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Identifying Barriers to Keeping Appointments in Mental Health

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Abstract

Accessing healthcare for mental illness is important but has been challenging to resolve. Due to barriers, individuals are missing appointments leading to long-term negative effects of poor patient outcomes, such as homelessness and suicide. Understanding why individuals cancel or do not show up to their appointments is crucial to resolve this nationwide problem. Further investigation is needed to identify what barriers cause individuals to miss appointments so interventions can be created to resolve it and improve patient care. For this study, those who did not attend their first or second appointments were called and given an eight-question survey. The information obtained revealed barriers that kept the individual from attending their appointments. Results of the data were used to formulate possible strategies or interventions that would alleviate the barriers affecting this patient population. There were 95 individuals who met criteria for the study, 49 participated. The top barriers identified were fear of contracting COVID-19 (n=12), treatment at a different facility due to wait times (n=9), lack of understanding why psychiatric evaluation was needed (n=6), and financial hardship (n=5). The other 17 participant barriers were: insurance problems, forgetting appointments, relocation, and transportation issues. Fear of contracting COVID-19 and financial hardship were the top barriers found and focused on in this project. The significance of this quality improvement project is to show that identifying barriers can lead to interventions that benefit this patient population. The success seen in this study revealed interventions that can be used by other offices experiencing similar appointment issues.

Keywords: Barriers, no show, cancellations, mental health

Barriers to keeping appointments in mental health

Background:

It is a well-known fact that no shows to outpatient clinic appointments can affect the patient as well as the institution. There is an abundance of research that addresses the epidemic of patient no shows. Whether in family medicine or a specialty, no shows are happening at an alarming rate (23.1 to 33.6%) (Mehra et al., 2018) The healthcare institution suffers a financial loss due to patient no shows and there is a potential for negative impact to the patient. If a patient is not seen within a timely manner due to no-showing to appointments, treatment is delayed resulting in mental decline. There are many components to barriers to appointment compliance and they vary upon socioeconomic, ethnicity, race, gender, and finances. Identifying the barriers to compliance is important in order to gain an understanding and apply a solution.

Problem statement:

Excessive no shows to outpatient appointments are on the rise at approximately 23.1-33.6%, causing poor outcomes for patients and a financial hardship for institutions. (Mehra et al., 2018) Further investigation is needed to identify the barriers to patients keeping the appointments within a psychiatry outpatient clinic. This project is a quality improvement study aimed to identify barriers in care. Identifying barriers to care can help institutions improve processes to reduce no shows.

Clinical relevance:

High no show rates cost practices a substantial monetary loss. There is \$150 billion in lost revenue for practices in the United States due to no show and missed

appointments (Grier, 2017). Missed appointments cause a misuse of resources and prevents others from utilizing that spot and obtaining help. Timely treatment can depend on if the patient appears for their initial appointment. Identifying the barriers that prevent patients from showing up to their appointment will benefit both patient and institution. Patients have poor outcomes due to lack of timely treatment, which can lead to increase in ED visits and disruption in care. Research has been conducted for varying specialties to reduce no shows; however, further research is needed to improve the incidence of no shows. Identifying common barriers and techniques to improve or reduce no shows can benefit offices by using the data collected as guidance on which intervention would provide the best patient outcomes and promote future research.

AIM:

The aim of this literature review was to examine current literature on barriers that have resulted in patients not appearing for their appointments, what impact no shows had on patient outcomes, institutional losses, and strategies developed to reduce missed appointments. (Mieloszyk, R. 2018) Key Questions were: What barriers effect patient compliance to keeping their appointments? What are the consequences for patient and institutions for missed appointments? What strategies can help reduce the prevalence of no shows? (Mehra, A. 2017)

Search Strategy:

A search of the literature was conducted through Cochran library, PubMed, Medscape, CINAHL. Key search words included: barriers to appointment, financial cost to institution, reducing no shows, strategies to reduce no shows, compliance to

appointments, barriers for psychiatric patients. Exclusionary criteria were: ages less than 18, hospital-based studies, cancelled appointments 1 day or longer in advance.

