Beyond communication: The role of standardized protocols in a changing health care environment

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Background: Communication errors have grave consequences in health care settings. The situation–background– assessment–recommendation (SBAR) protocol has been theorized to improve communication by creating a common language between nurses and physicians in acute care situations. This practice is gaining acceptance across the health care field. However, as yet, there has been little investigation of the ways in which SBAR may have an impact on how health care professionals operate beyond the creation of a common language.

Purpose: The purposes of the study were to explore the implementation of the SBAR protocol and investigate the potential impact of SBAR on the day-to-day experiences of nurses.

Methods: We performed a qualitative case study of 2 hospitals that were implementing the SBAR protocol. We collected data from 80 semistructured interviews with nurses, nurse manager, and physicians; observation of nursing and other hospital activities; and documents that pertained to the implementation of the SBAR protocol. Data were analyzed using a thematic approach.

Findings: Our analysis revealed 4 dimensions of impact that SBAR has beyond its use as a communication tool: schema formation, development of legitimacy, development of social capital, and reinforcement of dominant logics.

Key words: communication errors, nursing, SBAR, social capital

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Practice Implications: The results indicate that SBAR may function as more than a tool to standardize communication among nurses and physicians. Rather, the findings indicate that SBAR may aid in schema development that allows rapid decision making by nurses, provide social capital and legitimacy for less-tenured nurses, and reinforce a move toward standardization in the nursing profession. Our findings further suggest that standardized protocols such as SBAR may be a cost-effective method for hospital managers and administrators to accelerate the socialization of nurses, particularly new hires.

ommunication errors in the health care setting often have severe consequences. These mistakes are estimated to lead to 98,000 deaths and cost the industry in excess of \$17 billion annually (Sutcliffe, Lewton, & Rosenthal, 2004). Communication errors also lead to other negative outcomes, such as increased length of stay and decreased patient satisfaction (Pronovost et al., 2003). The causes and characteristics of communication errors in health care are myriad and complex (Manning, 2006; Sutcliffe et al., 2004), with the situation often complicated by hierarchical, gender, and ethnic differences, especially in communication between nurses and physicians (Haig, Sutton, & Whittington, 2006; Monroe, 2006). Nurse-physician communication is further impeded by differences in training and reporting expectations (Thomas, Bertram, & Johnson, 2009).

The dire consequences associated with these errors make effective communication among health care workers essential. Accordingly, health care professionals have sought to implement practices that aid in the reduction of communication errors. One practice that has recently been adopted in some health care settings is the situationbackground-assessment-recommendation (SBAR) protocol. A standardized communication tool, SBAR was first developed by the U.S. Navy as a means to create a scripted language that would reduce miscommunication incidents that often result in catastrophic events (Doucette, 2006). In the health care setting, the SBAR protocol was first introduced at Kaiser Permanente in 2003 as a framework for structuring conversations between doctors and nurses about situations requiring immediate attention (Thomas et al., 2009). From its introduction, SBAR was perceived by health care administrators as being able to improve the accuracy and efficiency of communication in various health care settings. Thus, SBAR has been positioned as a tool to facilitate understanding between people who interact frequently or infrequently but might not communicate in the same way.

The SBAR protocol may improve communication by creating a common protocol for clinicians. Research suggests that SBAR helps establish a common language and an expectation of what will be communicated (Haig et al., 2006; Hohenhaus, Powell, & Hohenhaus, 2006). In so doing, it may serve to mitigate the influence of hierarchy and differences in training (Manning, 2006; Sutcliffe et al.,

2004). When studied as a tool for improving communication, use of the SBAR protocol in critical situations has been shown to increase communication satisfaction among nurses as well as nurse perceptions that communication is precise (Woodhall, Vertacnik, & McLaughlin, 2008).

Although SBAR was originally implemented in health care settings with the intent of improving nurse-physician communication in acute care situations, its use has also been advocated in structuring communication during shift hand-offs (Monroe, 2006; Woodhall et al., 2008), medication discussions (Powell, 2007), postsurgery conferences (Ascano-Martin, 2008), and rehabilitation meetings (Velji et al., 2009). However, despite SBAR's widespread appeal as a means for structuring communication in multiple health care situations, little is known about its broader effects beyond creating a common language. Because new practices often have unintended consequences once they are implemented (Balogun & Johnson, 2004), it is quite possible that SBAR's impact may go beyond simply reducing miscommunication among health care professionals. Understanding this extended impact is important because SBAR's use is becoming more widespread as the protocol is promoted for use in an increasing number of clinical situations (Pope, Rodzen, & Spross, 2009).

