## **Creating Healthy Work Environments 2019**

## Rounding With Teams: An Evaluation of Interprofessional Collaborative Practice

Aletha E. Rowlands, PhD¹
Kayla A. McCormick, MA¹
Kari Sand-Jecklin, EdD, MSN, RN, AHN-BC²
(1)Department of Family Community Health in the School of Nursing, West Virginia University, Morgantown, WV, USA
(2)School of Nursing, West Virginia University, Morgantown, WV, USA

Introduction¹: Over the past 25 years, much attention has been placed increasingly on how interprofessional teams can improve professional relationships, collaboration, and the quality of patient care delivery. As a result, improved teamwork is a near-universal aspiration of health and social care practitioners, directors, managers, and organizations. Interprofessional collaboration is a type of work that involves different health and social care professions who regularly come together to solve problems or provide services with a focus on patient care. Interprofessional teamwork involves different health and or social professions who share a team identity and work closely together in an integrated and interdependent manner to solve problems and deliver safe quality care services. Research has demonstrated that strong interprofessional teamwork results in more patient-centered care and improved patient outcomes. Additionally, there is a lack of evidence focusing on interprofessional teamwork in real-time hospital settings that include the patient's perspective of teamwork. For too long, the patient's voice has been silent. This research project recognized the patient as a valuable member of the interprofessional team, as suggested in Dr. Scott Reeve's (leading scholar of interprofessional literature and consultant for this research) definition of interprofessional teams.

Study Purpose and Aims: The purpose of the larger study (Funded by HRSA, UD7HP28543 \$1.4 million) is to improve the health outcomes of vulnerable acute care patients by providing team-based, patient-centered care for cardiovascular surgical and older adult medical patients by using the Interprofessional Collaboration for Vulnerable Acute Care Patients model. Specific aims include: improving access to safe quality care by establishing an academic-service partnership; increasing the numbers of nurses, nurse leaders, other health professionals, and students delivering interprofessional collaborative care while strengthening the capacity for sustained and replicable interprofessional collaboration; and engaging prepared nurse leaders to facilitate team building opportunities. This project links education with practice through an academic-service partnership. This component of the larger project, focuses on how well the medical and surgical interprofessional teams at a large academic level one trauma center are utilizing interprofessional teamwork and collaborative practice during patient "rounds," with special attention to inclusion of nurses and patients. Quantitative and qualitative data were collected through observations and questionnaires. Descriptive statistics was used to analyze the quantitative data, and thematic analysis is being used to interpret qualitative comments.

**Presentation Purpose:** To report observational findings from rounding with four different medical and surgical teams over a two-month period. Rounding centered on two dyads: the patient/family and the interprofessional teams. Quantitative and qualitative data were collected from patients, their families, and the interprofessional research team.

**Background Information:** The first step in the larger project was to develop and implement education sessions about interprofessional collaboration and teamwork for nurses working on the medical-surgical units and in the operating room (OR). A traditional classroom approach and interprofessional-interactive simulations were provided. The **classroom approach** included interactive learning to increase attitudes, knowledge, and skills in initialing, cultivating, and sustaining an interprofessional collaborative practice. Sixty-four nurses evaluated the experience, content, presentation, and value (99.5% positive rating of the experience overall). The **simulation experience**, using guidelines from the TEAM STEPPs program, was facilitated by members of the team including a nurse, pharmacist, medical physician, surgeon, and four standardized patients. Three graduate students provided assistance. Simulation participants included 67

nurses, 11 pharmacists, and 11 physicians including a surgeon an anesthesiologist. Participants were able to practice interprofessional teamwork in a learning environment. The simulation experience provided three 30-minute components: (1) patient chart review; (2) patient interaction; and (3) post-simulation debriefing. Participants evaluated the experience, content, interaction, and debriefing (98.5% positive rating of the experience overall). Continuing educational units were provided both educational components.

