Evaluating Barriers to Outpatient Psychiatric Treatment: A Quality Improvement Project

Clarence Gocon

Rutgers: The State University of New Jersey School of Nursing

DNP Chair:

Dr. Barbara Caldwell

DNP Team Member(s):

Dr. Kathleen Patusky

Date of Submission:

4/23/2020

Table of Contents

Table of Contents	Error! Bookmark not defined.
Abstract	4
Evaluation of Barriers to Outpatient Treatment: A G	Quality Improvement Project6
Background and Significance	6
Needs Assessment	
Problem/Purpose Statement	
Clinical Question	
Aims and Objectives	
Review of Literature	
Framework	
Conceptual Framework	
Methodology	23
Design of Project	23
Setting	
Study Population	
Study Intervention	
Outcome Measures	
Risks/Harms/Ethics	
Recruitment	
Consent Procedure	
Subject Costs and Compensations	
Project Timeline	
Resources	
Needs/Economic Considerations (Project Budget.	
Results	
Recommendations	
Discussion of Limitations	
Implications for Clinical Practice	
Implications for Healthcare Policy	
Implications for Quality/Safety	
Implications for Education	
Plans for Future Scholarship	
Conclusion	
Reference	
Appendix A	
Appendix B	
Appendix C	
Appendix D	
Appendix E	
Appendix F	
Appendix G	
Appendix H	
Appendix I	74

Appendix J	75
Appendix K	
Appendix L	
Appendix M	
Appendix N	
Appendix O	
Appendix P	
Appendix Q	
Appendix R	
Appendix S	
Appendix T	
Appendix U	
Appendix V	
Appendix W	
Appendix X	
Appendix Y	
Appendix Z	
11	

Alcohol and substance use have been a contributing factor to economic and health issues affecting different parts of the world. Alcohol and substance use affect both the individual using the substances as well those other people around the individual. While treatment options have been available for alcohol and illicit substance users, an issue that continues to affect patient outcomes is treatment retention rates in outpatient settings. Literature has shown a large number of clients who begin treatment will stop treatment before its completion. Evaluating barriers and finding methods to improve outpatient rates can help to improve overall patient outcomes. The clinical question being asked is What are the changes to outpatient treatment (I) that can help increase retention rates (O) for clients who identify as using alcohol and/or illicit substances (P)? This project sought to identify clients that potentially use alcohol and/or illicit substance in order to find out what contributes to non-compliance in outpatient treatment. This was done through a retrospective chart review of 227 charts and 25 structured interviews of clients in the program. The review concluded that of the 227 charts, only 39% completed treatment. Of the remaining cases, 46% were closed out due to an unknown reason, and less than 1% had an identifiable barrier to attending treatment. The barriers were related to scheduling conflicts and transportation issues. Upon completion of the chart review, a structured interview was completed on 20 individuals that identified barriers to treatment. The results of the interviews noted 10(50%) individuals with issues regarding transportation, 4 (20%) individuals having financial issues, 5 (25%) individuals with issues with the treatment team, 1(5%) individual with schedule related issues, 2(10%)individuals reporting medication related issues, 1 (5%) individual reporting it made the

4

person feel like it was a sign of weakness, 1 (5%) individual reporting a depressed mood and low self-esteem, and 1 (5%) individual not having any interest in stopping using his or her drug of choice. The total results were greater than 100% because certain individuals noted multiple barriers to treatment. Based on the results of the chart review and structured interview, possible recommendations were identified that can help to decrease the barriers to attending treatment. Recommendations included adjustments in appointment availability, transportation options, such as van service or taxi service, staff education, and treatment of underlying depressed mood were included. Moving forward, it will be important to use current knowledge to focus on implementing these or other recommendation in order to further assist clients in achieving a better patient outcome.

Keywords: Alcohol use, Substance use, Barriers to Treatment, quality improvement, outpatient treatment

Evaluation of Barriers to Outpatient Treatment: A Quality Improvement Project

Alcohol and substance use have been an ongoing issue that has affected both individuals and families alike. Treatment options are available within New Jersey, From outpatient to inpatient services, there are different levels of care available to individuals (New Jersey Department of Human Services, 2019). However, there has been a need to make sure clients start and continue to go to their treatment program in order to achieve positive outcomes. The plan and objective of this project was to assess the barriers to outpatient treatment through a retrospective chart review and a structured interview. After the initial assessment, a set of recommendations based on the assessment, may impact the current retention treatment rates.

Background and Significance

Alcohol and substance abusers both have a major impact in society (NIAA, 2018r). The use of alcohol and illicit substances can play a role on an individual's physical and mental capacity. It not only affects the user, but all those around the user as well. From motor vehicle accidents due to loss of inhibition from alcohol ranging to disease transmission via sharing needles (NIAA, 2018), there are vast concerns regarding the use of alcohol and illicit substances.

According to the American Academy of Pediatrics, car accidents are the "leading cause of death among young people in the United States" (2017, p.2). Of the 84,756 car accidents in the article's study period, 28% were alcohol related. Aside from car accidents in young people, alcohol has a broader reach. According to the NIAA (2018), alcohol use is associated with a vast array of health-related concerns including blood pressure problems, strokes, abnormal heart rhythms, liver cirrhosis, alcoholic hepatitis,

mouth cancer, throat cancer, breast cancer, and other negative effects on the body. The statistics demonstrate the gravity of the epidemic, as there are about 88,000 people who die annually from alcohol related problems (NIAA, 2018).

Needle sharing is another potential risk related to the use of illicit substances. According to the CDC, "About 1 in 10 new HIV diagnoses in the United States are attributed to injection drug use or male-to-male sexual contact and injection drug use" (2018, para.1). That is a substantial statistic since the National Institute on Drug Abuse (2015) stated that in 2013 a total of 24.6 million American ages 12 or older had reported using an illicit drug within the previous month of being asked. Based on those two statistics, there could potentially be more than 2 million new cases of HIV in a year due to needle sharing from illicit drug use.

The data also shows that alcohol and illicit substance use places a major strain on the healthcare industry. According to NIAA, in 2010 alone, alcohol use caused the United States \$249 billion from medical expenses, lost wages, and other factors. Overall, according to the National Institute on Drug Abuse, tobacco, alcohol, and drugs cost the United States over \$740 billion a year from "crime, lost work productivity, and health care" (NIDA, 2018, para.2). The negative effects of alcohol and illicit drug use continue to present reasons why it is important to encourage people to seek treatment and decrease the burden on the United States economy.

Statistics also demonstrate that there is a disparity between alcohol and illicit substance use and those seeking treatment. According to the National Institute on Drug Abuse, "in 2013, an estimated 22.7 million Americans (8.6 percent) needed treatment for a problem related to drugs or alcohol, but only about 2.5 million people (0.9 percent) received treatment at a specialty facility" (2015, para.17). There are significantly more individuals who need care in comparison to those who seek it. Treatment options are available in many places. According to the New Jersey Department of Human Services of Mental Health and Addiction Services (2017), there were 76,509 inpatient and outpatient related admissions for substance related treatment in 2016. Of those admissions, more than 54,000 admissions accounted for some form of outpatient related treatment. With the continued need for treatment availability and options, there is a need to continue to evaluate barriers to treatment in order to positively affect the outcomes of much of this population.

Needs Assessment

Alcohol and substance use in the United Stated are a prevalent concern; it is widespread and affects individuals, regardless of age, sex, or race. The 2018 Substance Abuse and Mental Health Services Administration (SAMHSA) National Survey on drug use and health illustrates the prevalence of drug and alcohol use in the country. During the survey in individuals aged 12 and older, 164.8 million people surveyed reported substance use in the past month (60.2% of people surveyed) and 108.9 million people (39.8%) reported no past month substance use. Alcohol use was the most widely reported with 139.8 million people; of these, 67.1 million (48%) reported being binge alcohol users and 16.6 million reported being heavy alcohol users (11.8% of total alcohol users). There are 53.2 million people that reported drug use within the past year (19.4%) compared to those who reported no drug use within the past year (220.6 million people, 80.6%). Drug use was further classified into the following groups: marijuana (81%), prescription pain reliever misuse (18%), prescription sedative misuse (12%),

hallucinogens (10%), cocaine (10%), prescription stimulant misuse (10%), inhalants (3%), methamphetamine (3%), and heroin (1%) (SAMHSA, 2018).

According to the New Jersey Department of Human Services (2019), there were 89,629 substance treatment admissions in 2018 in the state of New Jersey. The primary drugs reported by users were heroin (44%), alcohol (28%), other opiates (6%), cocaine (5%), marijuana (12%), and other drugs (4%). The top five counties with admission rates due to substance abuse were Essex with 8,409 admissions (10%), Camden with 7,736 admissions (9%), Ocean with 7,675 admissions (9%), Monmouth with 6,923 admissions (8%), and Atlantic with 6,397 admissions (7%). Of the total admissions in 2018, 67% were male (60,118) and 33% identified as female (29,469) with 99% identified as 18 and older, 60% identified as White (non-Hispanic), 23% as Black (non-Hispanic), 16% as Hispanic, and 1% as Other. There were 65% of individuals that identified as unemployed/not in labor force. Upon discharge of their respective programs, 50% of the patients admitted completed their treatment plan, while 26% dropped out of their program, 8% needed different level of care, 4% were administratively discharged, 2% were incarcerated before completion, and 6% listed other (NJDOH, 2019).

According to the Department of Human Services, on a county level, Essex reported the highest admissions to substance use treatment programs in New Jersey. Primary substances reported were heroin (44%), alcohol (24%), marijuana (18%), cocaine (6%), other opiates (4%), and other drugs (3%). In this report, there are 61% that identified as male and 39% identified as female and all reported being age 18 and older. Sixty percent of the primary substance users were identified as Black (non-Hispanic), 21% identified as White (non-Hispanic), and 18% and 1% identified as Hispanic and other, respectively. Seventy-four percent of the primary substance users reported being unemployed/not in labor force. The top five municipalities with substance abuse admissions are Newark with 4,907 admissions (58%), East Orange with 744 admissions (9%), Irvington with 578 admissions (7%), Bloomfield with 428 admissions (5%), and Belleville with 265 admissions (3%). Based on the state and county levels, Essex county, particularly Newark, has the highest incidence of substance use and high incidence of residents admitted into treatment programs for drugs and alcohol. It was reported that 41% of discharged patients in Essex county completed treatment, 31% of individuals quit or dropped out of the program, 8% of the individuals needed a different level of care, 4% of the individuals were administratively discharged, 2% of the individuals were incarcerated during treatment, 1% of the individuals were medically discharged/deceased, and 7% of the individuals had other reasons for discharge or not completing treatment (NJDOH, 2019).

The outpatient program, where the project will take place, is in Newark, which is the city with the highest reported admissions in the state of New Jersey. Based on statistics provided by Early Intervention Support Services, in 2017, 30% of the clients enrolled in their program for the year dropped out due to loss of contact. However, it is unclear whether the percentage reflects clients who specifically reported alcohol and/or substance abuse. In terms of local assessment, the statistics provided by the program's outpatient clinic is based on the Basis-24 questionnaire (EISS, 2017). A sub-section of the Basis 24 asks 4 questions regarding a client's urge or use of alcohol and/or substances. This is the section of the Basis 24 that is being used to identify clients for the project.

Problem/Purpose Statement

The problem being evaluated is how to better improve the retention rates of outpatient clients with substance abuse problems. Clients who remain in treatment can have a better outcome than those who leave treatment early. However, retention rates among the substance abuse population has been a long-standing issue. The issues are: what are the barriers to outpatient treatment and what are the strategies needed to maintain ongoing attendance at treatment appointments?

Clinical Question

The clinical question being posed is: What are the changes to outpatient treatment (I) that can help increase retention rates (O) for clients who identify as using alcohol and/or illicit substances (P)?

Aims and Objectives

The overall aim of the project was to evaluate the barriers to outpatient treatment for alcohol and/or illicit substance use clients in order to provide recommendations to improve patient outcomes. The first objective was to complete a 250-300 chart review in a 1-month period to evaluate retention rates and any reported barriers to treatment. The second objective was to evaluate clients' perceived barriers to treatment through a structured interview of twenty-five clients over a one-month period. The last objective was to develop a list of recommendations based on the analysis of the chart review and the client interviews to improve outpatient treatment.

11

Review of Literature

There are few studies that evaluate barriers to treatment, and recommendations to improve retention rates and treatment completion in patients with alcohol and/or substance abuse. Articles regarding barriers to treatment and recommendations to improve treatment were obtained in CINAHL, Medline, PubMed, Academic Search Premier, Nursing and Allied Health Database, and ERIC. Key terms used were *barriers to treatment, alcohol, substance, alcohol abuse, substance abuse.* Date delimitations were 2013 to 2018 to maintain the most relevant and latest research. Inclusion criteria included articles with a copy of the original full-text version and geographic location restricted to the United States. Exclusion criteria included studies done in the pediatric setting, studies focused on one gender, and studies focusing on one race/ethnicity (see Appendix A and Appendix B).

This section will provide an overview of the topics that will be presented which will include barriers to treatment: in particular, external and internal barriers, demographics and socioeconomic status. External barriers include financial difficulties related to treatment and stigma related to people with alcohol and/or substance use. Internal barriers included lack of readiness for treatment, unwillingness to forsake use alcohol/illicit substance use, and depressed mood related to lack of motivation to move forward with treatment. Demographic factors such as age and race as well as socioeconomic factors are also included in order to understand the full scope of the clients' needs. In conclusion, a summary of the findings will be presented and gaps in the literature identified.

External Barriers to Treatment

One of the major reported issues for external barriers to treatment is the financial difficulties related to treatment (Ali, Teich, and Mutter, 2016; Han, Compton, Blanco, and Colpe, 2017). Treatment costs are expensive and many individuals that are seeking treatment for alcohol and/or substance use have a difficult time finding ways to afford it. The research by Ali, Teich, and Mutter (2016) was a quantitative study completed using data from the National Survey on Drug Use and Health that identifies a number of barriers to treatment for the substance abuse population based on whether the individual has private insurance or Medicaid/no insurance. The authors researched barriers to treatment, asking individuals thirteen questions based on: financial reasons for stopping treatment, treatment access, perceived stigma, lack of readiness to stop using, and treatment as not a priority. The two commonly cited reasons for not seeking treatment were financial concerns and the unwillingness to stop using substances.

People who were uninsured reported their most common reason for not seeking treatment or attending treatment, were financial concerns or inability to afford treatment. Han, Compton, Blanco, and Colpe (2017) assessed the prevalence, treatment, and unmet treatment needs of U.S. adults with co-occurring mental health and substance use disorders and noted the lack of health insurance/inability to afford treatment as a common barrier to treatment. Mental health as a service continues to be an expensive treatment option for many individuals. Many who cannot afford such treatment will continue to refuse treatment if given the choice of using their limited resources towards mental health care or something else. A major component towards improving treatment attendance due to financial constraints will be to find resources and provide resources to clients so that they will not have to make that hard decision.

A second major external barrier to treatment is the stigma held against patients with alcohol and/or substance use (Ali et al, 2016; Parcesepe and Cabassa, 2013). The systematic review completed by Parcesepe and Cabassa identified 36 different articles from 18 different population groups (2013). Parcesepe and Cabassa focused on public stigma and its effect on patients. Public stigma was identified as negative beliefs that affect people's views and actions towards people with mental health problems. The authors noted that public stigma is further associated with less engagement by patients in their care which decreases treatment outcomes. A common theme was that those patients who identified as having a substance abuse problem were believed to be less competent to make treatment-based decisions or financial decisions when compared to an individual with depression. Non-medical professional respondents stated they avoided persons addicted with drugs; the researchers found that social distance was greatest for those with drug abuse disorders followed by alcohol abuse.

Healthcare professional attitudes and stigma toward treatment is another major area associated with not completing treatment. When specifically discussing the treatment of substance use, clients' negative experiences with healthcare professionals impact their outcomes. Research from a systematic review completed by van Boekel,, Brouwers, van Weeghel, and Garretsen (2013) noted that clients that had reported perceived discrimination by the healthcare workers were not as likely to finish his or her treatment. The researchers noted that healthcare staff "unwittingly impose their beliefs

14

and prejudice on patients" (van Boekel et al, 2013) resulting in a barrier between the provider and the client.

Devine, Edwards, and Feldman (2018) completed systematic review that focused on external barriers to treatment, in particular medication- based treatment. According to the reviewers, patients forgetting that they have an appointment, decreased motivation from depressed mood, and lack of insurance were reported as some of the common themes. Stigma was also noted, but it was less common. Depressed mood was noted to play a role in negative outcomes. Holub and Abar (2018) used data from the Health Evaluation and Referral (HERA) noted that those individuals who had an active referral and greater readiness for change but also had greater depressed mood were associated with lower rates with getting in touch with a provider, getting evaluated, and starting treatment.

Internal Barriers to Treatment

The first two examples, lack of financial ability and stigma, show how external factors can affect clients' treatment. However, external barriers are not the only causes that affect treatment. Internal factors also play a major role in treatment results. Specifically, lack of readiness can affect a patient's motivation for treatment. Ali, Teich, and Mutter (2016) reported that, while those who lack insurance reported financial concerns as barriers to treatment, those with private insurances reported that lack of readiness for treatment as the greatest reason for not seeking treatment. This study was supported by Han, Compton, Blanco and Cople (2017), who also reported that in their research, 87% of people with reported co-occurring diagnoses did not seek treatment for substance use. The two most common reasons in the study were lack of readiness to stop

using substances and reported barriers to the access of the necessary treatment. Ali, Teich, and Mutter (2016) had similar findings with a significant number of individuals chose not to seek treatment because they reported that they did not want or need treatment services. These authors also added that there was no desire to give up the use of illicit substances that contributed to the lack of motivation to receive treatment. Personal Characteristics Related to Treatment Barriers

Aside from external and internal factors that affect patient seeking treatment, research has demonstrated that demographics of individuals can impact the course of treatment. Race, age, and socioeconomic factors play a role in treatment for individuals. Differences in race and age are noted to compromise the treatment process for individuals. Saloner and Lê Cook (2013) identify that Blacks and Hispanics are led to treatment via different modes, as ethnic minorities have higher rates of criminal history, increased Medicaid enrollment, and lower income which affects how and when treatment is accessed. Disparities in treatment completion for alcohol treatment varied by 3.5-7.9% points when comparing ethnic minorities to Whites, and 1.0-8.1% points for drug treatment. Completion rates were low for all groups, especially Blacks/Hispanics. However, common factors such as low education, unemployment, and discharge from a non-intensive outpatient treatment were significantly associated with incomplete treatment, regardless of race or ethnicity.