Thus, the purpose of this study was to examine the additional outcomes that may derive from the implementation of the SBAR protocol. With insights gleaned from research on individual social capital in organizations and drawing upon data collected during a 9-month engagement in two hospitals in the midsouth region of the United States, our findings suggest that the implementation of the SBAR protocol has additional impact beyond structuring discourse between health care professionals and reducing communication errors. Specifically, we detail how SBAR affects nurse schema development, facilitates the accumulation of social capital and legitimacy among nurses, and may be reinforcing a shift in the nursing profession from a logic of autonomy to one of standardization.

The SBAR Protocol

The Navy first employed SBAR in high-reliability situations, those in which errors may have disastrous consequences, including those involving loss of life (Baker, Day, & Salas, 2006; Doucette, 2006; Kalisch & Lee, 2009; Weick & Roberts, 1993). The success of the tool, particularly at standardizing communication in high-stress environments, led to its adoption in other settings, including health care. This appears to be a logical extension because nurses, physicians, and other health care workers often find themselves in situations requiring rapid but accurate communication while under extreme stress, as might be found in medical/surgical, obstetric, and neonatal units (Woodhall et al., 2008). Problems arise in these settings when messages are not clearly delivered by the sender or are misunderstood by the recipient. Furthermore, differences in communication styles between health care workers may contribute to a breakdown in communication and negative patient outcomes (Arford, 2005). The SBAR protocol was positioned as a solution to these problems.

The SBAR protocol structures communication around four components (Woodhall et al., 2008). The first component communicated is the situation, which includes communicating the sender's name and the current status or problem of the patient. Next, the background is communicated. This provides information about the patient's admission diagnosis, pertinent medical history, treatment to date, and change in condition since admission. Third is an *assessment*, which includes the patient's vital signs, whether the patient is on oxygen, the patient's pain level, and any change in the assessment since the most recent communication. Finally, a recommendation is communicated, providing information about what action the sender suggests be taken, and specifies precisely when the next communication will take place. In addition, SBAR dictates that the nurse compile the patient's chart, list of medications, laboratory test results, and code status before engaging in communication.

When SBAR is used, the sender communicates the patient's condition in a concise manner by delivering each of the components of the protocol in sequential order and without extraneous detail. This provides the receiver with an expected framework for communication, fosters preparation on the part of the sender, and reduces the likelihood of errors of omission (Marini, 2005). In this way, SBAR "allows for an easy and focused way to set expectations for what will be communicated and how between members of the team, which is essential for developing teamwork and fostering a culture of patient safety" (Kaiser Permanente, 2010). Because of its preliminary success, SBAR is becoming more widely adopted at hospitals across the United States, especially in acute care situations (Pope et al., 2009).

Conceptual Framework

Because SBAR is a protocol designed to structure and standardize communication, it is quite possible that it will have broader effects on the ways in which those who use it think about, and act upon, the issues that they face in their day-to-day experiences. In other words, the ways in which we communicate will affect the ways in which we, and others, make sense of the world around us (Weick, 1995). To access the ways in which the SBAR protocol may influence the ways in which health professionals think and act, we explore three conceptually distinct, but related, concepts: schema, social capital, and dominant logics. Each is important for gaining a greater conceptual understanding of the additional impact of SBAR.

Schema

Schemas comprise the mental models that impact the ways in which individuals respond to situations (Balogun & Johnson, 2004). They act as "templates against which members can match organizational experiences and thus determine what they mean" (Poole, Gioia, & Gray, 1989, p. 272). Schemas provide a categorization mechanism for individuals who might be bombarded with a large amount of stimuli. Schemas are, in this way, data reduction devices that allow individuals to make decisions rapidly in the face of large amounts of information (McVee, Dunsmore, & Gavelek, 2005). Through practice and interaction, individuals develop these categorization schemes as cognitive short cuts to enable them to make decisions without having to weigh every piece of data separately. Thus, schemas are vital in nursing due to the demands on nurses to make quick decisions even when bombarded with multiple pieces of data.

Social Capital

Social capital, the sum of the standing and trust that develops from an individual's network of relationships (Bourdieu, 1986), allows individuals to access resources, gain trust and belonging, and mobilize action within the work unit (Coleman, 1988). Individuals acquire social capital through relations with others, indicating that social capital is a product of the quality and nature of connections employees develop with each other (Tsai & Ghoshal, 1998). Social capital has been linked to important individual outcomes, such as power acquisition, mobility, performance, and reductions in job tension and emotional exhaustion (Chang, Gotcher, & Chan, 2006). Social capital has also been linked to improved information exchange and self-identity. Being assured and recognized for one's worthiness as an individual and as a member of a social group provides emotional support and self-efficacy, which in turn increases performance and group cohesion (Lin, 2001). Thus, engaging in communication practices that facilitate the accumulation of social capital is likely to build trust and legitimacy for the individual as well as foster better communication in the work group.

