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Implementing an EMR System in a Small Psychiatric Practice

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Executive Summary

Title

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Introduction of the Problem

Mental health settings are slower in adopting electronic medical records (EMRs) compared to other specialty practices (Cellucci et al., 2015). EMRs are digital versions of paper charts containing clinical notes and additional health information collected for diagnosis and treatment (ONC, 2019). EMRs provide an integrated patient data system providing readily available health information. EMRs have the potential to reduce medical errors and improve the legibility of records, accessibility to patient records, and coordination of care (Cellucci et al., 2015). Barriers to adopting EMRs in mental health settings include cost burden, physician reluctance, computer literacy, and concerns with privacy surrounding confidential psych notes (Kariotis & Harris, 2019). Overcoming barriers to the adoption of EMRs alone does not lead to the successful implementation of EMRs. The success of EMRs within organizations depends on EMR acceptance. Strategies for the successful implementation of EMRs are limited in mental health settings (Zurynski et al., 2021).

Literature Review

EMRs offer a platform to practice integrated care and facilitate communication between providers (Stanhope & Matthews, 2019). The adoption of EMRs is influenced by perceptions of the potential clinical benefits offered by EMR technology (Cellucci et al., 2015). The most common categories of barriers found are cost, technology, and user attitude toward EMR technology. EMR implementation will fail without the acceptance and support of clinicians (Singh et al., 2020). Accounting for all user's perceptions helps reduce the resistance to EMR change (Barrett, 2018).

Successful EMR implementation can be promoted by adequate planning from the selection of the EMR stage to the rollout phase. The success of EMR implementation in mental health requires a proper implementation plan (Kpobi et al., 2018). Perspectives of physicians and users, organizational factors, and technical factors have impacted EMR adoption in mental health settings (Zurynski et al., 2021). Negative provider perceptions surrounding disrupting workflow and lack of appropriateness in mental health settings have led to the slow adoption of EMRs (Zurynski et al. 2021). EMRs with the ability to be customized to individualized practice needs are more practical for mental health settings (Kruse, Kothman, et al., 2016). Successful implementation of an EMR system can be facilitated through adequate planning, preparation, staff training, and support (Aguirre et al., 2019). This required an understanding of the organization's needs and its users (Aguirre et al., 2019).

EMRs have much to offer with benefits from improving the quality of care, minimizing medical errors, improving accessibility of records, and financial savings. These benefits can only be seen if the implementation of EMRs is successful and accepted by all users. Implementation outcomes will be based on acceptability, appropriateness fitting the needs of the practice, implementation cost, and sustainability. Understanding the needs of each user's workflow can help identify the needs of each user. Providing support and including staff in the planning process can have a positive impact on the adoption of the EMR system. Benefits associated with EMRs can only materialize with acceptance by clinicians. Adequate planning, training, and rollout plan can aid in the successful rollout of an EMR system.

Project Methods

This quality improvement project developed an implementation and training plan to successfully transition from paper charts to electronic medical records (EMR) in a private

psychiatry clinic. The implementation rollout was a three-phase incremental rollout. Pre- and post-implementation survey results were used to guide training and overcome barriers to the implementation. Post-implementation surveys were collected two weeks following each phase. Results from the surveys were used to make changes to meet the practice needs and identify additional training needs.

The EMR rollout was done using an incremental, step-by-step process to avoid workflow disruptions. The incremental phase-in approach allowed for additional time for any revisions to the system or workflow to support the needs of all users. The timeline for each phase was created and reviewed with staff. Phase 1 consisted of the scheduling platform in the EMR system with a go-live date of July 18, 2022. Some feedback from the users after implementation included creating appointment profiles, adding appointment flags, and confirming all demographic information with patients. Phase 2 consisted of the e-scribing platform with a go-live date of August 1, 2022. This did end up being postponed to September 1, 2022, due to technical difficulties. During this time, the practice NP tested the clinical charting system and continued customizing forms and templates, entering problem lists for all practice patients, and updating medication lists for all practice patients. Phase 2 go-live was successful. Phase 3 consisted of the implementation of the billing platform with a go-live date of October 1, 2022. Some feedback from phase 3 user surveys included creating billing profiles, updating the workflow of clinicians, and creating a task to notify office staff when ready to be billed. As the practice continues to utilize more of the EMR features, the collection of user feedback continues and is used accordingly to support practice needs.

Evaluation

The primary outcome measurement was post-implementation survey results from users. . John Brooke's (1996) System Usability Scale (SUS) was administered two weeks post-implementation of the EMR system for each phase of implementation. Feedback from the surveys in conjunction with in-formal meetings was used to guide additional training and system revisions needed to support the successful adoption of the EMR.

The users reported being satisfied or very satisfied with overall satisfaction with the EMR system. All three phases of the post-implementation results had mean scores associated with a B grade and good ratings. Users reported 100% strongly agree, the EMR makes their jobs easier and improves the sharing of patient information. Overall, each user's response showed acceptance and satisfaction with the new EMR system despite the system changes made during the process. Feedback regarding suggested changes included revisions to workflows, revisions to formatting clinical notes, and creating appointment profiles to improve efficiency. As each step continues to be rolled out, feedback continues to be collected and used accordingly to support practice needs.

Impact on Practice

This project positively impacted the practice because of the outcomes in improving accessibility of patient information and improved efficiency of workflow. Implementing the EMR has improved the scheduling of follow-up appointments and tracking no-shows. Patient records' completeness has improved with an integrated system incorporating the patient's appointment history, chart notes, tests, demographics, and billing. Patients have reported positive feedback about having the ability to message versus call. Not only has this helped to reduce the number of calls to the front office, but improved patient satisfaction. Additionally, the clinical staff has real-time access to the information, reducing delays in receiving sometimes urgent

information. Accessibility and increased completeness of patient records improve patient safety and monitoring. A reduction of potential medical errors from inaccuracies in transcribing written notes and time spent trying to read handwritten notes. The implementation of this EMR has improved the organization of patient records.

In the future, this implementation process could be used in other outpatient clinics to implement new EMR systems. EMR systems provide an organized, efficient way to provide patient care. The implementation process is important to consider when adopting an EHR in healthcare organizations. Selecting an appropriate rollout strategy can promote user buy-in, minimize disruptions in workflow, and facilitate successful rollout. Understanding the organizational needs is detrimental when planning each incremental rollout phase. Overall user satisfaction can be increased when training needs are met and revisions to workflow are made based on feedback from post-implementation surveys.

Conclusions

Successful implementation of EMRs in mental health relies on the selection of an appropriate EMR system designed to meet the needs of the organization and the process outlined for implementation. Obtaining feedback following each phase of implementation has helped to facilitate change attitudes further supporting the adoption of the new EMR. The feedback from users was used to guide changes in the workflow to more efficient processes. This ultimately increased staff buy-in and overall user satisfaction detrimental to the success of the implementation process.

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