In addition to socioeconomic factors contributing to incomplete treatments within minority groups, ethnic and racial differences in perception of mental illness affected access to healthcare. Sorkin, Murphy, Nguyen, and Biegler (2016) identified that Asian-Pacific Islanders (APIs) (adjusted odds ratio (aOR) = 2.8, 95% confidence interval (CI) =

1.2-6.4, P = .01) and Hispanics (aOR= 2.2, 95% CI = 1.2-4.2, P = .01) had greater odds of endorsing not feeling comfortable talking to a professional for mental health care. APIs (aOR = 5.5, 95% CI = 2.2-16.3, P < .001) and blacks (aOR = 3.5, 95% CI = 1.6-7.6, P = .002) reported significantly higher odds of reporting not seeking mental health treatment due to fear of someone finding out. Hispanic respondents were twice as likely to report difficulty getting an appointment as a reason for not seeking care when compared with non-Hispanic White (NHW) respondents. Across all races, however, the primary reason for stopping treatment was because they perceived they no longer needed it (Sorkin, Murphy, Nguyen, and Biegler, 2016). Nonetheless, different ethnic and racial backgrounds noted different reasons for stopping treatment. Black and API respondents were less likely than NHW to voice the perception of "not getting better" as a reason for discontinuation of treatment. Hispanic respondents were less likely to answer that lack of time, transportation, or lack of insurance coverage were reasons to stop treatment when compared to their NHW counterparts.

Age has a role in how adults approach their treatment goals, their barriers to change, and the probability of starting and/or completing treatment. Based on the research completed by Choi, DiNitto, and Marti (2014), adults aged 65 and older were less likely to use treatment and to perceive that they needed treatment; they reported lack of readiness to stop using as the most common barrier to treatment for alcohol and substance use. Adults, between the ages of 26 and 64 years, also reported lack of readiness as a reason to not seek treatment, but also reported concern with stigma towards mental health, issues with confidentiality, cost of treatment/no insurance, and a lack of plays a role in effective use of treatment options. Part of the understanding regarding accounting for barriers to treatment involves taking into consideration how clients of different ages respond to available treatment options and reasons for non-attendance. This can help to focus on how to better engage clients and provide a higher standard of care.

Ways to Reduce Barriers to Treatment

Research studies are completed on how to address the target audience and encouraging them to seek or continue treatment. According to Molfenter (2013), the Substance Abuse and Mental Health Services Administration (SAMHSA) initiated a grant program to evaluate how to improve retention rates at various locations in multiple states. Ten states with a total of sixty-seven substance use disorder outpatient clinics were included in the study. Various interventions included behavioral engagement strategies (contingency management, motivational interviewing), reminder calls, wait-time reductions, creating a welcoming environment, and overbooking appointment slot times. The most successful interventions were reducing wait times, using behavioral engagement strategies (such as motivational interviewing), and adding capacity (adding more staff to increase availability). Telephone reminder was a commonly used intervention with mixed results. Shah et al. (2016) reported positive results when implementing a reminder 7 days prior to the scheduled appointment. It will be important to determine what recommendations can be made to improve patient retention rates.

Based on the barriers studied, the Substance Abuse and Mental Health Services Administration (SAMHSA) created the Prevention Collaboration in Action (2018) to engage clients who engage in drug and alcohol use and endorse strategies to decrease stigma. Recommendations include: (1) avoid stigmatizing labels such as "addict" or

"junkie" (2) use language that focuses on the person, such as "a person who uses substance/alcohol" to not define the individual by their drug use (3) identify that drug use is a continuum and encourage people to lessen harm and make more positive choices regarding their use (4) beware of personal biases and reflect upon yourself and your own experiences, and (5) understand how substance and alcohol use may relate to trauma. In summation of the research that was compiled, there are multiple reasons why barriers to treatment continue to be a major factor in affecting patient outcomes. External barriers to treatment included financial resources and the stigma towards clients with reported alcohol and/or substance abuse. The internal reason was the lack of readiness for treatment and depressed mood. Along with internal and external factors, there are noted differences among age and ethnic backgrounds. Older adults tended to focus on lack of readiness as a primary reason for not seeking treatment while younger adults reported both lack of readiness as well as issues with stigma related to alcohol and/or substance abuse. Different ethnic groups had more challenges than others in discussing substance abuse treatment with providers. As part of the project plan, there will be an evaluation of barriers in an outpatient setting to further add research in a much-needed population. At this time, there needs to be continued research in the area of alcohol and substance abuse clients. This project seeks to further help in this area in order to evaluate barriers to provide recommendations that can help to decrease barriers in outpatient treatment and improve patient outcomes.

Devine, Edwards, and Feldman (2018). examined the barriers related to outpatient medication management that was not specific to alcohol and substance abuse. External barriers included stigma by health care practitioners and staff towards individuals who are seeking treatment for alcohol and substance use as well as financial barriers that limit people's ability to receive the treatment they are seeking. The internal factors that affected barriers to treatment focused on client's readiness to seek treatment. Other factors that appeared in the research included demographics, such as race, age, education level, and employment status. Finally, the research provided recommendations for change, such as reducing wait times, using a telephone reminder to decrease patient barriers, and improve patient retention rates.

Framework

Conceptual Framework

The conceptual framework that was used for the project was the Donabedian model for quality of care. The idea of the Donabedian model is the relationship between structure and process that affects the outcome measures (Donabedian, 2005). The outcome is the measure by which treatment is evaluated. In the case of alcohol and substance use, the outcome measure that best evaluates. The outcome of treatment is the reported use of alcohol and illicit substances. The two factors that are related to the outcome are the structure and process.

The structure is reflective of the setting. The setting includes more than just the physical building and environment. It also includes the staff, policy and procedures, and training provided. They all play an integral role in the structure of the treatment. The processes are related to the communication between staff and patients and guidelines that further guide the care provided. The relationship between the structure and the processes are at the intersection that will impact outcomes being examined.

Within the confines of the outpatient treatment center, clients who enroll into the program have multiple steps that must be completed in order to participate in the program. Before being enrolled into the program, clients are triaged through a phone screening or through in person screening. After completing screening and deemed appropriate for treatment, they are asked to go to another area of the facility to register as a client for the facility. Then they are asked to return to the front desk of the outpatient treatment area in order to fill out additional paperwork including the Basis 24 screening tool. Based on availability, enrolled clients will either see an APN first or a clinician first to begin the 2-part admission process. If the clinician is the first to see the client, there is a possibility they may not see the APN within the same day due to scheduling constraints. If another client misses an appointment, there are times a new client can be given the appointment time. However, if a client cannot be seen within the same day, they must be offered an appointment within a certain time frame.

The staff currently work within the constraints of the system. However, there are challenges that arise from the current system. Delays in treatment due to scheduling conflicts and missed appointments play a role in clients not receiving medications and other behavioral health needs.

The Donabedian model displays an appropriate framework towards completion of the project because of it shows the importance of studying the relationship of the different levels that impact patient outcomes. In the case of the project, evaluating barriers and using them to create recommendations to help to improve the structure and the processes can potentially improve the outcome of reducing barriers to outpatient treatment. (See Appendix C)

Theoretical Framework

The theoretical framework that was used to adapt research into practice for improving outpatient care screening of substance use disorders will be the Stetler Model of Research Utilization. The Stetler Model was originally developed in 1976 with further refinement in 1994 (Stetler, 2001). The important aspect of the Stetler Model is the capacity to translate knowledge into practice and does so from a multifaceted approach.

The Stetler Model is appropriate for the project presented because of its relevance to health practitioner guided change. The Stetler Model clearly defines within its parameters that evidence- based practice does not have to come from administration or other areas of healthcare. It can be guided directly by the practitioners providing direct patient care in different healthcare settings. According to the National Collaborating Centre for Methods and Tools, the Stetler Model can be applied to "how individual practitioners can use research on an informal basis as part of critical thinking and reflective practice" (2001). Granted that the research provided and presented is valid and has been shown to be effective in the practical setting, the practitioner can take it upon himself or herself to use the practice to provide better patient care.

The Stetler Model has five phases regarding its use in research utilization. (NCCMT, 2011). Phase 1 is the preparation phase. The goal is to obtain the reason for the project based on the evidence. The evidence will be part of the basis for the overall project and will continue to play a role throughout the implementation. Phase 2 is to validate the evidence that has been gathered. In order to implement useful change in any setting, it is important to realize that the evidence must have clinical significance. Phase 3 is to compare the research with the goals and outcome expectations in relation to the project. The research is then used to justify the project by comparing the current practice with the project goals. Phase 4 is to determine the specific actions necessary during the implementation process and to make the necessary changes based on the research and barriers that might occur during the process. Phase 5 is the evaluation process. The point of the evaluation process is to consider whether the goals of the project have been met. The five phases are a clear representation of the effort that is necessary in order to assess and implementation a project. (See Appendix D)

Methodology

Design of Project

The project was a mixed retrospective chart review and structured interview that will evaluate barriers to outpatient psychiatric treatment and generate a list of recommendations in order to help improve client participation in treatment. The outpatient mental health facility focuses on managing clients specifically for nonalcohol and non-illicit substance use treatment. Clients with co-occurring alcohol/illicit substance use have been shown to be even more at risk for not attending treatment. While this location may not directly treat alcohol/illicit substance use as part of their treatment, identifying barriers to attending treatment is important in order to provide better services for this special population whether within the facility or referred to another appropriate service. The project used the Basis-24 self-report questionnaire to establish qualified individuals for participation in the study. The Basis-24 self-report questionnaire is a tool used to assess for outcomes for health services (Elsen, Normand, Belanger, Spiro, Esch, 2004). The internal consistency (Cronbach alpha) was 0.77 to 0.91 for outpatients showing reliability as a measure (Elsen et al, 2004). The cutoff scores for the Basis 24 questionnaire for each individual question in the subscale are 0 for none to mild frequency of symptoms to 4 for high frequency of symptoms (Tarescavage, Ben-Porath, 2014). According to the article, outpatients with a diagnosis of schizophrenia, depression, bipolar disorder, or substance abuse also tend to report higher symptom scores on the questionnaire in comparison to those without the diagnosis (Elsen et al, 2004). Once the Institutional Review Board approved the study, five steps were taken to complete the project.

Upon completion of review by the Institutional Review Board, the first step was to set up a meeting with the director of EISS and staff to establish staff roles and guidelines for the completion of the project. The meeting established the space to complete the chart reviews and interviews. The meeting also established the guidelines for referring clients to the primary investigator for the structured interviews. The staff was asked to refer clients that are English speaking and report a score greater than zero on the alcohol/substance abuse sub-section of the Basis-24 questionnaire.

Once the meeting was completed, step two was initiated and data collection was completed through a retrospective chart review of 250-300 charts of patients from April 2019-August 2019. Charts that were included in the study identified using responses from the Basis-24 questionnaire as having scored greater than zero in the sub-section under alcohol and/or substance use. Charts were also reviewed for completion of treatment and any reported barriers to treatment.

After completion of the retrospective chart review, step three was a structured interview process. The outpatient psychiatric facility has a constant influx of clients enrolling daily. As part of the meeting with the implementation team, staff were

instructed to refer clients to the primary investigator who are English speaking and report a score greater than zero in the sub-section under alcohol and/or substance use on the Basis-24 during enrollment.

In step four, the primary investigator then established whether the client was eligible to be included in the study based on inclusion/exclusion criteria as noted below. Clients were taken to a private room where the study was explained to them. They were read the informed consent, indicated that participation is voluntary, would not impact their treatment if they declined to participate, and their consent to participate may be withdrawn at any time during the study. Clients included in the study met with the primary investigator, reviewed the purpose of the study and potential risks, and signed the informed consent. After the consent had been signed and obtained by the primary investigator, the primary investigator used the structured interview questions (See Appendix G) to have the clients answer questions regarding historical and current course of treatment. Other information that was obtained will be reported barriers and perceived barriers to treatment. Clients who participate in the study were provided a \$5 gift card as compensation. A total of 20-25 clients were to be included in the study.

Finally, in step five of the study, the data that was collected from the retrospective chart review and structured interview process was analyzed with the research literature to develop a list of recommendations for future consideration in the outpatient psychiatric facility in order to decrease barriers to treatment and improve client participation in treatment.

Setting

The setting of the project was an outpatient mental health clinic in an urban city in New Jersey. The clinic caters to a multitude of ethnic backgrounds, many of whom are of different minority groups. The outpatient psychiatric facility focuses on treatment of non- alcohol and non-illicit substance use mental health treatment. Individuals who go there for treatment but require a more specialized treatment for alcohol and/or illicit substance use are referred to other facilities for treatment.

Study Population

Inclusion Criteria

For the retrospective chart review, the inclusion criteria were the charts of clients ages 18 years and older who reported alcohol and/or substance use based on the Basis-24 report. Inclusion criteria for the interview portion of the project were English speaking clients who were 18 years and older who score greater than zero on the alcohol and/or substance abuse section of the Basis-24 questionnaire.

Exclusion Criteria

Exclusion criteria includes clients under the age of 18, clients who do not report alcohol and/or substance use, and clients who decline to participate in the study.

Study Intervention

There are two components to the study. The first component was a retrospective chart review of 250-300 charts to assess for possible client barriers to attending outpatient treatment. The charts of clients who stopped coming to treatment was reviewed on whether they reported any reasons for no longer coming to treatment with the goal of evaluating possible similarities in clients' reasons for stopping treatment before completion. The dates that the charts were reviewed were between April 2019-August 2019.

The second component of the study was the implementation of twenty-five standardized interviews that evaluated clients' perceived barriers to outpatient treatment. The interview evaluated clients' perceived barriers to treatment (Appendix F). Those patients were interviewed between May 2019-December 2019. The combined information from the retrospective chart review and the interviews were used to analyze the data and develop recommendations for improving patient participation in treatment.

Outcome Measures

The first outcome measure that was being addressed were the rates of retention among clients in the outpatient mental health clinic setting who had a positive score on substance use on the Basis-24 questionnaire. Data was collected on the retention rates and reasons for missing appointments through the retrospective chart review that were to be completed prior to the implementation of the interview. The second outcome measure was the identification of barriers to treatment that were evaluated through a structured interview process that directly asked clients their perceived barriers to treatment in order to find the best way to improve treatment. The final outcome was the analysis of data and literature review with final recommendations on reducing barriers to treatment for this facility.

Risks/Harms/Ethics

Potential risks to the project were related to a possible breach of confidentiality of client's personal information. The potential risks were limited by keeping all study related material with the primary investigator on secure flash drive that in a locked cabinet. Other risks included the possibility of bringing up negative thoughts in clients with past or present alcohol and/or substance abuse.

Recruitment

The number of charts that were reviewed is based on the rationale from data provided by the outpatient clinic. Based on data provided by the outpatient clinic in March 2018, a total of 133 client were enrolled in Early Intervention Support Services. Of those clients, there were 74 clients enrolled over the course of the month that identified as alcohol and/or substance users with a score of greater than 0 on the Basis-24 section under substance use. Based on the data shown, over the course of 3 months, two-hundred twenty-two clients report alcohol and/or substance use on the Basis 24 upon enrollment. Therefore, based on the current set of data, a retrospective chart review of 250 charts over the previous 3 months prior to the implementation of the interviews was the plan to be completed to assess for barriers to treatment.

The recruitment for the interview process were based on the Basis 24 self-report questionnaire that is filled out during the registration process. Clients who report a positive score on the Basis 24 were asked by the staff if they would be willing to participate in an interview regarding barriers to treatment.

Twenty-five clients who agree to participate were referred to the primary investigator to sign a consent and complete the interview process. Clients who were referred to the primary investigator were then be briefed on the consent procedure, potential risks of involvement, and the client's ability to withdraw from the study at any time. Clients were then asked to sign the consent form and complete the interview process.

28

Consent Procedure

Upon completion of the Basis 24 questionnaire and while waiting to see the clinician or APN for his or scheduled appointments, clients were referred to the Primary Investigator when he or she was noted to have scored on the alcohol/substance use subsection of the Basis 24 questionnaire. Clients that report alcohol and/or substance use on the Basis 24 were asked by the clinician or the front desk staff that completed the intake if they would be willing to participate in the study. Clients were notified that agreement or declination of participation in the study would not interfere with the level of care that is being provided to them while in the service of EISS. Clients that agreed to participate in the study were referred to the primary investigator. The primary investigator then took the participant into a private office where only the client and the primary investigator were present. The primary investigator would obtain consent from the client and have the consent form signed in order to participate in the study. Clients were notified that as a participant in the study, they could retract their consent to participate at any time during the interview.

Subject Costs and Compensations

Clients were offered a \$5 Dunkin' Donuts gift card as compensation for participating for the study. Therefore, projected cost for the project is approximately \$125. During the project, there were limited participants so an increase to a \$15 Dunkin Donuts gift card was provided upon completion of an IRB modification in order to obtain more participants. Participants will not incur any costs for participating in the study.

Project Timeline

The project timeline was projected to be approximately 10-12 weeks. After completion of IRB approval, a staff and stakeholder meeting was conducted to discuss project purpose, projected timelines, and staff roles; staff were notified that at the start of the client interviews, they would be asked to refer clients to the primary investigator. A retrospective chart review was completed over the course of 5 months that evaluated the previous retention rates and potential barriers that may be listed. After completion of the chart review, the staff were directed to refer clients to the primary investigator. The primary investigator then obtained the consents from the clients to participate in the research project in order to address any questions or concerns the clients may have. The interviews first took place over the course of 5 weeks. Then continued for another month due to the length of time it took to obtain clients to agree to participate in the structured interview process. After completion of the interviews, data analysis occurred to evaluate the gathered information from the retrospective chart review and the interviews. (See Appendix D).

Resources

The multiple important resources that were required for the project included time, space, and financial cost of implementation. Additional time for staff was important because staff were delegated the task of referring clients to the primary investigator, which is an addition to their normal workflow. Space was required for the primary investigator to complete the retrospective chart review and the interviews to ensure confidentiality. Finally, there was a financial compensation that was provided by the primary investigator as an incentive for clients to participate.