Dominant Logics

We also drew upon the idea of dominant logics in understanding the additional impact of the SBAR protocol (Prahalad & Bettis, 1986). Dominant logics are thought templates that guide the cognition of actors within a field, profession, or organization by "defining the norms, values, and beliefs that structure the cognition of actors in organizations and provide a collective understanding of how... decisions are formulated" (Thornton, 2002, p. 82). Logics create a mindset that defines which tools and practices are appropriate in the profession and how work should take place (Prahalad & Bettis, 1986). Hence, logics underpin the cognitive processes of individuals embedded in a profession and serve as an overarching interpretive scheme for those professionals. Logics shape the identity of members in a profession or organization and the practices that members view as legitimate (Thornton, 2002). However, although the dominant logic shapes which practices are adopted, the practices that professionals engage in on a regular basis reinforce the thoughts that underpin the prevailing logic, suggesting that logics and practices may be mutually constituting.

Methods

We used a case study design that employed qualitative data collection methods and theme analysis (Yin, 2009). This approach was used to allow the details of protocol implementation in a complex setting to emerge, permitting us to identify ways in which SBAR influenced the day-to-day experiences of nurses beyond simple communication. Given that our intent here was to explore the effects of a standard protocol on workers' activities, using an in-depth qualitative approach seemed the most logical course of action (Lee, Mitchell, & Sablynski, 1999). Furthermore, because we examined a dynamic process, the implementation of a communication protocol, a qualitative approach allowed us to gain insight into fine-grained aspects of SBAR's influence beyond its stated purpose.

Sample and Data Collection

Our investigation took place in medical/surgical units spread over four floors in two hospitals. One location is a 339-bed acute care hospital, and the other is a 140-bed women's hospital. Both are in suburban settings and are part of a larger regional health care system. The hospitals were in the early stages of implementing the SBAR protocol at the time of our investigation. Nurses had received basic training in SBAR for use primarily in communication with physicians. Other SBAR-based protocols were being implemented idiosyncratically on a floor-by-floor basis, mostly for case conferences between nurses at shift change. This context was useful for two reasons: First, it provided a setting in which the principal actors had a working familiarity with SBAR; second, it allowed us to examine the ways in which health care professionals enacted SBAR in their day-to-day activities.

The primary method of data collection comprised semistructured interviews with nurses (n = 66), nurse managers (n = 9), and doctors (n = 5). The interviews took place during work time and were conducted on site. The interviews occurred in two stages. The first consisted of 28 interviews (5 doctors, 9 nurse managers, and 14 staff nurses). These interviews typically lasted about an hour and were used to gain an understanding of how SBAR was used and its broad effects on nurses' communication and other activities. The second stage was used to refine our initial findings and consisted of 52 staff nurse interviews. These interviews usually lasted about 10 minutes. Most of the interviews were recorded and later transcribed verbatim; where recording was not possible, we relied upon extensive field notes during the interview sessions. Although we modified the protocol to take advantage of emerging themes, the interview protocols commonly asked about the participant's knowledge of SBAR, perceptions of SBAR's value in the unit, how SBAR is used, and the influence that SBAR is having on health care activities in the hospital. These data were supplemented with nonparticipant observation and archival analysis. The nonparticipant observation allowed us to view firsthand how SBAR was being used and provided insight into SBAR's effects in each unit. The archival analysis provided us with a background on the rationale for SBAR's implementation.

Data Analysis

Data analysis proceeded in three major steps. In Step 1, we identified statements regarding our participant's thoughts on SBAR via open coding (Glaser & Strauss, 1967). In Step 2, we related these codes to others via a combination of inductive and deductive thinking, a process known as axial coding (Strauss & Corbin, 1990). Thus, in Step 2, we created theoretical categories. In Step 3, we aggregated the theoretical categories into aggregate dimensions that formed the basis for our identification of additional impact of SBAR. Figure 1 summarizes the process that we used and shows our first-order categories, theoretical categories, and aggregate theoretical dimensions. Although we describe these linearly, in reality, we moved back and forth between the different stages as our emerging insights informed subsequent data collection and vice versa.

