RESEARCH

Hospital Survey on Culture of Transitions in Patient Care at a Community Hospital

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ABSTRACT

Background: Delays in patient transitions of care are complex and, therefore, a reductionist model of improvement is not likely to produce sustainable results. Exploration of the culture-performance link in the organization has the potential to guide improvement methods aimed at complex, non-linear processes.

Methods: An exploratory, descriptive correlational study was conducted employing the administration of the Hospital Culture of Transitions in Patient Care survey to a cross sectional convenience sample.

Results: Sixty-three participants responded to the survey. In assigning a grade to transitions in the organization, 35% of participants selected a grade of "A" with 33.3% "B", 23.3% "C", and 8.3% "D". In the descriptive analysis, the most favorable responses related to the Hospital Leadership and the Unit Leadership domains. The least favorable responses revealed a perception of staff delaying transfers in both the "My Unit Culture" (49.1%) and the "Other Units' Culture" (29.8%) domains. The correlational analysis of the domains of the survey found the Hospital Leadership domain correlating significantly ($p < .001$) with five of the other six domains.

Discussion: The 65% of participants selecting grades of "B", "C", and "D" for organizational performance in transitions of patient care is indicative of improvement needed. The insights developed from the responses to the survey suggest it as a very relevant diagnostic tool for hospital leadership seeking to improve performance. The significant correlations of the hospital leadership domain with other domains are powerful indicators of the leveraging potential of leadership at the study site.

Keywords: Transitions in patient care, hospital culture, high reliability, teamwork, culture-performance link, process improvement

INTRODUCTION

Transitions of care, or intra-hospital movement of patients from one clinical area and team to another, are commonplace in hospitals today. Patient flow has been a focus of a myriad of published studies, national conferences, and books for over three decades. Yet, problems persist, provoking unwarranted stress for patients, families, and caregivers, jeopardizing safety and quality, and increasing costs (Bristol et al., 2020; Jensen & Mayer, 2015; Rutherford et al., 2017; Walker et al., 2016).

Transitions of care are complex. Each occurrence requires multiple professionals to execute an elegant synchronization of disposition, communication, notification, preparation and coordination activities (Blay et al., 2017; Bristol et al., 2020; Rosenberg et al., 2018; Tobiano et al., 2020). The process rarely occurs in a linear fashion as those involved must adjust and adapt to uncertainty and unpredictability, such as a physiological change in the patient, an emergency situation on the sending or receiving unit, or the unavailability of a team member (Bristol et al., 2020; Kreindler, 2017). The complexity and

variability in the process likely contribute to the intractability in achieving predictably effective transitions. Nonetheless, assuring our patients receive the right care, at the right time, in the right setting, every time, remains the pivotal framework for the National Strategy for Quality Improvement in Health Care (Department of Health and Human Services, 2011) and compels us to make changes.

Two bodies of knowledge are informing organizations and improvement professionals about implementing effective and sustainable change. The first is the paradigm shift from reductionist thinking to viewing health care organizations as complex adaptive systems (CAS) (Khan et al., 2018; Plsek, 2017; Ratnapalan & Lang, 2019). A fundamental precept in CAS is that of agency. Agents, or human beings functioning in the organization, have the freedom to act in unpredictable, interconnected ways due to the uncertainties of both internal and external forces (Khan et al., 2018; Notarnicola et al., 2017; Pype et al., 2018). In a hospital setting, the freedom to act is limited to a certain extent by relevant social constructs such as scopes of practice, licensure regulations, standards of practice, and job descriptions. However, the professional autonomy of the agents supports their freedom to adapt and adjust to a profusion of internal and external stimuli, for which there cannot be detailed plans nor central control (Khan et al., 2018; Pype et al., 2018; Ratnapalan & Lang, 2019).

