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Effectiveness of an Open Access Scheduling System in a Community Mental Health Center

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Effectiveness of an Open Access Scheduling System in a Community Mental Health Center

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Abstract

Open Access Schedule (OAS) systems are a new way to schedule patient appointment in an outpatient medical setting. In theory these systems will provide many benefits that are not seen in a traditional scheduling model, such as decreased wait times to see a provider and more provider flexibility. However, little research has been done to examine how effective these systems are once they are put into practice, particularly in the mental health setting. The purpose of this project was to examine a recently implemented open access scheduling system in a community mental health center in rural Northeast Tennessee and Southwest Virginia. A retrospective analysis was done of no-show and cancellation rates in the clinics, as well as provider productivity for the company. There also was an online survey completed by providers at the community mental health center to examine their perception of the OAS system. The results showed that there was some decrease in the no-show and cancellation rates in the clinics, and there was more consistent improvement in the cancellation rates. Provider productivity did somewhat improve, but there was not enough information to see if this change would be something sustained long term. And finally the provider perception of the OAS system was overall negative in regards to how the providers felt the OAS system affected their job, but there was one positive aspect of the system, that providers could request time off work with shorter notice. The limitations of the study were due to the fact that the time frame of study was short and the data was not statistically analyzed to control for outside factors, such as provider turnover. Overall, this study will add to the limited body of knowledge on the use of OAS systems in practice and provide information about their use in community mental health clinics.

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Introduction

The use of open access scheduling (OAS) systems is a relatively new concept in outpatient medical offices. These types of systems are modeled after the scheduling systems used in urgent care clinics, where no appointments are scheduled, patients are seen on a walk-in basis. With OAS systems, there is a degree of flexibility with the schedule. Some OAS systems will not schedule any future appointments as is traditionally done, but will give patients a call back date to schedule future appointments. Some OAS systems will allow for a certain number of traditionally scheduled appointments, but will leave blocks of time unscheduled for walk-in appointments or walk-ins. With these systems, there is a great degree of flexibility for each clinic to customize the schedule to their particular needs.

Problem

In theory, these types of OAS systems would allow greater flexibility for patients to schedule appointments and allow offices to achieve higher productivity by decreasing no shows and cancellations. This type of system has been studied in outpatient primary care offices and has shown some positive benefits related to provider productivity (Rose, Ross, & Horwitz, 2011). However, would the benefits of using an OAS system be seen in a community mental health center? The 1963 Community Mental Health Center Construction Act was originally designed to guarantee treatment to patients with serious and persistent mental illness regardless of their ability to pay in community mental health centers (The National Council for Behavioral Health, 2015). Although this is no longer a federal designation given and supplied with federal funds, many community mental health centers still operate with this philosophy: to treat anyone with a mental illness regardless of their ability to pay. Would the mental health population be able to

reap the benefits of an OAS system and would the providers who treat these patients see increased productivity as well, even with the severe illness and socioeconomic factors.

Purpose of the Project

A community mental health organization in Northeast Tennessee and Southwest Virginia recently adopted an open access scheduling system. The purpose of this project is to evaluate positive or negative changes in provider productivity and patient no-show and cancellation after implementation of the OAS system. The project will examine no-show rates and client cancellations of patient appointments. It will also compare provider/prescriber productivity percentages prior to and following initiation of the OAS system. Provider productivity is often tied to patients keeping their scheduling appointment. If this system helps to reduce no-show and cancellation rates, then productivity should also increase. The aim of this project is to determine if an OAS system is effective at decreasing no-show and cancellation rates, as well as increased prescriber productivity and the perception of the OAS system by providers.

Significance to Nursing and Healthcare

In recent years, there has been a greater shift to improve outpatient care. According to the Health Care Cost Institute, from 2012 to 2015, there was an increase in the number of outpatient visits, with the largest increases related to specialty appointments (Health Care Cost Institute , 2016). There was also a decrease in the number of emergency room visits (Health Care Cost Institute , 2016). Also in 2014, over 32% of the national health expenditures went to covering hospital care (Centers for Disease Control and Prevention , 2015). Only 19.9% of national health expenditures when to cover physician and clinical services (Centers for Disease Control and Prevention , 2015). With the shift towards outpatient care, expenditures of inpatient care will be decreased in the future. Patients need to receive quality outpatient care in a timely manner to

ensure their needs are met. Any improvements we can make to outpatient care should be studied and evaluated. Open access scheduling systems could lead to quality improvement not only in primary care or mental health settings, but in other specialty care areas as well. The traditional model of scheduling follow up appointment has been in use for quite some time. Providers and patients may be reluctant to change their methods without quality research supporting new methods.