Needed/Economic Considerations (Project Budget)

As incentive to participate in the study, \$5 Dunkin' Donuts gift card were offered to clients who agreed to participate in the interview process. For a total of 25 clients, a total cost of \$125 was expected as part of the project budget. Because there were limited participants at first, an increase to a \$15 Dunkin' Donuts gift card was provided after the first 5 participants. A total of 15 additional participants were provided the \$15 gift card for a total budget of \$250.

Results

Chart Review

After completion of the data collection from the retrospective chart review and the structured interview of the clients, data analysis of the compiled data was completed. The goal for the retrospective chart review was 250 harts to be evaluated. In total, 250 admissions were evaluated from the 2018 year. Of the 250 admissions evaluated, a total of 227 charts were included for complete chart review; client charts were dismissed for repeat admissions and incomplete information.

The data collected from the retrospective chart review was informative. Demographic data obtained from the chart review noted most of the clients in the outpatient program were between the ages of 18 and 56 years old with a mean age of 40 years old (See Appendix M). Two hundred and one of the 227 charts reviewed fell into this age range with only 26 accounting for clients older than 56. The education levels of the clients varied. However, the highest number of clients completed either a 12^{th} Grade (n=74, 32.6%) or some college (n=48, 21.15%) (See Appendix N). The diagnoses of the clients being admitted into the program were most notably Major Depressive Disorder (n=52, 22.91%), Mood Disorder (n=46, 20.26%), Bipolar Disorder (n=30, 13.22%), Schizoaffective Disorder (n=26, 11.45%), Bipolar Affective Disorder (n=16, 7.05%), Schizophrenia (n=9, 3.96%), and PTSD (n=7, 3.08%) (See Appendix J). The most predominant ethnicity for both male and female genders were Black or African American. For males, Black or African American accounted for 79 of the 114 males (69.3%) included in the chart review. For females, Black or African American accounted for 88 of the 113 females (77.88%) included in the chart review (See Appendix L). The genders were nearly identical with 113 females (49.78%) and 114 males (50.22%) that were included in the chart review (See Appendix L).

However, the most important information collected from the chart review was the clients who completed treatment versus those that did not complete treatment and any reported reasons for not completing treatment. Of the 227 charts evaluated, only 90 (39.65%) completed treatment from the outpatient program. Completion of treatment indicated that the client completed the appropriate requirements for treatment as noted by the client's clinician and/or was referred to the client's next level of care. In this study, 137 clients (60.35%) did not complete treatment. Of those 137 clients that did not complete treatment, 105 clients (76.64%) were due to loss of contact or lack of engagement (See Appendix I).

Potential reasons for loss of contact could be due to clients not answering calls from the outpatient clinic or clients not having phones on file which limits the communication between staff and the clients. Of the remaining 32 clients, 10 clients (31.25%) were admitted into an inpatient unit, 10 clients (31.25%) refused to continue treatment, four clients (12.5%) asked to have his or her treatment at a different facility, one client (3.13%) asked to have his or her case closed without a reason, one client (3.13%) had a duplication of services, one client (3.13%) was in police custody, one client (3.13%) extended his or her length of stay, two clients (6.25%) reported a personal reason for not being able to maintain his or her case, one client (3.13%) had started a new job and was unable to maintain appointments, and one client (3.13%) was unable to maintain an open case due to work schedule and commute issues.

Based on the information provided in the retrospective chart review, the two notable reasons for not completing treatment were scheduling conflicts and commuterelated issues. A one-way Anova was also used to compare the Basis Score results with the completion versus no completion of the program. In total 90 clients were noted to complete the treatment versus 137 that did not complete for various reasons. The oneway Anova was used to compare the mean scores of the Basis Scores between both groups. According to the test, the average Basis Score for clients who completed the program was 1.88 versus 1.74 for clients who did not complete the program. However, the p-value was 0.19 which is greater than 0.05 which shows that there is no statistical significance that can be drawn from this conclusion (See Appendix W).

A regression model was also completed to compare whether age and education level had any impact on completion of the program. Age was noted to have a positive coefficient of 0.003381 with p-value 0.174 and education had a negative co-efficient of 0.00924 with p-value 0.522. Based on this data age is shown to have a positive correlation with the completion of the program while education had a negative correlation. However, in both instances, the p-value is greater than 0.05. This demonstrates that both age and education have no statistical significance in their relationship with completion of the program.

Additional information was evaluated to determine whether diagnosis had a significant impact on outcomes. A comparison of diagnosis was noted between clients who completed treatment versus those who did not complete treatment (See Appendix Z). The diagnosis of those who completed treatment and those who did not complete treatment had similar diagnoses. Of those who completed treatment, 22 individuals (24.7%) had MDD, 16 individuals (18%) had Mood disorder, 14 individuals (15.7%) had bipolar disorder, 9 individuals (10.1%) had schizoaffective disorder, and 6 individuals (6.7%) had bipolar affective disorder. Of those who did not complete treatment, the same 5 diagnoses were the leading diagnoses with the only difference being their percentages: Individuals with Major Depressive Disorder and mood disorder were 29 (21%), individuals with schizoaffective disorder individuals were 17 (12.3%), individuals with bipolar disorder were 16 (11.6%), and individuals with bipolar affective disorder were 10 (7.2%) (See Appendix Z). The predominant diagnoses in the group who did not complete treatment were individuals with schizoaffective disorder and bipolar disorder, which may have implications on recommendations.

After completion of the structured interviews, the data was analyzed for demographic information and potential reasons for stopping treatment. Out of the goal of 25 clients, only 20 clients completed the structured interview process. The clients' ages ranged from 27 years old to 57 years old with a mean age of 42 years. There were 12 females (60%) and 8 males (40%) that completed the interview process. Four individuals (20%) identified as Hispanic or Latino, 15 individuals (75%) identified as Black or African American, and 1 individual (5%) identified as Native American. Sixteen (80%) reported not currently having a job, and 3 individuals (15%) reported having a full-time job, and 1 individual (5%) reported having a part time job. Eight (40%) individuals reported completing college or having some form of college education, 2 individuals (10%) completed the 12th grade, and 9 individuals (45%) had some high school education, and 1 individual (5%) reported having a 7th grade education. Of the areas that were identified as potential barriers to treatment, 10 people (50%) identified transportation as a barrier to treatment, 6 people (30%) identified financial concerns, and 5 people (25%) identified issues with the treatment team as a barrier to treatment. Individuals indicated that barriers to treatment were scheduling issues, not interested in stopping using the client's drug of choice, medication related issues, reporting it was a sign of weakness, and having a depressed mood/ low self-esteem.

A regression model was also used with the data obtained from the structured interview process. The information gathered was evaluated to see if there was any correlation between transportation, financial concerns, and issues with the treatment team in connection with the Basis scores. In all instances, transportation (c = -0.57755, p = 0.356), financial concerns

(c = -0.25633, p = 0.688), and issues with treatment team (c = -0.11193, p = 0.862), there was a negative correlation between the Basis scores and the identified issues. However, in all cases, all the p-values were greater than 0.05 which indicates lack of statistical significance.

Between the retrospective chart review and the structured interview process, some similarities were present. The two areas that were identified as common barriers were commute/transportation concerns and scheduling conflicts.

Recommendations

The final part of the project was to address recommendations that can help to reduce the barriers reported and potentially improve retention in treatment. The three areas being addressed include the scheduling conflicts, transportation issues, and treatment team issues.

Recommendations related to Scheduling

With regards to potential scheduling concerns, recommendations focuses on lengthening the availability of appointment hours to accommodate individuals who work or have trouble with transportation. The agency should have a van pick up service available for patients as they do with other programs. This would eliminate a major barrier identified by a large majority of individuals. As witnessed on a different unit within the same facility, there is an advanced practice nurse who works 3 days a week at 12 hours a day in order to assist with scheduling conflicts for clients who work throughout the day. The advanced practice nurse works from 7am to 7pm to allow clients early and late appointments. Although the advanced practice nurse only works 3 days a week, this allows her to extend her hours to accommodate a wide range of client work schedules to make sure they are seen in a timely manner. Such a schedule might be considered for the outpatient program as well. This is due to the clients having a wide range of backgrounds which potentially limit their availability to attend some appointments. Based on the data obtained through this research, it is unclear why some clients are unable to come to appointments based on solely on scheduling conflicts. However, by being more flexible with the scheduling, more clients would be able to maintain their scheduled appointments and thus not have their cases prematurely closed.

Recommendations related to Transportation

As noted above, service transportation by the agency should be enhanced. With regards to the transportation concern, the American Hospital Association (AHA, 2017) presented published information through their Social Determinants of Health Series that focused on the role of hospitals regarding transportation. In their guidelines, the AHA noted the importance of understanding the transportation needs within the community, combining transportation access within a health care systems' own mission, evaluating individual client's needs, and working in conjunction with local services to provide the necessary transport that clients need (AHA, 2017). The guidelines then went on to present case studies that have made strides in attempting to combine transportation as a part of the services the health care system offered in order to assist clients with limited means make it to his or her appropriate appointments. Using that information as a template can assist the outpatient facility with the proper support.

The role of hospitals from a transportation perspective is critical to reducing barriers in this area. Even from a financial perspective, there are many things that can be gained by assisting clients to make his or her appointments. As noted by the AHA, clients who miss appointments and not obtain prescriptions tend to have delays in care with the risk of disease complications leading to extended treatment and possible readmissions (AHA, 2017). Therefore, assisting clients to make necessary appointments can lead to better overall patient outcomes as well as be to lower costs for both the individual client and a health system.

At this time, the current assistance for transportation services is limited to reduced bus fare and LogistiCare services. Both services provide some assistance towards client transportation needs but present limitations. Reduced bus fare does allow clients to ride the New Jersey Transit bus lines at a reduced cost. However, there is still out of pocket cost to the client. Those with limited resources may have trouble covering the cost to travel. LogistiCare services provide an alternative transportation program that allows clients to attend appointments in a timely fashion.

However, limitations are also present with the system as well. Currently, the client is the one that is required to complete any necessary forms that need to be completed in order to use the LogistiCare service. Along with that, rides booked by an individual must be done in advance. This can be very limiting because transportation runs on a tight schedule which means that clients who are not seen exactly within the specified appointment might either miss his or her appointment or miss the transport vehicle. This is problematic because appointments may not always be completed within the specified time due to a multitude of reasons. Another limitation for LogistiCare is the need for insurance to cover the cost of the transportation services. Currently at the outpatient facility, not all clients have some form of medical insurance. Clients are still able to receive treatment because the program is run under a government grant. However, this is an issue for transportation services such as LogistiCare because they require insurance in order to receive services.

The American Hospital Association presented case studies where health care systems needed transportation assistance for their clients and their solutions for their needs. For example, two cases from Vermont and Colorado are presented. As noted by the AHA, the Denver Health system partnered with Lyft in order to provide service for their clients. The Denver Health system had selected staff members be responsible for requesting the Lyft at appropriate times in order to limit the wait times for clients (AHA, 2017). By doing this, clients would not be limited to the necessary time spent with the providers and other staff.

The Grace Cottage Family Health and Hospital in Vermont attempted a different solution to their transportation needs. They started a volunteer driver program. Drivers would use personal vehicles and station themselves outside the facility in order to provide transportation services to clients that would need them. They would even fulfill requests with less than 48-hour notice which was important because other programs required such a notice in order to provide transportation services (AHA, 2017).

Both instances present plausible programs that can be considered for future implementation. The programs have already proven to be successful in other areas. Clients with mental health issues are in just as much need for supportive services as any other medical condition. Moving forward, it will be important to assess the necessary structural requirements to implement the recommendations that have been provided.

Recommendations Related to Treatment Team

Another area that was being addressed was the reports of issues with the treatment team. Of the 20 individuals in the structured interviewed, five individuals reported problems with the treatment team as either a problem they have had in the past

or a problem they foresee to have in the future. Of the five individuals, two individuals did not specify what their issues were, two specifically mentioned having issues with the way they or a family member were talked to, and one reported a specific issue regarding feeling as though the treatment team got too personal by attempting to call family members without the person's consent. Parcesepe and Cabassa (2013) had previously noted that clients who had negative experiences with healthcare professions had negative impact on outcomes.

Treatment teams form the basis of communication for all clients that are seen at an agency Current protocol at the project site should focus on better explanation with consents and more detailed explanations ed to the clients on the policies and procedures of the agency. Specific consents that are signed during the early stages of treatment are the treatment plan and consent to contact outside individuals. The agreement to the treatment plan is signed once the plan has been created in conjunction with the client so both the client and the team are aware of how to proceed with treatment. The consent to discuss treatment with other individuals is very specific. Only those individuals that clients deem appropriate can receive phone calls from the treatment team or are allowed to receive information if they call the treatment team. Any person not noted on the consent is not allowed information regarding the client.

Communication training and reinforcement for effective communication patterns is important to ensure that the treatment team is aware of their verbal and non-verbal behavior patterns. Pearlman and Chou (2019) noted that there are negative outcomes associated with poor communication and noted that "outpatients prefer not to return to clinicians with poor communication skills, and readmission rates for inpatients are higher". Continuing education within a healthcare system should be sensitive to routinely updating communication advanced skills and techniques.

The California Mental Health Services Authority (CalMHSA) created to tool kit called *Partners in Health: Mental Health, Primary Care and Substance Use Interagency Collaboration* (2013). The focus of the tool kit was to provide insight into integrated care between primary care and mental health staff. However, there is insightful information that can be adapted for the outpatient behavioral health treatment staff. The first is an "Attitudes Assessment" that provides self-insight into stigma a health care practitioner may have towards mental health clients (CalMHSA, 2013). The tool can be an important guide to staff in order to do self-evaluations. The use of an orientation document can assist clients to their treatment process and procedures. The five areas include the "initial screening and admission process, getting to know my treatment team, deciding to enroll in the initiative, service planning, and service delivery" (CalMHSA, 2013). Using the tools provided in this tool kit can help with improve treatment and potentially improving retention of clients.

SAMHSA (2018) also created the Prevention Collaboration in Action to engage behavioral health staff to reduce stigma. The recommendations included: (1) avoid stigmatizing labels such as "addict" or "junkie" (2) use language that focuses on the person, such as "a person who uses substance/alcohol" to not define the individual by their drug use (3) identify that drug use is a continuum and encourage people to lessen harm and make more positive choices regarding their use (4) beware of personal biases and reflect upon yourself and your own experiences, and (5) understand how substance

41

and alcohol use may relate to trauma. Educating staff on these points can help to decrease potential feelings of stigma by clients and increase their desire to maintain treatment.

Recommendations on Admission Procedures

The final recommendation is to introduce a simple method to proactively address potential barriers clients may report upon admission into the program. This project sought to identify potential barriers for clients while they were still enrolling into the program. By doing so, staff can note what adjustments can be made so that clients continue to make their appointments in order to have better outcomes. While the structured interview was not very time consuming, if integrated into the long admission process, it may be difficult to include. Therefore, focusing on two questions from the structured interview "Did you ever have to stop going to treatment abruptly before completing it in the past?" If so, what were the reasons for stopping treatment in the past?" is a way to proactively attend to potential barriers that prevents clients from attending treatment. The introduction of the recommendations has potential for improving patient retention rates and therefore improving overall patient outcomes.

Recommendation based on Diagnosis

Motivation due to depressed mood or other mood disorders also play a major role in seeking and maintaining treatment. Holub and Abar (2018) indicated that people with an active referral and greater readiness for change, but also had greater depressed mood were associated with decreased rates of attending appointments or reaching out to providers. Within the confines of the outpatient treatment facility, one important factor that should be addressed is the implementation of a depression tool such as the PHQ-9 in order to identify the severity level of incoming clients' depression level. This is a key factor in identifying and addressing clients who may have decreased motivation to attend treatment. The PHQ-9 can be used as an objective tool in identifying clients at risk on an ongoing basis during treatment. Clients identified as high severity should be considered for more immediate appointments due to their potential for not returning if scheduled later. Reducing wait times and adding staff to accommodate for such individuals may be necessary in order to provide the treatment that is needed.

Discussion of Limitations:

The project was able to note barriers to attending outpatient psychiatric treatment. However, some limitations must be noted. The first is the final sample size for the structured interviews. The goal was to obtain approximately 20-25 individuals to participate in the interview process in order to obtain an ample sample size to ascertain data. However, during the first half of the structured interviews, only 5 individuals consented to participating to the study and were interviewed. Due to this, an adjustment to the incentive was made. The Dunkin Donuts gift card value was increased from \$5 to \$15 in an attempt to increase the sample size, After adjustment of the gift card value, an additional 15 participants were included into the study for a total of 20 participants for the structured interview portion of the study.

Other factors that need to be addressed include addressing scheduling related issues. Currently a large portion (72.69%) reported not having employment. Further studies should be completed to evaluate scheduling related conflicts that may arise as a barrier to treatment.

Due to the way the structured interview was completed, there is limited information that was gathered specific to one of the barriers that was being addressed which was the way clients felt like they were being treated by staff. Further insight as to how clients felt would be beneficial in order to appropriately address the problem.

Another limitation noted through the project was the limited ethnic background to the clients involved in both chart review and interviews. In the retrospective chart review, 167 of the 227 charts reviewed were noted to be Black/African American. Of the interviews completed, 15 of the 20 clients were of Black/African American background. Due to this, there is a lack of generalizability of the data gathered and further studies will be required of other populations to address the knowledge gap.

Implications for Clinical Practice:

Clinical staff play a pivotal role in assisting clients with barriers to attending treatment.

Clinical staff are the individuals who spend the most time in direct contact with clients. Therefore, they are the most knowledgeable regarding the individual needs. Through the course of this project, barriers that were identified included transportation and scheduling conflicts. Both barriers affect the number of clients who attend treatment. As clinical staff, it is important to identify clients who may have either of these issues or possibly other barriers to attending treatment. Clients who present with transportation issues can still receive some assistance by clinical staff. Clinical staff are still able to assist with reduced bus fare applications and provide information regarding LogistiCare services. In addition to that, clinical staff can advocate for additional support to management with appropriate suggestions that can help provide better care to the clients that they serve. Special consideration can be made to advocate for devoting a current employee or to hire an additional employee with the task of scheduling a car share service or some

other form of transportation in order to make sure clients are able to arrive and depart scheduled appointments on time.

As noted through the research, clinical staff are not immune to acting and communicating in stigmatizing manner. Their verbal and nonverbal communication can have a negative effect in already depressed or stigmatized individual. It is important to also be able to be self-aware as a provider and clinician to understand these personal attitudes towards the people that are being treated. Continuing education focused on selfawareness and biases towards the people being treated is another important area that can be focused on in order to provide the best treatment possible.

