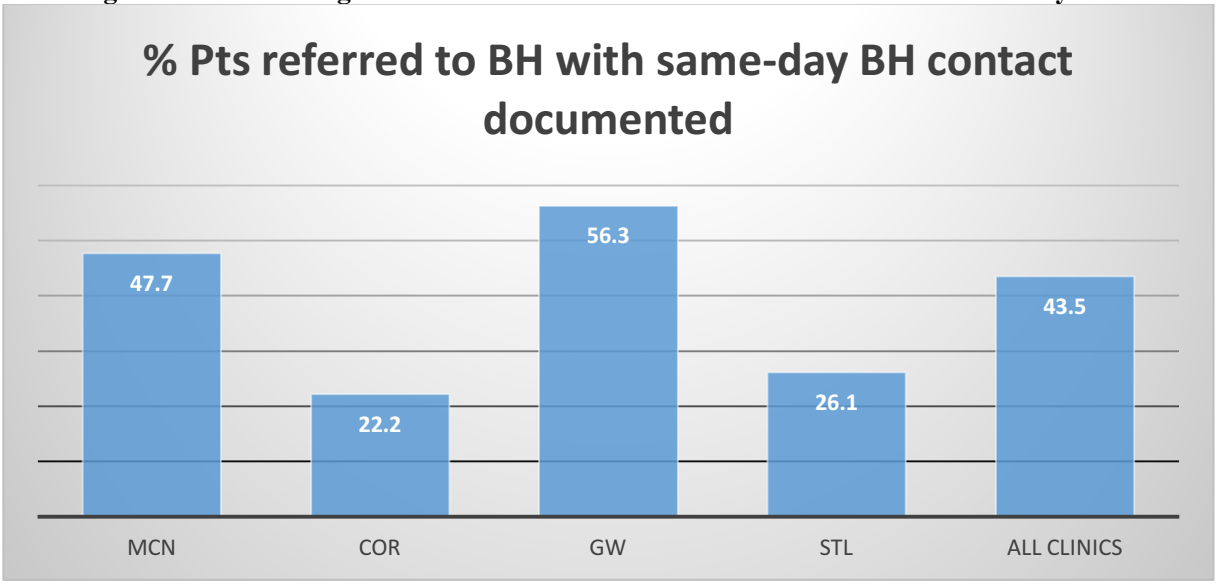
	Decatur	North	City of Refuge	Gateway	St. Luke's	All Clinics
% Pts Screened for BH (% Needing Screen)	64.8 (35.2)	95.9 (4.1)	73.8 (26.2)	95.7 (4.3)	98.6 (1.4)	81.5 (18.5)
%Screened Screening (+) (%Screened Screening (-)	61.9 (38.1)	38 (62)	73.3 (26.7)	59.4 (40.6)	60.6 (39.4)	53 (47)
% BH Issue % No BH Issue (% unclear/unknown)	56.2 14.7 (29.1)	47.9 44.4 (7.7)	69.3 7.9 (22.8)	70.1 23.9 (6)	93 7 (0)	58.8 24.2 (17)
% All pts w/ documented DEPRESSION	33.9	29	41.6	37.3	57	34.9
% BH pts w/ documented DEPRESSION	60.3	60.4	60	52.1	61.2	61
% All pts w/ documented ANXIETY	17.2	16.7	28.7	17.9	29.2	19
% BH pts w/ documented ANXIETY	30.7	41.6	41.4	25.5	31.3	32.9
% All pts w/ documented SUBSTANCE USE	16.4	1.9	22.8	29.8	54.2	27.3
% BH pts w/ documented SUBSTANCE USE	29	4	32.9	20.8	58	15.6
% All Pts BH Issue=Unclear	4	5.5	4	16.4	8.3	5.1
% BH Pts BH Issue=Unclear	2.3	11.4	5.7	23.4	9	8.9
% All pts w/ 2 BH issues	16.9	11.6	37	34	33.3	16.8
% BH pts w/ exactly 2 BH issues	30.2	23.5	25.7	23.9	35.8	29.5
% All pts w/ ≥3 BH issues	9	3.2	15.8	6	25	8.8
% BH pts w/ ≥3 BH issues	16.1	6.7	22.9	8.5	26.9	15.5