Findings

As we analyzed the data, two findings became clear. First, SBAR was thought of by most of our participants strictly as a communication protocol that was intended to reduce



errors that were a result of miscommunication. However, our second finding was that SBAR actually had a more far-reaching effect than just being a communication tool. As can be seen in Figure 1 and illustrated in Table 1, four themes emerged from our data: schema formation, development of legitimacy, development of social capital, and the reinforcement of dominant logics. In the sections that follow, we detail the influence of SBAR in each of these areas.

Schema Formation

Apparent early on in our investigation was the value nurses placed on the importance of schema in the rapid decision-making process that nursing requires. The nurses acknowledged that many interpretations and decisions are made quickly. To make those rapid decisions, nurses rely upon schema, intuitive and subconscious knowledge structures developed from past experience that are used to organize and structure new information and facilitate understanding (McVee et al., 2005). A nurse manager described how schemas were vital in identifying patient distress even when quantitative data from technology do not detect it:

It's that intuitive part of it, and you can't take that away. You can't take away from any practitioner, nurses, physicians; there's an ability for the patient to give you data that's not numerical, that's not cultured, and technology isn't getting those.

This idea was supported by a nurse manager describing a mother in labor:

So [physicians] can pull up the [data] strip from home. So then, you know, Renee's¹ the nurse sitting there with the mom and everything, all the vital signs she's been looking at, all the stuff that she's seen, her hours taken in, and she's called the doctor and said I'm concerned about Mary and her baby, and the doctor says, 'Well let me pull up [the data]' and he takes a look [and says], 'No, no,

¹All names of people and organizations used in the article are pseudonyms.

Table 1	
Additional impact derived from the implementation of SBAR	
Dimension of impact	Participant statements about dimension
Schema formation	I don't want to lose the intuition [that is used in nursing]. (Nurse) It's good because lots of things we do cause us to lose [intuition]. Luckily, SBAR still lets us have that. (Nurse manager) SBAR gives me a way to think. (Nurse) I go through the steps [SBAR] can make things easier. (Nurse)
Development of social capital	 A lot of nursing is about trust, trust in the doctor, trust from the patient, the family, trust for the other nurses, trust in the lab people, trust in everybody. You gotta have that. (Nurse manager) I need to be able to trust what [the nurse] is telling me on the other end of that phone. (Doctor) Every time they use [SBAR] it instills that confidence [nurses believe] that everything
Development of nurse legitimacy	 has been covered and that they've communicated what's going on. (Nurse manager) When it's late, a lot of times doctors don't want to be bothered. If I use [SBAR] at least they know they're getting all the info. (Nurse) A lot of any [profession] is doing the same things that others [in the profession] do. SBAR does that. It gives them a way to fit in right away. (Nurse manager)
Reinforcement of dominant logic	 Standardized Everything's like that now. [SBAR] is just more of it. (Nurse manager) SBAR is part of [a move toward standardization] Everything is documented, everything is by the book it's not bad; we need do it for some things. I'm not saying we don't it just used to be so different. (Nurse) Sometimes that gets lost I became a nurse because I cared things like [SBAR] make me forget [why] sometimes. (Nurse)

it's alright.' That's what we're worried about—that [technology] will take away the intuitive part of it.

Another nurse manager detailed how technology had reduced the intuitive element of care:

We've actually been programmed to actually look at the physical [condition] of someone before we put a pulse oximeter on to see if O_2 SAT is down. Your body communicates a ton of information just with color, turgor; I mean, that's scary if we quit looking at that and just go to those numbers that technology gives us. Those data give a delayed response because you get signs prior to numbers showing up.

Given the importance of schema, an interesting finding was that nurses reported that SBAR helped to aid this development. For instance, a nurse at one of the hospitals detailed how SBAR assisted her in developing schema:

I was first trained on SBAR when I was at Central Hospital, and now when I hear the situation, background, and assessment I just know. Things just click. It took some time but now when I hear things I can really make sense of it fast. Another nurse at a different hospital offered a similar opinion:

I need a framework to think in. SBAR kind of is that framework. I guess I'd say I can think in SBAR [laughter]. It gives me sort of a structure for my thoughts and helps me when I'm trying to figure out what might be going on with the patient.

This illustrates how SBAR serves not only as a communication protocol but also as a mental model that undergirds how patient evaluation takes place. By drawing on the common language that SBAR provides, nurses are able to create knowledge structures that allow them to make sense of the situation and make decisions in a timely evaluation.

