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Shadowing to Improve Teamwork and Communication:

A Potential Strategy for Surge Staffing



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Teamwork and communication are paramount to patient safety. Poor communication during handoff is implicated in near misses and adverse events. Exposing nurses to other units' workflow early in their orientation may also aid in surge staffing. This study showed improvements in teamwork and communication, and a deeper understanding of another units' workflow.

Teamwork and communication are paramount to patient safety during intrahospital transfers. In 2004, after conducting a root cause analysis of sentinel events in US hospitals, The Joint Commission concluded that over 70% of these events were due to communication failures.¹ Communication plays an integral part in teamwork, while teamwork plays a large role in nursing.

Health care team members, including registered nurses (RNs), must adapt to rapidly changing environments, while working on complex tasks with different team members on any given shift. Working together, health care teams must be able to problem solve, communicate in a timely manner, quickly adapt to complex situations, and identify cues and assign meaning to those cues.² Teamwork is more than coexisting within an organization; teamwork encompasses a willingness to cooperate and the ability to coordinate and communicate together while having a shared understanding of goals.³ Nurses in particular must facilitate open communication, share knowledge effectively, and diagnose and evaluate patients while employing shared decision making.⁴ Outcomes of high levels of teamwork include: lower mortality rates⁵; fewer patient falls with injury⁶; better quality of care^{7,8}; higher patient satisfaction⁹; higher nurse job satisfaction¹⁰; and lower nurse turnover and burnout.^{11,12}

Communication is equally important to patient safety. Patient handoff can be a taxing cognitive exercise, and poor communication during handoff has been implicated in near-misses and adverse patient events.¹³ Common problems that may result in poor communication during handoff include a high volume of patients in the initiating unit, high workload, and lack of standardization for handoff communication.¹⁴

Failure to communicate pending tests and diagnostic results can lead to treatment delays, whereas poor communication during transfer can lead to medication errors and inaccurate patient plans.¹⁵ Patients are especially vulnerable during hospital transfers, which can result in falls with injury, complications from medical errors, and wound infections.¹⁶ In a study by Horwitz et al.,¹⁷ 29% of physicians reported an adverse event or near miss following patient transfer from the emergency department (ED), with failure to communicate the most recent set of vital signs resulting in the most significant amount of errors.

Teamwork and communication are also imperative to a health care organization's response to unprecedented conditions, such as the current novel coronavirus (COVID-19) pandemic. Organizations may struggle to implement a new model of care that continues to deliver high levels of quality and safety in a complex environment. Utilizing shadowing experiences on a collaborative unit during a nurse's orientation to the organization or new unit could enhance the efficiency of team-based care delivery models used during surge staffing needs. Although our study was completed prior to COVID-19, the concepts of

KEY POINTS

- Teamwork and communication are paramount to patient safety.
- Shadowing can play an important role in teamwork and handoff communication.
- These strategies can also be implemented to prepare nurses and healthcare workers during surge staffing situations.

teamwork and communication, along with the lessons learned from this experience, can be used to prepare hospitals for future changes in health care delivery resulting from this situation.

BACKGROUND

Efforts to decrease errors in communication and improve teamwork between units have focused mainly on standardizing handoff measures. Tools such as situation, background, assessment, and recommendation (SBAR) have been employed with some success.^{18,19} As part of a comprehensive unit-based safety program (CUSP), one hospital implemented a shadowing program to identify issues in communication, collaboration, and teamwork and to identify methods to resolve these issues. This involved health care workers from different disciplines shadowing each other for a set time to observe issues relating to communication and the effects on patients. Findings from the study indicated improved teamwork and communication between nurses and physicians and resulted in the program's implementation in the school of medicine.²⁰

A study of transition of care between outpatient and EDs found only 38% of ED providers believed handoff informed them of the patient's clinical stability either very well, or extremely well, whereas 68% of the outpatient providers felt their handoff communication achieved this very well or extremely well.²¹ Themes from a free text portion of the study revealed the importance of standardizing the handoff process. Participants described variability in information that is communicated and the importance of developing a standardized tool to reduce omission of key information.

A study by Monahan et al.²² included a job-shadowing project that partnered second-year medical, third-year pharmacy students, and an advanced practice nurse for a 4-hour job-shadowing experience. Results indicated pre- and post-shadowing differences in interprofessional domains of role awareness, collaboration, and communication, suggesting a shadowing experience is effective in developing competencies in interprofessional collaborative practice.

Morar et al.²³ used shadowing to improve the relationship and communication between doctors and nurses on a pediatric unit. Junior doctors (residents) shadowed a nurse on the general pediatric unit. When surveyed about the experience, all nurses would recommend the experience, and their perceptions of doctors improved. Doctors felt they had a better understanding of nurses' pressures, need for good organization and timekeeping, and the amount of paperwork required.