Figure 11 – Average Estimated Time Lapse Between a BH Referral & the Patient Seeing a BHS



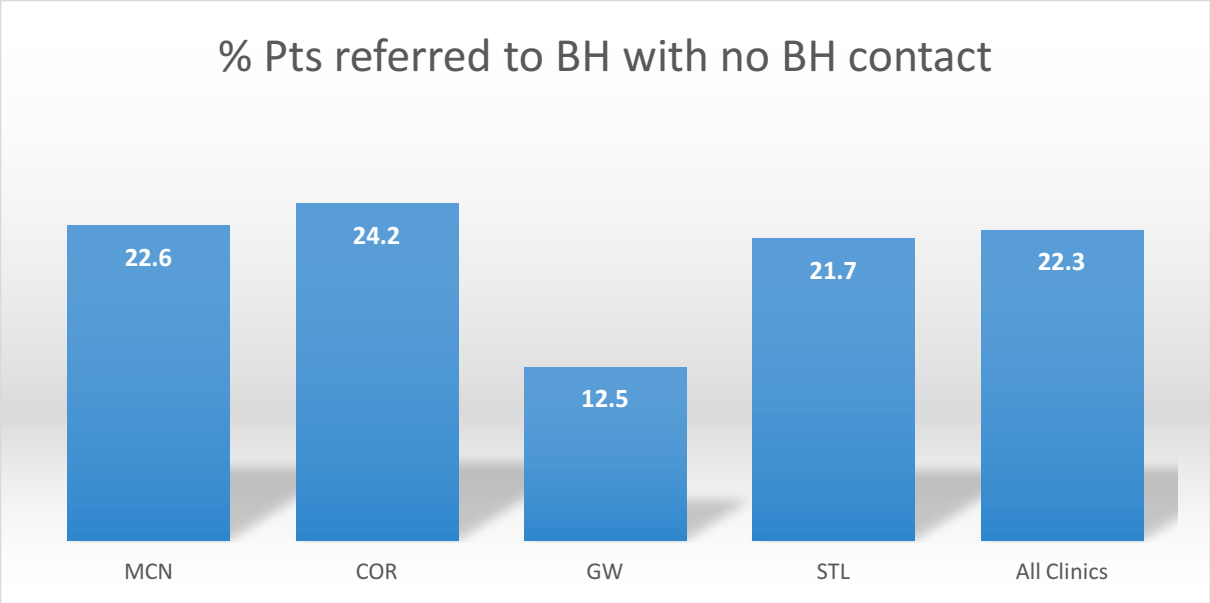
Above: Due to unclear documentation, the average estimated number of days between a BH referral and the patient seeing a BHS is based on a very small sample of patients. MCN shows the longest gap between a referral and a patient being seen. This is likely explained by patient resistance to being seen by a BHS and the relatively large sample size of patients with clearly documented referrals to behavioral health. The extremely low time gap for referrals at Gateway is probably due to the high percentage of referred patients seen by the BHS on the same day.

Figure 12 – Percentage of Patients Referred to BH with Documented Same-Day Contact



Above: MCN and Gateway, two clinics where the BHS and medical providers share workspace, have higher percentage of patient referred to behavioral health with same-day contact with the BHS. By comparison, the BHS and medical providers have separate workspaces at COR and St. Luke's, where the prevalence of same-day contact with the BHS is relatively low. Data was not available for estimates at MCD.