Development of Legitimacy

Beyond being a communication tool, we observed that SBAR might also function as a legitimating practice for nurses. Legitimacy, the demonstration of adherence to appropriate norms and standards in an organization, profession, or field, is important for professionals because it establishes credibility on the part of the practitioner (Cable & Parsons, 2001). Particularly among inexperienced nurses, we observed that legitimacy was an important attribute that facilitates communication with doctors and other nurses. One nurse, who had graduated from nursing school less than 6 months previously, spoke to this issue, "Sometimes when they don't know you, the doctors don't want to listen to you... not disrespectful or anything, but they listen to the [nurses] that have been around a while."

Furthermore, nurses spoke about the importance of social support in the care environment and how legitimacy was gained by demonstrating competence during interaction with other nurses and physicians. A nurse manager explained, "The [nurses] that have been here a while, they want to see if you get it before they trust you to do it... it's the same with the doctors." Indeed, the value of social support was evident as nurses, particularly lessexperienced nurses, reported that input from others was very useful in managing the day-to-day duties of being a nurse. As a nurse manager reported, "The new [nurses] need that time with the [nurses] that have been here a while. They need it. It helps them get it."

However, this interaction was limited by situations in both hospitals. Both hospitals had recently adopted a policy of updating patient charts in the room rather in the central nursing station, reducing the amount of time that nurses had to interact in common areas; furthermore, the physical layout at one of the hospitals made interaction difficult. One nurse lamented the lack of social support and interaction that was now available in the hospital:

A big problem is that we don't congregate anymore in the center core. We used to go there to document but now we document in the rooms, so you lose a lot of the interaction with other nurses that you need to keep you going.

Given the diminishment of social interaction as a mechanism that facilitated learning, SBAR seemed to provide a legitimating mechanism for those who mastered its use. The SBAR protocol may afford such legitimacy because it provides a common language that nurses can share with each other as well as with doctors. This was evidenced by a nurse discussing late night telephone calls to physicians when they have a concern about a patient: "At least [when I use] SBAR, [doctors] will listen. They may still disagree and tell me to wait and see, but they at least listen... that's been an improvement." This was supported by a nurse manager:

[With SBAR,] they have that real professional kind of communication back and forth of 'tell me exactly what you're kind of seeing' so that they can see if they can get a good grasp for what the 12 hours will look like or whatever. Dr. Smith was talking about one of the new nurses on step down. He said that she is awesome... the doctors don't love SBAR... they think it wastes time... but that never would have happened without SBAR. It would have taken years for him to trust her like that.

This illustrates how adherence to appropriate behaviors and practice places individuals in a position of good standing within the field in which they operate. Nurses gained credibility by using the standardized SBAR protocol. Thus, using SBAR may confer legitimacy to nurses who are new to the profession or new to a particular hospital.

Development of Social Capital

The use of SBAR in nurse-to-doctor communication is intended to reduce errors of omission and make communication more concise (Hohenhaus et al., 2006). However, it also emerged from our data that SBAR can contribute to the development of long-term social capital for nurses. Social capital (Bourdieu, 1986; Coleman, 1988; Lin, 2001) is highly valued by nurses because it provides a sense of self-efficacy, which, in turn, reinforces the confidence nurses have when dealing with other nurses and doctors:

There are nurses and physicians that have great collaboration and communication, and that's kind of like... they've developed a relationship that I know that you're a good nurse and that you're on top of things and you're not going to call me unless there's really a need, and you're going to have your data and your thoughts together... and SBAR can work so nurses like that get the respect. (Nurse manager)

Nurses typically do not have the amount of face-toface contact with physicians necessary to establish relationships through direct experience and interaction, as evidenced in the following quotes from two nurses:

We've discussed that our physicians are not employed [directly by the hospital] and they have their own practices out there. So they're busy all day long, and like the time of day that patients and families would like to communicate and have some conversation with them, they're not here.

Physicians come in and need to get rounds done. They have an office practice, they round between 8:00 and 8:30, and then he's [*sic*] gone. Then he comes back in the evening and does a quick round of whoever he needs to see, some results or something, and he's gone again.

In such dynamic hospital settings, social capital is difficult to establish among staff. Our findings suggest that SBAR's potential value in building social capital comes from its creation of a platform that allows trust to develop based on the delivery of timely and appropriate information. This was illustrated by a nurse manager speaking about how SBAR had assisted less-experienced nurses in their interactions with doctors:

With SBAR, when I call a doctor in the middle of the night, when I talk to that doctor, I can talk confidently, I don't stumble around. He knows what I'm going to tell him. I start out on stronger footing right from the beginning.