Nurses have a long standing history of being patient advocates and encouraging our patients to achieve optimal health. The American Nurses Association's Code of Ethics includes the provision "The nurse promotes, advocates for, and protects the rights health and safety of clients" (American Nurses Association , 2015). As nurses, we must advocate for our clients for our patients and encourage them to be as independent as possible. Mental health patients often have issues with poor autonomy due to the symptoms of their mental illness, such as irrational thinking and poor decision making skills (Broer, Nieboer, & Bal, 2010). Encouraging them to be independent in making their own appointments would increase their level of autonomy.

Review of Literature

In recent years, many outpatient medical offices have adopted open access scheduling and same day appointment systems. These systems are designed to improve patient access to providers, reduce wait times, and decrease no-show rates in the clinics, thus improving provider productivity (Murray & Tantau, 1999). These systems are being implemented in several different outpatient areas, with varying results. When a clinic is deciding if this system would be beneficial they should first examine their own practice, then move to selecting the type of system that would best benefit them. Research was first conducting on these systems in the early to mid 2000s when the systems first became popular, but there are limited follow up studies that

continue to examine their effectiveness. Multiple were studies were found that related to this topic, however there has been limited information published within the past 5 years. When expanding the search to the past 10 years, many more relevant studies were found. Overall, studies have shown mixed reviews on OAS systems, either showing positive changes of decreasing no-show rates and cancellations or that there were no changes noted overall. Within the literature, there were no negative changes found after implementing OAS systems (Degani, 2013).

Landmark Studies and Systematic Reviews

One landmark study was found on open access scheduling. Written in 1999 by Mark Murray and Catherine Tantau, this article discussed defining a system where patients can access care quickly when needed (Murray & Tantau, 1999). Open access scheduling should be “the ability to see and receive care from the provider of choice at the time of patient choosing” (Murray & Tantau, 1999). One systematic review and one evidence based analysis were found as well. The systematic review covered advanced access scheduling and the evidence based analysis examined open access scheduling on patients with chronic diseases. The systematic review found that overall no-show rates were improved when the clinic had more than a 15% no show rate before the system was implemented (Rose, Ross, & Horwitz, 2011). Patient satisfaction with the system also varied. The evidenced based analysis found there to be no improvement but no harm to using an open access scheduling system (Degani, 2013). Overall, based on these finding, open access scheduling systems do show some benefits, but overall changes are minimal (Rose, Ross, & Horwitz, 2011).

Examining OAS Systems in Practice

Several studies were analyzed that examined the implementation of an open access scheduling system in the actual practice setting. All of these studies were done in an outpatient setting, but varied in their specific practice setting. Practice settings and patient populations were varied, including the primary care setting, mental health issues, elderly patients, pediatric patients and long term results. The results of these studies did not show consistent results, but were overall positive in their review of OAS systems.

The majority of the studies analyzed showed a positive change when implementing an open access scheduling system. A North Carolina pilot program implemented an OAS system in 2005 in four outpatient primary care offices and studied the results over 12 months. They found that an open access scheduling system allowed for a shorter wait time to a preventative care appointment, decrease in no-show rates, and increased patient satisfaction (Bundy, Randolph, Murray, Anderson, & Margolis, 2005). Staff satisfaction neither improved nor declined. Another study conducted in 2010 analyzed the implementation of an open access scheduling system in 2 clinics and monitored the changes over a year. They found that there was a reduction in third available appointment times, indicating improved patient access (Cameron, Sadler, & Lawson, 2010). There was also a decline in no-show rates and there was no change in the patient volume seen by providers (Cameron, Sadler, & Lawson, 2010). These studies indicate that there was an overall improvement in the time it took patients to be seen by a provider.

OAS Systems in Use with Special Populations

There were several studies that focused on special populations and the use of an open access scheduling system, including patients with a mental health diagnosis, pediatrics, and the elderly. One study focused on patients diagnosed with depression in a primary care office. An

open access system was implemented and the quality of care for depressed patients was studied over an 11 year period (Solberg, et al., 2006). The study showed a decrease in the number of patients started on antidepressants with no follow up. However, the study found that although the improvements were seen in wait time until appointments, there was also an increase in continuity of care, which played a larger factor in patient improvement (Solberg, et al., 2006). This study recommends that in order for open access scheduling to be effective there needs to be the continuity of providers, particularly for mental health issues.