Implications for Healthcare Policy:

Healthcare and agency policy are major factors in positive client outcomes. Access to transportation services, providing adjustments to scheduling availability, and addressing treatment team issues through education may have significant improvements to patient outcomes. Proactively addressing client concerns by asking clients on intake regarding potential issues to attending treatment can also better aid in addressing client concerns. This serves as a twofold purpose. First, clients and staff will be able to better collaborate in client treatment options. Second, clients will also feel more comfortable with the staff because their needs, outside of their psychiatric treatment, is being addressed. Better patient outcomes provide a better outlook for both patients and healthcare systems alike.

Implications for Quality/Safety:

Quality of care and safety for clients are driving forces that guide change in healthcare systems. It is important to continue to do research that can be used to make the appropriate changes for improved quality of treatment in a safe environment for clients. The information that has been gathered through this research and presented in the recommendations section can potentially be used to help guide future changes in the outpatient setting in conjunction with other completed research protocols. Introduction of yearly education for all staff including verbal/nonverbal communication, decreasing stigma, and motivational interviewing are important ways to address barriers to treatment. Moving forward, it is important to encourage the outpatient agency to consider using the data acquired from this research or to do their own internal research into the issues that prevent clients from completing treatment.

Implications for Education:

Continued education for behavioral health care staff on the data collected by their agency on negative client outcomes and ways to address these issues are critical to changing client centered care. Providing education for up and coming providers can bring awareness to the topic and allow for future clinicians and providers to be more aware of the specific needs that clients may require. Addressing specifically clients who report having issues with treatment teams in the past that might prevent them from completing treatment is important. By reinforcing awareness of stigma, lack of motivation, depressed mood, and other barriers addressed, it can help to provide better care of the clients that continue to come to treatment.

Plans for Future Scholarship:

The evaluation of barriers to treatment has been done in order to find out what problems arise for clients that prevent them from coming to treatment. Through the course of the project, barriers had been identified in the outpatient psychiatric setting. Barriers include transportation, scheduling conflicts, client motivation, depressed mood, staff stigma, financial supports and lack of patient-centered care practice. Potential considerations for future scholarships will be the possible implementation of agency policy changes and behavioral health staff changes in clinical practice that provide resolutions to the barriers identified through this project. At the time of completion for the data gathering for this project, potential barriers to the changes have been noted such as financial compensation required to implement the changes. Provided that there was a solution to this barrier, future scholarship to implement changes will be able to help identify solutions to the barriers.

Conclusion:

The evaluation of barriers to treatment in an outpatient psychiatric setting is an important protocol to research because there has been an increase in outpatient treatment. However, barriers to attending treatment has been an issue that affects both patient outcomes and hospital compensation. Missed appointments have been shown to have poorer outcomes and lost income for healthcare systems. The purpose of this project was to identify barriers to attending treatment in an outpatient psychiatric setting. This project was able to accomplish the identification of barriers. Though it was a small sample, the information can still be useful towards future research. Future scholarship towards expanding the data gathered to be more inclusive and implementing changes to decrease barriers will be important to provide better outcomes for both clients and healthcare systems.

Reference

 Ali, M., Teich, J., & Mutter, R. (2017). Reasons for Not Seeking Substance Use Disorder Treatment: Variations by Health Insurance Coverage. *The Journal of Behavioral Health Services & Research, 44*(1), 63–74. Retrieved from

https://doi:10.1007/s11414-016-9538-3.

American Hospital Association. (2017). Social Determinants of Health Series:

Transportation and the Role of Hospitals. Health Research & Educational Trust. Retrieved from <u>https://www.aha.org/system/files/hpoe/Reports-HPOE/2017/sdoh-</u> <u>transportation-role-of-hospitals.pdf.</u>

California Mental Health Services Authority. (2013). *Partners in Health: Mental Health, Primary Care, and Substance Use Interagency Collaboration Tool Kit.* Retrieved from <u>https://www.integration.samhsa.gov/operations-</u>

administration/IBHP_Interagency_Collaboration_Tool_Kit_2013.pdf.

- Choi, N., Dinitto, D., & Marti, C. (2014). Treatment use, perceived need, and barriers to seeking treatment for substance abuse and mental health problems among older adults compared to younger adults. *Drug and Alcohol Dependence*, *145*(C), 113–120. Retrieved from https://doi:10.1016/j.drugalcdep.2014.10.004.
- Center for Disease Control and Prevention. (2018). *Injection Drug Use and HIV Risk*. Retrieved from <u>https://www.cdc.gov/hiv/risk/idu.html</u>.
- Crutchfield, T. M., & Kistler, C. E. (2017). Getting patients in the door: medical appointment reminder preferences. *Patient Preference and Adherence*, 11, 141– 150. Retrieved from <u>http://doi.org/10.2147/PPA.S117396.</u>

Department of Human Services Division of Mental Health and Addiction Services Office
of Planning, Research, Evaluation and Prevention. (2019). New Jersey Drug and
Alcohol Abuse Treatment Substance Abuse Overview 2018 Essex County.
Retrieved from
https://www.nj.gov/humanservices/dmhas/publications/statistical/Substance%20A
buse%20Overview/2018/Ess.pdf.
Department of Human Services Division of Mental Health and Addiction Services Office
of Planning, Research, Evaluation and Prevention. (2019). New Jersey Drug and
Alcohol Abuse Treatment Substance Abuse Overview 2018 Statewide. Retrieved
from

http://www.nj.gov/humanservices/dmhas/publications/statistical/Substance%20A buse%20Overview/2016/statewide.pdf.

- Devine, F., Edwards, T., & Feldman, S. (2018). Barriers to treatment: describing them from a different perspective. *Patient preference and adherence*, *12*, 129.
 Retrieved from <u>https://doi:10.2147/PPA.S147420</u>.
- Donabedian, A. (2005). Evaluating the Quality of Medical Care. Milbank Quarterly, 83(4), 691–729. doi:10.1111/j.1468-0009.2005.00397.x. Retrieved from https://onlinelibrary-wiley-

com.proxy.libraries.rutgers.edu/doi/full/10.1111/j.1468-0009.2005.00397.x.

- Early Intervention Support Services. (2017). *Program Evaluation Fiscal Year 2017*. Rutgers University Behavioral Health Sciences.
- Eisen, V., Normand, J., Belanger, J., Spiro, J., & Esch, J. (n.d.). *The Revised Behavior* and Symptom Identification Scale (BASIS-R): Reliability and Validity. Medical

Care, *42*(12), 1230–1241. Retrieved from <u>https://doi:10.1007/s11262-004-</u> 7441-0.

Hadland, S., Xuan, Z., Sarda, V., Blanchette, J., Swahn, M., Heeren, T., Voas, R., et al. (2017). Alcohol Policies and Alcohol-Related Motor Vehicle Crash Fatalities
Among Young People in the US. *Pediatrics*, *139*(3). doi:10.1542/peds.2016-3037. Retrieved from

http://pediatrics.aappublications.org/content/early/2017/02/09/peds.2016-3037.

- Han, B., Compton, W., Blanco, C., & Colpe, L. (2017). Prevalence, Treatment, And Unmet Treatment Needs of US Adults With Mental Health And Substance Use Disorders. *Health affairs (Project Hope)*, *36*(10), 1739. Retrieved from https://doi:10.1377/hlthaff.2017.0584.
- Holub, A., Boudreaux, E., & Abar, B. (2018). 44 Linking Anhedonia and Depressed Mood With Substance Abuse Treatment Among Emergency Department Patients. *Annals of Emergency Medicine*, 72(4), S20–S21. Retrieved from <u>https://doi.org/10.1016/j.annemergmed.2018.08.049</u>.
- Loveland, D., & Driscoll, H. (2014). Examining attrition rates at one specialty addiction treatment provider in the United States: A case study using a retrospective chart review. *Substance Abuse: Treatment, Prevention, And Policy*, 9(1). Retrieved from <u>https://doi:10.1186/1747-597X-9-41.</u>
- McLean Hospital. (2011). *BASIS-24 [PDF File]*. Retrieved from <u>http://ebasis.org/pdf/BASIS-24-form.pdf.</u>
- Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. (2009). Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *Annals of internal*

medicine, *151*(4), 264. Retrieved from <u>https://doi:10.7326/0003-4819-151-4-</u> 200908180-00135.

Molfenter, T. (2013). Reducing Appointment No-Shows: Going from Theory to Practice. Substance Use & Misuse, 48(9), 765-771. Retrieved from https://doi:10.3109/10826084.2013.787098.

National Institute on Alcohol Abuse and Alcoholism. (2018). *Alcohol Facts and Statistics*. Retrieved February 12, 2018 from <u>https://www.niaaa.nih.gov/alcohol-health/overview-alcohol-consumption/alcohol-facts-and-statistics</u>.

- National Institute on Alcohol Abuse and Alcoholism. (2018). *Alcohol's Effects on the Body*. Retrieved February 11, 2018 from <u>https://www.niaaa.nih.gov/alcohol-health/alcohols-effects-body</u>.
- National Institute on Drug Abuse. (2015). *Nationwide Trends*. Retrieved April 10, 2018 from <u>https://www.drugabuse.gov/publications/drugfacts/nationwide-trends</u>.
- National Collaborating Centre for Methods and Tools (2011). Stetler model of evidencebased practice. Hamilton, ON: McMaster University. (Updated 18 September, 2017) Retrieved February 10, 2018 from <u>http://www.nccmt.ca/knowledgerepositories/search/83.</u>

NIAAA. (2018). *Treatment Utilizations*. Retrieved May 5, 2018 from <u>https://www.niaaa.nih.gov/sites/default/files/section%202c_Final_11_17_2014.pd</u> f

Parcesepe, A., & Cabassa, L. (2013). Public Stigma of Mental Illness in the United States: A Systematic Literature Review. *Administration and Policy in Mental* *Health and Mental Health Services Research, 40*(5), 384–399. Retrieved from https://doi:10.1007/s10488-012-0430-z.

- Pearlman R.E., Chou C. (2019). Communication Skills Training to Enhance Patient Adherence. In: Fornari V., Dancyger I. (eds) *Psychiatric Nonadherence (1st* ed. 2019). Retrieved from <u>https://doi.org/10.1007/978-3-030-12665-0</u>.
- Roush, K. (2015). *A nurse's step-by-step guide to writing your dissertation or capstone*. Indianapolis, Indiana: Sigma Theta Tau International, 2015.
- Saloner, B., & Lê Cook, B. (2013). Blacks and Hispanics are less likely than whites to complete addiction treatment, largely due to socioeconomic factors. *Health affairs* (*Project Hope*), 32(1), 135. Retrieved from

https://doi:10.1377/hlthaff.2011.0983.

SAMHSA. (2018). Engaging People Who Use Drugs in Prevention Efforts: Strategies for Reducing Stigma. Retrieved from

http://captcollaboration.edc.org/sites/captcollaboration.edc.org/files/attachments/e ngaging-people-who-use-drugs-strategies-reducing-stigma_0.pdf.

SAMHSA. (2018). Key Substance Use and Mental Health Indicators in the United States:

Results from the 2018 National Survey on Drug Use and Health. Retrieved December 10, 2019 from <u>https://www.samhsa.gov/data/sites/default/files/cbhsq-</u> <u>reports/NSDUHNationalFindingsReport2018/NSDUHNationalFindingsReport20</u> <u>18.pdf.</u>

Shah, S., Cronin, P., Hong, C., Hwang, A., Ashburner, J., Bearnot, B., & ... Kimball, A.B. (2016). Targeted Reminder Phone Calls to Patients at High Risk of No-Show

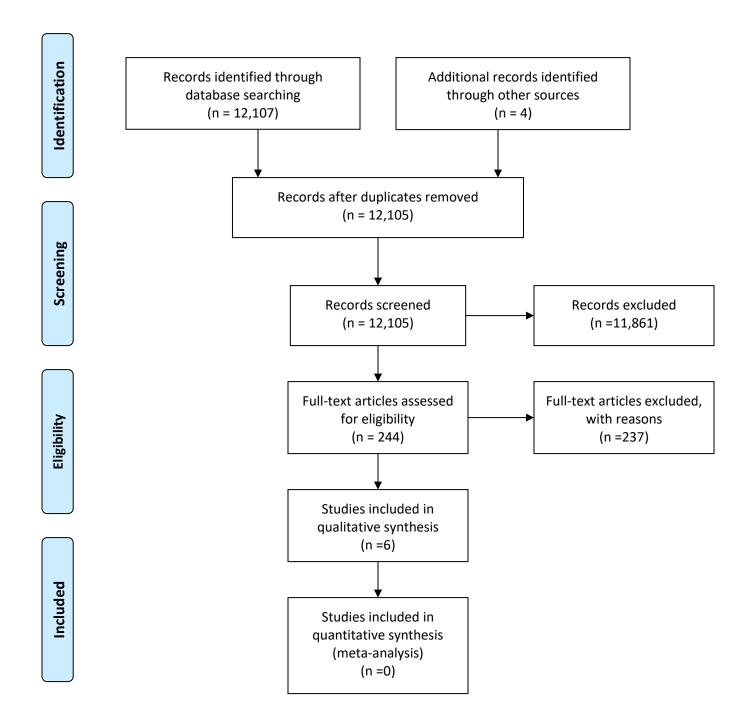
for Primary Care Appointment: A Randomized Trial. *Journal Of General Internal Medicine*, *31*(12), 1460. Retrieved from <u>https://doi:10.1007/s11606-016-</u> 3813-0

- Sorkin, D., Murphy, M., Nguyen, H., & Biegler, K. (2016). Barriers to Mental Health Care for an Ethnically and Racially Diverse Sample of Older Adults. *Journal of the American Geriatrics Society*, 64(10), 2138–2143. Retrieved from https://doi:10.1111/jgs.14420
- Stetler, C. (2001). Updating the Stetler Model of Research Utilization to facilitate evidence-based practice. Nursing Outlook, 49(6), 272-279. Retrieved February 10, 2018 from http://www.nccmt.ca/registry/resource/pdf/83.pdf.
- Tarescavage, A., & Ben-Porath, Y. (2014). Psychotherapeutic Outcomes Measures: A Critical Review for Practitioners. *Journal of Clinical Psychology*, 70(9), 808–830.
 Retrieved from <u>https://doi.org/10.1002/jclp.22080</u>.
- van Boekel, L., Brouwers, E., van Weeghel, J., & Garretsen, H. (2013). Stigma among health

professionals towards patients with substance use disorders and its consequences for healthcare delivery: Systematic review. *Drug and Alcohol Dependence*, *131*(1-2), 23–35. Retrieved from

https://doi.org/10.1016/j.drugalcdep.2013.02.018.

Appendix A PRISMA 2009 Flow Diagram



Article #	Author and Date	Evidence Type	Sample/Sample Size/Setting	Study findings that help answer the EBP Question	Limitations	Evidence Level &Quality
1	Ali, M., Teich, J., & Mutter, R. (2017).	Research	Data is from 2008-2013 National Survey on Drug Use and Health used on non-institutionalized population in the USA	Data from 2008-2013 NSDUH is used to evaluate why people report not getting treatment even though they reported needing it. Barriers such as not being ready, stigma, and financial issues were reported being major factors in not getting treatment	Data was cross sectional, based on self-reports for not receiving treatments	Level II Good
2	Choi, DiNitto, and Marti (2014),	Research	Data is from 2008-2012 NSDUH. N=96,966.	Older clients in the 65+ age group were less likely to seek treatment or perceive need for treatment. It is important to understand and find ways to encourage the age group to seek treatment if needed.	The sample of older adults is too small to be generalizable. There was not a test to correlate age, treatment, and perceived need.	Level II Good

Appendix B Table of Evidence

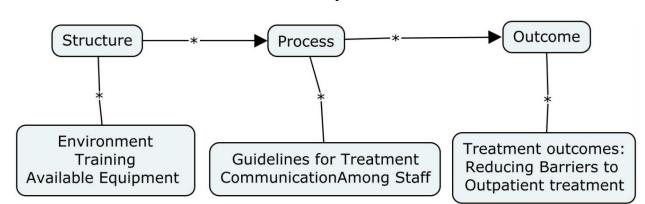
3	Crutchfield T	Research	Adults 18 years of age or	Two primary reasons	Only able to test	Level III
3	Crutchfield, T. M., & Kistler, C. E. (2017).	Research	Adults 18 years of age or older, 49% male and 51% female, mean age: 43, 84% Caucasian and 8% African-American/n=251 patients/Online questionnaire	Two primary reasons for missing appointment given were transportation problems (28%) and forgetfulness (26%). Patients indicated overall, they prefer a single reminder, via email, phone call, or text message, delivered less than 2 weeks prior to appointment.	Only able to test limited number of attributes and levels in the questionnaire. Sample was mostly Caucasian and highly educated, so results may not be generalizable. Patients reported stated preferences for reminders, but did not assess if patients' actual attendance changed due to implementation of "preferred	Level III Good
4	Devine, F., Edwards, T., & Feldman, S. (2018)	Research	Peer review of systematic reviews based on the barriers to medication treatment.	Evaluates barriers to treatment that can be used as a guideline for the project	reminder". Non-reported	Level II Good
5	Han, B., Compton, W., Blanco, C., & Colpe, L. (2017).	Research	325,800 adults who participated in the National Survey on Drug Use and Health	Data for perceived unmet need for substance use treatment showed the top reason for not getting treatment was not being ready with the second highest reason being the lack of	The study did not cover homes people not living in shelters, active duty members of the military, or people in institutions. Survey did not measure quality and timing of	Level II Good

	7
Э	1

				insurance/afford the cost.	receipt of mental health care and treatment. Survey did not ask about substance use treatment in outpatient medical clinics. Surveys did not measure the frequency or duration of substance use treatment.	
6	Molfenter, T. (2013).	Research	Sixty-seven substance use disorder outpatient clinics in 10 states participating in the STAR-SI project	Use of reminder phone calls decreased no- show rates on average by 19%. Twenty of the treatment organizations that utilized this method reported greater than 20% reduction, while 14 treatment sites reported less than 10% change in no-show rates.	Data used to synthesize results were obtained from treatment agencies' electronic administrative data sets, which may be incorrect. The state and treatment organization participants were self-selected using non-random sample. No comparison group was utilized.	Level II Good
7	Parcesepe, A., & Cabassa, L. (2013).	Research	36 articles covering 18 population based studies were included.	Literature review was meant to evaluate population based studies in order to lead further research that	Possibly missed articles that fit criteria. Coding of articles was subjective.	Level II Good

				can help to reduce stigma towards mental illness.		
8	Saloner, B., & Lê Cook, B. (2013).	Research	2007 Substance Abuse and Mental Health Service Administration's Treatment Episode Data Set. Includes discharges from publicly funded substance abuse treatment facilities in 44 states, D.C., and Puerto Rico. Total 1,026,332 people	Linkage of lower socioeconomic status with lower completion of treatment rates.	Findings may not be generalizable. Data set only covers publicly funded facilities. Study outcome (completion of program) does not guarantee long term rehabilitation. It does not take into account different treatment modalities used.	Level II Good
9	SAMHSA	Non- Research	N/A	Recommendations to reducing stigma in order to help clients go to treatment.	N/A	Level IV Good
10	Shah, S., Cronin, P., Hong, C., Hwang, A., Ashburner, J., Bearnot, B., & Kimball, A. B. (2016).	Research	Adults 18 years or older, mean age: 51.4, /N=2247, intervention group=1129, control group=1118/Primary care clinic	A phone call intervention seven days prior to appointment lead to decrease in no- show rates. No-show rate in intervention group was 22.8% versus the control group which was 29.2%.	Conducted at a single hospital-based primary care clinic, results may not be generalizable. Only 72.9% of patients received complete intervention, which was phone calls before each visit, in the intervention group. Unable to	Level I Good

				determine cost- effectiveness.	
11 Sorkin, D., Murphy, M., Nguyen, H., & Biegler, K. (2016).	Research	Total sample consisted of 75,324 non-Hispanic white, 6,600 black, 7695 Asian and Pacific Islander, and 4319 Hispanic adults aged 55 and older.	API and Hispanic Adults had higher odds than NHWs of endorsing feeling uncomfortable talking to a professional as a reason for not seeking treatment. All respondents regardless of race listed no longer needing treatment as most frequent reason for stopping treatment	Study was over the phone, so it is possible most- isolated people may be omitted from the study.	Level II Good



Appendix C Donabedian Model: Conceptual Framework

Conceptual Framework:	Example:	Project
Structure	Environment/Training/Available Equipment	What is the current setting like? How does the current setting work for patient retention? Evaluate the setting of the project to see how the environment is set up that addressed client treatment.
Process	Guidelines for Treatment/ Communication Among Staff	What are the current tools at the disposal for staff towards patient retention? Evaluate the processes involved with client enrollment and treatment that affect client outcomes.
Outcome	Treatment outcomes: Reduce Barriers to Outpatient treatment	Evaluate the relationship between the structure and process in the client outcomes. What improvements can be done using the information gathered from the structure, process, and chart review/interviews that will improve the retention rates in outpatient treatment.