Reinforcement of Dominant Logics

Another theme that emerged was that SBAR was part of a larger bundle of practices that was facilitating a logics shift in the nursing field. Our interviews elicited comments about how the profession has fundamentally changed:

If you go back to the 70s and the 80s, when I was here, the pace was slower. The outpatient procedures, such as a tonsillectomy, that we now do and we send you home, used to be [put the patient] up there [on the ward] and [have them eat] popsicles for a week. And the staffing ratio, if you told me you needed some more staff, I said. 'Ok that's good, have another nurse.' Well, all that got changed as well. (Nurse manager)

We uncovered a sense that the broader health care industry was evolving, and that the nursing profession was changing along with the industry. The SBAR protocol was perceived, often negatively, by nurses as part of a trend that is removing the flexibility that nurses have enjoyed. This is reflected in a statement from a staff nurse:

One lawsuit in the OB [obstetrics] arena is millions of dollars. [Obstetrics]... is the highest litigated... and it pays out the most money. So with that situation, we have to do things that make it not like it used to be... SBAR is kind of a part of that. We have to follow protocol all the time now. It can't be like it used to be.

This indicates that SBAR may be reflective of, and contributing to, a shift in the logic of the nursing profession from one in which flexibility and individual decision making were prioritized to best meet the individual needs of a patient to one where standardization of service delivery and clear documentation of procedure are emphasized. As a nurse detailed to us, the use of an SBAR protocol that required documentation during shift hand-offs reinforced this standardization:

SBAR is just part of it because of the huge amount of information that we're required to document now. I don't see how anyone has time to see it, and I don't see how they have time to do the things that they do. I mean it's unbelievable, the amount of documentation that's required.

The SBAR protocol is perceived to be part of a bundle of practices that are diffusing across the health care industry and reinforcing the shift from autonomy to standardization in nursing.

Practice Implications

Our findings have several implications for practice. The first comes from our finding that SBAR may shape schema formation among nurses. Most interesting about this finding is that a standardized protocol went beyond simply providing a common language for doctor–nurse communication, but also facilitated the development of schemas that aid nurses in intuitive decision making. This finding suggests that beyond reducing the incidence of costly communication errors, SBAR may also impact patient care and hospital efficiency by increasing the accuracy of decision making among nurses. Of course, the corollary to this is that a standardized device may also have a negative effect if, for example, it decreases scrutiny of decisions or substitutes for supervision, and thus could lead to practice errors.

We also found that SBAR was effective at standardizing communication, as it was intended. However, SBAR also served to integrate personnel, in our case, nurses, into the organization. Because SBAR standardized the way communication was done, its presence allowed newly hired nurses to more quickly acquire social capital and gain legitimacy with coworkers and physicians. Considering the wave of retirements that is expected in the nursing profession (Goodin, 2003), this finding is important because it shows how SBAR might help overcome the often difficult transition period that accompanies socializing new workers (Cable & Parsons, 2001). Because SBAR can provide nurses with a means to accumulate social capital, the implementation of the protocol may prove to be a cost-effective way for hospital administrators to provide an integration mechanism for newly hired nurses.

Work on socialization in organizations has highlighted the importance of the attainment of legitimacy for new employees. Employee acceptance has been linked to important individual outcomes such as attachment to the organization, task mastery, and self-efficacy (e.g., Allen, 2006; Bauer & Green, 1998; Feldman, 1976). The results from this case are interesting in that they show that the simple use of a common practice may be enough for an individual to gain essential credibility. Indeed, our finding that something as simple as the use of a standardized protocol can provide legitimacy to an individual is useful because it suggests that organizations may reduce some of the problems associated with newly hired employees by standardizing the way that communication takes place. This effort might serve to reduce the power distance between veteran and recently hired employees as well as foster greater productivity and collaboration. This may be of particular interest to health care administrators because added legitimacy and social capital among nurses should lead to better intraorganizational communication networks that allow information to flow freely and efficiently throughout the work unit (Tsai & Ghoshal, 1998).

These findings may also have broader implications for the nursing profession. From the perspective of dominant logics, our finding that SBAR is contributing to, or at least supporting, a logic shift in the nursing profession indicates that logics are indeed reified by the practices that underpin them, a finding that is consistent with extant findings in the broader literature on logics (e.g., Rao, Durand, & Monin, 2005; Thornton, 2002). In this case, the use of SBAR appears to support the shift in nursing from a logic of individual autonomy to one of standardization and formalization in the profession.

