Impacting Patient Non-Attendance with Appointments in Psychiatric Outpatient Clinics, A Quality Improvement Project

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Abstract

The following examines an quality improvement intervention aimed at reducing non-attendance at an outpatient community mental health organization in the Pacific Northwest of the United States. Policy creation in regards to interventions designed to reduce non-attendance is presented to twenty-five medical providers and the effects of this intervention are then measured using data from the electronic medical record. Only patients eighteen years and older and who are Oregon Health Plan participants are measured, as these clients have the highest rate of non-attendance and because these clients are unable to be charged a financial disincentive to no-show. Results from this study shows that policy around non-attendance must be enforced for it to be effective. Results also suggest further directions to take, including focusing on providers with the highest patient non-attendance rates and focusing on specific clients with high non-attendance rates.

Keywords: appointment non-attendance, community mental health, policy, Oregon Health Plan, quality improvement

Introduction: The Clinical Problem

Nonattendance at outpatient appointments can be a significant clinical and systemic problem. Appointment non-adherence by clients at Western Psychological and Counseling is a recurring issue encountered by psychiatric providers. Understanding the causes of and possible remedies for patient non-attendance with appointments is necessary so that client, provider and agency burden can be minimized. Clinicians often find themselves challenged because of adverse productivity that appointment non-adherence has on their day-to-day functioning. The cost of no-show appointments also has a significant impact on revenue. This project will explore the issue of missed appointments at Western Psychological and Counseling and how the creation of policy around treatment continuation, appointment adherence and treatment engagement training may help to reduce these rates. A review of current literature will seek to discover interventions that have been shown to be effective in lowering the rate of missed appointments. No-show rates will be compared before and after the intervention through the use of appointment adherence data collected from the electronic medical record.

Population affected by the problem

Twenty-five psychiatric providers and Oregon Health Plan (OHP) clients at thirteen Western Psychological and Counseling clinic locations are the population of interest. Western Psychological and Counseling provides outpatient behavioral health services, chemical dependency services, employee assistance programs and psychiatric services in Portland, Oregon and in Vancouver, Washington. The focus on Oregon Health Plan clients is because this population has the highest rate of appointment non-adherence (24%) compared with Medicaid clients and commercial health care clients (averaged together at 15.8%) (J. Hromco, personal

communication, data retrieved from the electronic health record, December, 2017). The purpose of this project is to examine appointment adherence data, explore the issues that Western Psychological medical providers face that may contribute to this problem and to assist in the creation of policy regarding client appointment adherence expectations. The effectiveness of these interventions will then be evaluated by examining no-show data during a three-month pre intervention period and for three months after the intervention.

A lack of communication with clients around provider/agency expectations, a lack of agency policy regarding patient service termination protocols, as well as a lack of financial penalties for Oregon Health Care clients in regards to appointment non-adherence have all been identified as contributing to relatively high no show rates (J. Hromco, personal communication, July, 2016). Missed appointments create system challenges that have an impact on clients, providers and other staff. Clinical capacity is poorly utilized when clients fail to attend scheduled appointments and psychiatric providers express discomfort or refuse to prescribe psychotropic medication for clients that they have not seen in some time (J. Hromco, personal communication, July 17, 2016). This is especially true in prescribing stimulants and benzodiazepines. Clients that are unable to get their medications refilled can sometimes end up in the emergency room. It therefore becomes useful to examine the service practices and policy within a broader context of the organization of Western Psychological and Counseling itself (Lu, 2006).