Figure 13 – Percentage of Patients Referred to BH with No Documented Contact with BH



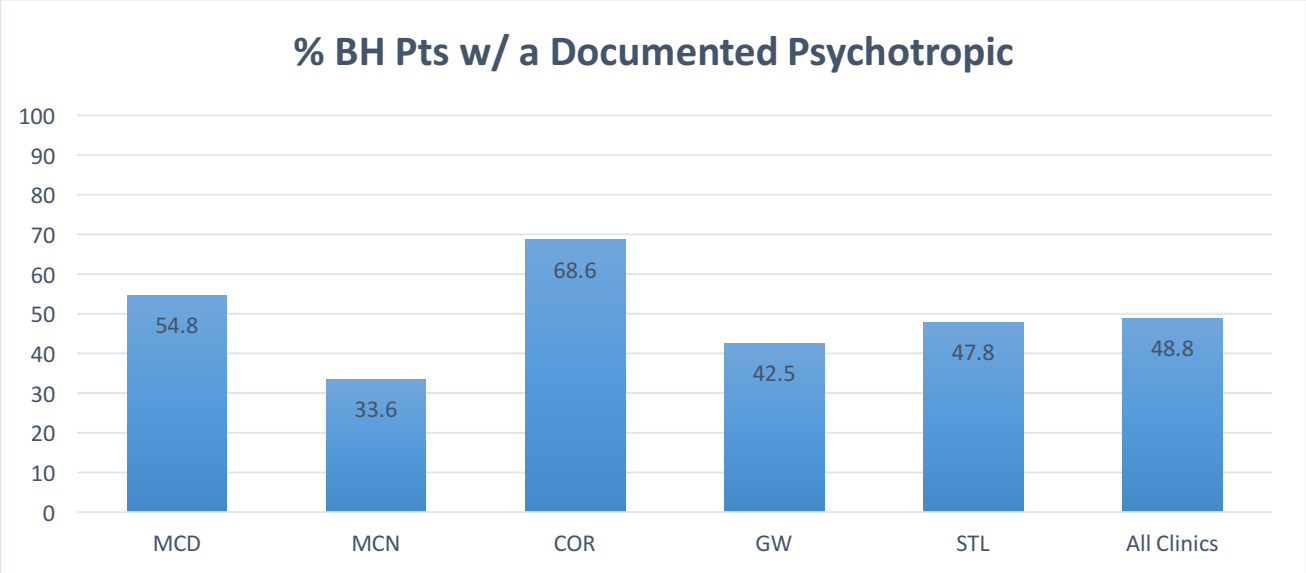
Above: The percentage of patients referred to behavioral health with no documented contact with the BHS was fairly consistent across clinics, with the exception of Gateway. Gateway's low rate of referred patients with no BH contact may partially be explained by the controlled clinic flow, shared workspace, and close collaboration between the BHS and medical provider. Despite a shared workspace, the percentage of referred patient with no BH contact at MCN was similar to clinics where the BHS and medical providers don't share a workspace. This may be due to patient resistance to being seen and the limited availability of the clinic's only BHS. Data was not available for estimates at MCD.

Table 5: Documented BH Referrals & Time to Being Seen, by Clinic

	MCD	MCN	COR	Gateway	St. Luke's	All Clinics
# BH pts seen by PCP with clearly documented referral to BH *Excludes pts with referral documented during data collection*	**Data n/a**	**84**	**33**	**16**	**23**	**184**
Average # days between BHS referral & pt seeing BHS (range)* *Excludes pts with no visit/contact documented by BHS prior to data collection*	**Data n/a**	**11.2** **(0 - 150)**	**21** **(0 - 180)** **8.5** **(0 - 49)**	**3.5** **(0 - 40)** **0.7** **(0 - 5)**	**24.1** **(0 - 270)** **9.6** **(0 - 42)**	**15.5** **(0 - 270)** **13.7** **(0 - 180)**
% Pts referred to BH with no BH contact documented on EHR*	**Data n/a**	**22.6**	**24.2**	**12.5**	**21.7**	**22.3**
% Pts referred to BH with same-day BH contact documented on EHR	**Data n/a**	**47.7**	**22.2**	**56.3**	**26.1**	**43.5**
% established BH Pts seen by PCP for whom author was unable to calculate time from BH referral to being seen*	**Data n/a**	**2.3**	**26.7**	**30.4**	**15.6**	**14.4**

*Excludes new referrals and patients whose initial referral (if any) was not clearly documented in EHR.