Results

Research of the literature used search databases such as EBSCO, Pubmed, PsychInfo, CINAHL. Filters within the search tools were used to narrow the search for dates 2016-2020. Key terms were no shows to patient appointments, noncompliance to psychiatric appointments, barriers to missed appointments, financial implications for missed appointments, and strategies for reducing no shows. This search pulled up 10,342 results. Articles met inclusionary criteria if they were written in English, outpatient based, adult patients older than 18, and related to missed appointments. Sixteen studies met the criteria and 23 were excluded due to old dates, inpatient care, and adolescent patients. There were no difficulties in finding research for this study. There were an abundance of articles and studies that were conducted for barriers to appointment keeping.

Prevalence of mental illness:

Mental illness affects millions of people every year. It is estimated that 46.6 million (18.9%) adults in the U.S. have some form of mental illness. (NIMH, 2020) This number has since increased, and in 2018, an estimated 47.6 million (19.1%) were recorded to have a mental illness. (Nami, 2020) Breaking these numbers down even further, 1 in 5 U.S. adults experience mental illness each year while 1 in 25 U.S. adults experience serious mental illness (Nami, 2018). The number of people who suffer from mental illness is staggering and can affect all ethnic backgrounds, socioeconomic levels, gender, or race. Ensuring that those who suffer from mental illness receive timely

and adequate care is important. Mental illness affects the patient and it also has an impact on family, communities, medical treatment clinics, and the economy. If those who suffer with mental illness go untreated, this can have a ripple effect that can be life altering for many. Families of those who have a mental illness find themselves caring for their loved ones approximately 32 hours a week without pay. This dynamic creates a state of caregiver fatigue. Communities suffer an increase in homelessness of about 20.1 % and the rate of incarcerated adults is 37%. The inappropriate use of resources such as ER visits due to limitations on providers and clinics is another issue being experienced. This behavior of using the ER as a provider costs the institution and the economy, which has seen lost earnings of approximately 193.2 billion dollars. (NAMI, 2018)

There is a disparity in the psychiatric field and many are left to fend for their mental illness alone. Why are there so many untreated or poorly treated people in the U.S? Most people are seen first by a primary care provider and are either diagnosed there or referred to a specialist to receive appropriate diagnosis and treatment.

There is a time gap between when a person is referred to a specialist and when they actually make it to the appointment. No showing to appointments is a growing epidemic that effects all specialty offices. As mentioned previously, there is a significant financial loss for the organization when patients do not keep their appointments. This financial loss has a trickle effect on the business and organizations begin to cut costs in other departments. No shows to appointments result in missed prescription refills/ delay in initial treatment and a delay in counseling, which can contribute to poor health outcomes. Why are patients not showing up for their appointments? What barriers are

they experiencing that hinders them from coming to the office? Can we identify what these barriers are for our office? What strategies can be used to reduce no shows?

Review of the Literature

The purpose of this literature review was to identify and understand the barriers that cause patients to no show to their scheduled appointments. This data will shed light on no shows and its implication on patient outcomes.

Effects of no shows

Healthcare systems incur significant losses in revenue secondary to no shows and late cancellations. Kheirkhah et. al (2016) evaluated the economic consequences and prevalence of missed appointments. In this retrospective study, it was found that patients not showing up for their appointments affected resource planning and cost of care delivery. When appointments are missed, there is an inability to collect the anticipated revenue for the service not rendered. (Kheirkhah et. Al, 2016)

Patient missed appointments, either from no shows or cancellations, can have a negative long-term effect, especially for those with mental illness. People with mental illness are at increased risk for not caring for their medical conditions when mental stability is altered. In a retrospective cohort study conducted by McQueenie et. Al (2019), the impact of missed appointments for patients with long term conditions was evaluated. Results showed that there was an 8-fold increase in risk of mortality in those who missed more than 2 appointments with long-term mental health as compared with those who missed no appointments resulting in poor outcomes. Suicide was found to be a common factor for the premature deaths of these patients. (McQueenie et. al, 2019)

Stigma:

No shows or cancellation of an appointment can have undesired consequences. Understanding mental illness and barriers to treatment is vital to gaining insight to what the barriers are and how we can anticipate them to create strategies to reduce the prevalence. Research of the literature identified several barriers to patient adherence to appointments. Mental illness related stigma has been identified as a barrier to access healthcare. Public stigma causes people with mental illness to feel dehumanized, devalued, and ignored by healthcare professionals. (Knaak, et. al 2017) Tristian, et. al (2017) is a qualitative study that provided an evaluation of barriers to mental health services through the families who cared for the loved one with mental illness. It was found that stigma experienced from healthcare providers made patients and families feel shamed, which resulted in discontinuation of treatment and cancelled appointments. Some families felt that community stigma created discomfort for them making it hard to except that their loved one had mental illness. A prospective study (Schomerus, 2019) evaluated how stigma can prevent people from allowing self-awareness of their mental illness or denial. It was found that, due to societal prejudice, discrimination, and lack of knowledge, people were less likely to seek help. Those who did not seek help had a higher prevalence of no show on the initial appointment.

Confidentiality

It is very challenging to gain an individual's trust in medicine and even harder in mental health. It is even harder for the patient suffering from mental disease to trust anyone. Salaheddin & Mason, (2016) provided a cross-sectional study that evaluated

young adults' barriers to help-seeking. The results found that young adults had concerns that people not involved in their medical treatment would find out. It is important to ensure the patient feels secure and trust that any information discussed would stay confidential.

Understanding of Illness

Some people are referred to the psychiatrist by their PCP post hospitalization or due to family suggestion but do not understand why. Participants of Salaheddin & Mason, (2016) stated that their diagnosis was not explained, which created fear that treatment would not work. Assumptions of the ability to "take care of it themselves" was a common statement along with not wanting to talk about their feelings. (Salaheddin, & Mason, 2016)

Transportation/Socioeconomic factors

There are many people who live in poverty or low socioeconomic statuses. Having a vehicle would be an expense that is not affordable. Transportation is another barrier identified in the research as a barrier to healthcare. According to a study conducted by Miller et. al, (2015), young, low income, and female participants seemed to be at higher risk for no show or missed appointments. Those who did not have reliable transportation incurred a cost of a copay plus money needed for gas money for transportation or bus fare. The psychiatric visit was simply an expense that was sacrificed when finances were scarce or if there was no insurance to cover the cost of the visit.

Long waits (Lead time) between scheduling and actual appointment

When being referred by PCP, hospitalists, or through family encouragement, there can be a significant wait due to the limited resources. There is a fast-growing shortage of psychiatric healthcare providers. Due to the provider and facility shortage, there is an extended wait time to be seen as a new patient by psychiatry. (Weiner, 2018) The average wait time from calling to schedule to the actual appointment was 2 months. This is an exceedingly long time to wait when not feeling mentally well. Patients will call multiple facilities to get an earlier date, and if given an earlier date somewhere else, the patient does not show for their originally scheduled appointment. According to Dantas et. al, (2017) literature review, lead time had a significant impact on no show rates. The more days between the scheduling of the appointment, the higher the risk of no show.

Strategies to reduce no shows-feasibility

Several studies have identified the most common barriers to accessing healthcare and the prevalence of no shows in each barrier. Many studies have been conducted to reduce the prevalence of no show or missed appointments. In an attempt to reduce no shows, different strategies have been trialed to show their feasibility of implementation and success of reducing missed appointments. Short message services were conducted by Boksmati et. al 2015, revealing utilizing the SMS system reduced no shows. In addition, patients were 1.8% times likely to show for their appointments, which increased profit. One study conducted by (Arshad, & Alvi, 2017), used text message reminders prior to patient appointments. The results were positive, noting an

increase in patient adherence to appointments. Reminder calls were used in the study conducted by Mehra, et al, (2017), which saw a reduction in no shows from 20% to 15% after the implementation of reminder calls.

Overall the literature shows that mental illness is prevalent and affects many people. Services to provide adequate care are scarce, causing long wait times for patients. Barriers such as finances, transportation, and stigma are shown to increase the risk of no shows or missed appointments. The consequences of no shows have a negative effect on the institution and patient outcomes. Developing strategies to reduce no shows are important to achieving this goal as noted in the review, many studies have been conducted to show how institutions can succeed with an increase in compliance. Reducing no shows is needed in order to improve patient safety and mental stability. Mental illness has a ripple effect and can have an impact on many, including loved ones.