Review of the Literature

The literature review concentrated on studies that examined appointment adherence in community mental health agencies. Current literature was reviewed in order to provide a context and background regarding the existing knowledge as to causes of missed appointments as well as

successful interventions. Searching in the multi-disciplinary journal database Academic OneFile journals using the terms appointment AND adherence AND mental, while restricted to peer reviewed articles revealed 144 academic journal articles. Sorting by relevance revealed five articles that pertained to this project. Searching in the database PubMed (MEDLINE) using the search terms appointment AND adherence AND psychiatry revealed fifty-eight articles, five of which were relevant. Adherence was defined as the extent in which the patient's behavior coincided with medical or health advice (Adams & Howe, 1993). Low adherence rates are also associated with poorer outcomes (Najt, Pfusar-Poli, & Brambilla, 2011). Non-adherence can mean failing to engage in an initial treatment visit, missing appointments, failing to adhere to prescribed medication regimens, dropping out of treatment early, or failing to transition from one level of care to another (Daley & Salloum, 2002). Demographics, illness, attitudes towards treatment and psychosocial issues are all determinants of adherence (Pinikahana, Happell, Taylor & Keks, 2002). Consistent with this population are a high number of clients who have been diagnosed with a psychiatric disorder but who are not taking maintenance medication for the disorder (Sajatovic, et al., 2013). Mitchel & Selmes (2007) indicate that patients miss about 20% of scheduled appointments for mental treatment, which is about twice the rate in other medical specialties. O'donnell (2003) found that non-specific counseling to stimulate positive attitudes towards treatment was an effective intervention in promoting appointment adherence. Zolnierek & Dimatteo, (2009) found in a meta analysis that the odds of a patient adhering to follow-up appointments was 2.16 times greater if the clinician was a good communicator. Duncan, Best & Hagen (2010) found that shared decision making has increased self-determination and in turn better patient adherence. Bull et. Al (2011) found that communicating with clients regarding adverse effects of medications can significantly decrease the odds of

patients missing appointments. Thompson & McCabe (2012) found that clinicians who are friendly, who explain the reasons for prescribing the medication, and who address patient concerns are more likely to have patients that adhere to treatment regimes. Cruz et. Al (2013) found that nonverbal conveyance of positive affect was associated with greater adherence to medication management appointments. Molfenter (2013) has shown that in addiction services, reducing waiting time and increasing appointment availability is beneficial in reducing missed appointments. He also showed that pre-appointment reminder calls decreased no-show rates on average by 19% while Mitchell & Selmes (2007) found that telephone reminders have a reasonable evidence base for use in outpatient clinics. Kroll, et. Al (2026) demonstrated that missed initial psychiatry appointments could be accurately predicted by prior missed medical appointments and that many outpatient clinical services do not proactively address the problem of missed appointments. Lacy (2004) found that appointment non-adherence without notifying clinic staff was mainly due to emotions, perceived disrespect and not understanding the scheduling system.

Approach to the Conduct of the Project

The population of interest for this project is Oregon Health Care clients who are eighteen years or older and who are currently under the care of psychiatric providers. This project will be implemented at all thirteen clinics of Western Psychological and Counseling. There are 7,779 Oregon Health Care clients currently being served by twenty-five psychiatric prescribers at these various locations (J. Hromco, personal communication, Sept, 2016). Initial meetings with the quality improvement committee for Western Psychological and Counseling as well as meetings with psychiatric providers at Western Psychological has elicited feedback and direction for this project in regards to the potential for policy creation and enforcement and for

the development of treatment engagement training for some no show clients. This group of psychiatric providers as well as the quality improvement committee met periodically in order to decide how the implementation of suggested interventions for missed appointments for Oregon Health Plan clients was working and whether changes needed to be made.

Patient appointment adherence data was not identified with specific patients, although this study was focused on Oregon Health Plan clients and is protected through an approval by the Institutional Review Board (IRB). Appointment adherence data collected from the electronic record was anonymous. Each psychiatric provider has had the responsibility of choosing in how to respond to no who clients. Patients who cancelled their appointments within twenty-four hours or more prior to the scheduled appointment were not counted as having missed their appointment. The percentage of filled to booked appointments per three month pre intervention period and three month post intervention period was analyzed in order to ascertain the impact of the intervention. Rates were calculated by dividing the number of missed appointments by the number of scheduled appointments multiplied by 100 throughout the organization. Data was pooled and was not be analyzed by each individual clinic or by individual provider, although this is a future possibility (J. Hromco, personal communication, May, 2017).