Summary

The studies examined in the literature review overall did show positive results with OAS systems, but within each system there were unique problems that needed to be addressed. There were no negative effects of the OAS systems. However, because there is so much flexibility with the design of OAS systems and patient populations, further studies need to be done to expand on OAS systems before generalizations can be made about their usefulness. Also, there is limited data related to specialty practice areas. Further studies need to be conducted to see how this type of system works for those specialty services as well.

Theoretical Framework

The project outlined above needs a flexible framework model due to the organizational aspects of patient care being studied. The Neuman systems model is a systems-based model that focuses on holistic care and the maintenance of optimal patient wellness (Fawcett, 2001). This model, originally published in 1979, was intended to be used in an educational setting and was used as a teaching aid (Fawcett, 2001). However, this model can be adapted to fit many different areas of nursing and has been used extensively in subsequent research and practice models (Fawcett, 2001).

The Neuman systems model has several rules when used as the framework for research. It “guides research by stating what phenomena make up the domain of inquiry and specifying methodological directions about how it is investigated, how theories are generated and tested, how data are to be collected, and how those data are to be analyzed” (Neuman, 1995).

One of the purposes of the Neuman based research is to “predict the effects of primary, secondary, and tertiary prevention interventions on retention, attainment, and maintenance of client system stability” (Neuman, 1995). This purpose is particularly important and relevant to this current research study. When a new change is implemented in a clinic setting, the desired outcome is improved patient health. This model attempts to predict and measure how changes in the clinical setting can improve patient’s overall health.

Another purpose of this model is to “determine the cost, benefit, and utility of prevention interventions” (Neuman, 1995). This is one of the main goals of the proposed research study. With the implementation of the open access scheduling system, there should be an improvement in provider productivity and a decrease in no-show rates by patients. The use of the Neuman systems model allows the study to place emphasis on these improvements.

Another important rule of this systems model states that “research will advance understanding of the influence of prevention interventions on the relationship between stressors and client system stability” (Neuman, 1995). The goal of this research study is to examine if an open access scheduling system is effective at reducing no-show rates and thus allowing patients to access a provider more quickly than traditionally scheduled appointment. By using this model, we can advance the knowledge regarding open access scheduling systems.

The Neuman systems theory is appropriate for this research study. It is adaptable to many different types of research. It is important in this instance because it emphasizes how

interventions made are linked to patient outcomes, which is the overall goal of this research study.

DNP Project Plan

Design and Method

The study is a longitudinal retrospective, interrupted time series design, measuring data before the implementation of an OAS system (or baseline) and at intervals after the implementation. It was originally designed to study the system at 3 months, 6 months, and 9 months post implementation, but the data supplied from the facility was from 3 months, 4 months, and 7 months post implementation. The OAS system was implemented in July 2016. Baseline data will be taken from the month of April 2016, October 2016, November 2016, and February 2017.

There is also a voluntary convenience sample survey that was gathered from providers at the community mental health center to examine provider perception of the OAS system. There are currently 17 providers employed at the center. The survey was administered online and was emailed to all the providers at the site.

Setting and Resources

The setting is an outpatient community mental health organization serving 12 predominantly rural counties in Northeast Tennessee and Southwest Virginia. This organization serves mainly lower socioeconomic patients, but does accept private insurance, Medicaid, Medicare, and patients without insurance. The majority of patient that the facility serves have Medicare, Medicaid, or no insurance. The organization is cooperative of the research and provided the data used for analysis and was the contact point for providing surveys to providers.

Study Population

The outpatient community mental health setting where the research is being conducted already tracks monthly performance for providers and patient data regarding no-shows and client cancellations. This data was obtained from the research site and was analyzed using Microsoft Excel. Productivity goals are set for each provider on an annual basis and every quarter a percentage of total productivity is prepared and supplied to each provider. The productivity goals are personalized for each provider based on their location, supervisory roles, and administrative requirements. Productivity rates are influenced by the number of no-shows and cancellations, but these are just some of the factors that can influence provider's output. There are currently 17 providers within the company and all were sampled for the voluntary survey to examine provider perceptions of the OAS system. The majority of provider at the organization are nurse practitioner, with a mix of psychiatric mental health nurse practitioner and family nurse practitioners. There are also several medical doctors and an osteopathic doctor as well.