Appendix D Stetler Model: Theoretical Framework

Phases	Application
1: Preparation	 Decide on the topic and find research that provides a background for the completion of the project. Obtain agency cooperation and discuss with the agency regarding areas of need.
2: Validation	2) Evaluate the research gathered to consider the project is appropriate through the completion of a Table of Evidence.
3: Comparative Evaluation/ Decision Making	 Deciding the possibility and feasibility of the project within the project setting. Factors that are being considered include facility willingness, cost, and time.
4: Translation/Application	4) Applying the project to the project setting. Sit down with staff to discuss the outline of the project, complete a retrospective chart review and complete a structured interview.
5: Evaluation	5) Evaluate the project upon completion of data collection. Analyze the data and obtain research that will help to develop recommendations. Develop a list of recommendations with the goal of improving outpatient retention. The project is being evaluated for effectiveness and feasibility to complete the recommendations provided.

Appendix E

Basis 24

BASIS-24[®] (Behavior And Symptom Identification Scale) ADULT VERSION

Instructions to Staff: Please fill in the following information completely.

Client ID: ______ HCO ID: ______ Admission / Intake Date: ___ /___/___ Time Point: ___ Admission/Intake ___ Mid-treatment ___ Discharge termination ___ Post-treatment follow-up

1□ Inpatient

Level of Care:

2□ Outpatient

Program Type or Unit: ____

- 3□ Partial/day hospital
- ₄□ Residential

it folioff up

Instructions to Respondents:

This survey asks about how you are feeling and doing in different areas of life. Please check the box to the left of your answer that best describes yourself during the **PAST WEEK**. Please answer every question. If you are unsure about how to answer, please give the best answer you can.

EXAMPLE:

During the PAST WEEK, how much difficulty did	No	A little	Moderate	Quite a bit	Extreme difficulty
you have	difficulty	difficulty	difficulty	of difficulty	
Ex Sleeping?					

During the PAST WEEK, how much difficulty did you have	No difficulty	A little difficulty	Moderate difficulty	Quite a bit of difficulty	Extreme difficulty
1 Managing your day-to-day life?					
2 Coping with problems in your life?					
3 Concentrating?					
During the PAST WEEK, how much of the time did you	None of the time	A Little of the time	Half of the time	Most of the time	All of the time
4 Get along with people in your family?					
5 Get along with people outside your family?					
6 Get along well in social situations?					
7 Feel close to another person?					
8 Feel like you had someone to turn to if you needed help?					
9 Feel confident in yourself?					
During the PAST WEEK, how much of the time did you	None of the time	A Little of the time	Half of the time	Most of the time	All of the time
10 Feel sad or depressed?					
11 Think about ending your life?					
12 Feel nervous?					
During the PAST WEEK, how often did you	Never	Rarely	Sometimes	Often	Always
13 Have thoughts racing through your head?					
14 Think you had special powers?					
15 Hear voices or see things?					
16 Think people were watching you?					
17 Think people were against you?					

Copyright McLean Hospital, 2011

1 TURN PAGE

EVALUATING BARRIERS TO OUTPATIENT TREATMENT

Dur	ing the PAST WEEK, how often did you	Never	Rarely	Sometimes	Often	Always
18	Have mood swings?					
19	Feel short-tempered?					
20	Think about hurting yourself?					
Dur	ing the PAST WEEK, how often	Never	Rarely	Sometimes	Often	Always
21	Did you have an urge to drink alcohol or take street drugs?					
22	Did anyone talk to you about your drinking or drug use?					
23	Did you try to hide your drinking or drug use?					
24	Did you have problems from your drinking or drug use?					

ABOUT YOU

Li use?	
ABOUT YOU	
 25. How old are you? 26. What is your sex? 1□Male 2□Female 27. Are you 1□Hispanic or Latino 2□NOT Hispanic or Latino 28. What is your racial background? (Select one.) 1□American Indian or Alaskan native 2□Asian 3□Black or African-American 4□White/Caucasian 5□Native Hawaiian or other Pacific Islander 0□Multiracial or other (specify) 	32. Where did you sleep in the past 30 days? (Select all that apply.) 1□Apartment or house 2□Halfway house/group home/board and care home/residential center/supervised housing 3□School or domitory 4□Hospital or detox center 5□Nursing home/assisted living 6□Shelter/street 7□Jail/prison 8□Other (fill in)
29. How much school have you completed? 1□8th grade or less 2□Some high school 3□High school graduate/GED 4□Some college 5□4-year college graduate or higher	33. At any time in the past 30 days, did you work at a paying job? 1□No 2□Yes, 1 – 10 hours per week 3□Yes, 11 – 30 hours per week 4□Yes, more than 30 hours per week
30. Are you now 1□Married 2□Separated 3□Divorced 4□Widowed 5□Never married	34. At any time in the past 30 days, did you work at a volunteer job? 1□No 2□Yes, 1 – 10 hours per week 3□Yes, 11 – 30 hours per week 4□Yes, more than 30 hours per week
31. Outside of your treatment providers, what is your main source of social support? (Select all that apply.) 1 Wife, husband, or partner 2 Other family (parents, children, relatives) 3 Friends/roommates	35. At any time in the past 30 days, were you a student in a high school, job training, or college degree program? 1□Yes 2□No
4□Community/church 5□Other 9□No one	 36. Do you now receive disability benefits; for example, SSI, SSDI, or other disability insurance (Check one or more) 1□No 2□Yes, I receive disability for medical reasons 3□Yes, I receive disability for psychiatric reasons 4□Yes, I receive disability for substance abuse 37. Today's Date://

THANK YOU VERY MUCH!

Copyright McLean Hospital, 2011

Appendix F Perception Regarding Barriers to Psychiatric T

Clients' Perception Regarding Barriers to Psychiatric Treatment

(Adapted from an NIAA Survey)

Good morning/afternoon, my name is Clarence Gocon. I am a nurse practitioner student at Rutgers University working on a research project as part of my degree requirements. I would like to take this opportunity to thank you for agreeing to participate in this project. I will try my best to keep this session short. Before we begin the interview, I would like to say thank you for agreeing to participate in this study. This project discusses the possible barriers to treatment in this type of setting for clients with reported alcohol and/or substance use. Personal information, such as date of birth, will not be included. If you are still willing to participate in the study, can you please sign this consent (present consent form) that just shows you agree to participate in this study. However, if at any given time you wish to stop participation, you may and your treatment here will not change.

- 1) Was there ever a time when you thought you should see a doctor, counselor, or other health professional or seek any other help for your drinking?
- 2) Was there ever a time when you thought you should see a doctor, counselor, or other health professional or seek any other help for your drinking, but decided not to go?
- 3) Have you gone to treatment for alcohol and/or substance use previously?
- 4) Did you ever have to stop going to treatment abruptly before completing it in the past?
- 5) If so, what were the reasons for stopping treatment in the past?
 - a. Money
 - b. Transportation
 - c. Way you were treated by the staff
 - d. Felt Better
 - e. Other
- 6) What suggestions would you make to better help keep you coming to your appointments?

I appreciate the time you have taken to spend with me in order to complete this interview. If you have any questions please do not hesitate to ask.

Appendix G Data Collection Sheet Retrospective Chart Review

Clie nt #	Age	Со-ДХ	Chart Revie w	Completed Treatment	Ethnicity/Gender	Basi s Scor e	Employed	Education Level	Transpo rt	Financi al Concer ns	Issues with Treatme nt Team	Other
1	53	SCHIZOAFFECT IVE	DON E	ADMITTED TO INPATIENT	FEMALE/BLACK OR AFRICAN AMERICAN	t 4	NONE	12TH GRADE	N/A	N/A	N/A	ADMITTED TO INPATIENT
2	44	BIPOLAR AFFECTIVE D/O	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	0.7	NONE	BACHELO R'S DEGREE	<u>YES</u>	N/A	N/A	UNABLE TO ATTEND DUE TO WORK SCHEDULE/ COMMUTE
3	53	MOOD D/O	DON E	TERMINATE D	MALE/BLACK OR AFRICAN AMERICAN	2.3	NONE	11TH GRADE	N/A	N/A	N/A	STARTED A NEW JOB/COULD NOT CONTINUE TO MAKE APPOINTME NTS
4	70	MDD	DON E	TERMINATE D	MALE/HISPANIC	0.9	RETIRED	SOME COLLEGE	N/A	N/A	N/A	REQUESTED TO RECEIVE SERVICES FROM DIFFERENT FACILITY
5	41	SCHIZOAFFECT IVE	DON E	TERMINATE D	MALE/BLACK OR AFRICAN AMERICAN	1.5	NONE	10TH GRADE	N/A	N/A	N/A	REQUESTED TO RECEIVE SERVICES FROM DIFFERENT FACILITY
6	24	BIPOLAR D/O	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	1.4	FULL TIME	SOME COLLEGE	N/A	N/A	N/A	REQUESTED TO RECEIVE SERVICES FROM DIFFERENT FACILITY
7	44	SCHIZOAFFECT IVE	DON E	TERMINATE D	MALE/HISPANIC	1	NONE	12TH GRADE	N/A	N/A	N/A	REQUESTED TO RECEIVE SERVICES FROM DIFFERENT FACILITY

27	BIPOLAR D/O	DON E	TERMINATE D	FEMALE/CAUCAS IAN	1.3	NONE	SOME COLLEGE	N/A	N/A	N/A	REFUSED TX
46	SCHIZOAFFECT IVE	DON E	D TERMINATE D	MALE/HISPANIC	2.7	NONE	BACHELO R'S DEGREE	N/A	N/A	N/A	REFUSED TX
24	MOOD D/O	DON E	TERMINATE D	MALE/BLACK OR AFRICAN AMERICAN	2.5	FULL TIME	BACHELO R'S DEGREE	N/A	N/A	N/A	REFUSED TX
31	ANXIETY DISORDER	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	1.7	PART- TIME	GRADUAT E DEGREE	N/A	N/A	N/A	REFUSED TX
38	MOOD D/O	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	2.7	NONE	ASSOCIAT ES DEGREE	N/A	N/A	N/A	REFUSED TX
29	MDD	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	2.4	NONE	GED	N/A	N/A	N/A	REFUSED TX
56	MOOD D/O	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	4	NONE	12TH GRADE	N/A	N/A	N/A	REFUSED TX
42	MDD	DON E	TERMINATE D	MALE/BLACK OR AFRICAN AMERICAN	1	FULL TIME	8TH GRADE	N/A	N/A	N/A	REFUSED TX
30	MDD	DON E	TERMINATE D	FEMALE/HISPANI C	1.9	NONE	6TH GRADE	N/A	N/A	N/A	REFUSED TX
56	OPIOID DEPENDENCE	DON E	- TERMINATE D	MALE/CAUCASIA N	1.9	NONE	12TH GRADE	N/A	N/A	N/A	REFUSED TX
53	MDD	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	2.8	NONE	12TH GRADE	N/A	N/A	N/A	PERSONAL/ PLANNED SURGERY SO UNABLE TO MAINTAIN CASE
20	BIPOLAR D/O	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	2.8	PART- TIME	12th GRADE	N/A	N/A	N/A	PERONSAL/O UT OF THE STATE/UNAB LE TO ATTEND THE APPOINTME NTS
35	BIPOLAR D/O	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	0.9	NONE	BACHELO R'S DEGREE	N/A	N/A	N/A	NO ENGAGEMEN T
38	MOOD D/O	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	1.4	NONE	SOME COLLEGE	N/A	N/A	N/A	NO ENGAGEMEN T
67	PARANOID SCHIZOPHRENI A DISORDER	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	0.8	NONE	7TH GRADE	N/A	N/A	N/A	NO ENGAGEMEN T

23	39	MOOD D/O	DON E	TERMINATE D	MALE/UNKNOWN	3.7	NONE	12TH GRADE	N/A	N/A	N/A	NO ENGAGEMEN T
24	25	MOOD D/O	DON E	TERMINATE D	MALE/UNKNOWN	3.3	FULL TIME	SOME COLLEGE	N/A	N/A	N/A	I NO ENGAGEMEN T
25	37	SCHIZOAFFECT IVE	DON E	TERMINATE D	MALE/HISPANIC	3.5	FULL TIME	12TH GRADE	N/A	N/A	N/A	NO ENGAGEMEN T
26	28	SUBSTANCE INDUCED MOOD D/O	DON E	TERMINATE D	MALE/BLACK OR AFRICAN AMERICAN	3.7	NONE	GED	N/A	N/A	N/A	NO ENGAGEMEN T
27	25	MOOD D/O	DON E	TERMINATE D	MALE/BLACK OR AFRICAN AMERICAN	1.4	NONE	12TH GRADE	N/A	N/A	N/A	NO ENGAGEMEN T
28	47	SCHIZOPHRENI A	DON E	TERMINATE D	MALE/BLACK OR AFRICAN AMERICAN	2.9	NONE	8TH GRADE	N/A	N/A	N/A	NO ENGAGEMEN T
29	37	BIPOLAR AFFECTIVE D/O	DON E	TERMINATE D	MALE/BLACK OR AFRICAN AMERICAN	3.2	NONE	SOME COLLEGE	N/A	N/A	N/A	NO ENGAGEMEN T
30	31	GENERALIZED ANXIETY DISORDER	DON E	TERMINATE D	MALE/BLACK OR AFRICAN AMERICAN	2.4	NONE	9TH GRADE	N/A	N/A	N/A	NO ENGAGEMEN T
31	71	MOOD D/O	DON E	TERMINATE D	MALE/BLACK OR AFRICAN AMERICAN	3.1	NONE	6TH GRADE	N/A	N/A	N/A	NO ENGAGEMEN T
32	56	OTHER SPECIFIED DEPRESSIVE D/O	DON E	TERMINATE D	MALE/BLACK OR AFRICAN AMERICAN	2.7	NONE	SOME COLLEGE	N/A	N/A	N/A	NO ENGAGEMEN T
33	55	MOOD D/O	DON E	TERMINATE D	MALE/BLACK OR AFRICAN AMERICAN	3.1	NONE	SOME COLLEGE	N/A	N/A	N/A	NO ENGAGEMEN T
34	29	ADJUSTMENT DISORDER	DON E	TERMINATE D	FEMALE/UNKNO WN	2.5	FULL TIME	12TH GRADE	N/A	N/A	N/A	NO ENGAGEMEN T
35	48	SCHIZOAFFECT IVE	DON E	TERMINATE D	FEMALE/HISPANI C	2.7	NONE	6TH GRADE	N/A	N/A	N/A	NO ENGAGEMEN T
36	50	MOOD D/O	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	1.1	NONE	SOME COLLEGE	N/A	N/A	N/A	NO ENGAGEMEN T
37	44	BIPOLAR D/O	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	2.2	FULL TIME	BACHELO R'S DEGREE	N/A	N/A	N/A	NO ENGAGEMEN T
38	65	OPIOID DEPENDENCE	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	2.7	NONE	11TH GRADE	N/A	N/A	N/A	NO ENGAGEMEN T