The current component of the larger project was to evaluate interprofessional teamwork in the hospital setting. To accomplish this, an observational evaluation approach was used, whereby five members of the research team "rounded" in pairs with different teams on the medical-surgical units. Each rounding experience lasted between three to three and a half hours visiting patients scattered on multiple units within the hospital. Specifically, three different Medical-Surgical teams were observed twice a month. Only one observation day was cancelled because of unforeseen circumstances on the unit (scheduling; staffing). A total of 26 observations were completed in 13 observation days spanning over a two-month period (April and May). The observer-pairs followed the teams throughout the entire rounding process and thoughtfully listened and took notes on the prepared observation instrument. The instrument asked observers to evaluate and rate the teams using a Likert Scale (1=Never, 2=Rarely, 3=Occasionally, 4=Mostly, 5=Always). Instrument content is grouped into sections that align with the five established interprofessional core competencies: (1) Roles and Responsibilities; (2) Teamwork; (3) Communication; (4) Values and Ethics; and (5) Patient-Centeredness. For example, "Did the teams utilize active listening?"; "Did the team communicate in an understandable level for the patients and their families."

To incorporate the patient's voice, the Project Manager visited each patients and their families seen during rounds to provide him or her an opportunity to evaluate their care teams' interprofessional teamwork. Information about the research project was provided and questions were addressed. Data collection was accomplished using Qualtrics on a tablet device. Verbal consent was obtained after providing necessary information about the study, as participation was completely voluntary. For consistency and ease, five questions, each representing a core competency, were selected. The same Likert scale was also used and participants were provided ample time to share additional open ended comments at the end. Seventy-six patients (and present family members) completed the questionnaire. For additional perspectives of teamwork, surveys taken by ancillary personnel have also been collected, and will be reported in future research presentations.

Findings: Initial analysis of the direct observations of teamwork and patient evaluations of teamwork provide descriptive quantitative data. Overall, observers rated the teams highly in each of the core competencies, with item means ranging from 4.35 (Interprofessional Communication) to 4.85 (Values and Ethics). Although analysis is not fully developed, some initial major themes have emerged from the qualitative data as well. Generally, observer narrative notes indicated that teams were respectful of and attentive to patients, used ethical decision making, had clear roles, and communicated positively. However, there was inconsistency between teams in regards to members' involvement. Sometimes medical students, pharmacists, and nurses were less involved. This was related to the attending physicians' lack of facilitating engagement from team members. When attendings actively solicited participation from team members, members were more engaged and likely to contribute. Conversely, when attendings were less engaging, conversations were dominated by the more assertive and experienced members. Additionally, when the team was not announced when entering the hospital unit, there were fewer nurses attending the rounds for their assigned patients. It is generally the responsibility of the attendings to announce the team's arrival on the units for rounds in order to increase nurse involvement. Announcement of attending arrival increased nurse involvement. Other factors that impacted teamwork included high patient census and low staffing. Overall, patient evaluation data indicated positive perceptions of teamwork; ratings ranged from 4.46 (Values and Ethics and Patient-Centeredness) to 4.61 (Teams and Teamwork). Although patient comments were overwhelmingly positive, others pointed to a lack of communication among independent care providers, negative attitudes, and more.

**Discussion and Implications:** Initial statistics and analysis highlighted some important takeaways to be explored further about the nature of teamwork within this specific hospital. Overall, the major aspects of

interprofessional collaboration are being exercised. Variations in teamwork exhibited through observations indicated the importance of leadership in facilitating teamwork. More emphasis should be placed on announcing when rounds are beginning to increase nurse involvement. In addition, a priority of educating new hires for all disciplines, as well as re-educating existing employees, including leadership positions, on interprofessional education should be prioritized. A culture of interprofessional collaboration and education should be embedded into existing hospital systems at all levels in order to decrease communication issues and other problematic areas and increase positive patient experiences. Lastly, this study showcases the importance of engaging patients' perspective in research examining interprofessional collaboration.

### Title:

Rounding With Teams: An Evaluation of Interprofessional Collaborative Practice

### **Keywords:**

Interprofessional Collaboration, Observations and Teamwork

#### References:

1. Reeves, S., Lewin, S., Espin, S., & Zwarenstein, M. (2011). *Interprofessional Teamwork for Health and Social Care*. John Wiley & Sons.