Conclusion

In this study, we have offered insights into the impact that SBAR, ostensibly a device intended to improve communication, is having on nurses and the broader nursing profession. We found four primary impacts that SBAR is having beyond enhanced communication: It facilitates schema development, contributes to the accumulation of social capital, provides legitimacy for less-socialized or recently hired nurses, and reinforces a logic shift in the nursing profession and broader health care field. As SBAR and similar protocols diffuse throughout the field, future research might consider the value of SBAR for other health care practitioners, including technicians, orderlies, social workers, and administrators. It seems likely that our findings regarding SBAR's effect on schema formation, developing social capital, and bestowing legitimacy to new employees will be transferable to other functional areas beyond nursing. Future work might also compare the differences in effect of standardized communication protocols across different functional areas and consider how such impacts can be attributed to differences in role characteristics.

As with any study, our work is not without its limitations. The most significant of these is that our findings are gleaned from a case study of two hospitals. Although most studies on the implementation of new practices are completed via a case study approach (e.g., Hinings & Greenwood, 1988), the generalizability of our findings to other health care settings might be called into question. However, the hospitals that were at the center of our inquiry were large facilities that do not appear to differ significantly from other medical centers. Furthermore, because of the highly regulated nature of the health care industry, it is likely that variance in implementation of the SBAR protocol, as well as in the effects of that implementation, will be minimal, suggesting that our findings should be transferable. Finally, many studies employing a case study approach have shed significant light on implementation processes. For example, the research on local government in the United Kingdom by Hinings and Greenwood (1988), the work on civil service reform by Tolbert and Zucker (1983), and the examination of the British National Health Service by Pettigrew, Ferlie, and McKee (1992) have made notable contributions to understanding how changes in practice take place. Our work is in keeping with this tradition.

In sum, this study suggests that the SBAR protocol has implications beyond structuring verbal discourse and reducing communication errors; SBAR may also facilitate other possible outcomes for nurses and reify changes occurring in the broader nursing profession. We, of course, would welcome work that would test our suppositions, both in other health care settings and beyond.

References

- Allen, D. (2006). Do organizational socialization tactics influence newcomer embeddedness and turnover? *Journal of Management*, 32, 237–256.
- Arford, P. H. (2005). Nurse-physician communication: An organizational accountability. *Nursing Economics*, 23, 72–77.
- Ascano-Martin, F. (2008). Shift report and SBAR: Strategies for clinical post conference. Nurse Educator, 33(5), 190–191.
- Balogun, J., & Johnson, G. (2004). Organizational restructuring and middle manager sensemaking. Academy of Management Journal, 47, 523–549.
- Baker, D. P., Day, R., & Salas, E. (2006). Teamwork as an essential component in high-reliability situations. *Health* Services Research, 41(4), 1576–1598.
- Bauer, T. N., & Green, S. G. (1998). Testing the combined effects of newcomer information seeking and manager behavior on socialization. *Journal of Applied Psychology*, 83, 72–83.
- Bourdieu, P. (1986). The forms of capital. In J. Richardson (Ed.), *Handbook for theory and research in sociology education* (pp. 241–258). New York: Greenwood.
- Cable, D. M., & Parsons, C. K. (2001). Socialization tactics and person-organization fit. Personnel Psychology, 54, 1–23.
- Chang, K., Gotcher, D., & Chan, M. (2006). Does social capital matter when medical professionals encounter the SARS crisis in a hospital setting. *Health Care Management Review*, 31, 26–33.
- Coleman, J. S. (1988). Social capital and the creation of human capital. American Journal of Sociology, 94, S95–S120.
- Doucette, J. (2006). View from the cockpit: What the aviation industry can teach us about patient safety. *Nursing*, 36(11), 50–53.
- Feldman, D. C. (1976). The contingency theory of socialization. Administrative Science Quarterly, 21, 433–452.
- Glaser, B. G., & Strauss, A. (1967). The discovery of grounded theory: Strategies for qualitative research. Chicago: Aldine.

