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Improving Quality Through Nursing Participation at Bedside Rounds in a Pediatric Acute Care Unit: A Pilot Project

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ABSTRACT

Problem: Implementation of bedside rounds enhances communication and collaboration between physicians and nurses, resulting in improved clinical outcomes. Yet, the literature demonstrates that it remains difficult for nurses to attend rounds if they don't know when they are happening.
Purpose: This project aimed to increase nurses' presence and participation at bedside rounds in a pediatric acute care unit, enhance teamwork and collaboration, and improve quality outcomes.
Design and methods: Nurses carried a pager so that physicians could alert them of rounds. Perception of teamwork and collaboration was assessed via surveys pre- and post-intervention as well as the annual survey evaluating RN and MD interactions from the National Database of Nursing Quality Indicators™ (NDNQI®). Other quality outcome measures included length of stay and patient satisfaction through Press Ganey™ surveys.
Results: Findings demonstrated that when nurses were notified in advance, their participation in rounds increased from 44.4 to 73%. Length of stay decreased from 2.5 days prior to the project to an average of 2.10 days during the project. Scores on inpatient satisfaction surveys increased from 82.4 to 92.2%, and nursing communication improved from 83.3 to 95.65%.
Conclusion: Interprofessional collaboration as reflected by the inclusion of nurses at bedside rounds led to positive outcomes in patient care.
Implications: Increasing nurses' presence and providing them with a role at rounds is an important step towards fostering teamwork and collaboration with physicians and enhancing team-based care in a pediatric inpatient setting. Further research measuring the impact of interprofessional collaboration in healthcare is needed.

Introduction

Problem Description

A need for Interprofessional Collaboration

Over the last few years, guidelines from regulatory agencies such as the Joint Commission (TJC) (2017), the U.S. Department of Health and Human Services (2015), and the Agency for Healthcare Research and Quality (2015), have focused on the need for improved quality outcomes at every healthcare institution. Providing higher-quality care and maintaining patients' safety must be priorities for an industry at risk for a range of human errors.

More than 20 years ago, Zinn (1995) revealed that poor communication and collaboration practices were identified as the most common causes of preventable clinical errors. Further reports from TJC reveal that communication failures were the root cause of over 80% of sentinel events (The Joint Commission, 2012). Additionally, nurses have cited communication issues with physicians as one of the two most highly contributing factors to patient care errors according to the National Council of State Boards of Nursing report (n.d.).

A fundamental theme common to most recommendations for an improved healthcare delivery-system is enhanced interprofessional collaboration among disciplines. Collaboration and communication can potentially be enhanced in inpatient settings through daily, bedside rounding, in which physicians, nurses, families, and other healthcare members provide input on the patients' plan of care (Burger, 2007; Halm et al., 2003).

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Research on bedside rounds has been limited. A Cochrane review concluded that insufficient evidence existed to evaluate the impact of these rounds (Shields, Pratt, Davis, & Hunter, 2007). Additionally, the lack of consistent participants in bedside rounds makes the implementation of a randomized controlled trial very difficult (Rappaport, Ketterer, Nilforoshan, & Sharif, 2012).

The purpose of this article is to summarize the critical evidence on interprofessional collaboration and its impact on bedside rounds, to describe the design and results of a pilot project in a pediatric acute care setting designed to increase nurses' participation in bedside rounds, and to discuss the implications and next steps for improving nursing contributions during rounds. The findings of this quality improvement project are described according to the Revised Standards for Quality Improvement Reporting Excellence (SQUIRE 2.0) guidelines as outlined by Ogrinc et al. (2015).

Equal Partners

In order to foster teamwork and collaboration among professions, understanding key concepts such as equity and partnership is fundamental. Equity and partnership are both identified by Porter-O'Grady and Malloch (2015) as essential features of an effective team. *Partnership* is essential to building relationships, involves all staff members in decisions and processes, implies that each member has a key role in fulfilling the mission and purpose of the organization, and is critical to the healthcare system's effectiveness (Batson, 2004; Porter-O'Grady & Hinshaw, 2005). *Equity* is a guiding principle for integrating staff roles and relationships into structures and processes to achieve positive patient outcomes. Teamwork based on equity maintains a focus on services, patients, and staff, and indicates that no one role is more important than any other. While there may be differences in terms of scope of practice, knowledge, authority, or responsibility, each team member is essential to providing safe and effective care (Batson, 2004; Porter-O'Grady & Hinshaw, 2005).