Figure 14 – Percentage of BH Patients with a Documented Psychotropic

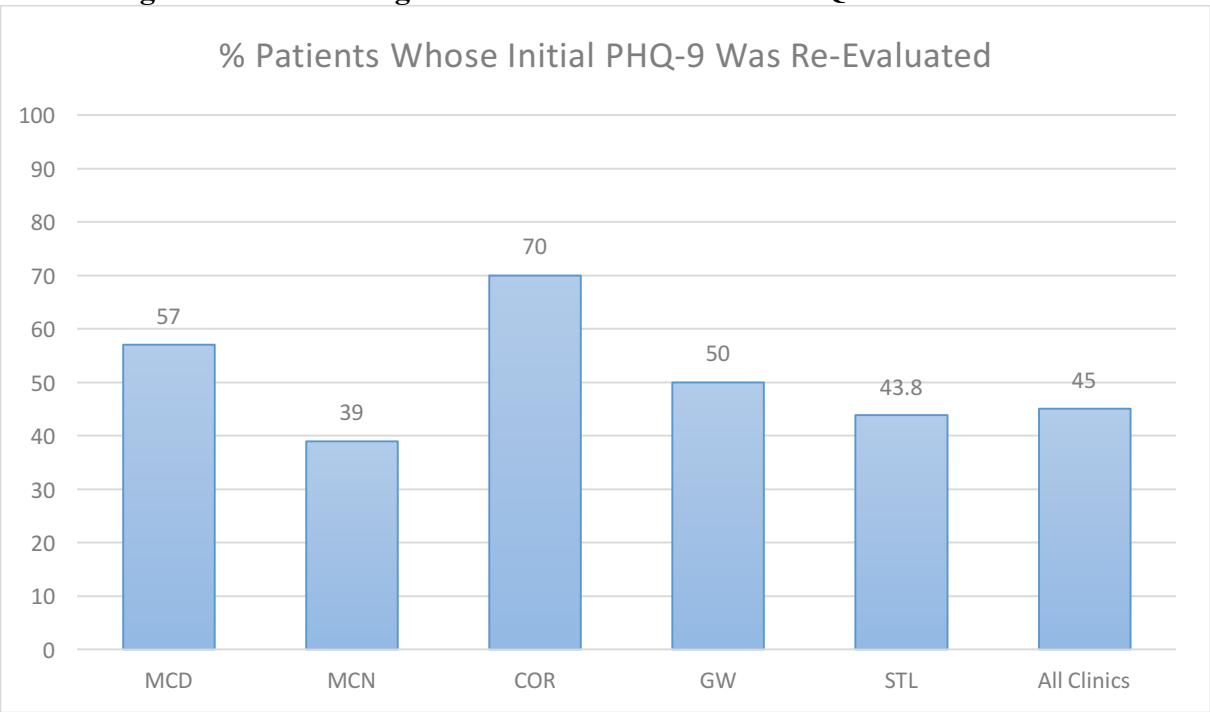


Above: The relatively low rate of BH patients at MCN with a documented psychotropic is likely explained by patient resistance to psychiatric therapy. A higher rate seen at COR may be due to BH patients seen at this location for a longer duration and the occasional on-site presence of a psychiatrist and psychiatric NP.