Discussion:

Though there were several studies with different barriers that affected their population, it seemed that the most common barrier was stigma. The fear of being labeled “crazy” or self-stigmatizing had a significant role in the majority of the studies; however, one study evaluated post no show phone calls revealing that identifying the source to the missed appointment was vital to future patients. Identifying each person’s barrier to no shows can help the organization develop strategies to improve the prevalence of future no shows.

Conclusion

The findings for this literature review showed that phone calls and text messaging prior to patient appointments improved no shows; however, it did not prevent no shows at a significant percent. Patients were still not showing for their appointments for varying reasons such as transportation, financial hardships, and stigma. Each study conducted produced its own set of barriers that their population experienced. Understanding the barriers in your own community is a vital step to improving no shows. This data from the literature review can be used to help identify the barriers in any clinic and start the process of implementing strategies based on what barriers are found from the population it serves.

Theoretical Framework

This study was guided by The Health Belief Model (Champion & Skinner, 2008). The Health Belief Model (HBM), is a theory that uses socio-cognitive approaches to explain health behaviors. HBM hypothesizes that person's motivation for change is dependent upon the person's ability to associate their health with disease severity, susceptibility, and benefit to one's health. A person's understanding of the barriers to care, lack of self-efficacy, and missed cues to action are other factors that can have an impact on health behavior. (Champion & Skinner, 2008) The HBM theory guided the study by showing the correlation of both internal and external factors that have an effect on a person's responses to medical care, and how important it is to discover what the factors are. Identifying what barriers impede persons from attending their first or second appointment is the basis of this study. Many patients in our mental health office miss their appointments. Due to this, I wanted to identify what barriers were affecting my

clinic and causing patients to miss appointments. By doing this, I was able to determine that several patients felt that stigma, lack of understanding of their illnesses, transportation, financial hardship, and denial were barriers to keeping their appointments, which led to poor outcomes for the patients.

In order to create and structure the study, we used the model for improvement framework (MI). This is a structuring tool designed to use for improvement pilots whose premise is the Plan-DO-Study-Act methods. MI uses cycles continuously that develop, test, and help implement change. The use of idea stimulating questions helped us formulate what change we wanted to see and how to get there. (IHI, 2020)

The tool began with 3 questions that guided the study to answer what it was we were trying to accomplish, which was identifying barriers for persons keeping appointments. The second question aimed to answer how we would know when change is an improvement. Once the barriers had been identified, interventions geared towards correcting those barriers would be initiated. Once there was a decrease in no shows and cancelled appointments post implementation of the interventions, it was concluded that the implanted changes revealed improvement. The next portion of this tool involved cycles of process. The cycles in this tool helped guide which steps to take in creating the plan and taking action.

The Plan section of the improvement process was gathering together to map out our plan for the study and creating the design for the questionnaire. Once the questionnaire was created and evaluated for reliability, we started to identify those who met criteria by using the EMR. We then placed calls to the patients to try out the

questionnaires in the DO section of the cycle. As information was gathered on the individuals, barriers that prevented patients from coming to the office were written down and entered into the spreadsheet in the STUDY cycle. Next, in the act section of the cycle, we learned what the barriers were and developed ideas of how to reduce these barriers for our patient population.

Methods/Setting:

This was a qualitative research analysis study that was conducted in a privately owned Psychiatric mental health outpatient clinic. The clinic is located within a commercial building that has five other businesses with moderate traffic coming and going. Caucasians make up 62.2%, Blacks 29.8%, Hispanic 3.94%, Biracial 2.45% and Asian 1.39% of the St Clair county of Illinois population. Population of 261,059 with a 17.0% poverty rate with 19.6% of patients being on Medicaid and 12.6% being on Medicare. Education is as follows: White /Caucasian (2,691 and 74.3%), followed by Black/African American (467 and 12.9%), Unknown (142 and 3.92%), and Two or More Races (139 and 3.84%). Due to the shortage of facilities and an abundance of patients, the clinic also sees patients in the surrounding area as far as 25-40 miles away. The clinic has 1 Physician, 2 nurse practitioners, 4 licensed social workers, 1 secretary, 1 medical assistant, 1 CEO. The patient population serviced in this study were: Caucasian at 94%, African American 5%, and Asian <1 %. (Datausa, 2020)