In a study aimed to evaluate the perception of both physicians and nurses on collaboration and clinical decision making through simulation, Maxson et al. (2011) demonstrated that nurses and physicians have significantly different perceptions of clinical decision-making. Their implementation of a simulation training with nurses and physicians led to more effective communication and better interprofessional relationships. These findings emphasize the importance of developing strategies to gain an understanding of these perceived role differences and, thus, optimize the nurse-physician relationship. Additionally, physician-nurse collaboration can be affected by the lack of understanding of each other's role according to Robinson, Gorman, Slimmer, and Yudkowsky (2010). In their study, a crucial finding was that "nurses expressed frustration that physicians did not understand the independent nature of their practice or the scope of their practice" (Robinson et al., 2010, p. 214).

This contrasts with the findings from a study conducted by Muller-Juge et al. (2013), in which nurses and physician residents were interviewed about each other's role. It was surprising to find that nurses' general responses included a statement saying, "my role, well in two points: the first one is my autonomy, which is proper to nursing care. Then comes patient care through medical delegation, or we are here to execute doctor's orders…" (pp. 3–4). Sharma and Klocke (2014) stated that power gradients prevent nurses from demanding cooperative patient rounding. In their research, it was found that nurses perceived rounding time as an "investment that made them an equal partner in patient care with a valued opinion" (Sharma & Klocke, 2014, p. 476).

Moreover, Benner (2007) suggested that challenges to sustaining positive outcomes for patients stem from the hierarchical approach in the implementation of rounds, with the physicians remaining as the decision makers.

Available Knowledge

Interprofessional Collaboration and Bedside Rounds to Improve Quality

Patient safety related to human error was studied by Donchin et al. (2003) who recommended that, "regarding verbal briefings, it is highly desirable that nurses be included in the physicians' rounds and have a formal role in the information exchange" (p. 146). Moreover, Edwards (2008) suggested that bedside rounds should promote an environment that gives all disciplines an opportunity to provide input, and facilitate frequent and effective communication. This results in "improved patient safety through more accurate transfer of information, more efficient use of time and resources, and a decrease in medical errors" (p. 256). Similarly, Arford (2005) summarized the need for collaboration in healthcare when she suggested that providing the best patient care possible must begin with clear and appropriate communication.

In response to some of these findings, the Institute for Healthcare Improvement (IHI) along with the Robert Wood Johnson Foundation, developed a national program called Transforming Care at the Bedside in 2003. A total of ten hospitals contributed to this program aimed to "improve the quality and safety of patient care on medical and surgical units; increase the vitality and retention of nurses; engage and improve the patient's and family members' experience of care; and improve the effectiveness of the entire care team." (p. 4). A subsequent initiative on optimizing communication and teamwork supported that "true transformation in a medical-surgical setting begins and ends with the front-line staff, working in close collaboration with a multidisciplinary team" (Lee, Shannon, Rutherford, & Peck, 2008, p. 15).

Several studies have looked at the outcomes of collaboration between physicians and nurses with varying results (O'Leary et al., 2011; Gonzalo, Kuperman, Lehman, & Haidet, 2014; Muething, Kotagal, Schoettker, Del Rey, & DeWitt, 2007; Zwarenstein, Goldman, & Reeves, 2009). While most of these studies have found some benefit in quality outcomes, other findings showed unremarkable changes. In the study conducted by Muething and colleagues, implementation of bedside rounds enhanced a sense of communication and collaboration as perceived by families and resulted in improved clinical outcomes, such as reducing time to discharge. Additionally, collaboration between physicians and nurses has been shown to decrease costs, length of stay, and negative outcomes (Baggs, Ryan, Phelps, Richeson, & Johnson, 1992; Curley, McEachern, & Speroff, 1998; Evanoff et al., 2005; O'Leary et al., 2010). Furthermore, in a study by Townsend-Gervis, Cornell, and Vardaman (2014), it was suggested that structured bedside rounds reduced readmission rates through the close monitoring of risk factors affecting potential readmissions. Meanwhile, Gonzalo et al. (2014) found a correlation between collaboration and quality outcomes following the survey of nurses and their inclusion in bedside rounds. It is important to mention that a similar study conducted by O'Leary et al. (2011) suggested no difference. Moreover, Townsend-Gervis et al. (2014) found no improvement in patient satisfaction due to collaborative rounding.

Barriers in Achieving Interprofessional Collaboration at Bedside Rounds

Multiple studies have reviewed nurses' perception of collaborative practice as it relates to their involvement in bedside rounds (Burns, 2011; Fulmer et al., 2014; Gonzalo et al., 2014; Sharma et al., 2014). Most of these studies have sought to identify the barriers to promoting nursing participation in the care of patients and families, demonstrating that it remains difficult for nurses to attend rounds if they don't know when they occur. At the same time, these