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Conducting a Root Cause Analysis to Improve Intake Processes and Record Review in Home Health

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Executive Summary

Introduction of the Problem

Minimization of adverse events, reduction of inpatient admissions, and prevention of polypharmacy are goals within outpatient healthcare that rely heavily on a provider's access to patient medical records. The use of electronic medical record (EMR) systems and release of health record policies allow for a seamless transfer of data between healthcare institutions (Agency for Healthcare Research and Quality, 2020). Unfortunately, the home-health niche of outpatient care presents multitudinous variables which limit access to patient's medical records thus increasing the incidence of adverse events, readmission, and polypharmacy. These risks are further compounded given that home-health patients are some of the hardest patients to treat as they often have the most complex past medical histories (Redelmeier et al., 2021).

The Centers for Medicare and Medicaid Services (CMS) report that the United States has 10,591 home health agencies which deliver care to elderly and disabled individuals (Ellenbecker et al., 2008). In 2019, CMS reported 5,266,931 patients were served, accounting for 7,439,849 episodes of care (Centers for Medicare & Medicaid Services [CMS], 2021). The same year, The Medicare Payment Advisory Commission projected an increase of patient enrollment to greater than 50% over the next 15 years. Considering the current aging population in the United States, it is projected that the number of beneficiaries will rise from 54 million to more than 80 million by the year 2030 (Landers et al., 2019). Urgency to prepare for the projected, exponential increase of Medicare beneficiaries was addressed at the Institute of Medicine and National Research Council workshop in 2019. The main topic discussed by the council was the national movement

to expand home health care (Landers et al., 2019). An increase in the frequency of transferred care to home health from inpatient and outpatient providers has steadily increased over the past years (Lober et al., 2006).

The present investigation was developed to explore the risks associated with a lack of new patient intake process in a privately-owned home health company and to identify root causes of organizational and provider obstacles to implementation and adaptation of new processes.

Literature Review

A literature review was conducted to examine the quantity and quality of research supporting the lack of intake processes and record review in privately-owned home health agencies. It was found that intake processes in healthcare are unregulated and highly individualized patterns of collecting patient data. Distinctive characteristics exist within this niche and influence institutional processes (Ellenbecker et al., 2008).

The Agency for Healthcare Research and Quality identifies three root causes of medical errors associated with the lack of institution specific intake processes including insufficient information flow, lack of organizational transfer of knowledge, and inadequate policies (Agency for healthcare research and quality, 2020). Medical errors are now the third-leading cause of death in the United States, surpassing diabetes, Alzheimer's, and stroke (Johns Hopkins Medicine, 2016). According to the CDC, 611,105 people died of heart disease, 584,881 died of cancer, and 149,205 died of chronic respiratory disease in 2013. Newly calculated figures place medical errors as the cause of death right behind cancer and ahead of respiratory disease (Johns Hopkins Medicine, 2016).

Initiatives surrounding the implementation of EMRs aim to streamline access to data however, most home health agencies are privately owned and interoperability between EMRs is

limited. The disparities in funding became evident when home health was excluded in CMSs 2009 quality report which focused on improving health information technology (IT) in outpatient populations. The United States has a complex, sophisticated health care industry but the delivery of health care is fragmented and decentralized. Without access to pertinent health history data, prevalence for serious, adverse patient outcomes remains.

Researchers caution most of medical errors aren't due to inherently bad providers, they are a representation of systemic problems, including poorly coordinated care, fragmented information technology networks, and other protocols. Clinical leaders must take measures into their own hands and improve individual intake processes (Johns Hopkins Medicine, 2016). The creation of quality measures tools is important and necessary in promoting accountability and quality improvement within the home health industry (Jeffs et al., 2013). In healthcare environments, change is inevitable and critical for future success. A retrospective analysis for improving centralized intake and management systems in a home health agency indicates creating patient population specific intake processes remains a viable alternative to traditional processes (Hamm & Callahan, 1999). Evidence supports the integration of custom, patient population specific, intake forms to bridge the gaps in care for home health patient.