Facilitators in reducing missed appointments include prescribing only enough medication until the next appointment (S. Schrauben, personal communication, Aug, 2016), as well as person-to-person reminder calls for OHP clients that have new evaluations and for those who have missed appointments. In general health based clinics, reminder phone calls have been shown to reduce no-show rates from 23.1% to 13.6% (Parikh et al., 2010). Currently, there is a computerized automated system for making reminder calls but providers have suggested that this system is not always reliant and that a person-to-person call for clients that repeatedly no-show

would be more effective (J. Hromco, personal communication, Aug. 2016). Even though this would not be as cost efficient as the computerized call system, person-to-person calls would be more effective for appointment non-adherence clients than automatic phone call reminders in decreasing the no-show rate. Person-to-person calls would give the clients the opportunity to decline the appointment as well as give Western Psychological and Counseling an idea into which clients might not show for their appointment based on their not answering the call. Clients who do not answer the person-to-person reminder calls have a higher likelihood of not showing for the appointment (medical provider meeting, August, 2016). Person-to-person reminder calls by front desk staff will be placed forty-eight to seventy-two hours before appointments in order to give clients the chance to re-schedule. Providers at the Gladstone, OR clinic reported that the no-show rate for evaluations was much lower because the front desk consistently called for new patient evaluations (medical provider meeting, August, 2016). Because an initial intake requires greater clinic time and expense, the new policy recommendation is that each clinic places a person-to-person appointment reminder for all new patient evaluations.

There are other interventions that were discussed for agency-wide adoption. A part of encouraging treatment engagement includes not allowing no-show clients next day appointments. Instructing the front desk to communicate to clients who have missed their appointment that the provider has a very busy schedule has been suggested as a method to reinforce the scarcity of service as a way to motivate clients to adhere to their scheduled appointment times (medical provider meeting, August, 2016). For clients that have not shown for two appointments, scheduling them for stand-by appointments only can also be a part of treatment engagement training (J. Hromco, personal communication, July, 2016). It was

encouraged for providers to communicate with pharmacists through medication refill instructions that the patient will be unable to refill this medication again without a face-to-face meeting with the provider (medical provider meeting, August, 2016). It has been suggested that the creation of policy with very clear no-show language and consequences is also needed (medical provider meeting, August, 2016). This policy would also help guide providers in how to respond to clients who miss appointments.

Prior creation of missed appointment policy by Western Psychological employed a ‘three no-show strike’ policy for termination of care (J. Hromco, personal communication, July, 2016). The difficulty in applying this policy in a consistent way meant that clients expected to be exceptions to that rule. Another obstacle is the lack financial disincentive for Oregon Health Plan clients, as a no show fee cannot be applied per OHP rules. However, providers have stated that the charging of a seventy-five dollar penalty for commercial policy clients dramatically decreases no shows (C. Thoen, personal communication, August, 2016, J. Hromco, personal communication, May, 2017). Decreasing wait time for appointments and making appointment reminder calls have been shown as predictors of addiction outcomes and health (Craig & Olson, 2004).

Psychiatric providers at Western Psychological prefer face-to-face follow-up consultations and patients sometimes become frustrated because they are required to keep appointment schedules set by providers in order to continue to get their medications refilled (medical provider meeting, Western Psychological, August, 2016). Anderson and Tomenson (1995) found that medication adherence depends on the involvement of healthcare providers in follow-up appointments more than the drug type itself. Missed appointments have also been

correlated with the length of treatment and with the length of the abstinence period (Craig & Olson, 2004).

Implementation of the Project

The evolution of this project over time gradually expanded from analysis and implementation with psychiatric providers at one community mental health clinic to an application and intervention with all psychiatric providers within the entire organization. This included thirteen separate locations throughout Oregon and Washington and included twenty-five psychiatric providers. This project was based on a need to examine and then implement methods to increase appointment adherence. Working closely with the quality improvement committee meant that an examination of existing policies and procedures was necessary.