Few studies to date have employed a shadowing method to increase understanding between nursing units by allowing nurses to view patient care from the other's perspective. Because nurses must communicate

effectively with other areas of the hospital, teamwork and communication between these units are important to patient safety and nurse satisfaction. Therefore, the purpose of this pilot study was to evaluate the Walk a Mile in My Shoes shadowing program for improvements in perceived teamwork and communication between nursing units.

METHODS

Because this was a pilot study that stemmed from discussion during an interdepartmental nursing shared governance council meeting (nurse senate), a convenience sample was used. The study took place at an urban public academic health system, where staff provide care at 4 hospitals, 4 emergency departments, more than 20 health centers, and 40 additional sites throughout the region. The main campus hospital is home to the county's most experienced Level I adult trauma center, verified since 1992, and currently 1 of only 2 burn centers in the state verified for the care of both adults and children by the American Burn Association and the American College of Surgeons Committee on Trauma. In addition, the system received its third American Nurses Credentialing Center (ANCC) Magnet[®] designation in 2015 and was the first in the region to be awarded ANCC accreditation for their new graduate nurse residency program.

Registered nurses regularly attending the nurse senate meetings from various units were invited to participate in the Walk a Mile in my Shoes shadowing program. The nurse senate represents clinical RNs throughout the system. Elected representatives from each unit meet monthly during shared governance day, with a purpose of enhancing the nurse practice environment and ensuring the RNs' ability to provide quality patient care.

During the July 2016 nurse senate meeting, the group matched units who routinely work together and chose a representative to shadow an RN at the units' shadowing convenience. Prior to shadowing, all participants completed a demographic data collection tool, the Walk a Mile in My Shoes survey, and the Hand-Off CEX,²⁴ which were e-mailed electronically. A free text response section was added to further inform investigators of participant shadowing experience perceptions.

Prior to implementation, the study was approved by the hospital nursing research council and the institutional review board as a not-greater-than-minimal-risk study. Informed consent consisted of a nonreturn cover memo outlining the risks and benefits of participating in the study and stressing the voluntary nature of participation.

The Walk a Mile in My Shoes tool is an in-house-developed tool, using a 6-point Likert scale, to measure aspects of communication and understanding between units. The Hand-Off CEX is a standardized tool, using a 9-point Likert scale, designed to provide assessment

and feedback to improve the quality of handoff communication and has been previously validated.²⁴ After the shadowing was completed, each participant completed the surveys again. Because the surveys were anonymous, the pre- and post-surveys were not linked.

All data were anonymous and entered into a database for analysis with statistical software. Descriptive statistics, including mean, frequencies, and standard deviations, were conducted to describe the study sample. Inferential statistics were conducted to determine differences in mean scores between pre- and post-survey responses for the Walk a Mile in My Shoes survey and the Hand-Off CEX.

RESULTS

A total of 46 RNs completed the surveys. The mean age of participants was 47.67 years. Most held a bachelor of science in nursing degree (54.3%), followed by associate degree (21.7%), diploma (19.6%), and master of science in nursing (4.3%). Most were Caucasian (95.7%) and female (84.8%). Mean length of time as an RN was 17.51 years, whereas the mean length of time at this institution was 15.79 years. The mean length of time on their current unit was 10.04 years.

Analysis showed statistically significant differences pre- and post-shadowing in mean scores of perceived: quality of communication, quality of teamwork, quality of professionalism and respect, and quality of understanding and peer support. Mean scores were higher on every question of the surveys in the post group, most notably, overall handoff communication (see [Table 1](#) for mean scores pre- and post-shadowing).

The open comments sections of surveys were analyzed for common themes. Three themes emerged: understanding other unit's workflow, recognizing challenges experienced by the unit the RN shadowed, and the importance of the shift and the unit they were assigned to shadow. Overwhelmingly, the participants viewed this as a positive experience. Understanding the workflow and recognizing difficulties experienced by the unit the RN shadowed emerged as important themes. Many participants noted that prior to shadowing, they had

not known the workflow of the unit they transferred to or received patients from, even though they interacted with that unit on a regular basis. Most of the RNs either transferred patients to or received patients from the unit they shadowed.

Additionally, prior to shadowing, many participants commented regarding the importance of ensuring the experience aligned with a day and time where they could observe a typical shift, which would give a broad overview of the challenges of each unit. When planning the shadowing, participants felt it was important to arrange for units who work closely together, but do not float or cross train staff, for example, having RNs from the ED shadow RNs from the operating room or intensive care units where they have frequent interactions involving the transfer of patient care. (see [Table 2](#) for participant comments).