Table 6: Psychotropic Medications & BH Management, by Clinic

	Decatur	North	City of Refuge	Gateway	St. Luke's	All Clinics
% BH pts with psychotropic documented on EHR med list	**54.8**	**33.6**	**68.6**	**42.5**	**47.8**	**48.8**
% BH pts with exactly 2 documented psychotropics	**20.1**	**8.7**	**24.3**	**17**	**17.9**	**17.4**
% BH pts with 3 or more documented psychotropics	**15.6**	**3.3**	**20**	**6.4**	**14.9**	**12.2**
% BH pts documented as being treated by an outside provider, including rehab facility	**6.4**	**8.6**	**8.5**	**2.7**	**32.7**	**11.2**

Figure 15 – Percentage of Patients Whose Initial PHQ-9 Was Re-Evaluated



Above: The percentage of patients re-evaluated after an initial PHQ-9 score of ≥8 is highest at COR. This is likely due to patients who attend groups being screened at each visit and the psychiatrist and psychiatric NP screening patients with each encounter. Lower rates may reflect patients not attending follow-up appointments or being lost to follow up.

Table 7: PHQ-9 Score Trends, by Clinic

	Decatur	North	City of Refuge	Gateway	St. Luke's	All Clinics
#Pts w/ documented PHQ-9 scores (#Pts w/ multiple PHQ-9 scores)	**79 (45)**	**128 (50)**	**40 (28)**	**28 (14)**	**128 (56)**	**307 (138)**
% of Pts w/ PHQ-9 scores with a f/u PHQ-9 score documented	**57**	**39**	**70**	**50**	**43.8**	**45**
Average initial PHQ-9 score (range)	**15.4 (0 - 27)**	**8.9 (0 - 27)**	**15.5 (1 - 27)**	**15.8 (0 - 25)**	**15.5 (0 - 27)**	**12.8 (0 - 27)**
Average most recent f/u PHQ-9 score (range)	**11.3 (0 - 26)**	**7.7 (0 - 27)**	**12.4 (0 - 27)**	**12 (2 - 25)**	**9.5 (0 - 24)**	**10.2 (0 - 27)**
% of pts w/ documented serial PHQ-9 scores whose f/u PHQ-9 scores improved ≥5 points	**40.9**	**51.2**	**53.6**	**42.9**	**63.6**	**48.6**
% of pts w/ documented serial PHQ-9 scores whose f/u PHQ-9 scores are getting worse by ≥5 points	**4.4**	**14.6**	**7.1**	**28.6**	**9.1**	**10.9**
% of pts w/ documented serial PHQ-9 scores whose f/u PHQ-9 scores are staying about the same (+/-4)	**54.5**	**34.1**	**39.3**	**28.6**	**27.3**	**40.6**
Average difference in score between initial and most recently documented f/u PHQ-9 (range)	**-4.5 (-16 - +6)**	**-4.4 (-17 – +16)**	**-5.9 (-24 - +11)**	**-3.5 (-20 - +12)**	**-7.6 (-19 - +6)**	**-5.5 (-24 - +16)**
Average length of time between initial and most recently documented f/u PHQ-9 (range)	**154.2 (7 - 120)**	**148.3 (7 - 390)**	**209.6 (14 - 420)**	**157.4 (7 - 360)**	**173.2 (37 - 390)**	**165.5 (7 - 420)**

Appendix 1: Key Informant Interview Guide

Good morning. My name is a Mark, a student at the Rollins School of Public Health at Emory. For my summer practicum project, I am evaluating Mercy Care's Integrated Behavioral Health (IBH) Program. The evaluation entails interviewing clinicians from each of the five fixed-location sites about their perceptions and experiences of IBH at their health centers. I will also assess various metrics in the Electronic Health Record (EHR). You were selected to be interviewed because of your role at Mercy Care and your willingness to allow me to shadow you today. I want to be clear that you are not being evaluated. The purpose of this evaluation is to identify what is going well with IBH and what can be improved. While the results will be shared with Mercy Care, nothing you say or do today will be linked directly back to you. I will compare observations and our discussion today with what is observed and discussed with other clinicians and at other sites. All of this information will be used to create a general overview of Mercy Care's IBH right now, what is going well, and what can be improved. As a clinician working within IBH, your insight is critical for understanding how the program works and how it can improve.