Participants:

The population for this study included patients who were no shows or those who canceled their appointments less than 24 hours prior to the scheduled appointment for

the outpatient mental health clinic. Inclusion criteria for participation of the study: Adults aged 18 and older, English speaking, who no show or cancel their appointments less than 24 hours before their scheduled appointments. Exclusion criteria: patients 17 or younger, clearance for surgery patients, cancellations greater than 24 hours prior to appointment, untreated alcoholics or drug addicts. It is important to note that there were other criteria that could have been used for inclusion but the clinic is not equipped for inclusions, such as non-English speaking patients and children. This is a study of convenience sampling; patients were chosen from the practice fusion database of patients who had been in the system from previous appointments. Patients were easily accessible by calling the phone numbers on each patient's profile.

Design:

This is a Quality Improvement project that is designed to gather information that will identify issues that prevent patients from coming to their appointments, discuss and provide avenues to promote change, and provide recommendations for practice improvement with evidence-based research.

Approval Process:

Approval of the study was obtained by Southern University Illinois of Edwardsville Institutional Review Board (IRB). Approval for the project was also obtained by the Preferred behavioral health administration. Benefits for this project would include: improved compliance to medication regimens, reduction in no shows and cancelations, better patient outcomes, and reduced financial burden.

Potential risk of this project was patient information access and exposure. The information obtained was gathered and placed in protected folders and spreadsheets. Patients risk for emotional re-exposure to a possible stressful event was also a risk of this project. All information gathered was deleted and properly disposed of once the purpose of the information was served. All participants were given the options to reschedule if it was feasible to do so.

Materials/Tools:

The analysis involved a descriptive design to be conducted by use of telephone calls made to those who have cancelled or no showed. A 8-item survey was used to gather data of patient responses to the questions related to the missed or canceled appointments. This was voluntary process and consent was needed prior to implementing the questionnaire. Protected Excel spreadsheet with password access was used to transfer data from the practice fusion EMR. Each barrier identified was placed in the spreadsheet for later analysis.

Procedure:

The EMR was used to identify the patients who had missed appointments. Those who were chosen were patients who did not call or show up to their appointments and those who cancelled within 24 hours of the appointment. The data collected during the 3-month processing period is entered into the database and used for criteria for inclusion. Review of the charts prior to contact with the patient was important to identify which ones were new patient no shows versus patient missed appointments. Patients

who met the criteria were then called via telephone with 2 attempts to make contact, either a phone call or text message. If contact was not made within the two attempts, the patient was moved to the end of the list. Once contact had been established, the patient was given information for verbal informed consent with 2 witnesses, one being the provider. Once informed consent was established, it was documented in the chart and the survey began. As the questions were asked, the information was simultaneously entered into the database. The participants were asked to answer with complete honesty and to the best of their recollection. This data was then entered into the project database and resulted out for analysis and interpretation. The interviews were conducted verbally via telephone, voluntarily, with verbatim handwritten documentation during the call. Transcription of the data was entered into the Excel spreadsheet by the office secretary. Data will be analyzed using bar graphing and pie charts. The findings will be used for future patients in order to meet their needs and reduce the prevalence of missed appointments.

This is a Quality Improvement project designed to gather information to identify issues preventing patients from showing up to their appointments, discuss & provide avenues to promote change, and provide recommendations for practice improvement with evidence-based research. The study took place at a psychiatric outpatient office located in Madison county. This is a 4-month descriptive design study conducted by telephone calls made to those who have missed their 1st or 2nd appointment either by cancellation or no show. All people that meet the inclusion criteria will be called during the 4-month period between April 22, 2020 – August 22, 2020. An 8-item survey to

gather data of patient responses related to barriers of missed or canceled appointments was used.