DISCUSSION

Previous studies employing shadowing have involved students and/or nurses and physicians. These studies have shown improvements in the understanding of pressures faced by the different roles and improvements in overall teamwork and communication.^{20,22,23}

Our study supports these findings, noting a specific increase in overall handoff communication and RNs expressing positive reactions to the experience. This suggests that interventions to improve communication between units may need to go further than standardizing handoff measures and allow health care workers to shadow units they frequently work with.

Considering recent events stemming from the COVID-19 pandemic, programs such as Walk a Mile in My Shoes may be beneficial to prepare nurses and health care staff for surge situations. A study describing preparations within the United States Department of Veterans Affairs (VA) noted that in pandemic situations, a major concern might be availability of essential staff. One suggestion to mitigate this included cross-training prior to an emergency or for staff to receive just-in-time training. Facilities noted a limited knowledge about the full skill sets of each employee. The authors suggested a system whereby cross-trained individuals could be authorized to perform duties outside

Table 1. Mean Scores Pre-and-Post Shadowing

Question	Mean Score Pre	Mean Score Post
<i>Quality of communication</i>	3.91	4.62
<i>Quality of teamwork</i>	3.78	4.57
<i>Quality of professionalism and respect</i>	4.48	5.00
<i>Quality of understanding and peer support</i>	3.83	4.43
<i>Overall handoff communication</i>	6.61	7.38

Table 2. Themes and Specific Comments From Staff

Theme	Specific Comments
<i>Understanding another unit's workflow</i>	<p>I am hopeful that this will lead to a better understanding of what goes on in other units and how we can work together to improve relations between units, this will overall help us to improve patient care and job satisfaction. Unless you have worked in that particular unit, there may always be disjointed attitudes or jumping to conclusions on how a particular unit is run—this experience may help each other learn quite the opposite.</p> <p>Shadowing Life Flight's ground unit allowed me to better understand their transfer and handling of patients who do not necessarily need critical care air transport.</p> <p>I have not experienced difficulty with transferring patients between my unit and any other unit; however, that being said it, can be a negative experience when nurses transfer patients between units. I really enjoyed my experience, and I am glad to see someone addressing this problem with our nursing culture.</p> <p>Even though my department is to be an extension of the clinics, we don't see what the clinics actually do. It was interesting to see what keeps clinic nurses busy during the day and how they follow up on our patient requests.</p> <p>This experience was a good way to see where our patients are discharged to and to understand the difference between an acute rehab center and a SNF.</p> <p>I'd worked on a Med/Surg floor for the first 3 years of my career, so I am familiar with the workflow of a RNF. I think that were this project to expand, my coworkers would benefit from having an insight into what goes on on a RNF. I think that the RNF nurses will gain an appreciation for what goes on in the ICU on any given shift.</p> <p>Gave me a better understanding of "the other side." We received patients from this unit almost exclusively. I learned a lot and would recommend this program.</p> <p>I was able to experience the receiving and the discharge of a [patient] pt in the PACU. I was already familiar with the nursing staff in the PACU and it was nice to put faces to the names and vice versa. I learned why they do certain things and the flow of the unit. It should be offered to more of the staff I work on. Very interesting to see how other units work and different stresses they are under.</p>
<i>Recognizing challenges experienced by the unit they were shadowing</i>	<p>Gain greater appreciation for staffing needs of sister clinics.</p> <p>I think it is very valuable to see what other areas deal with and their strengths/weaknesses.</p> <p>I really enjoyed the experience. I am inpatient, and the unit shadowed was outpatient. When a patient is transferred, there is a mutual respect and professionalism between units. If there is a handoff of a patient, it would be from an outpatient appointment to an inpatient setting.</p> <p>More opportunities to walk in shoes should be done. This would be good for communication and provide a deeper understanding of the adjustments, hurdles, and difficulties all units share, including other departments such as pharmacy. It's like travelling the world compared to living in a small secluded town. We learn so much from others and how they approach and resolve issues due to staffing issues in clinic.</p> <p>Critical care nursing is very different than ambulatory nursing. More intense and detailed oriented.</p> <p>It was such an experience to learn more about our ICU. They are so impressive and knowledgeable.</p>

(continued on next page)

Table 2. (continued)

Theme	Specific Comments
<i>Importance of the shift and the unit they were assigned to shadow</i>	<p>My only concern is that this is slated to be a relatively short shadow—2 hours or so. The potential exists for neither nurse to not get a good look at a typical day on either unit.</p> <p>It depends upon the level of activity on the day the OR shadows us. If it's a busy day, and we are getting slammed with admissions from the ED and OR, they may not gain appreciation of how difficult that can be.</p> <p>I hope the shadow days on both experiences are good days to reflect how things truly are in both CCP 3W and the OR so we can gain an appreciation for each other's responsibilities during our workdays.</p> <p>Very interesting program although I feel it would be difficult to implement large scale. Maybe a 4 h block of out-of-staffing time scheduled for a staff member to shadow in another unit.</p>