Participation in the interview is completely voluntary. Your responses are appreciated, but you're not obligated to answer every question. You may skip any questions you'd prefer not to answer. With your permission, I'd like to record our discussion so that I can pay full attention to what you're saying without scribbling notes. After our interview, I will listen to the recording, write down everything stated, remove any identifying information such as names, and permanently delete the recording. Your name or other identifying information will not be linked to the transcription. If I quote anything you say, the quote would be placed in context with the question I asked leading up to the quote and a summary of what was discussed prior to the statement. That quote will not have any identifying information, and would be used as an example of a common theme mentioned by several interviewees, or as something that contradicted what other interviewees stated.

What questions do you have about the interview?

Do I have your permission to record our conversation?

I have list of questions I'd like us to focus on, but you're free to bring up any topics you feel demonstrate what is going well and what can be improved with Mercy Care's IBH.

Background
First, I'd like to learn a little about your background as a clinician. Remember, you are not being evaluated. This is just to provide me with some background about the education and training of Mercy Care clinicians.

1-How long have you worked at Mercy Care?

2-Could you tell me about any education or training you've received in treating mental illness?
Probes : As a student?
In your career?

IBH Processes at Mercy Care
Next, I'd like to hear your perceptions regarding IBH processes at Mercy Care.

3- In your experience, how have IBH processes changed at Mercy Care over time?

Probes :
What changes have you seen in IBH processes?
How have processes gotten better or worse?

4-For this question, think about some of the ways clinicians communicate about patient issues within IBH. Can you think of some ways patients are affected by communication amongst clinicians?

Probes :
What are some examples of how communication among staff helped a patient?
What are some examples of how miscommunication led to a missed opportunity to help a patient?

Experience Treating Mercy Care Patients with Mental Health Issues
For these next questions, I'd like to hear about your experiences treating patients with mental health issues within IBH.

5-Can you describe some examples of patients you'd expect medical providers to treat on their own without consultation or referral?

Probes :
What experiences or training would help them treat thsee patient?

6-Can you describe some examples of patients seen in primary care whose mental health issues did not improve with treatment?

Probes :
Examples of the patient's behavioral health issues?
Examples of patients where the behavioral health treatment plan was altered?

7-Can you describe some of the times when primary care consulted a psychiatrist?

Probes :
Examples of patients primary care was able to treat after consulting?
Examples of patients primary care still did not feel comfortable treating after consulting?
Any problems with the consultation process?

Any disagreements during consultations?
8-Can you describe some examples of patients you've referred to psychiatry?
Probes :
What are some examples of patient issues that led to the referral?
How was the referral process?
What happened with the patients?

Improving IBH at Mercy Care
These last few questions focus on your perspective about what's going well with IBH and how it can improve.

9- From your perspective, what are some things that can be done to improve IBH at Mercy Care?

10-Overall, what is going well with IBH at Mercy Care?

11-If you were training someone to replace you, what advice would you that person about treating patients with mental health issues through IBH?

12-Is there anything you'd like to discuss that we haven't already?

Thank you for your willingness to participate and for all that information. Your insights are necessary for writing an accurate depiction of IBH at Mercy Care. If you think of any questions, or anything you'd like to add, please feel free to let me know in person the next time you see me, or by phone or over e-mail. I'll leave you with my contact information.

Appendix 2: Additional Recommendations

Recommendations are discussed in greater detail and are divided by topic below.