~0	
68	

39	44	SCHIZOAFFECT IVE	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	2.8	PART- TIME	SOME COLLEGE	N/A	N/A	N/A	NO ENGAGEMEN T
40	43	MDD	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	3	NONE	11TH GRADE	N/A	N/A	N/A	NO ENGAGEMEN T
41	32	MOOD D/O	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	2.9	NONE	11TH GRADE	N/A	N/A	N/A	NO ENGAGEMEN T
42	56	BIPOLAR D/O	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	3.7	NONE	SOME COLLEGE	N/A	N/A	N/A	NO ENGAGEMEN T
43	30	PTSD	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	1.4	NONE	SOME COLLEGE	N/A	N/A	N/A	NO ENGAGEMEN T
44	33	BIPOLAR AFFECTIVE D/O	DON E	TERMINATE D	MALE/BLACK OR AFRICAN AMERICAN	1.6	PART- TIME	ASSOCIAT E DEGREE	N/A	N/A	N/A	LOSS OF CONTACT
45	25	SCHIZOAFFECT IVE	DON E	TERMINATE D	MALE/BLACK OR AFRICAN AMERICAN	1.6	FULL TIME	SOME COLLEGE	N/A	N/A	N/A	LOSS OF CONTACT
46	50	SCHIZOAFFECT IVE	DON E	TERMINATE D	MALE/UNKNOWN	1.5	NONE	10TH GRADE	N/A	N/A	N/A	LOSS OF CONTACT
47	28	SCHIZOAFFECT IVE	DON E	TERMINATE D	MALE/BLACK OR AFRICAN AMERICAN	1	NONE	10TH GRADE	N/A	N/A	N/A	LOSS OF CONTACT
48	59	MDD	DON E	TERMINATE D	MALE/BLACK OR AFRICAN AMERICAN	1.5	NONE	BACHELO R'S DEGREE	N/A	N/A	N/A	LOSS OF CONTACT
49	51	MDD	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	1.5	NONE	11TH GRADE	N/A	N/A	N/A	LOSS OF CONTACT
50	56	MOOD D/O	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	1.3	NONE	11TH GRADE	N/A	N/A	N/A	LOSS OF CONTACT
51	18	ADHD	DON E	TERMINATE D	MALE/UNKNOWN	1.8	NONE	SOME COLLEGE	N/A	N/A	N/A	LOSS OF CONTACT
52	25	MOOD D/O	DON E	TERMINATE D	MALE/UNKNOWN	2	NONE	SOME	N/A	N/A	N/A	LOSS OF CONTACT
53	60	MDD	E DON E	TERMINATE	MALE/UNKNOWN	2	NONE	12th	N/A	N/A	N/A	LOSS OF CONTACT
54	38	MDD	DON	D TERMINATE	MALE/HISPANIC	2.7	PART-	GRADE 11TH	N/A	N/A	N/A	LOSS OF
55	38	BIPOLAR	E DON	D TERMINATE	MALE/CAUCASIA	1.1	TIME NONE	GRADE SOME	N/A	N/A	N/A	CONTACT LOSS OF
56	27	AFFECTIVE D/O MOOD D/O	E DON	D TERMINATE	N MALE/CAUCASIA	0.9	NONE	COLLEGE SOME	N/A	N/A	N/A	CONTACT LOSS OF
57	25	MOOD D/O	E DON E	D TERMINATE D	N MALE/CAUCASIA N	2.3	FULL TIME	COLLEGE 12TH GRADE	N/A	N/A	N/A	CONTACT LOSS OF CONTACT

58	48	SCHIZOAFFECT IVE	DON E	TERMINATE D	MALE/BLACK OR AFRICAN AMERICAN	2.2	NONE	10TH GRADE	N/A	N/A	N/A	LOSS OF CONTACT
59	46	BIPOLAR D/O	DON E	TERMINATE D	MALE/BLACK OR AFRICAN AMERICAN	1.2	PART TIME	GRADUAT E DEGREE	N/A	N/A	N/A	LOSS OF CONTACT
60	39	MDD	DON E	TERMINATE D	AMERICAN MALE/BLACK OR AFRICAN AMERICAN	2	NONE	SOME COLLEGE	N/A	N/A	N/A	LOSS OF CONTACT
61	36	PARANOID SCHIZOPHRENI A DISORDER	DON E	TERMINATE D	AMERICAN MALE/BLACK OR AFRICAN AMERICAN	1.6	NONE	12TH GRADE	N/A	N/A	N/A	LOSS OF CONTACT
62	35	MDD	DON E	TERMINATE D	MALE/BLACK OR AFRICAN AMERICAN	1.4	NONE	GED	N/A	N/A	N/A	LOSS OF CONTACT
63	34	PSYCHOTIC D/O	DON E	TERMINATE D	MALE/BLACK OR AFRICAN AMERICAN	0.7	NONE	10TH GRADE	N/A	N/A	N/A	LOSS OF CONTACT
64	31	BIPOLAR AFFECTIVE D/O	DON E	TERMINATE D	MALE/BLACK OR AFRICAN AMERICAN	0.7	NONE	11TH GRADE	N/A	N/A	N/A	LOSS OF CONTACT
65	29	MDD	DON E	TERMINATE D	MALE/BLACK OR AFRICAN AMERICAN	0.9	NONE	11TH GRADE	N/A	N/A	N/A	LOSS OF CONTACT
66	24	BIPOLAR D/O	DON E	TERMINATE D	MALE/BLACK OR AFRICAN AMERICAN	1.5	FULL TIME	12TH GRADE	N/A	N/A	N/A	LOSS OF CONTACT
67	23	MOOD D/O	DON E	TERMINATE D	MALE/BLACK OR AFRICAN AMERICAN	1.3	FULL TIME	12TH GRADE	N/A	N/A	N/A	LOSS OF CONTACT
68	23	MDD	DON E	TERMINATE D	MALE/BLACK OR AFRICAN AMERICAN	0.9	WORK- STUDY	SOME COLLEGE	N/A	N/A	N/A	LOSS OF CONTACT
69	22	BIPOLAR AFFECTIVE D/O	DON E	TERMINATE D	AMERICAN MALE/BLACK OR AFRICAN AMERICAN	1.5	NONE	GED	N/A	N/A	N/A	LOSS OF CONTACT
70	20	MOOD D/O	DON E	TERMINATE D	AMERICAN MALE/BLACK OR AFRICAN AMERICAN	1.3	NONE	10TH GRADE	N/A	N/A	N/A	LOSS OF CONTACT
71	19	MDD	DON E	TERMINATE D	AMERICAN MALE/BLACK OR AFRICAN AMERICAN	0.9	NONE	12TH GRADE	N/A	N/A	N/A	LOSS OF CONTACT
72	19	ANXIETY DISORDER	DON E	TERMINATE D	MALE/BLACK OR AFRICAN AMERICAN	1.4	PART TIME	12TH GRADE	N/A	N/A	N/A	LOSS OF CONTACT
73	63	BIPOLAR D/O	DON E	TERMINATE D	AMERICAN MALE/BLACK OR AFRICAN AMERICAN	0.7	PART TIME	SOME COLLEGE	N/A	N/A	N/A	LOSS OF CONTACT

69

7	n	
1	υ	

74	57	SCHIZOAFFECT IVE	DON E	TERMINATE D	MALE/BLACK OR AFRICAN AMERICAN	1.1	NONE	12TH GRADE	N/A	N/A	N/A	LOSS OF CONTACT
75	54	MOOD D/O	DON E	TERMINATE D	MALE/BLACK OR AFRICAN	1.2	NONE	12th GRADE	N/A	N/A	N/A	LOSS OF CONTACT
					AMERICAN							
76	25	BIPOLAR D/O	DON E	TERMINATE D	MALE/BLACK OR AFRICAN AMERICAN	2	NONE	12th GRADE	N/A	N/A	N/A	LOSS OF CONTACT
77	52	SCHIZOAFFECT IVE	DON E	TERMINATE D	FEMALE/UNKNO WN	2.2	NONE	12TH GRADE	N/A	N/A	N/A	LOSS OF CONTACT
78	51	MDD	DON E	TERMINATE D	FEMALE/UNKNO WN	0.9	NONE	SOME	N/A	N/A	N/A	LOSS OF CONTACT
79	37	MDD	DON E	TERMINATE D	FEMALE/UNKNO WN	1	FULL TIME	12TH GRADE	N/A	N/A	N/A	LOSS OF CONTACT
80	66	MDD	DON E	TERMINATE D	FEMALE/UNKNO WN	1.8	RETIRED	11TH GRADE	N/A	N/A	N/A	LOSS OF CONTACT
81	24	Other recurrent depressive disorders	DON E	TERMINATE D	FEMALE/UNKNO WN	1.1	NONE	10TH GRADE	N/A	N/A	N/A	LOSS OF CONTACT
82	40	BIPOLAR D/O	DON E	TERMINATE D	FEMALE/HISPANI C	1.4	NONE	SOME COLLEGE	N/A	N/A	N/A	LOSS OF CONTACT
83	39	PTSD	DON E	TERMINATE D	FEMALE/HISPANI C	1	NONE	12TH GRADE	N/A	N/A	N/A	LOSS OF CONTACT
84	28	MDD	DON E	TERMINATE D	FEMALE/HISPANI C	1.4	NONE	9TH GRADE	N/A	N/A	N/A	LOSS OF CONTACT
85	21	POSTPARTUM DEPRESSION	DON E	TERMINATE D	FEMALE/HISPANI C	0.9	NONE	12TH GRADE	N/A	N/A	N/A	LOSS OF CONTACT
86	21	MOOD D/O	DON E	TERMINATE D	FEMALE/HISPANI C	0.7	PART TIME	10TH GRADE	N/A	N/A	N/A	LOSS OF CONTACT
87	29	MDD	DON E	TERMINATE D	FEMALE/CAUCAS IAN	1.4	SELF EMPLOYE D	SOME COLLEGE	N/A	N/A	N/A	LOSS OF CONTACT
88	43	BIPOLAR AFFECTIVE D/O	DON E	TERMINATE D	FEMALE/CAUCAS IAN	1.9	NONE	11TH GRADE	N/A	N/A	N/A	LOSS OF CONTACT
89	52	PARANOID SCHIZOPHRENI A DISORDER	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	1	NONE	12TH GRADE	N/A	N/A	N/A	LOSS OF CONTACT
90	50	SCHIZOAFFECT IVE	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	0.7	NONE	SOME COLLEGE	N/A	N/A	N/A	LOSS OF CONTACT
91	49	MOOD D/O	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	1.8	NONE	SOME COLLEGE	N/A	N/A	N/A	LOSS OF CONTACT
92	49	MDD	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	0.9	NONE	12TH GRADE	N/A	N/A	N/A	LOSS OF CONTACT
93	49	MDD	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	1.7	NONE	12TH GRADE	N/A	N/A	N/A	LOSS OF CONTACT

7	1	
1	L	

94	47	MDD	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	1.6	NONE	12TH GRADE	N/A	N/A	N/A	LOSS OF CONTACT
95	45	MOOD D/O	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	1.2	NONE	ASSOCIAT E DEGREE	N/A	N/A	N/A	LOSS OF CONTACT
96	45	MIXED ANXIETY AND DEPRESSIVE DISORDER	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	1.1	NONE	12TH GRADE	N/A	N/A	N/A	LOSS OF CONTACT
97	44	BIPOLAR D/O	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	0.9	NONE	SOME COLLEGE	N/A	N/A	N/A	LOSS OF CONTACT
98	43	PTSD	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	0.7	DISABLED	12TH GRADE	N/A	N/A	N/A	LOSS OF CONTACT
99	42	MOOD D/O	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	1.6	NONE	GED	N/A	N/A	N/A	LOSS OF CONTACT
100	41	SCHIZOPHRENI A	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	1	NONE	7TH GRADE	N/A	N/A	N/A	LOSS OF CONTACT
101	39	PARANOID PSYCHOSIS	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	0.8	NONE	GRADUAT E DEGREE	N/A	N/A	N/A	LOSS OF CONTACT
102	39	OTHER SPECIFIED DEPRESSIVE D/O	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	2.2	NONE	9TH GRADE	N/A	N/A	N/A	LOSS OF CONTACT
103	39	SCHIZOAFFECT IVE	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	1.8	NONE	12TH GRADE	N/A	N/A	N/A	LOSS OF CONTACT
104	33	DYSTHYMIA	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	2.2	FULL TIME	SOME COLLEGE	N/A	N/A	N/A	LOSS OF CONTACT
105	33	ADJUSTMENT DISORDER	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	1.3	NONE	SOME COLLEGE	N/A	N/A	N/A	LOSS OF CONTACT
106	31	MOOD D/O	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	1.8	NONE	12TH GRADE	N/A	N/A	N/A	LOSS OF CONTACT
107	29	ADJUSTMENT DISORDER	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	1	FULL TIME	12TH GRADE	N/A	N/A	N/A	LOSS OF CONTACT
108	28	MDD	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	1.8	NONE	12TH GRADE	N/A	N/A	N/A	LOSS OF CONTACT
109	27	BIPOLAR AFFECTIVE D/O	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	1.7	NONE	12TH GRADE	N/A	N/A	N/A	LOSS OF CONTACT

$\overline{7}$	\mathbf{r}
1	7

110	26	BIPOLAR D/O	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	0.7	FULL TIME	12TH GRADE	N/A	N/A	N/A	LOSS OF CONTACT
111	26	SCHIZOAFFECT IVE	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	0.7	NONE	12TH GRADE	N/A	N/A	N/A	LOSS OF CONTACT
112	24	MOOD D/O	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	1.4	PART TIME	9TH GRADE	N/A	N/A	N/A	LOSS OF CONTACT
113	24	MOOD D/O	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	1.9	NONE	12TH GRADE	N/A	N/A	N/A	LOSS OF CONTACT
114	21	DYSTHYMIA	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	0.8	NONE	12TH GRADE	N/A	N/A	N/A	LOSS OF CONTACT
115	62	BIPOLAR D/O	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	1	NONE	9TH GRADE	N/A	N/A	N/A	LOSS OF CONTACT
116	58	MOOD D/O	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	1.7	NONE	11TH GRADE	N/A	N/A	N/A	LOSS OF CONTACT
117	57	MDD	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	2.2	NONE	11TH GRADE	N/A	N/A	N/A	LOSS OF CONTACT
118	55	BIPOLAR AFFECTIVE D/O	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	0.9	NONE	SOME COLLEGE	N/A	N/A	N/A	LOSS OF CONTACT
119	54	GENERALIZED ANXIETY DISORDER	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	0.9	FULL TIME	SOME COLLEGE	N/A	N/A	N/A	LOSS OF CONTACT
120	53	BIPOLAR AFFECTIVE D/O	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	0.7	NONE	9TH GRADE	N/A	N/A	N/A	LOSS OF CONTACT
121	45	PTSD	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	2	NONE	10TH GRADE	N/A	N/A	N/A	LOSS OF CONTACT
122	44	SCHIZOAFFECT IVE	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	2	NONE	SOME COLLEGE	N/A	N/A	N/A	Loss OF CONTACT
123	30	MDD	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	2.7	NONE	10TH GRADE	N/A	N/A	N/A	LOSS OF CONTACT
124	19	PARANOID SCHIZOPHRENI A	DON E	TERMINATE D	MALE/BLACK OR AFRICAN AMERICAN	0.9	NONE	12TH GRADE	N/A	N/A	N/A	LOSS OF CONTACT
125	37	MOOD D/O	DON E	TERMINATE D	FEMALE/HISPANI C	1.3	FULL TIME	GRADUAT E SCHOOL	N/A	N/A	N/A	LENGTH OF STAY EXCEEDED

EVALUATING BARRIERS TO OUTPATIENT TREATMENT

126	26	BIPOLAR D/O	DON E	TERMINATE D	FEMALE/BLACK OR AFRICAN AMERICAN	2.1	NONE	SOME COLLEGE	N/A	N/A	N/A	In police custody
127	42	BIPOLAR D/O	DON E	TERMINATE D	MALE/BLACK OR AFRICAN AMERICAN	0.8	NONE	GED	N/A	N/A	N/A	DUPLICATIO N OF SERVICES
128	61	BIPOLAR D/O	DON E	COMPLETED TREATMEN T	MALE/HISPANIC	2.6	NONE	ASSOCIAT ES DEGREE	N/A	N/A	N/A	COMPLETED TREATMENT- -FEELS BETTER (NO AFTERCARE)
129	38	ALCOHOL ABUSE	DON E	COMPLETED TREATMEN T	MALE/BLACK OR AFRICAN AMERICAN	1.8	FULL TIME	12TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT- -FEELS BETTER (NO AFTERCARE)
130	24	MOOD D/O	DON E	COMPLETED TREATMEN T	MALE/UNKNOWN	1.3	NONE	11TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
131	39	SCHIZOAFFECT IVE	DON E	COMPLETED TREATMEN T	FEMALE/BLACK OR AFRICAN AMERICAN	0.9	UNION	GRADUAT E DEGREE	N/A	N/A	N/A	COMPLETED TREATMENT
132	54	MIXED ANXIETY AND DEPRESSIVE DISORDER	DON E	COMPLETED TREATMEN T	MALE/BLACK OR AFRICAN AMERICAN	1.6	DISABLED	GED	N/A	N/A	N/A	COMPLETED TREATMENT
133	52	MDD	DON E	COMPLETED TREATMEN T	MALE/UNKNOWN	1.2	FULL TIME	12TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
134	58	MDD	DON E	COMPLETED TREATMEN T	MALE/UNKNOWN	2.1	NONE	12TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
135	58	SCHIZOAFFECT IVE	DON E	COMPLETED TREATMEN T	MALE/HISPANIC	3	NONE	6TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
136	47	MOOD D/O	DON E	COMPLETED TREATMEN T	MALE/HISPANIC	0.8	FULL TIME	SOME COLLEGE	N/A	N/A	N/A	COMPLETED TREATMENT
137	39	SCHIZOAFFECT IVE	DON E	COMPLETED TREATMEN T	MALE/HISPANIC	1.5	NONE	9TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
138	35	MDD	DON E	COMPLETED TREATMEN T	MALE/HISPANIC	1.8	NONE	12TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
139	22	BIPOLAR D/O	DON E	COMPLETED TREATMEN T	MALE/HISPANIC	1.4	NONE	11TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
140	62	BIPOLAR D/O	DON E	COMPLETED TREATMEN T	MALE/HISPANIC	0.8	NONE	2ND GRADE	N/A	N/A	N/A	COMPLETED TREATMENT