Patient consent was obtained prior to the survey questions. Questions such as what caused the missed appointment, what understanding do they have of their diagnosis, who made the appointment, did the patient agree that a psychiatrist or counselor was needed, what does the term mental illness mean, and what could have been done differently to ensure the appointment was kept. The nurse practitioners, secretary and medical assistant will be making the calls to those who have met the criteria for the survey. Protected Excel spreadsheet with password access was used to receive data from the practice fusion EMR. Once this was done and calls made, the answers to the questions along with the consent form was scanned into each person's EMR. Two-person verbal consent was obtained over the phone. Excel graphed the data and identified the issues reported within the study group. Barriers identified and documented were placed on the spreadsheet table. Analysis of the data was used to formulate interventions to produce better outcomes. Evaluation of the intervention's effectiveness was measured by the reduction of no shows and cancellations.

Executive Summary

Introduction of the problem

It is a well-known fact that no shows to outpatient clinic appointments can affect the patient as well as the institution. Whether in family medicine or a specialty care, no shows are happening at an alarming rate (Mehra et al., 2018). Missed appointments have a negative impact on the patient, so maintaining continuity of care is essential for better patient outcomes. At Preferred Behavioral Health (PBH), the average

cancellation/no-show rates was 27-28%. Identifying which barriers were affecting the population PBH served was the focus. Creating interventions to improve the barriers identified was the aim of the study, with the purpose of reducing the incidence of no shows/cancellations. There is an 8-fold risk of mortality for those who miss more than 2 appointments. (McQueenie et. Al 2019) Interruption in mental health care has led to homelessness with a rate of 20.1% and incarceration at 37%. (NAMI 2020) Understanding why patients in mental health cancel or no show is vital in order to achieve better patient outcomes.

Literature review

A retrospective cohort study conducted by McQueenie et. Al (2019), evaluated the impact of missed appointments on patients with long term mental conditions. Results revealed an 8-fold increase in risk of mortality in those who missed more than 2 appointments with long-term mental health as compared with those who missed no appointments resulting in poor outcomes. Patients who missed their appointments were found to be at increased risk for non-compliance to their medical regimen, which led to compounding illnesses. The weight of both mental and medical illness increased suicide rates and premature deaths in this population. (McQueenie et. al, 2019)

Gandy, et. al (2019) was a longitudinal retrospective study that evaluated low-income patients ages 18-65 that missed their initial appointments in psychiatry. The goal was to create interventions based on the barriers that the patients stated kept them from the appointment. Data was collected with the use of a questionnaire, and the results were used to create interventions that would reduce the incidence of no shows. The study showed that the use of education, phone calls, and warm hand offs helped

the patients become more comfortable with the need for mental health assistance. The study saw an increase in adherence by 66.6% after interventions were implemented. This shows that identifying the barriers was key to creating the interventions that improved patient quality of care.

A prospective study (Schomerus, 2019) evaluated how stigma can prevent people from allowing self-awareness of their mental illness or denial. It was found that, due to societal prejudice, discrimination, and lack of knowledge, people were less likely to seek help. Those who did not seek help had a higher prevalence of no shows on the initial appointment. Self-realization was a key variable in the study. Patients understanding the need of mental health determined that general practitioners could play an important role in reducing misinformation and increased understanding.

Salaheddin & Mason, (2016) provided a cross-sectional study that evaluated young adults aged 18-25. The study used anonymous questionnaires to determine the patient's barriers to seeking help. The results found in this study ranged from anxiety from needing mental help, difficulty assessing help, and difficulty expressing concerns. The results yielded ideas that helped patients by way of education through primary care. Though patients are referred to the psychiatrist by their PCP, others were post hospitalization, or family suggested. Participants of Salaheddin & Mason, (2016) stated that their diagnosis was not explained, which created fear that treatment would not work.

According to a study conducted by Miller et. al, (2015), young, low income, and female participants seemed to be at higher risk for no show or missed appointments. Those that did not have reliable transportation incurred a bigger cost due to copay plus

money needed for transportation or bus fare. The psychiatric visit was an expense that patients were not wanting to pay and sacrifice other important expenses.

Project methods

This was a quality improvement study, conducted in a psychiatric mental health outpatient clinic. The population included Adults 18 and older, English speaking patients that no showed or canceled within 24 hours of the appointment. The purpose of this study was to gather information, identify which barriers were the cause of no shows or cancellations, and use this data to create interventions that would reduce missed appointments. Sample size of 99 was obtained, and analyzed. The use of telehealth via zoom and telephone calls was implemented. COVID-19 was the most common reason for the no show/cancellations for this study. Other barriers such as wait times, finances, transportation and not understanding diagnosis were found. Preferred Behavioral Health saw a decrease in the rate of no shows/cancellations after the use of telehealth zoom and phone calls (facetime).