I. IBH Orientation & Training

1. Develop a formal IBH-specific orientation for new employees. Consider using learning modules from the University of Washington AIMS Center. Include a mock walk-through or skit demonstrating the clinic flow of IBH.
2. During orientation and after, offer providers the opportunity to shadow other providers or request additional education or training to help them feel more comfortable.
3. Increase ongoing IBH-specific training for clinicians, particularly medical providers. Consider developing decision trees or other protocols to guide BHSs and providers on when to start a medication, when to adjust the dose, when to consult psychiatry, and when to refer for specialty psychiatric services. Be prepared to refer providers to resources for self-education. Provide tools such as those available on the AIMS Center website to assist with prescription of psychotropics.
4. Clearly communicate the expectations of medical providers operating under Mercy Care's IBH model. Specify which conditions primary care providers should be able to manage with BHS consultation, which conditions they should manage with psychiatric consultation, and which warrant a referral.
5. Allow all staff the opportunity to learn how to manage 1013s. Consider doing mock drills. After each 1013, allow the opportunity for formal debriefings to identify what went well and what can be improved.
6. If not done already and deemed appropriate, consider offering mental health education to the chaplain, with the goal of facilitating behavioral health referrals and empowering the

chaplain with evidence-based therapies such as motivational interviewing and cognitive behavioral therapy.

II. IBH Staffing

7. Increase psychiatric specialists. If possible, consider dedicating one psychiatric specialist to managing consultation and provider education with the goal that this may decrease the need for psychiatric referrals.
8. To the extent possible, ensure each clinic has at least one BHS on-site at any time providers see patients. BHSs should be considered part of the clinical team that is necessary for patients to be seen. Missing a BHS might be perceived equally as disruptive as missing a medical provider, MA, or MOS.
9. Increase the number of substance abuse counselors. When expanding substance abuse counseling services, prioritize the population seen at St. Luke's. Literature suggests Latino patients such as those served by MCN are more likely to seek substance use services when they're offered (Nam, Matejkowski, & Lee 2016). Lack of a SAC at MCN may account for the extremely low prevalence of substance use issues observed in that population during data collection.

III. IBH Scheduling

10. To the extent possible, consider limiting most BHS follow-up therapy sessions to 30 minutes, with the goal being to promote BHS availability, particularly on walk-in days. Encourage scheduling of follow-up appointments during typically low-volume clinic times. BHSs may advise further.

IV. IBH Screening

11. At clinics with lower screening rates, consider adopting successful screening processes implemented by clinics with higher screening rates.
12. Consider processes to increase serial testing of patients previously scoring ≥10 on the GAD-7 or PHQ-9.
13. Empower all staff to administer PHQ-9 or GAD-7 screening tools to any patient who seems anxious or depressed.

V. EHR Use & Tracking BH Patients

14. Continue exploring options for developing and utilizing registries to track BH patients.
15. Once a registry is developed and patients are tracked, assess common reasons patients miss become lost to follow-up. Use this information to anticipate which patients are at most risk for falling out care.
16. Continue exploring options for tracking patient outcomes and aggregating data at the clinic and organizational levels.
17. In collaboration with Grady, explore options for tracking shared patients who frequently utilize ED services or are otherwise high-utilizers of health services. To the extent possible, explore options for referring these patients to case management.

VI. Patient Engagement & Stigma Reduction

18. Consider campaigns to de-stigmatize mental illness. Specifically, campaigns should target Hispanic and African-American patients. Campaigns can include information about signs and symptoms of common mental health conditions, and how IBH might help.
19. Continue introducing the BHS in neutral terms that are less threatening to patients resistant to BH services.

20. When possible, consider increasing the number of peer support specialists.
21. Expand efforts to incorporate behavioral health information into disease-specific education groups such as those for diabetes.
22. Consider expanding chaplain presence across clinics and increasing the number of chaplains available to speak with patients.
23. For future IBH evaluations, consider interviewing IBH patients regarding their experiences being treated by the IBH model.
24. With regard to MyChart, consider partnering with an organization such as the public library or an individual that can offer computer literacy training for adults.

