Follow-up Attendance Among USF BRIDGE Physical Therapy Patients

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ABSTRACT

Objectives: Establish baseline attendance data to inform quality improvement for patient follow-up care at BRIDGE Physical Therapy Clinic. Background: The BRIDGE Healthcare Clinic is a student-run free clinic affiliated with the University of South Florida, serving the surrounding University Area community. Based on informal observation, there is potential for improving patient attendance. Quantitative assessment of baseline data regarding current attendance for initial visits, follow-up visits, and length of episodes of care were obtained via retrospective review of electronic health record (EHR). Methods and Measures: HIPAA/CITI certified BRIDGE Physical Therapy Patient Coordinators abstracted data from patient records maintained in Practice Fusion, the EHR system utilized by BRIDGE Clinic, between October 2012 and September 2013 (N = 67). Patients seen for more than one initial evaluation within the designated time period (i.e. more than one episode of care) were excluded from the sample. Data regarding attendance for initial visit, follow-up visits, and length of episode of care were abstracted, de-identified, and reported in an Excel document. Frequency counts and percentages were derived using IBM SPSS Statistics, version 21. Likelihood of follow-up attendance based on attendance for initial visit was calculated using logistic regression. Associations between duration of care and overall attendance were examined using bivariate correlation. Results: There was a low rate of attendance for both initial physical therapy visits (60%), and follow-up visits (43%). Conclusion: Low rate of attendance indicates the need for quality improvement efforts targeting causative factors to improve initial and follow-up visit attendance. Suspected reasons for non-attendance include inconsistency of care, lack of transportation, and patient satisfaction. Findings from this study will inform further investigation towards subsequent changes in policy and procedures. Recommendations include implementation of a standardized classification system for patient chief complaints, efforts to ensure that follow-up visits are appropriately scheduled after initial visit, and maintenance of clinic operation throughout the entire year, opposed to the academic calendar.

Background

The BRIDGE Healthcare Clinic is a student-run free clinic at the University of South Florida, located at the Morsani Center for Advanced Healthcare. BRIDGE stands for “Building Relationships and Initiatives Dedicated to Gaining Equality.” The clinic serves the surrounding University Area community, with the goal of providing a healthcare clinic where patients are treated compassionately and cared for through the collaboration of students and faculty from multiple disciplines. Over the past several years, faculty and student volunteers in the physical therapy clinic have observed highly variable patient attendance for follow-up appointments without quantitative data to support their observations. With a lack of baseline data on patient attendance, further investigations cannot be completed in a scientific manner without making assumptions. It is important to transform qualitative observations into quantitative figures in order to proceed with
investigations on causes for this non-attendance.

Past student directors have commented on the importance of investigating follow-up attendance in order to discover potential causes of non-attendance. These potential causes include patient satisfaction, poor health literacy, barriers to transportation, emotional distress, and illness duration, with patient satisfaction at the forefront of modifiable barriers. Consequently, baseline data regarding patient non-attendance has been collected through a retrospective investigation. Previous research conducted by other health care clinics have shown correlations between low levels of patient satisfaction and non-attendance. Based on this correlation, the data obtained from this study will inform subsequent quality improvement measures; namely measures to determine patient satisfaction. In order to identify and target ways to improve patient attendance through satisfaction surveys, a baseline value of attendance must first be established.

In addition to low patient satisfaction, common reasons for non-attendance include failure to remember the appointment, illness, transportation barriers, and other obligations, such as work or family demands. Lack of transportation appears to be a major cause of non-attendance for BRIDGE patients. Qualitative observations made at BRIDGE have indicated decreased attendance following the translocation of the clinic from a site more central to most patients’ homes to the more distant Morsani Center. Although the data gathered for this study will only provide information about attendance versus non-attendance, future studies can subsequently investigate reasons for non-attendance and provide support for programs that may reduce these barriers. Certain procedures, including phone call and appointment card reminders, have been implemented for the past three years in an effort to improve attendance. However, there are additional measures to explore that may also improve attendance.