Data regarding no-shows to appointment and cancellation of appointment were obtained from the research site and analyzed using Excel. The data provided from the facility was from 3 months prior to initiation of the open access scheduling system, 3 months post implementation, 4 months post implementation and 7 months post implementation for both no-show and cancellation rates. The data was provided as a percentage from each individual location within the facility. No-show and cancellations data from the entire company will be analyzed. There is no need for an independent statistician, as the data provided was already analyzed to controlled for internal factors before being given to this researcher. Provider productivity was provided for each individual provider for each quarter. No patient recruitment was necessary for this part of the study. No patient identifying data was used in order to minimize ethical concern.

The providers were given a link to a voluntary online survey that consisted of four yes or no questions related to satisfaction and perception of the OAS system. Questions related to providers' perception of patient benefit, no-show rates, and their productivity overall. Survey questions are attached in Appendix A. This survey was administered online through SurveyMonkey. The survey link was emailed to all the providers within the company with the assistance of the organizational contact. Participation was voluntary and consent was obtained prior to completing the survey. The results of the survey were then analyzed using SPSS to determine provider satisfaction with the OAS system. The questions have no identifying data to link answers to a particular provider.

Data analysis

Data was analyzed using Microsoft Excel to track changes and trends at each interrupted time point and evaluate overall change within the organization. No-show rates and cancellation percentages were compared at pre-implementation, three, four, and seven months post implementation. Prescriber productivity percentages were also analyzed for each quarter. The percentages for no-show rates, cancellations, and provider productivity were already generated by the organization, for each provider's profile, location site, and for the organization as a whole. This retrospective data was gathered from the organization and analyzed. The survey results were also analyzed using Excel, evaluating the percentage of providers who expressed satisfaction and positive benefit with the OAS system in the survey.

Human Subject Protection

The information for no-shows and cancellation rates were provided to this researcher by the organization. The community mental health center already monitored the percentage of no-show and cancellation rates for the company on a monthly basis. These percentages were

provided by the organization with no patient data attached. This is the same procedure for provider productivity rates. These percentages are also calculated monthly and quarterly for each provider. These percentages were also provided by organization's compliance officer for analysis. No patient information or patient data was included or attached to the data.

The online survey done through SurveyMonkey of the provider perceptions of the OAS system was completely voluntary. Consent was obtained prior to completing the survey with the knowledge that consent can be revoked at any time without penalty. The surveys were administered through SurveyMonkey and a password protected account was used. The site also allows for an anonymous submission, so no provider identifying data was collected. Approval was obtained from the Lincoln Memorial University IRB, attached in Appendix B.

Results

No-show and Cancellation Rates

Data percentages were provided by the community mental health center. The no-show and cancellation percentages were given for the months of November 2015, February 2016, April 2016, October 2016, November 2016, and February 2017. The percentages were analyzed and compared using Excel.

When examining no-show rates for the entire organization, the overall percentage of patient no-shows did decrease slightly. In February 2016, the no-show rate was 21.6% for adults and 15.7% for children and 17.9% and 13.1% in April 2016 for adults and children respectively. After the OAS system was introduced in July 2016, there was a drop in the percentage of no-shows, down to 15.2% for adults and 6.6% for children in October 2016. The rates slightly rose to 8.1% and 9.5% in November 2016 and February 2017 for children, respectively. The rates for

adults continued to drop to 13.4% in November 2016 but rose to 14.8% in February 2017. However, this showed an overall decrease from the rates in February and April 2016.

When considering the clinic cancellation rates, there was more sustained decrease in the cancellation percentages. The overall cancellation rate in February 2016 was 15.1% and in April 2016 was 11.9%. The rates dropped to 9.1% in October 2016 and were 9.8% in February 2017.

Provider Productivity

Provider productivity within the site is measured quarterly. There were 4 different quarters that were examined for this project, the first, second, and fourth quarters of 2016 and the first quarter of 2017. The first quarter of 2016, from January to March, the overall provider productivity was 69%. For the second quarter, from March to June 2016, this rose to 71% overall. The fourth quarter of 2016, from October to December, showed an overall company productivity of 68%. And finally for the first quarter of 2017, from January to March, there was an increase to 75% productivity for the company as a whole. Achieving 100% productivity is a near impossible goal, however, providers are encouraged to aim for 85% of their productivity goal or higher.