VII. Interdisciplinary Collaboration in IBH

25. At each clinic, consider using morning huddles as an opportunity to review the day's patients and to anticipate issues that might arise. Ensure staff huddles consistently, and encourage the presence of all staff members.
26. At each clinic, to promote warm handoffs, consider how to alter clinic layout or workstations so that BHSs and providers share work space.
27. Designate a time each week for behavioral health, medical staff, and case management to discuss shared caseloads of difficult to manage patients.
28. With the acquisition of an on-site pharmacy at MCD, explore options for involving pharmacists in consultation regarding patient care, and in discussing difficult to manage patients.
29. Consider how to better utilize nurses and case managers in the IBH model. For example, nurses might educate BHSs on common medical issues such as diabetes and hypertension and assist BHSs in managing patients with medical and psychiatric comorbidities. Case

managers might be more involved in consulting BHSs, psychiatry, and medical providers about social issues impacting a patient's health status. Further interviewing or surveying current staff may help leadership consider how to best utilize nurses and case managers in IBH.

30. Many staff are not aware of the roles and duties of their colleagues. If possible, develop and continually update a staff registry that clinicians can reference for referrals for case management and support services. Include photo ID, cell phone number, e-mail address, services the staff person provides for patients, and situations that warrant a referral to that person.
31. To promote collaboration and mutual respect, consider allowing staff the opportunity to spend a few hours each year or quarter shadowing a staff person of a separate discipline. For example, a medical provider might choose to shadow a psychiatric specialist. A BHS might choose to shadow a nurse. A MOS might choose to shadow a MA. A MA might choose to shadow a BHS.

VIII. Medication Management

32. Consider developing a protocol or guidelines for the management of psychotropic medications of new patients that providers do not feel comfortable prescribing. For patients whose psychotropics were initiated by a Mercy Care psychiatric specialist, develop a protocol or guidelines to show medical providers which (if any) psychotropics may be refilled by the primary care provider, and which should not.
33. For medical patients, consider developing standing orders, protocols, or guidelines so that patients who only get a one-month supply of medicines can get their blood pressure,

diabetes, or other medications refilled after a brief nursing visit in triage without seeing a medical provider.

34. Consider developing a protocol or guidelines for performing a medication reconciliation at each patient visit to ensure medication lists are accurate.

IX. Walk-Ins, Registration, & Scheduling Processes

35. Re-evaluate the need for patients to see a medical provider before meeting with a BHS. Solicit staff feedback on this matter as it relates to facilitating or preventing patient access to BH services.
36. Continue experimenting with various scheduling models to reduce or eliminate the burdens on staff and patients associated with walk-in days. Consider open-access scheduling.
37. Consider having a triage nurse assist with patient scheduling in the mornings at MCD, particularly on walk-in days. The nurse can do a preliminary assessment of each patient, determining the reason for their visit, and ensuring patients are seen in order of acuity, rather than time of arrival. This may prevent patients from lining up at 4:30 a.m., since time of arrival will not influence when they need to be seen. If Mercy Care pursues this approach, they should communicate it to shelters, community partners, and the patient population as early as possible to prevent patients from waiting outside the clinic at 4:30 a.m. The nurse might also read PPDs and expedite medication refills as needed.
38. Consider having a patient navigator on-site for walk-in days to ensure patients have the appropriate paperwork. Navigators can ensure patients intend to see specialists (e.g. dental, ophthalmology, psychiatry) that are on-site that day. They can also assist patients

who lack the necessary paperwork before the patient arrives at the front desk. This may help expedite the registration process.

39. Ensure signage at all clinic locations clearly communicate to patients the days of the week specialty services are offered. If not done already, distribute brochures to shelters and other community partners to prevent patients from seeking specialty services on days that they're not offered.
40. Develop an automated phone system that provides patients calling the clinic after-hours with the information regarding specialty services, clinic hours, and paperwork they need to prepare for a walk-in or scheduled day at Mercy Care clinics. This may be useful for patients lacking internet access.
41. Educate all staff regarding the scheduling and registration process. Encourage suggestions for process improvement.
42. In addition to the currently administered patient satisfaction surveys, consider employing a "secret-shopper" patient who can offer feedback about clinic processes and the patient experience.

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