During robust discussions with all the medical providers and leadership within the organization, it became evident how each site differed in terms of how no-show clients were handled. Some front desk support made reminder calls or queried as to why the appointment was missed, some site's front desk support flagged the patients in the banner of the electronic medical record thus indicating how many appointments they had no-showed, while other sites let each provider choose how they handled no-shows. Mandating and standardizing a response to no-show clients was not the goal of this intervention. Rather, the purpose evolved to clarifying company policy and offering tools to providers to impact non-attendance. During the intervention period, it was up to each provider whether to adopt the suggested interventions. One definitive policy that was created during these discussions gives clients a chance to work with a maximum of three different providers before being discharged from the organization for no-shows. As a result of this examination of company guidelines, the drafting of a last chance agreement letter template that detailed the effects of missed appointments for clients and for the

organization was made. This letter became the final step between continuing to offer services to clients or of discharging them. No patients were discharged during the intervention period.

An initial examination of data from the electronic medical record included all ages of patients. Later examination of data focused only on clients eighteen years and older. The focus of this study was narrowed because of potential conflicts with the Institutional Review Board and because minors (those under eighteen years of age) have less control over no-shows. Because it took a higher-level understanding of how to access this data within the electronic medical record as well as the support of the informatics department, the initial goal was to pull the data monthly but instead the actual data was pulled twice and analyzed over a nine-month period.

Outcomes

This project shed light on the effectiveness of interventions designed to increase the rate of appointment adherence by measuring the rate of no-shows during a three-month period before and after the interventions. By focusing on this issue within the organization, new policy was drafted and dialogue occurred between the organization's leadership and the medical providers. This robust exchange highlighted ways that some clinics and providers were managing no-show clients. It also led to additional avenues of exploration, such as focusing on specific providers with high no show rates and whether or not to enforce interventions aimed at reducing the no show rate with these providers.

By bringing an awareness of how to intervene when clients no-showed, it was expected that the overall rate of no-shows would decrease. The data examined and pulled from the electronic medical record included a period (termed post intervention data) between February 1, 2017 to April 30, 2017. A pre intervention data period from November 1, 2016 to January 31, 2017 was also analyzed. Because the winter of 2016 was particularly snowy, it was surmised

that the no show rate could feasibly have been impacted because of this and data shows that during the ten day period of snow, the no show rate was higher than usual (indeed, the rate of no shows climbed to almost 30% during this period). To compare for possible weather influence in impacting the no-show rate during the pre-intervention period, the same time period was analyzed the year before (November 1, 2015 to January 31, 2016) and compared with the pre-intervention period of November 1, 2016 to January 31, 2017. The data examined was Oregon Health Plan (OHP) clients specifically, eighteen years and above.

The comparison between the two periods revealed that the no show rate was 23.9 % pre-intervention and 24% post intervention for adult OHP clients. This shows that one out of every four appointments for adult OHP clients is a no show and that this intervention had minimal impact on reducing this rate. If these numbers came out to 10-15%, the organization could simply absorb the costs and tolerate these no-shows (J. Hromco, personal communication, May 2017) but because this no-show rate is high, it became clear that the organization needs to do more to decrease the no-show rate for OHP clients. According to the quality improvement committee, this was somewhat expected. The historical response of educating and giving options about a desired change within the organization tends to be that interest is expressed initially amongst participants but that there tends to be no lasting behavior change and that people move on and do things like they have always done (J. Hromco, personal communication, May, 2017).

Because of this intervention not having had a strong response, recommendations to decrease the no show rate have now evolved to include the targeting of specific providers with high no show rates by involving the medical director of the organization. It will be important to frame the motivation for this intervention not as ‘who is doing a bad job and then go after them’

but rather, supporting those providers that have a high no show rate by helping them employ interventions designed to reduce that rate (J. Hromco, personal communication, May, 2017). What this project helped to show is that a voluntary adoption of interventions to decrease no show rates was not effective. At this point, standardizing and enforcing approaches to no show clients as well as brainstorming further interventions is the direction in which this organization is committed to pursuing. A question arises as to whether the organization needs to 'force' this issue more (J. Hromco, personal communication, May, 2017). Another possibility would be to identify the no show clients and make targeted interventions for those specific clients. For example, no showing at three provider appointments would definitively result in action (J. Hromco, personal communication, May, 2017). Putting these clients in drop-in or standby appointments may be enforced throughout the organization. Another option is to ask the no show clients to meet with the medical assistant or the manager of the clinic. Further collaboration between colleagues has also been suggested regarding suggested strategies in handling no show clients. This could be done through email or in person (J. Hromco, personal communication, May, 2017). By analyzing specific providers who have low no show rates and then investigating as to why this may be the case could offer important clues in to what might be adopted as effective company policy.