Project Methods

The purpose of this project is to investigate the barriers of implementing intake processes and the corresponding challenges of record review in privately-owned home health agencies. A 5-step root cause analysis approach guided the project. The literature directed proposal of evidence-based interventions to overcome the identified root causes of the lack of intake processes and record review in privately-owned home-health agencies. A presentation of findings was made to stakeholder leadership. The project design was quantitative, utilizing a pre

and post Qualtrics survey. The survey delivered predefined questions pertaining to record review in the home health setting, current intake processes, challenges related to current processes, perceived root causes of challenges, and stakeholder readiness to implement change. To promote the reliability of measures, content of the surveys was not discussed with the stakeholder. Surveys were developed with meticulous consideration of the home health niche to enhance validity. Ethical considerations were addressed through completion of a structured Institutional Review Board (IRB) process. This project was exempted from the IRB approval process.

Evaluation

Implementation of the DNP project occurred via Zoom virtual meeting software due to the current COVID-19 pandemic. The project presentation was delivered to key stakeholders utilizing PowerPoint software. Prior to the start of the presentation the audience was directed to complete the pre-presentation evaluation tool. After completion, the presentation was delivered. Upon conclusion of the presentation, the audience was directed to complete the post-presentation evaluation tool. Pre- and post-presentation evaluation tools were designed using Qualtrics software and utilized a 5-point Likert scale.

The same eight questions were utilized in both pre- and post- presentation surveys. The first question asked for a ranking of the daily challenges of patient record review in privately-owned home health agencies, based upon current clinical experience. The next question asked about the importance of access to patient records in relation to creating comprehensive patient care plans. The audience was then asked to rank perceived relationships between intake processes and record review. Following this ranking, the next two questions addressed current knowledge of barriers related to record review and corresponding root causes for the barriers. The survey concluded with three final questions aimed to assess current knowledge of the

available resources to improve practice processes, comfort levels with implementing change, and level of readiness for change.

Following the collection of data, pre- presentation surveys were compared to post-presentation surveys to determine if the information presented resulted in an increase of knowledge on the root causes for challenges of record review in the privately-owned home health industry. Survey responses were also used to determine readiness for change amongst stakeholder leadership. To evaluate a provider's current perceived challenges of patient record review in daily practice and the corresponding importance of accessing records, the audience was instructed to choose from 'not at all', 'slightly', 'somewhat', 'moderately', or 'extremely' challenging/important answer choices. The survey proceeded to ask for ranking of the relationship between intake processes and record review utilizing the aforementioned answer choices. Evaluating participant current knowledge of the barriers related to record acquisition and corresponding root causes of such barriers was assessed by allowing the audience to quantify the amount of barriers/root causes known by choosing from 'none', '1', '2', '3', or '4'. The final three survey questions assessed familiarity of resources to improve processes, level of comfort with implementing new processes, and readiness for change by allowing participants to choose from 'not at all', 'slightly', 'somewhat', 'moderately', or 'extremely' answer choices.

Survey results showed a significant improvement in knowledge on the root causes associated with inadequate intake processes and record review within a home-health agency. Level of readiness to change also reflected significant improvement. The owner of the home-health agency reported feelings of empowerment to implement change and expressed a sense of readiness to lead her team through the process of implementing custom intake forms at the practice. The limitations to this study include surveying of a small sample size as research was

geared towards a specific niche in healthcare and only encompassed key stakeholders for one privately-owned home health agency.

Impact on Practice

The immediate impact of the presentation was overwhelmingly positive. Just moments after the presentation, leadership scheduled a mandatory staff meeting for the following week to begin implementation of recommended improvements. Understanding the root causes of present barriers to patient care provided a substantial boost in energy and confidence. A substantial increase of knowledge and readiness to change was demonstrated post-presentation via stakeholder-initiated conversation. The predicted long-term impact of this project is to support initiatives for agencies to streamline intake processes and decrease adverse patient events. Having a system in place will serve to prepare this agency for the predicted influx of patients who will need home-care services in the near future.

When considering ongoing implementation, I would suggest an in-person presentation should variables surrounding the COVID-19 pandemic permit. Having the opportunity to engage with staff more intimately is recommended. Considering the observed impact, implementation of this project in varied privately-owned home health agencies is recommended.

Conclusions

The outcomes of this project resulted in productive planning and action to improve intake process. Utilization of evidence-based research greatly increased stakeholder knowledge and fueled confidence which resulted in increased readiness change. As a leader of her team, the stakeholder expressed feelings of motivation which trickled down to other staff. As a chair member of a professional organization, she plans to share her knowledge with other advanced

practice nurse entrepreneurs. Leveraging networking efforts within the nursing profession will help bridge gaps in knowledge and serve to increase awareness.

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