73

141

142

143

144

145

146

147

148

149

150

151

152

153

154

155

156

57

67

54

54

29

54

33

50

49

46

44

43

39

39

35

33

BIPOLAR D/O

PTSD

DON

DON

TREATMEN

COMPLETED

TREATMEN

Т

Т

Е

Е

MDD	DON E	COMPLETED TREATMEN T	MALE/HISPANIC	1.3	NONE	12TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
MDD	DON E	T COMPLETED TREATMEN T	MALE/HISPANIC	2.4	NONE	11TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
BIPOLAR D/O	DON E	COMPLETED TREATMEN T	MALE/HISPANIC	2.8	NONE	11TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
SCHIZOPHRENI A	DON E	COMPLETED TREATMEN T	MALE/HISPANIC	2	NONE	SOME COLLEGE	N/A	N/A	N/A	COMPLETED TREATMENT
MDD	DON E	COMPLETED TREATMEN T	MALE/CAUCASIA N	0.7	FULL TIME	GRADUAT E SCHOOL	N/A	N/A	N/A	COMPLETED TREATMENT
MDD	DON E	COMPLETED TREATMEN T	MALE/CAUCASIA N	1.4	NONE	SOME COLLEGE	N/A	N/A	N/A	COMPLETED TREATMENT
MDD	DON E	COMPLETED TREATMEN T	MALE/CAUCASIA N	2.8	PART- TIME	SOME COLLEGE	N/A	N/A	N/A	COMPLETED TREATMENT
SUBSTANCE INDUCED MOOD D/O	DON E	COMPLETED TREATMEN T	MALE/BLACK OR AFRICAN AMERICAN	2.3	TEMPORA RY AGENCY	GED	N/A	N/A	N/A	COMPLETED TREATMENT
SCHIZOPHRENI A	DON E	COMPLETED TREATMEN T	MALE/BLACK OR AFRICAN AMERICAN	0.9	NONE	12TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
PTSD	DON E	COMPLETED TREATMEN T	MALE/BLACK OR AFRICAN AMERICAN	1.5	NONE	GED	N/A	N/A	N/A	COMPLETED TREATMENT
MOOD D/O	DON E	COMPLETED TREATMEN T	MALE/BLACK OR AFRICAN AMERICAN	1.8	NONE	11TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
SCHIZOAFFECT IVE	DON E	COMPLETED TREATMEN T	MALE/BLACK OR AFRICAN AMERICAN	2.6	FULL TIME	11TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
SCHIZOPHRENI A	DON E	COMPLETED TREATMEN T	MALE/BLACK OR AFRICAN AMERICAN	2.2	NONE	10TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
SCHIZOAFFECT IVE	DON E	T COMPLETED TREATMEN T	AMERICAN MALE/BLACK OR AFRICAN AMERICAN	1.1	NONE	10TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
	DOM									001/01/07/07

FULL TIME SOME

NONE

COLLEGE

10TH

GRADE

N/A

N/A

N/A

N/A

N/A

N/A

COMPLETED

TREATMENT

COMPLETED

TREATMENT

COMPLETED MALE/BLACK OR 1.4

AFRICAN

AFRICAN

AMERICAN

AMERICAN

MALE/BLACK OR

1.1

$\overline{7}$	5	
1	J	

157	32	MDD	DON E	COMPLETED TREATMEN T	MALE/BLACK OR AFRICAN AMERICAN	0.9	NONE	12TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
158	32	BIPOLAR AFFECTIVE D/O	DON E	T COMPLETED TREATMEN T	MALE/BLACK OR AFRICAN AMERICAN	2.3	NONE	12TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
159	30	SCHIZOAFFECT IVE	DON E	COMPLETED TREATMEN T	MALE/BLACK OR AFRICAN AMERICAN	1.4	NONE	SOME COLLEGE	N/A	N/A	N/A	COMPLETED TREATMENT
160	29	SCHIZOPHRENI A	DON E	COMPLETED TREATMEN T	MALE/BLACK OR AFRICAN AMERICAN	1.4	NONE	12TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
161	28	MOOD D/O	DON E	COMPLETED TREATMEN T	MALE/BLACK OR AFRICAN AMERICAN	1.5	NONE	12TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
162	25	SCHIZOAFFECT IVE	DON E	COMPLETED TREATMEN T	MALE/BLACK OR AFRICAN AMERICAN	1.7	PART- TIME	12TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
163	22	PSYCHOTIC D/O	DON E	COMPLETED TREATMEN T	MALE/BLACK OR AFRICAN AMERICAN	2.2	NONE	12TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
164	19	R/O PSYCHOSIS	DON E	COMPLETED TREATMEN T	MALE/BLACK OR AFRICAN AMERICAN	1.5	NONE	11TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
165	19	SUBSTANCE INDUCED MOOD DISORDER	DON E	COMPLETED TREATMEN T	MALE/BLACK OR AFRICAN AMERICAN	1.2	NONE	12TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
166	69	OPIOID ABUSE	DON E	COMPLETED TREATMEN T	MALE/BLACK OR AFRICAN AMERICAN	0.9	DISABLED	11TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
167	57	MOOD D/O	DON E	COMPLETED TREATMEN T	MALE/BLACK OR AFRICAN AMERICAN	2.2	NONE	11TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
168	55	ADJUSTMENT DISORDER	DON E	COMPLETED TREATMEN T	MALE/BLACK OR AFRICAN AMERICAN	1.1	NONE	TRADE SCHOOL	N/A	N/A	N/A	COMPLETED TREATMENT
169	52	MDD	DON E	COMPLETED TREATMEN T	MALE/BLACK OR AFRICAN AMERICAN	2.6	NONE	GED	N/A	N/A	N/A	COMPLETED TREATMENT
170	48	MOOD D/O	DON E	COMPLETED TREATMEN T	MALE/BLACK OR AFRICAN AMERICAN	2.9	NONE	10TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
171	43	MOOD D/O	DON E	COMPLETED TREATMEN T	MALE/BLACK OR AFRICAN AMERICAN	2.5	NONE	11TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
172	43	MOOD D/O	DON E	COMPLETED TREATMEN T	MALE/BLACK OR AFRICAN AMERICAN	4	FULL TIME	12TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT

173	36	MOOD D/O	DON E	TERMINATE D	MALE/BLACK OR AFRICAN AMERICAN	2	NONE	SOME COLLEGE	N/A	N/A	N/A	COMPLETED TREATMENT
174	36	MOOD D/O	DON E	COMPLETED TREATMEN T	MALE/BLACK OR AFRICAN AMERICAN	2.8	NONE	GED	N/A	N/A	N/A	COMPLETED TREATMENT
175	30	PARANOID SCHIZOPHRENI A DISORDER	DON E	COMPLETED TREATMEN T	MALE/BLACK OR AFRICAN AMERICAN	2.4	NONE	9TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
176	30	A DISORDER BIPOLAR AFFECTIVE D/O	DON E	COMPLETED TREATMEN T	MALE/BLACK OR AFRICAN AMERICAN	2.5	NONE	12TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
177	25	MOOD D/O	DON E	COMPLETED TREATMEN T	MALE/BLACK OR AFRICAN AMERICAN	1.6	NONE	11TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
178	58	MOOD D/O	DON E	COMPLETED TREATMEN T	MALE/BLACK OR AFRICAN AMERICAN	2.8	NONE	12TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
179	56	MOOD D/O	DON E	COMPLETED TREATMEN T	MALE/BLACK OR AFRICAN AMERICAN	1.9	FULL TIME	SOME COLLEGE	N/A	N/A	N/A	COMPLETED TREATMENT
180	53	MOOD D/O	DON E	COMPLETED TREATMEN T	MALE/BLACK OR AFRICAN AMERICAN	2	NONE	12th GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
181	36	MDD	DON E	COMPLETED TREATMEN T	MALE/ BLACK OR AFRICAN AMERICAN	4	FULL TIME	SOME COLLEGE	N/A	N/A	N/A	COMPLETED TREATMENT
182	35	BIPOLAR D/O	DON E	COMPLETED TREATMEN T	MALE/ BLACK OR AFRICAN AMERICAN	2.1	NONE	11TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
183	35	MDD	DON E	COMPLETED TREATMEN T	FEMALE/UNKNO WN	0.7	FULL TIME	12TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
184	20	MDD	DON E	T COMPLETED TREATMEN T	FEMALE/UNKNO WN	0.9	NONE	SOME COLLEGE	N/A	N/A	N/A	COMPLETED TREATMENT
185	28	MDD	DON E	COMPLETED TREATMEN T	FEMALE/UNKNO WN	2.6	PART- TIME	8TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
186	57	MDD	DON E	T COMPLETED TREATMEN T	FEMALE/HISPANI C	2.6	NONE	SOME COLLEGE	N/A	N/A	N/A	COMPLETED TREATMENT
187	44	PANIC DISORDER	DON E	T COMPLETED TREATMEN T	FEMALE/CAUCAS IAN	2.1	NONE	12TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
188	38	PANIC DISORDER	DON E	T COMPLETED TREATMEN T	FEMALE/CAUCAS IAN	2.7	FULL TIME	GED	N/A	N/A	N/A	COMPLETED TREATMENT
				-								

_	_	
1	1	
'	'	

189	52	PTSD	DON E	COMPLETED TREATMEN T	FEMALE/BLACK OR AFRICAN AMERICAN	1.5	NONE	SOME COLLEGE	N/A	N/A	N/A	COMPLETED TREATMENT
190	51	ANXIETY DISORDER	DON E	COMPLETED TREATMEN T	FEMALE/BLACK OR AFRICAN AMERICAN	0.9	FULL TIME	ASSOCIAT E DEGREE	N/A	N/A	N/A	COMPLETED TREATMENT
191	50	MDD	DON E	COMPLETED TREATMEN T	FEMALE/BLACK OR AFRICAN AMERICAN	2.3	NONE	GED	N/A	N/A	N/A	COMPLETED TREATMENT
192	47	MOOD D/O	DON E	COMPLETED TREATMEN T	FEMALE/BLACK OR AFRICAN AMERICAN	0.9	NONE	12TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
193	41	MDD	DON E	COMPLETED TREATMEN T	FEMALE/BLACK OR AFRICAN AMERICAN	1.8	FULL TIME	12TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
194	41	SCHIZOAFFECT IVE	DON E	COMPLETED TREATMEN T	FEMALE/BLACK OR AFRICAN AMERICAN	0.9	NONE	11TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
195	34	MOOD D/O	DON E	COMPLETED TREATMEN T	FEMALE/BLACK OR AFRICAN AMERICAN	1	NONE	SOME COLLEGE	N/A	N/A	N/A	COMPLETED TREATMENT
196	32	MDD	DON E	COMPLETED TREATMEN T	FEMALE/BLACK OR AFRICAN AMERICAN	1	PART TIME	BACHELO R'S DEGREE	N/A	N/A	N/A	COMPLETED TREATMENT
197	32	BIPOLAR AFFECTIVE D/O	DON E	COMPLETED TREATMEN T	FEMALE/BLACK OR AFRICAN AMERICAN	1.4	FULL TIME	12TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
198	31	BIPOLAR D/O	DON E	COMPLETED TREATMEN T	FEMALE/BLACK OR AFRICAN AMERICAN	0.7	NONE	SOME COLLEGE	N/A	N/A	N/A	COMPLETED TREATMENT
199	27	MDD	DON E	COMPLETED TREATMEN T	FEMALE/BLACK OR AFRICAN AMERICAN	1.4	FULL TIME	SOME COLLEGE	N/A	N/A	N/A	COMPLETED TREATMENT
200	23	MDD	DON E	COMPLETED TREATMEN T	FEMALE/BLACK OR AFRICAN AMERICAN	0.8	PART TIME	SOME COLLEGE	N/A	N/A	N/A	COMPLETED TREATMENT
201	21	BIPOLAR D/O	DON E	COMPLETED TREATMEN T	FEMALE/BLACK OR AFRICAN AMERICAN	1.7	NONE	8TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
202	18	MDD	DON E	COMPLETED TREATMEN T	FEMALE/BLACK OR AFRICAN AMERICAN	0.7	NONE	10TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
203	71	SUBSTANCE INDUCED MOOD DISORDER	DON E	COMPLETED TREATMEN T	FEMALE/BLACK OR AFRICAN AMERICAN	2.2	NONE	12TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
204	67	MDD	DON E	COMPLETED TREATMEN T	FEMALE/BLACK OR AFRICAN AMERICAN	1.5	NONE	11TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT

205	56	BIPOLAR D/O	DON E	COMPLETED TREATMEN T	FEMALE/BLACK OR AFRICAN AMERICAN	1.8	NONE	9TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
206	51	BIPOLAR D/O	DON E	COMPLETED TREATMEN T	FEMALE/BLACK OR AFRICAN AMERICAN	2.6	NONE	8TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
207	50	MOOD D/O	DON E	COMPLETED TREATMEN T	FEMALE/BLACK OR AFRICAN AMERICAN	4	NONE	12TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
208	49	SCHIZOAFFECT IVE	DON E	COMPLETED TREATMEN T	FEMALE/BLACK OR AFRICAN AMERICAN	4	NONE	12TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
209	45	BIPOLAR D/O	DON E	COMPLETED TREATMEN T	FEMALE/BLACK OR AFRICAN AMERICAN	2.4	NONE	11TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
210	41	BIPOLAR AFFECTIVE D/O	DON E	COMPLETED TREATMEN T	FEMALE/BLACK OR AFRICAN AMERICAN	2	NONE	12TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
211	34	BIPOLAR AFFECTIVE D/O	DON E	COMPLETED TREATMEN T	FEMALE/BLACK OR AFRICAN AMERICAN	3.4	FULL TIME	12TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
212	32	POSTPARTUM DEPRESSION	DON E	COMPLETED TREATMEN T	FEMALE/BLACK OR AFRICAN AMERICAN	2	PART- TIME	12th GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
213	31	BIPOLAR AFFECTIVE D/O	DON E	COMPLETED TREATMEN T	FEMALE/BLACK OR AFRICAN AMERICAN	4	NONE	ASSOCIAT ES DEGREE	N/A	N/A	N/A	COMPLETED TREATMENT
214	24	BIPOLAR D/O	DON E	COMPLETED TREATMEN T	FEMALE/BLACK OR AFRICAN AMERICAN	1	NONE	12TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
215	61	MDD	DON E	COMPLETED TREATMEN T	FEMALE/BLACK OR AFRICAN AMERICAN	2.8	NONE	8TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
216	55	BIPOLAR D/O	DON E	COMPLETED TREATMEN T	FEMALE/BLACK OR AFRICAN AMERICAN	2.3	NONE	10TH GRADE	N/A	N/A	N/A	COMPLETED TREATMENT
217	26	BIPOLAR D/O	DON E	COMPLETED TREATMEN T	FEMALE/AMERIC AN INDIAN OR ALASKAN NATIVE	1.8	PART- TIME	BACHELO R'S DEGREE	N/A	N/A	N/A	COMPLETED TREATMENT
218	26	MOOD D/O	DON E	TERMINATE D	MALE/CAUCASIA N	1.2	FULL TIME	10TH GRADE	N/A	N/A	N/A	ASKED TO HAVE CASE CLOSED
219	52	MDD	DON E	TRANSFERR ED TO HIGHER LEVEL OF CARE	MALE/BLACK OR AFRICAN AMERICAN	2.9	NONE	12TH GRADE	N/A	N/A	N/A	ADMITTED TO INPATIENT

EVALUATING BARRIERS TO OUTPATIENT TREATMENT

220	27	PARANOID SCHIZOPHRENI A DISORDER	DON E	TERMINATE D	MALE/HISPANIC	1.5	DISABLED	9TH GRADE	N/A	N/A	N/A	ADMITTED TO INPATIENT
221	57	PSYCHOTIC D/O	DON E	ADMITTED TO INPATIENT	MALE/HISPANIC	4	NONE	11TH GRADE	N/A	N/A	N/A	ADMITTED TO INPATIENT
222	25	PARANOID SCHIZOPHRENI A DISORDER	DON E	ADMITTED TO INPATIENT	MALE/BLACK OR AFRICAN AMERICAN	1.2	NONE	12th GRADE	N/A	N/A	N/A	ADMITTED TO INPATIENT
223	23	MDD	DON E	TERMINATE D	MALE/BLACK OR AFRICAN AMERICAN	1	NONE	12TH GRADE	N/A	N/A	N/A	ADMITTED TO INPATIENT
224	38	Other recurrent depressive disorders	DON E	ADMITTED TO INPATIENT	MALE/BLACK OR AFRICAN AMERICAN	2.5	NONE	12TH GRADE	N/A	N/A	N/A	ADMITTED TO INPATIENT
225	29	SUBSTANCE INDUCED MOOD D/O	DON E	ADMITTED TO INPATIENT	MALE/BLACK OR AFRICAN AMERICAN	3.5	NONE	11TH GRADE	N/A	N/A	N/A	ADMITTED TO INPATIENT
226	31	PARANOID SCHIZOPHRENI A DISORDER	DON E	TERMINATE D	FEMALE/HISPANI C	0.9	NONE	10TH GRADE	N/A	N/A	N/A	ADMITTED TO INPATIENT
227	24	MDD	DON E	ADMITTED TO INPATIENT	FEMALE/BLACK OR AFRICAN AMERICAN	1.7	FULL TIME	12TH GRADE	N/A	N/A	N/A	ADMITTED TO INPATIENT

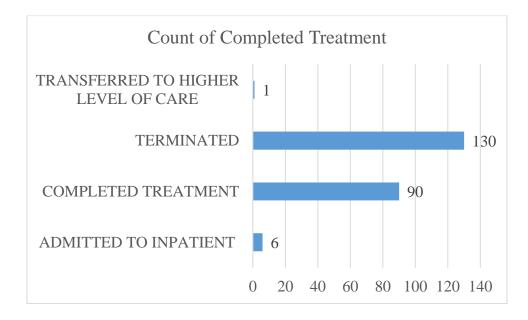
Client #	Age	Co-DX	Ethnicity/Gender	Basis Score	Employe d	Education Level	Transp ort	Financi al Concer ns	Issue s with Tx Team	Other
1	41	SCHIZOAFFECT IVE	MALE/BLACK OR AFRICAN AMERICAN	1	NONE	12TH GRADE	YES	NO	NO	PERSONAL/Not Interested in Stopping
2	47	BIPOLAR	FEMALE/HISPA NIC OR LATINO	2.667	NONE	SOME COLLEGE	NO	NO	YES	Therapist was too Invasive
3	57	SCHIZOAFFECT IVE	FEMALE/BLACK OR AFRICAN AMERICAN	2.285	NONE	HIGH SCHOOL/ GED	YES	YES	NO	N/A
4	47	BIPOLAR	FEMALE/BLACK OR AFRICAN AMERICAN	2.667	NONE	SOME HIGH SCHOOL	YES	NO	NO	N/A
5	45	BIPOLAR AFFECTIVE	FEMALE/BLACK OR AFRICAN AMERICAN	3.75	FULL TIME	SOME COLLEGE	NO	NO	NO	DIFFICULTY WITH SCHEDULING AROUND WORK
6	41	MOOD DISORDER	FEMALE/BLACK OR AFRICAN AMERICAN	0.5	NONE	11TH GRADE	YES	YES	NO	N/A
7	48	PTSD	MALE/BLACK OR AFRICAN AMERICAN	1.25	FULL TIME	HIGH SCHOOL/ GED	YES	YES	NO	N/A
8	41	SCHIZOAFFECT IVE	MALE/BLACK OR AFRICAN AMERICAN	0.5	NONE	9TH GRADE	YES	YES	NO	N/A
9	29	GAD	FEMALE/BLACK OR AFRICAN AMERICAN	1.5	NONE	12TH GRADE	YES	NO	NO	N/A
10	28	MOOD DISORDER	FEMALE/HISPA NIC OR LATINO	1.75	NONE	SOME COLLEGE	NO	NO	NO	MEDICATION RELATED ISSUE
11	48	PTSD	FEMALE/NATIV E AMERICAN	1.5	NONE	7TH GRADE	YES	NO	YES	N/A
12	38	BIPOLAR	MALE/BLACK OR AFRICAN AMERICAN	4	NONE	BACHELO R'S DEGREE	NO	NO	NO	"SIGN OF BEING WEAK"