## **Abstract Summary:**

Poster describes results of evaluations of teamwork collected through on-site observations of 3 Medical Surgical teams and one Operating Room team in addition to surveys of patient observations. Research was done in part of a larger HRSA funded grant project which facilitates interprofessional collaboration, education, and teamwork.

#### **Content Outline:**

Content Outline for Rounding with Teams: an Evaluation of Interprofessional Collaborative Practice

### 1. Introduction

- 1. Interprofessional collaboration is a type of work that involves different health and social care professions who regularly come together to solve problems or provide services with a focus on patient-centered care.
- 2. Research has demonstrated that strong interprofessional teamwork results in more patient-centered care and improved patient outcomes.
- 3. There is a lack of evidence focusing on interprofessional teamwork in real-time hospital settings that include the patient's perspective of how well his/her teams are working together.
- 4. This abstract and findings are one component of research done in part of a larger HRSA funded grant project.

# 2. Study Purpose and Aims

- The purpose of the larger study is to improve the health outcomes of vulnerable acute care patients by providing team-based, patient-centered care for cardiovascular surgical and older adult medical patients by using the Interprofessional Collaboration for Vulnerable Acute Care Patients (ICVAP) model.
- 2. Specific aims of the grant project include:
  - 1. Improving access to safe quality care by establishing an academic-service partnership.
  - 2. Increasing the numbers of nurses, nurse leaders, other health professionals, and students delivering interprofessional collaborative care while strengthening the capacity for sustained and replicable interprofessional collaboration.
- Engaging prepared nurse leaders to facilitate team building opportunities.

- 1. This component of the larger project examines how well medical and surgical interprofessional teams are utilizing interprofessional teamwork and collaborative practice during patient "rounds."
  - 1. Special attention is given to how often nurses and patients are included in the process, through direct observations as well as patient surveys.

# • Presentation Purpose

- 1. To report observational findings when rounding with four different medical and surgical teams over a two month period (April and May) in a large academic level one trauma center.
  - 1. Both qualitative and quantitative data were collected from patients, their families, and our interprofessional research team.

# 2. Background Information

- 1. Our first step in our larger project was to develop and implement education sessions about interprofessional collaboration and teamwork for nurses working on the medical-surgical units and in the operating room (OR).
  - 1. The *classroom approach* included interactive learning to increase attitudes, knowledge, and skills in initialing, cultivating, and sustaining an interprofessional collaborative practice.
    - 1. Sixty-four nurses evaluated the experience, content, presentation, and value (99.5% positive rating of the experience overall).
  - 2. The *simulation experience* provided three 30-minute components: (1) patient chart review; (2) patient interaction; and (3) post-simulation debriefing, to 67 nurses, 11 pharmacists, and 11 physicians including a surgeon an anesthesiologist. (98.5% overall positive rating).
- In the research presented here (the next step in overall project), an observational evaluation, and survey evaluation approach was used, whereby five members of our research team "rounded" in pairs with different teams on the medical-surgical units. The patients seen during rounds were surveyed later the same day each day.
  - 1. **Observational Approach**: Three different Medical-Surgical teams were observed twice a month by 5 researchers grouped in pairs per observation. A total of 26 observations were completed in 13 observation days spanning over a two-month period (April and May).
    - 1. The prepared observation instrument used asked observers to evaluate and rate the teams using a Likert Scale (1=Never, 2=Rarely, 3=Occasionally, 4=Mostly, 5=Always).
      - Instrument content is grouped into sections that align with the five established interprofessional core competencies: (1) Roles and Responsibilities; (2) Teamwork; (3) Communication; (4) Values and Ethics; and (5) Patient-Centeredness.
    - Surveys of Patient Perspective: the same patients and families seen during rounds were visited to provide him or her an opportunity to evaluate their care teams' interprofessional teamwork. 76 total surveys were collected.
      - For consistency and ease, five questions, each representing a core competency, were selected. The same Likert scale was used and participants were provided ample time to share additional open ended comments.

## 3. Findings

1. Initial analysis of the direct observations of teamwork and patient evaluations of teamwork provide descriptive quantitative data.