Disparities in attendance have been found to exist among nationalities and between genders. This is significant in terms of evaluating the experiences of BRIDGE patients due to the variety of patients who are served, including 56.5% of patients who have been identified as Spanish speakers. Studies have shown that patients who are Hispanic are at increased risk for poor health literacy. Poor health literacy can impair reception of education regarding importance of attending therapy sessions, thereby impeding attendance. In accordance with the documented majority of patients who are only Spanish-speaking and their increased risk for inadequate health literacy, it may ultimately be beneficial to break down attendance by ethnicity. This will aid in the determination of conceivable discrepancies in attendance based on patient demographics as well as what can be done to lessen these disparities. Categorical breakdown of data was not performed at this time secondary to a small sample size, however this should be completed once a larger sample size is available.

In an effort to improve the quality and effectiveness of service delivery, faculty and student volunteers generated several practice-based research questions based on observations of highly variable patient attendance for follow-up appointments. By quantifying existing levels of attendance, the data obtained from this study act as a starting point for subsequent quality improvement measures in order to identify and target possible ways to improve access and consistency of care. Therefore, the goal of this retrospective investigation is to establish baseline data regarding existing attendance for initial visits, follow-up visits, and length of episodes of care.
Methods

The study was submitted for review and deemed exempt by the University of South Florida Institutional Review Board. Study methods and procedures complied with all Health Insurance Portability and Accountability Act (HIPAA) regulations. Researchers examined electronic health records for all BRIDGE patients scheduled for physical therapy during the period of October 1, 2012 to September 31, 2013. Records were excluded from the sample if patients were seen for more than one initial evaluation within the designated time period (i.e. more than one episode of care), resulting in a final sample size of N = 67. De-identified patient attendance data were abstracted from the BRIDGE clinic electronic health record (EHR), titled Practice Fusion, by HIPAA and Collaborative Institutional Training Initiative (CITI) certified physical therapy staff. Principal investigators were blinded to the data collection process. Data was analyzed using IBM SPSS Statistics, version 21. Descriptive statistics such as frequency counts and percentages were used to determine 1) the percentage of patients who attended their scheduled initial visit, 2) the percentage of follow-up visits attended, and 3) the presence or absence of an association between duration of care and patient attendance rates.

Discussion

Results collected indicate the following findings. Sixty-one percent (41/67) of patients attended their scheduled initial visit, noted in Figure 1. Of those who attended their initial visit, eighty-five percent (35/41) had one or more follow-up visits scheduled. Only forty-three percent (30/69) of those follow-up visits were attended. A relatively high rate of non-attendance for initial visits was observed, noted in Figure 2 with 15 subjects. Figure 2 also reveals that 15 subjects attended zero percent of their follow-up visits scheduled. According to an odds ratio analysis at an alpha level of .001, patients who attended their initial visit were over 10 times more likely to schedule and attend follow-up visits, as compared to those who did not attend their first scheduled visit. This trend is reflected in Figure 2. No significant correlation was observed between duration of care and overall attendance of scheduled visits (R = -.12, p = 0.51). These observations may be limited by overall sample size (n=67).

Potential reasons for non-attendance are numerous, as discussed above in the Background section. Various reasons for non-attendance could denote different patient attitudes towards physical therapy and the treatment received at the clinic. For example, if a patient’s satisfaction is low from a previous experience, then he or she may not return to the clinic for subsequent visits, negatively affecting patient attendance. However, if the reason for non-attendance is failure to remember the appointment, then this behavior could reveal that the patient does not believe in the importance of their health or of the treatment they are currently receiving from physical therapy. Authors of a recent study on female patients attending pro bono clinics have reported that social support may be a key factor in motivating patients to engage in their prescribed exercise regimen. Another article indicates that both perceived and actual social support have a direct or buffering effect on health. Moreover, social support can positively affect health status and health literacy by preventing social isolation and moderating stressors on health. Therefore, it is imperative to identify and further analyze each patient’s reasons for non-attendance in order to address the actual barriers. Future research should investigate the impact of these factors on patient attendance at the BRIDGE Physical Therapy Clinic. Given the low rate
of attendance revealed by this study, these considerations are certainly worth exploring in order to effectively enhance attendance. Limitations of this study include the small sample size (n=67), inconsistencies in EHR documentation with variable recording of patient reasons for not scheduling a follow-up visit, and the retrospective nature of the data.