Approval of the study was obtained by Southern University Illinois of Edwardsville Institutional Review Board (IRB). Approval for the project was also obtained by the Preferred behavioral health administration. Benefits for this project would include, improved compliance to medication regimens, reduction in no shows/cancelations, better patient outcomes, and reduced financial burden. Potential risk of this project was patient re-exposure to trauma, and information access. Data was placed in protected folders, and spreadsheets once gathered and then deleted. All participants were given the options to reschedule with the office if it was feasible to do so.

Evaluation

An eight-questionnaire survey was used to gather information regarding the barriers that kept patients from showing up. As phone calls were made the demographic information was written and kept in a designated area for later use. Cancellation sheets were used to document no shows and the information was transferred to an excel spreadsheet weekly.

During the months of September 2019 – January 2020, the average no show and cancellation rate was 27% (range 26%-31%). In the months of February 2020-April 2020, the average rate of no show and cancellation rates was 30% (range 27% -32%). The 3% increase recorded continued into the study that started April 23rd 2020 and stayed consistent into the month of May 2020. Prior to the COVID pandemic, appointments had been held face to face. After months of COVID-19, and new restrictions, visits were via telehealth and phone visits. Barriers found in the study were transportation, financial hardships, lack of understanding of need, scheduling issues, insurance issues, forgetting appointment and wait times. Fear of COVID 19 was the biggest barrier in this study. No literature/research was available at the end of the study to compare the effects of COVID on patient no show/cancellations. Our data showed that fear of COVID -19 accounted for 24% of the study group while those who decided to go somewhere accounted for 18%. Lack of understanding of their diagnosis and need of help was (12%). Financial hardship was 10%.

The goal of this Quality improvement study was to identify barriers that impacted the patient's ability to maintain their appointment and create processes for quality improvement. Strategies implemented included discounted payment plans for self-pay

patients and those with financial hardship. The 2nd strategy involved providing appointments via telehealth Zoom/telephone calls. Patients were notified on the initial call for their appointment that telehealth was an option. Patients were given instruction for zoom meetings.

The interventions were started June 2020-August 2020 and continued after the study. Post intervention, there was a decrease in no shows/cancellations by 10%, noting the average of 16%. The literature shows interventions yield an average rate or 20%-21%. This study produced better results in comparison by 4-5%. The method of telehealth and reduced pay helped with transportation, finances, and the fear of being exposed to COVID-19.

Limitations of this study were convenience sampling; participants were selected from one location with easy access. Sample size was small with 49 participants in a 4-month period. The sample was not diverse with Caucasians making up 83% of the study group, which was not a true generalization of the population. Starting telehealth to improve patient care was delayed due to the unpreparedness of the office and time constraints due to limitations of program.

Impact on practice

This Quality improvement projects significance to practice is to improve quality care that is available to patients in mental health. The study revealed barriers that effected the no show /cancellation rate for (PBH) patients. Identifying these barriers helped create strategies to improve the average rate and in turn provided more efficient quality care. Interrupted care can have a negative impact on a person's mental and physical health, so it is vital that patients can be seen in a timely fashion. Missed

appointments can result in longer wait times, leading to worsening symptoms and negative outcomes. Future studies would benefit to focus on interventions for a pandemic.

Conclusion

Our goal to identify barriers within the psychiatric office was successful. Fear of COVID was the barrier in which two interventions were created to resolve. After implementing the telehealth via zoom and telephone, PBH saw a decrease in no shows/cancellations. Prior to intervention implementation September, 2019 – January 2020, no shows/cancellations were at a rate of 27% with an increase during the peak of COVID-19 at a rate of 29-30%. After interventions were started, there was a decrease of approximately 10% in the rate of no shows/cancellations. The success seen in this study by using tele technology and payment programs can be used in other facilities that are struggling with new guidelines that have been created due to COVID -19. These interventions can also be used for future reference in any office that sees patients and are dealing with no shows/cancellations

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