CCP 3W, Critical Care Pavilion 3 West; ICU, intensive care unit; OR, operating room; PACU, post-anesthesia care unit; RNF, rehabilitation nursing facility; SNF, skilled nursing facility.

their typical responsibilities.²⁵ Team members without critical care experience may be utilized for tasks such as IV starts, documentation, and routine nursing interventions.²⁶ A shadowing experience may provide health care workers with exposure to different areas and may help them to feel psychologically safe if the need arises to float to that area during a crisis. In addition, effective management of COVID-19 patients includes identifying alternative staffing resources who may have had prior critical care experience.²⁶ Understanding the workflow on other units was described in the comments section of our study. This could be beneficial to management because the nurses who are redeployed may already have knowledge and understanding of the flow of the unit they are reassigned to.

Shadowing experiences on a collaborative unit could also enhance the efficiency of team-based care delivery models used during staff redeployment to supplement surge staffing needs. Because many organizations plan and prepare to care for an influx of critical patients due to COVID-19, nursing leaders have utilized team-based nursing to meet the high staffing demands. These models often include pairing RNs from low-volume sites (RN extenders) with an experienced intensive care unit RN who is fully competent to care for critically ill patients. The nursing team is then able to divide patient care, procedures, and tasks based on each team member's skillset, competence, and comfort level to care for larger patient ratios, thus meeting the demands of census.

Ideally, the RN extender is assigned to a collaborative unit that frequently interacts with the assigned unit or cares for similar patients at a varying stage across the care continuum. For example, an RN extender who is typically assigned to work in the Invasive cardiology lab, would be assigned to an

experienced RN in the cardiac intensive care unit during surge staffing. The RN extender, having already shadowed on the collaborative unit, would have previous exposure to patient workflow, physical setting and layout, and unit culture.

Some health systems, such as Baylor Scott & White Health (BSWH), have expanded teams to include interprofessional members, such as respiratory therapists and unlicensed assistive personnel.²⁷ This interprofessional team approach further stresses the importance of fully understanding, not only another RN's role within a collaborative unit, but also the role of non-nursing team members. This suggests that shadowing opportunities may be beneficial within an interprofessional team to prepare staff to adequately care for surge staffing demands and enhance team care delivery models.

Our study underscores the importance of experiencing firsthand the workflow, challenges, and issues encountered by the nursing units that RNs work with to coordinate patient care. The perceived quality of teamwork and quality of communication rose significantly after the shadowing experience. In addition, handoff communication increased post-shadowing. Noting the importance of teamwork and communication contributions to the ability to provide high quality care for patients, while adapting to complex situations,² this finding may be useful for departments who are struggling with handoff communication. Understanding the workflow and the challenges faced by the different units may impact the quality of reports given when transferring patients and improve communication between units. Although it was out of the scope of this research study, a program that exposes hospital staff to units and departments they would not typically work in may benefit hospitals in crisis situations such as managing pandemic surge staffing or disaster preparedness.

LIMITATIONS

This study had limitations including instrumentation and sample. The instrument was investigator developed due to a desire to evaluate the Walk a Mile in My Shoes shadowing program at a single institution. Further, the instrument was self-rating, introducing the possibility of response bias. Because the intent of the study was to evaluate a pilot of the shadowing program, only RNs participating in the nurse senate meetings completed the program. This may not represent all RNs.

CONCLUSIONS AND IMPLICATIONS FOR NURSING MANAGEMENT

As RNs work closely with other departments as part of their role, teamwork and communication is essential for patient safety. Poor communication and teamwork between units can lead to poor patient outcomes.^{5,15} However, many RNs may not have a thorough understanding of the challenges faced on other units. This pilot study shows that shadowing may lead to improved teamwork and communication between units, which is paramount to patient safety. Allowing nurses to shadow a unit they work closely with, but may not have cross-trained on, led to improvements in awareness of the unique difficulties faced in each unit. Based on the results, the institution has plans to incorporate a shadowing element into its ANCC-accredited nurse residency program. In addition, the radiology department has begun an interdisciplinary nurse led research study that will involve shadowing between all roles. Further research is indicated to determine the impact of shadowing across interdisciplinary departments and to evaluate the effect on patient outcomes. Considering the current situation created by the COVID-19 pandemic, health care organizations may need to implement structured shadowing and cross-training experiences to stay prepared for future staffing needs.

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