- Goodin, H. J. (2003). The nursing shortage in the United States of America: An integrative review of the literature. *Journal of Advanced Nursing*, 43(4), 335–350.
- Haig, K., Sutton, S., & Whittington, J. (2006). SBAR: A shared mental model for improving communication between clinicians. *Joint Commission Journal of Quality and Patient* Safety, 32(3), 167–175.
- Hinings, C. R., & Greenwood, R. (1988). The dynamics of strategic change. Oxford, UK: Blackwell.
- Hohenhaus, S., Powell, S., & Hohenhaus, J. (2006). Enhancing patient safety during hand-offs. American Journal of Nursing, 106(8), 72A–72C.
- Kaiser Permanente. (2010). SBAR technique for communication: A situational briefing model. Retrieved July 31, 2010, from http:// www.ihi.org/IHI/Topics/PatientSafety/SafetyGeneral/Tools/ SBARTechniqueforCommunicationASituationalBriefingModel. htm
- Kalisch, B. J., & Lee, H. (2009). Nursing teamwork, staff characteristics, work schedules, and staffing. *Health Care Man*agement Review, 34(4), 323–333.
- Lee, T. W., Mitchell, T. R., & Sablynski, C. J. (1999). Qualitative research in organizational and vocational psychology, 1979–1999. Journal of Vocational Behavior, 55, 161–187.
- Lin, N. (2001). Social capital. Cambridge, UK: Cambridge University Press.
- Manning, M. (2006). Improving clinical communication through structured conversation. *Nursing Economics*, 24(5), 268–271.
- Marini, V. (2005). The SBAR technique: Improves communication, enhances patient safety. Joint Commission Perspectives on Patient Safety, 5, 1–12.
- McVee, M., Dunsmore, K., & Gavelek, J. (2005). Schema theory revisited. *Review of Educational Research*, 75(4), 531–566.
- Monroe, M. (2006). SBAR: A structured human factors communication technique. *Healthbeat: American Society of Safety Engineers*, 5(3), 1–24.
- Pettigrew, A. M., Ferlie, E., & McKee, L. (1992). Shaping strategic change: Making change in a large organizations: The case of the National Health Service. London: Sage.
- Poole, P., Gioia, D. A., & Gray, B. (1989). Influence modes, schema change, and organizational transformation. *Journal* of Applied Behavioral Science, 25, 271–289.
- Pope, B., Rodzen, L., & Spross, G. (2009). Raising the SBAR: How better communication improves patient outcomes. *Nursing*, 38(3), 41–43.

- Powell, S. (2007). SBAR—It's not just another communication tool. Professional Case Management, 12(4), 195–196.
- Prahalad, C. K., & Bettis, R. A. (1986). The dominant logic: A new linkage between diversity and performance. *Strategic Management Journal*, 7, 485–501.
- Pronovost, P., Berenholtz, S., Dorman, T., Lipsett, P. A., Simmonds, T., & Haraden, C. (2003). Improving communication in the ICU using daily goals. *Journal of Critical Care*, 18, 71–75.
- Rao, H., Monin, P., & Durand, R. (2005). Institutional change in Toque Ville: Nouvelle cuisine as an identity movement in French gastronomy. *American Journal of Sociology*, 108, 795–843.
- Strauss, A., & Corbin, J. (1990). Basics of qualitative research: Grounded theory procedures and techniques. Newbury Park, CA: Sage.
- Sutcliffe, K., Lewton, E., & Rosenthal, M. (2004). Communication failures: An insidious contributor to medical mishaps. *Academic Medicine*, 79(2), 186–194.
- Thomas, C., Bertram, E., & Johnson, D. (2009). The SBAR communication technique: Teaching nursing students professional communication skills. *Nurse Educator*, 34(4), 176–180.
- Thornton, P. (2002). The rise of the corporation in a craft industry: Conflict and conformity in institutional logics. *Academy of Management Journal*, 45, 81–101.
- Tolbert, P. S., & Zucker, L. G. (1983). Institutional sources of change in the formal structure of organizations: The diffusion of civil service reform, 1880–1935. Administrative Science Quarterly, 28, 22–39.
- Tsai, W., & Ghoshal, S. (1998). Social capital and value creation: The role of intrafirm networks. Academy of Management Journal, 41, 764–767.
- Velji, K., Baker, G., Fancott, C., Andreoli, A., Boaro, N., Tardif, G., ... Sinclaire, L. (2009). Effectiveness of an adapted SBAR communication tool for a rehabilitation setting. *Healthcare Quarterly*, 11, 72–79.
- Weick, K. E. (1995). Sensemaking in organizations. London: Sage.
- Weick, K. E., & Roberts, K. (1993). Collective mind in organizations: Heedful interrelating on flight decks. Administrative Science Quarterly, 38, 357–381.
- Woodhall, L., Vertacnik, L., & McLaughin, M. (2008). Implementation of the SBAR communication technique in a tertiary center. *Journal of Emergency Nursing*, 34(4), 314–317.
- Yin, R. K. (2009). Case study research: Design and methods. Thousand Oaks, CA: Sage.