Provider Perception Survey

When examining the online survey completed by providers, the overall perception of the OAS system was negative. The survey was made available to all 17 of the providers currently employed in the organization. Only 9 providers completed the survey. Eight out of 9 providers felt that the OAS system had not decreased the no-shows and cancellations within their clinics, nor had they felt it increased their productivity rates. Only one respondent felt that the the OAS system had improved satisfaction with their job. Seven out of 9 providers reported they felt the OAS system had not benefited the company or the patients. Five providers gave comments

regarding the OAS system. Most of these comments reiterated the answers they provided in the survey, but one positive comment noted that the provider could take time off work with short notice, which was a positive not previously discussed in the survey.

Discussion

No-show and Cancellation Rates

When examining the overall changes in the no-show rates to the facility, there were positive improvements for the organization as a whole. Although the changes have not been consistent to steadily improving, they have improved over the course of a year, even if minimally. The months chosen for analysis do seem to be somewhat random, but there was thought put into choosing these particular months. The organization used their own method to account for variables in the data. Originally, the plan was to examine the OAS system 3 months prior to implementation, and 3, 6, and 9 months afterwards. Due to a variety of factors, these dates changed. The data was provided for 3 months prior to implementation, April 2016, as well as 5 months prior to implementation, February 2016. The OAS system was implemented on July 11th 2016, but it was a slow roll out process. Three months' post implementation would have technically been in the middle of September, so it was felt that a truer sense of changes would be gained by examining the month of October 2016. The months of December and January were not chosen for analysis because of several external factors, including holidays and providers taking vacations around this time, as well as weather related issues that typically affects appointment compliance. The month of February was chosen for analysis due to the mild weather in the area for that month. Additionally, there was a new computer electronic medical record that went into use in March 2017. At this time, the facility has been unable to extract the precise data needed from the new EMR software for any months after March. Due to these numerous issues, it is

difficult to say that the positive benefits seen in the no-show and cancellation rates could actually be attributed to the OAS system, so further study is needed.

When looking closely at the no-show rates, there was an overall decrease in no-show percentages for the company overall. When comparing February 2016 to February 2017, the no-show percentage dropped from 21.6% to 14.8% in adult services and 15.7% to 9.5% in children services. There was some fluctuation in the benefit from shortly after implementation to where the most recent analysis stands, but overall there was some change. Most of the individual clinics showed similar results, with a larger decrease in the no-show percentage in October 2016, with a rebound and slightly higher percentage in November 2016 and February 2017. However, the percentages were lower compared to prior to implementation.

When examining the cancellations rates, there was a more consistent change. When comparing February 2016 to February 2017, the cancellation rates dropped from 15.1% to 9.8%. The change in cancellation percentages did drop from 11.9% pre-implementation in April 2016 to 9.1% in October 2016. The rate then further decreased to 8.5% in November. The slight increase in the percentages for the month of February could be due to the potential for winter weather during the month of February, but overall the change has been much more consistent. A consistent low cancellation rate could lead to increased provider productivity.

Provider Productivity

When examining the provider productivity, the productivity goal varies from provider to provider. The overall number of patients that a provider is expected to see in a quarter can depend on several factors. These can include travel time from site to site, supervision between nurse practitioners and physicians, daily documentation allowances, and continuing education. The amount of time needed for each of these activities will reduce the amount of time to see

patients on a daily basis and can lower someone productivity target for the quarter. And every provider has a different productivity target based on these measures. The overall percentage of their productivity is based on the number of billable patient encounters they had during the quarter and their productivity target. It is possible to have greater than 100% productivity but this is a very rare occurrence. Because there was turnover in several of the providers during the course of this study, it was difficult to track each provider's productivity changes, however, the total productivity for the company was examined, but looking at the total number of patients seen for the quarter and how many patients should have been seen to achieve 100% productivity. The third quarter of 2016 was not examined because this was in the months the OAS system was implemented and it was felt that this transition period would not accurately reflect the effects of the OAS system.

When looking at the overall productivity percentages, there was a positive change when you compare the first quarter of 2016 to the first quarter of 2017. The first quarter of 2016 had 69% overall productivity, but then rose to 71% in the second quarter. Weather changes in the months of January, February, and March could account for the lower percentage in the first quarter. In the fourth quarter, the productivity then dropped to 68% for the company. However, the productivity then rose to 75% in the first quarter of 2017. The initial drop in productivity during the fourth quarter of 2016 could be related to the adjustment period after the implementation of the OAS system, but it is hard to say this for certain, since the data was not statistically controlled for any other outside factors, such as provider turnover rates. If data from several year prior could be examined, it would be possible to see trends in data that would show patterns in productivity, to see if particular quarters tend to have higher productivity or lower productivity due to some of these external factors.