Appendix H Demographic form for Structured Interview

EVALUATING BARRIERS TO OUTPATIENT TREATMENT

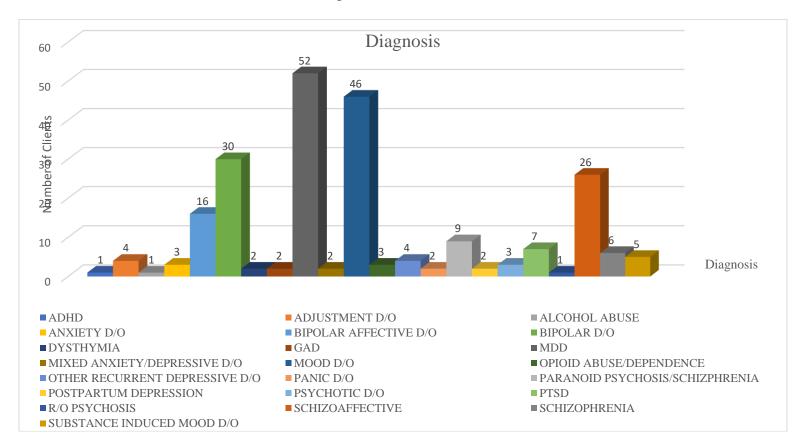
13	40	BIPOLAR AFFECTIVE	FEMALE/BLACK OR AFRICAN AMERICAN	1.25	PART TIME	ASSOCIAT E'S DEGREE	NO	NO	YES	N/A
14	55	MOOD DISORDER	FEMALE/BLACK OR AFRICAN AMERICAN	0.5	NONE	BACHELO R'S DEGREE	NO	NO	NO	MEDICATION RELATED ISSUE
15	48	MDD	FEMALE/BLACK OR AFRICAN AMERICAN	0.25	NONE	SOME HIGH SCHOOL	YES	YES	NO	N/A
16	24	MDD	FEMALE/HISPA NIC OR LATINO	0.5	NONE	SOME COLLEGE	NO	NO	YES	N/A
17	56	PARANOID SCHIZOPHRENI A	MALE/BLACK OR AFRICAN AMERICAN	1.5	NONE	SOME HIGH SCHOOL	YES	NO	NO	N/A
18	27	MOOD DISORDER	MALE/HISPANIC OR LATINO	2	NONE	BACHELO R'S DEGREE	NO	NO	NO	DEPRESSION/LOW SELF ESTEEM
19	44	MOOD DISORDER	MALE/BLACK OR AFRICAN AMERICAN	0.25	FULL TIME	HIGH SCHOOL/ GED	NO	NO	NO	N/A
20	34	BIPOLAR	MALE/BLACK OR AFRICAN AMERICAN	2.75	NONE	SOME HIGH SCHOOL	NO	YES	YES	N/A

Appendix I



Completed Treatment	Count of Completed Treatment	Percentage
ADMITTED TO INPATIENT	(5 2.64%
COMPLETED TREATMENT	90) 39.65%
TERMINATED	130) 57.27%
TRANSFERRED TO HIGHER		0.44%
LEVEL OF CARE		1

Appendix J



Diagnosis	Number of Charts	Percentage
ADHD	1	0.44%
ADJUSTMENT D/O	4	1.76%
ALCOHOL ABUSE	1	0.44%
ANXIETY	3	1.32%
BIPOLAR AFFECTIVE D/O	16	7.05%
BIPOLAR D/O	30	13.22%
DYSHYMIA	2	0.88%
GAD	2	0.88%
MDD	52	22.91%
MIXED ANXIETY/DEPRESSIVE D/O	2	0.88%
MOOD D/O	46	20.26%
OPIOID ABUSE/DEPENDENCE	3	1.32%
OTHER RECURRENT DEPRESSIVE	4	1.76%
D/O		
PANIC D/O	2	0.88%
PARANOID PSYCHOSIS/	9	3.96%
SCHIZOPHRENIA		
POSTPARTUM DEPRESSION	2	0.88%
PSYHOTIC DISORDER	3	1.32%
PTSD	7	3.08%
R/O PSYCHOSIS	1	0.44%
SCHIZOAFFECTIVE D/O	26	11.45%
SCHIZOPHRENIA	6	2.64%
SUBSTANCE INDUCED MOOD D/O	5	2.22%

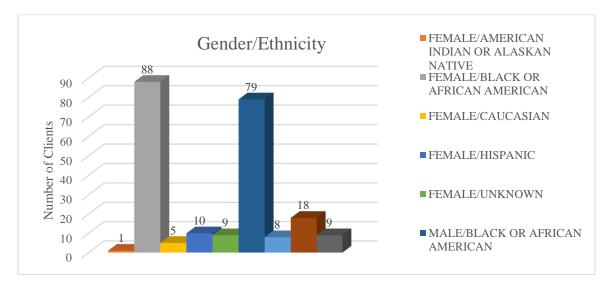
Appendix K



Basis Scores	0.7-1.19	1.19-1.68	1.68-2.17	2.17-2.66	2.66-3.15	3.15-3.64	3.644
# of Charts	64	52	39	32	24	5	11
%	28.19%	22.91%	17.18%	14.1%	10.57%	2.2%	4.85%

Mean	Median	Mode
1.79	1.6	0.9

Appendix L

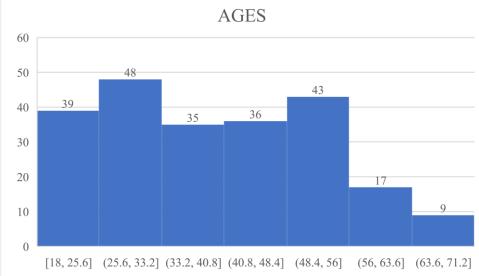


Gender	Number	Percentage
Male	114	50.22%
Female	113	49.78%

Ethnicity	<u>Number</u>	Percentage
American Indian/Alaskan Native	1	0.44%
Black or African American	167	73.57%
Caucasian	13	5.72%
Hispanic	28	12.33%
Unknown	18	7.93%

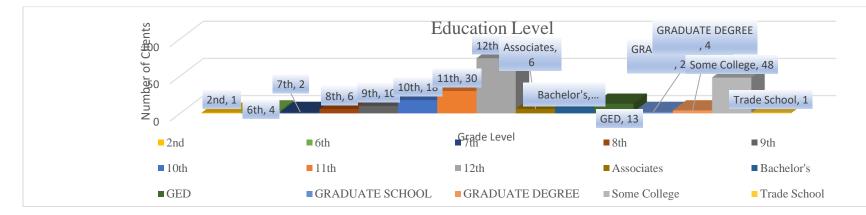
AGES [18, 25.6] (25.6, 33.2] (33.2, 40.8] (40.8, 48.4] (48.4, 56] (56, 63.6] (63.6, 71.2]

Appendix M			
Retrospective Chart Review Data			



AGE	<u>NUMBER</u>	PERCENTAGE
18-25.6	39	17.18%
25.6-33.2	48	21.15%
33.2-40.8	35	15.42%
40.8-48.4	36	15.86%
48.4-56	43	18.94%
56-63.6	17	7.49%
63.6-71.2	9	3.96%

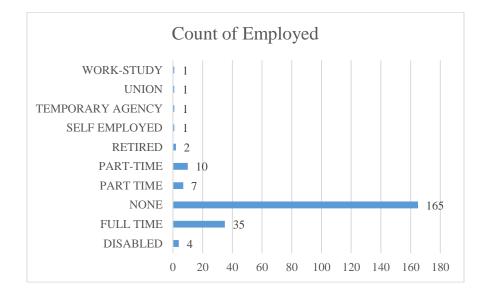
MEAN	MEDIAN	MODE
39.92	39	39



Appendix N Retrospective Chart Review Data

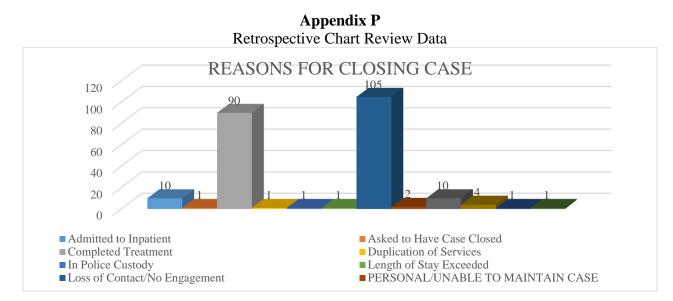
Education Level	<u>Number</u>	Percentage
2 nd	1	0.44%
6 th	4	1.76%
7 th	2	0.88%
8 th	6	2.64%
9 th	10	4.41%
10 th	18	7.93%
11 th	30	13.22%
12 th	74	32.6%
Associate's	6	2.64%
Bachelor's	8	3.52%
GED	13	5.73%
Graduate School	2	0.88%
Graduate Degree	4	1.76%
Some College	48	21.45%
Trade School	1	0.44%

88



Appendix O Retrospective Chart Review Data

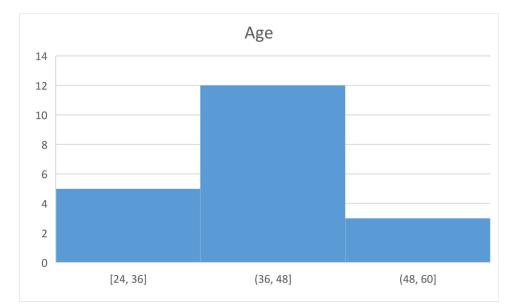
Employed	Count of		Percentage
Employed	Employed		1 7 60/
DISABLED		4	1.76%
FULL TIME		35	15.42%
NONE		165	72.69%
PART TIME		7	3.08%
PART-TIME		10	4.41%
RETIRED		2	0.88%
SELF			0.44%
EMPLOYED		1	
TEMPORARY			0.44%
AGENCY		1	
UNION		1	0.44%
WORK-STUDY		1	0.44%



90

Reasons for Closing The Case	<u>Number</u>	Percentage
Admitted to Inpatient	10	4.41%
Asked to have Case Closed	1	0.44%
Completed Treatment	90	39.65%
Duplication of Services	1	0.44%
In Police Custody	1	0.44%
Length of Stay Exceeded	1	0.44%
Loss of Contact/No Engagement	105	46.26%
Personal/Unable to Maintain Case	1	0.44%
Refused Treatment	10	4.41%
Requested to Receive Services from Different Facility	4	1.76%
Started New Job/Could Not make Appts	1	0.44%
Unable to Attend due to Work Schedule/Commute	1	0.44%

Appendix Q



Age	Number	Percentage
24-36	5	25%
36-48	12	60%
48-60	3	15%

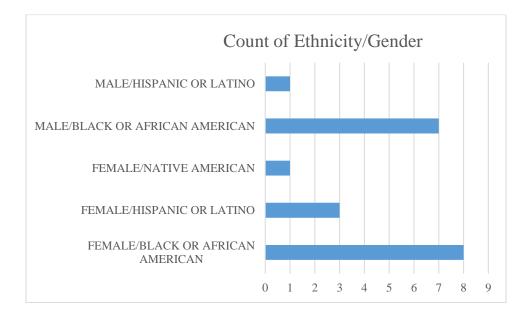
Mean	Median	Mode
41.9	42	41

Count of Co-DX SCHIZOAFFECTIVE PTSD PARANOID SCHIZOPHRENIA MOOD DISORDER MDD GAD BIPOLAR AFFECTIVE BIPOLAR 0 2 3 1 4 5 6

Appendix	R
----------	---

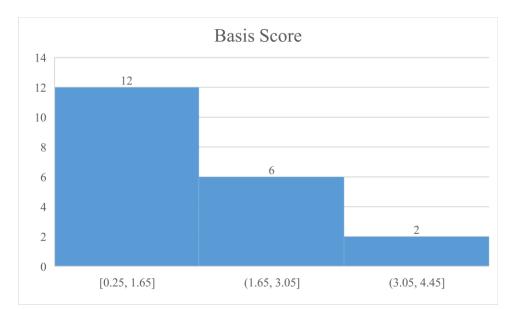
Co-DX	Count of Co-DX	Percentage	
BIPOLAR		4	20%
BIPOLAR AFFECTIVE		2	10%
GAD		1	5%
MDD		2	10%
MOOD DISORDER		5	25%
PARANOID SCHIZOPHRENIA		1	5%
PTSD		2	10%
SCHIZOAFFECTIVE		3	15%

Appendix S



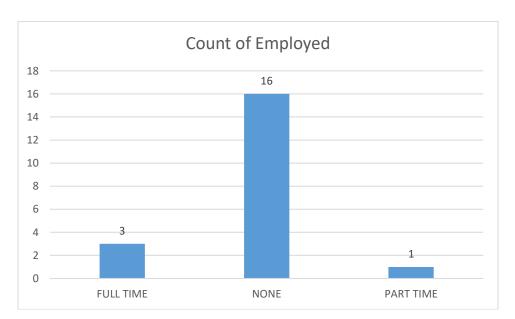
	Count of	Percentage	
Ethnicity/Gender	Ethnicity/Gender		
FEMALE/BLACK OR AFRICAN AMERICAN	8		40%
FEMALE/HISPANIC OR LATINO	3		15%
FEMALE/NATIVE AMERICAN	1		5%
MALE/BLACK OR AFRICAN AMERICAN	7		35%
MALE/HISPANIC OR LATINO	1		5%

Appendix T



Basis Score	Number	Percentage
0.25-1.65	12	60%
1.65-3.05	6	30%
3.05-4	2	10%

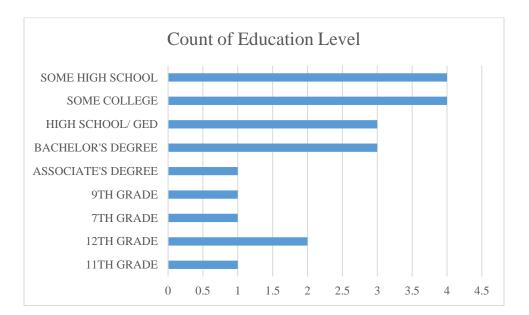
Mean	Median	Mode
1.62	1.5	0.5



Appendix U

Employed	Count of Employed	Percentage
FULLTIME	3	15%
NONE	16	80%
PARTTIME	1	5%

Appendix V



Education Level	Count of Education Level	Percentage	
11TH GRADE]		5%
12TH GRADE	~ _	2	10%
7TH GRADE]	l	5%
9TH GRADE]	l	5%
Associate DEGREE]	l	5%
BACHELOR'S DEGREE		3	15%
HIGH SCHOOL/ GED		3	15%
SOME COLLEGE	2	ł	20%
SOME HIGH SCHOOL	2	Ļ	20%

Appendix W

Anova: Single Factor Retrospective Chart Review

Anova: Single Factor

SUMMARY

Groups	Count	Sum	Average	Variance
Column 1	90	169.7	1.885556	0.710463
Column 2	137	239.5	1.735507	0.715445

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	1.226447	1	1.226447	1.718957	0.191158	3.882934
Within Groups	161.2472	226	0.713483			
Total	162.4737	227				

Appendix X Retrospective Chart Review Regression Model: Age/Education Level/Completion of Treatment SUMMARY OUTPUT

Regression Statistics				
Multiple R	0.104688			
R Square	0.01096			
Adjusted R				
Square	0.002129			
Standard				
Error	0.48877			
Observations	227			

ANOVA

ANOVA					
					Significance
	$d\!f$	SS	MS	F	F
Regression	2	0.592976	0.296488	1.241075	0.291053
Residual	224	53.51275	0.238896		
Total	226	54.10573			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	0.369295	0.212361	1.739	0.083409	-0.04919	0.787775	- 0.04919	0.787775
Age Education	0.003381	0.002479	1.363539	0.174081	-0.00151	0.008266	0.00151	0.008266
Level	-0.00924	0.014414	-0.64116	0.522074	-0.03765	0.019163	0.03765	0.019163

Appendix Y

Regression Model Using Structured Interview Data-Transportation/Financial Concerns/Issues with Treatment Team in Correlation with Basis Score

SUMMARY OUTPUT

Regression Statistics						
Multiple R	0.315267					
R Square	0.099393					
Adjusted R Square	-0.06947					
Standard Error	1.156142					
Observations	20					

ANOVA

					Significance
	df	SS	MS	F	F
Regression	3	2.360282	0.786761	0.5886	0.631268
Residual	16	21.38661	1.336663		
Total	19	23.74689			

		Standard				Upper	Lower	Upper
	Coefficients	Error	t Stat	P-value	Lower 95%	95%	95.0%	95.0%
Intercept	2.012104	0.448902	4.48228	0.000377	1.060475	2.963734	1.060475	2.963734
Transport	-0.57755	0.60798	-0.94995	0.356269	-1.86641	0.711311	-1.86641	0.711311
Financial Concerns	-0.25633	0.627285	-0.40863	0.688231	-1.58611	1.07346	-1.58611	1.07346
Issues with Tx								
Team	-0.11193	0.636719	-0.17579	0.862664	-1.46171	1.237854	-1.46171	1.237854



Appendix Z

Diagnosis of Individuals that Completed versus Did Not Complete Treatment Based on the Retrospective Chart Review