Conclusion

Overall, data provides quantitative evidence of poor attendance at the BRIDGE Physical Therapy Clinic. Attendance data obtained from this study informs subsequent quality improvement measures, namely patient satisfaction, based on possible relationships between patient satisfaction and participation in follow-up care. Evidence gathered by other free clinics has shown that quality of life among patients who attend pro bono clinics is generally lower compared to that of the general population. This thereby enhances the need for optimum attendance at visits in order to build rapport and effectively address quality of life issues. Based on the identified discrepancy between scheduled and attended visits, an investigation into the reasons for this discrepancy is warranted. A need for more detailed baseline data regarding the patient population served by the BRIDGE clinic was identified, including patient demographics like age, gender, preferred language, mobility status, and method of transportation. Such detailed information can be used to investigate potential differences in attendance based on individual patient characteristics, and potential interventions aimed at reducing barriers to access.

Several recommendations were generated as a result of the study and its findings, including implementation and use of a standardized classification system for patient chief complaints; more detailed documentation of patient demographics including age, gender, language preference, mobility status, and transportation methods; assurance of follow-up appointment scheduling based on findings of initial visit; and promotion of continuity of care with year round clinic hours.

Publications note the importance of free clinics as part of health care’s safety net, providing services to millions of people that might not otherwise receive necessary medical care. The BRIDGE Physical Therapy Clinic is aiding in provision of care to this population in need, however more consistent patient attendance at therapy
sessions is essential to ensuring receipt of quality care. To this end, each of the goals developed as a result of this study is centered around the concept of standardization of procedures in order to improve quantitative attendance rates, as well as quality of care provided.

The need for a standardized classification system for patient chief complaints arose during the data collection process, and is intended to allow more effective analysis of patient data for quality assurance purposes. With the implementation of a standardized system, patients may be categorized by affected anatomy, type of pathology, and practice pattern for a variety of research purposes.

Documentation of patient demographics is vital in ensuring that the health care needs of patients from all walks of life are being met. Studies have shown that, overall, medically uninsured and low income populations demonstrate significantly higher rates of smoking and obesity, \(^{12,18}\) indicating the need for specific intervention tailored to population needs. Lack of insurance or inadequate insurance coverage is a requirement for receipt of care of the BRIDGE Clinic, therefore these population-specific needs, as well as potential needs that have yet to be identified, may interfere directly and indirectly with appointment attendance. As the aforementioned articles indicate, it is important to explore the demographics of patients served. By determining the unique demographics of the BRIDGE population served, barriers to quality of life and provision of care may be more effectively addressed.

Recent figures indicate 46 million Americans were uninsured as of 2006, and many of those forego medical treatment secondary to cost.\(^{16,17}\) Pro bono services aid in alleviation of cost as a barrier to healthcare, however may also lead to decreased value placed on healthcare by patients receiving care at free or reduced cost. Qualitative observation and patient reports have indicated that patients may place less priority on attendance because there are no financial consequences for failure to attend visits. Although the services provided by the BRIDGE Clinic are free of monetary charge, the value of physical therapy services must be imparted at each visit to ensure that patients make attendance a priority. Education regarding health-related repercussions associated with skipped visits must be provided in conjunction with appropriate scheduling of follow-up visits. Extraneous scheduling may lead to increased missed visits because the patient does not require or does not perceive the need for further therapy services.

The current clinic hours of the physical therapy division of BRIDGE halt for the months of May through August in accordance with the academic calendar. While this allows greater feasibility from the standpoint of volunteers and coordinators, patients’ plans of care are placed on hold for several months until the next school year begins. This interferes with the continuum of care, which has been integrally linked to patient satisfaction, patient retention, adherence to interventions, clinical outcomes, and quality of care.\(^{19-22}\) It is predicted that each of these valuable measures will be improved by maintaining physical therapy clinic operations throughout the summer. With the data achieved through this study and those discussed above as follow-up investigations, it is the hope of the BRIDGE Physical Therapy Clinic that barriers to attendance will be reduced and quality of care will be enhanced.

References

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