The financial impact of this project was projected to increase revenue within the organization because of increased compensation from OHP clients. While no patients were actually discharged from service within the organization during the study, the rate of no-shows measured after this intervention did not have any impact on revenue as the rate stayed almost the same, even decreasing slightly. Although there was minimal cost to implement this project, there was a time expenditure during the all-site provider meetings in that the agenda for this

discussion meant that other topics received less time or had to be moved to future meetings. There was also the effort required to periodically extract and analyze date from the electronic medical record. Meetings with the quality improvement committee also required time.

The expectations of this project were that by suggesting interventions designed to increase appointment adherence through group dialogue with psychiatric providers, that these providers would voluntarily adopt these interventions and appointment adherence would increase. However, it became clear that each site within the organization as well as each provider had differing ways of handling no-show clients and a non-enforcement of intervention meant that providers would continue to manage no show clients as before. Measuring or suggesting policy around no-shows was met with some resistance and was perceived as potentially punitive by some providers. It was stressed that the interventions suggested during the meetings were intended as guidance and that what was being suggested was in no way a standardized or obligatory way of intervening with no-show clients within the organization. However, merely suggesting ways to lower no show rates without enforcing them really did not prove to have any noticeable impact.

Some providers expressed concern in potentially standardizing and enforcing no-show intervention while others welcomed the structure and guidelines around the proposed policies. It also became clear that punitive language toward the client could be counter-productive in enhancing the alliance of the provider/patient relationship. The focus on explaining the importance of appointment adherence to clients and providers evolved into an explanation of how no showing impacted the availability of services for other clients waiting for services. Allowing time during provider meetings to discuss these issues had an impact for providers in that it helped frame their own ideas and expectations around appointment adherence as well as

how each site within the organization managed no shows. Examining this data proved to be a building block for further analysis (J. Hromco, personal communication, May 2017). A great deal was learned by the organization about the no show rates through a focused examination of the no show data. This has suggested next steps to take in order to lower no show rates.

Conclusion

Further examination and implementation of interventions that could help reduce missed appointments at Western Psychological and Counseling continues to be needed in order to lower the adverse effects on clinic workflow and on clinical outcomes (Craig & Olson, 2004). Interventions such as the enforcement of agency-wide policy on client expectation around no-show appointments, enforcing the use of person-to-person appointment reminder calls, and employing treatment engagement training in reminding patients of the importance of appointment adherence are all interventions that will now be considered as required policy to be implemented at all Western Psychological locations in order to reduce the missed appointment rate. Providers and clients will benefit from an agency shift that actively works to strategically problem solve issues around appointment non-adherence and from the enforcement of policy that helps to support and guide clinicians in developing interventions to reduce the number of missed appointments.

In order to adequately meet the needs of the agency and clients, Western Psychological and Counseling continues to be committed to ways that facilitate appointment adherence (Hernandez, Nesman, Isaacs, Callejas, & Mowery, 2006). As a result of this project, a system-wide creation of organization policy relating to appointment adherence has facilitated a clear course of action to take for clients who miss appointments. Standardizing and enforcing this policy for all thirteen Western Psychological clinics will help to ensure that providers are in

alignment with each other and with the vision of the organization. These policies will continue to be developed, discussed and disseminated during all site provider meetings and through company e-mail. It is postulated that a system-wide agreement on service contracts as well as enforcing treatment engagement training will show a decrease in missed appointments and will thereby help to reduce frustration amongst staff and clients, increase organization revenue, and allow access for clients who desire treatment but cannot access it because of provider appointment scarcity.

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