Provider Perception Survey

There was only a limited number of providers who completed the survey, slightly over half of the providers. Since this was such a small number, results of the overall perception of the OAS system would be difficult to determine, but of the responses gathered, the majority were negative. The majority of providers who responded felt there was no change in the no-show and cancellation rates, that there was no change in their productivity, and overall was not beneficial for the patients and the company. When asking for open ended comment, 5 people responded. Several of the comments mentioned that they felt their patients were very unsatisfied with the system. The one positive comment notes that the provider had an increased job satisfaction because they were able to take leave with shorter notice.

Strengths and Limitations

In previous studies related to open access scheduling systems, there has been issues with outside factors, such as a high rate of provider turnover, that have affected the results. There also are few studies that examine OAS systems in the mental health setting. This study could call attention to the further need of studies within this specialty. Also, because OAS systems are relatively new and unused, this could call attention to the need for further research about this system.

When looking at the results of this study, having varying months for analysis is a limitation. Being able to look at all the months consistently would be beneficial. However, the facility felt that providing the information for these months would be the best, because the data for December 2016 and January 2017 was clouded by the amount of providers taking vacation, the holidays, and the inclement weather. Another limitation of this study was the fact that it only examined a short period of time. In order to see the long term changes of the OAS system,

further study is needed over the next several years in order to see its true benefit. As previously noted turnover rate can affect the results and within the period of examination of this facility, there was several providers who left and new employees that started. Other possible variables were not statically controlled for in this study, which also limits the findings. One strength of the study was that it did exam several different aspects related to the OAS system, including provider perception of the system, no-show and cancellation rates, and provider productivity. Also, a positive benefit was noted, that providers can request time off work with shorter notice.

Conclusion

Open access scheduling systems have the potential to be very beneficial for companies, if the conditions are right. Using this system in a community mental health center is something that has not been studied, and most likely needs further examining to see if it would be beneficial for this unique patient population. The use of the OAS system within this community mental health center did show slight positive changes in the no-show and cancellation rates in the short time since it has been implemented, which would support its continued use. There was variable overall provider productivity, but there was an increase in productivity when comparing the first quarter of 2016 to the first quarter of 2017. One drawback to the OAS system, the providers do not seem to feel that the system has made positive changes within the clinic. Because this is a new system that is quite different from the traditional scheduling model, it could take time for them to become accustomed to the system. Also, if the benefits and changes in the no-show and cancellation rates and productivity become more apparent over time, the providers may see more benefit in the system. If use of the OAS system continues in this organization, further study is needed to ensure that there continues to be positive changes and benefits as a result of the system.

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Appendix A

Survey Questions

Do you think the open access scheduling system has improved your satisfaction with your job?
Yes/No

Do you feel that the open access scheduling system has improved your productivity?
Yes/No

Do you feel that the open access scheduling system has decreased no-show and client cancellations within your clinic?
Yes/No

Do you feel the open access scheduling system has been beneficial overall for the company?
Yes/No

Do you feel that the open access scheduling system has been beneficial for the patients?
Yes/No

Do you have any other comments, thoughts, or ideas about the open access scheduling system?

Appendix B



VALUES • EDUCATION • SERVICE

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www.lmunet.eduFederal-Wide Assurance Number FWA00012543
Institutional Organization Research Group (IORG) IORG0005225
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Rose Hill, VA

May 4, 2017

Protocol #: 606 V.0

Project Title: Effectiveness of an Open Access Scheduling System in a Community Mental
Health Center

Dear Ms. Crockett:

Thank you for submitting your application for exemption to the Lincoln Memorial University Institutional Review Board (LMU IRB). The IRB appreciates your work in completing the proposal. Your proposal was evaluated in light of the federal regulations that govern the protection of human subjects.

Specifically, 45 CFR 46.101(b)(2) identifies studies that are exempt from IRB review, including: Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: (i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

Specifically, 45 CFR 46.101(b) (4) Research involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens, if these sources are publicly available or if the information is recorded by the investigator in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects.

The IRB has determined that your proposed project employs surveys that pose no more than minimal risk to the participants. The information will be obtained in such a way that one's responses will not be linked to one's identity or identifying information. Moreover, accidental disclosure of the participants' responses would not have the potential to harm to the person's