- Observations: Overall, observers rated the teams highly in each of the core competencies, with item means ranging from 4.35 (Interprofessional Communication) to 4.85 (Values and Ethics).
  - 1. Initial themes emerged from the qualitative data:
    - Observer narrative notes indicated that teams were respectful of and attentive to patients, used ethical decision making, had clear roles, and communicated positively.
    - There was inconsistency between teams in regards to members' involvement, which was related to how much attendings actively solicited participation from team members.
    - Announcement of attending arrival increased nurse involvement.
    - 4. Increased patient census and low staffing also impacted collaboration.
  - 2. **Patient Perspective**: Patient evaluation data indicated positive perceptions of teamwork overall; ratings ranged from 4.46 to 4.61.
    - Comments were overwhelmingly positive, but some indicated a lack of communication among independent care providers, negative attitudes, and more.

## 3. Discussion and Implications

- Overall, initial analysis demonstrates that the major aspects of interprofessional collaboration are being exercised.
- 2. Variations in teamwork exhibited through observations indicated the importance of leadership in facilitating teamwork.
  - Consistent education of interprofessional collaboration for all employees should be prioritized to embed teamwork within the existing system.

 This study showcases the importance of engaging patients' perspective in research examining interprofessional collaboration.

First Primary Presenting Author

Primary Presenting Author

Aletha E. Rowlands, PhD

West Virginia University

Department of Family Community Health in the School of Nursing

Clinical Associate Professor

Morgantown WV

USA

**Professional Experience:** Accomplished career demonstrating consistent success as a clinical researcher, educator, administrator, and staff nurse in the hospital setting. Outstanding record in assuring safe quality care strategies/practices while working with hospital administrators, nursing administration, physicians, nurses, sale representatives, and ancillary personnel in a variety of clinical settings. Seasoned in conceiving and developing programs from the ground up through proven competencies, project and program management, staff development, and empowerment. Effective communicator with excellent planning, organizational, and negotiation strengths as well as the ability to lead, reach consensus, establish goals, and attain results. I have been conducting clinical research since 2006. In August 2011, I began working in academia (research; teaching; service/practice). The underpinnings of my program of research is to evaluate and improve point-of care delivery and patient safety for a variety of patient populations in the hospital setting.

**Author Summary:** Clinical Associate Professor with an accomplished career demonstrating consistent success as a clinical researcher, educator, and administrator. Outstanding record in assuring safe quality care strategies/practices while working with hospital administrators, nursing administration, physicians, nurses, sale representatives, and ancillary personnel in a variety of clinical settings. Seasoned in conceiving and developing programs from the ground up through proven competencies, project and program management, staff development, and empowerment. Effective communicator with excellent planning, organizational, and negotiation strengths.

Second Secondary Presenting Author

Corresponding Secondary Presenting Author

Kayla A. McCormick, MA

West Virginia University

Department of Family Community Health in the School of Nursing

Program Manager

Morgantown WV

USA

**Professional Experience:** As a newly graduated Sociologist, I have had two years of experience working in health related activities as well as 6 years of educational training in research and grant management. **Author Summary:** Kayla McCormick educational background is in Sociology and Anthropology with research interest on disadvantaged populations' access to healthcare resources. Her experience providing health care to impoverished individuals in rural Nicaragua inspired her to pursue a career in healthcare research. She joined the HRSA grant team in the School of Nursing at WVU in 2018 as Program Assistant and quickly became Program Manager. In this role she aided in planning, collecting, analyzing and composing this research.

Third Author

Kari Sand-Jecklin, EdD, MSN, RN, AHN-BC West Virginia University School of Nursing Assistant Professor Morgantown WV USA

**Professional Experience:** I am currently Vice President of Alpha Rho chapter, and in charge of programming for the chapter. I have conducted several research projects related to both education and use of complementary/alternative therapies and have published articles in both areas. **Author Summary:** Dr. Sand-Jecklin is an Associate Professor at the School of Nursing. She has been named a West Virginia University Foundation Outstanding Teacher in 2008 and is a member of the Health Science Center Academy of Excellence in Teaching and Learning. Dr. Jan-Jecklin has a program of research in holistic and integrative nursing. She works with nurses at the hospital who are interested in conducting clinical research.