The second body of knowledge informing organizations relates to the culture-performance link. The knowledge, experience, and empowerment of the professionals predicate the effectiveness and efficiency of transitions in care to an extent (Mayer & Jensen, 2009). However, a maturing appreciation and awareness of the relationship of organizational culture to the performance of the organization has evolved since the 1980s (Bradley et al., 2018; Mannion & Davies, 2018; Mannion & Smith, 2018). Although the exact nature of the culture-performance link is not well-understood, both macro- and micro-cultures are viewed as variables that influence how individuals and groups think, feel, and act in specific situations and effect performance (Boyce et al., 2015; Braithwaite et al., 2017; Curry et al., 2018; Mannion & Davies, 2018; Mannion & Smith, 2018; Vaughn et al., 2019).

Schein (2017) synthesized the body of knowledge related to culture in the context of organizational behavior as "...the accumulated shared learning of that group as it solves its problems of external adaptation and internal integration..." (p. 6). The learned beliefs, values, and behaviors that have repeatedly proven successful by group members are shared within the group and mutually reinforced, becoming implicit assumptions that fade from awareness (Braithwaite et al., 2017; Schein, 2017). These deeply embedded patterns of beliefs, attitudes, values, and customs consequentially shape the mental models that determine behavior and effect performance (McClelland et al., 2015; Schein, 2017; Scott & Pringle, 2018).

These two bodies of knowledge intersect to affirm that professional autonomy combines both actions compliant with explicit policies and protocols and those conforming to customary routines and procedures (Olson et al., 2020). While social constructs underwrite imposed actions through inducements or sanctions, acquired behaviors are transmitted through imitation or learning and are embedded at a cultural level (Curry et al., 2018; Olsson et al., 2020). An understanding of the micro- and/or macro-culture as it relates to transitions in patient care will assist teams in designing and structuring more effective and sustainable performance (McClelland et al., 2017).

OBJECTIVES

The research questions for this study were: (1) What are the attitudes, values, beliefs, and practices related to patient care transitions in the total sample? (2) What are the attitudes, values, beliefs, and practices related to patient care transitions by demographic group? (3) How do the attitudes, values, beliefs, and practices related to patient care transitions vary between and within demographic groups? (4) How do the attitudes, values, beliefs, and practices related to patient care transitions correlate with the overall grade indicated for patient transitions? (5) Which responses to questions on the instrument predict the overall grade indicated for patient transitions in care for each participant? The purpose of the study was to develop an understanding of the culture of transitions in care at a community hospital to guide future strategies for improving transitions in care.

METHODS

Design, Sample, and Setting

The study utilized an exploratory, descriptive correlational design to answer the research questions. Employing a cross-sectional convenience sample, all employees from an acute care community hospital in the Southeastern United States were invited to participate. Conversely, volunteers, students, and contracted workers were excluded from participating in the study.

Data Collection

The instrument administered in the study was the *Hospital Culture of Transitions in Patient Care (H-CulT) survey* (McClelland et al., 2017). The H-CulT, a psychometrically sound and practical survey, was designed to assess a hospital's organizational culture related to within-hospital transitions in care involving patient movement (McClelland et al., 2017). Permission to use the survey for this study was granted by the author. The survey included a series of 22 statements, each with a Likert scale for response. Twelve (12) of the statements represented beliefs, values, practices, and attitudes that are positive and ten (10) of the statements represented negative beliefs, values, practices, and attitudes. A 23rd item in the survey asks the participant to give the organization a grade, "A" through "F", for patient transitions in care. In addition to the survey questions, four demographic questions were included to support comparisons and contrasts of attitudes, values, beliefs, and practices related to transitions of patient care between groups. Demographic questions included: Primary Work Area, Tenure at Study Site, Tenure in Current Profession/Specialty, and Role/Job Category.

The survey and demographic questions were loaded into Survey Monkey. Before the survey and demographic questions were emailed to all employees who met inclusion criteria, announcements regarding the study design and purpose were delivered via email, posters, and scripted messages at inter-professional hospital meetings. The survey was open for six weeks with weekly reminders.

Protections of Human Subjects

The organization's Institutional Review Board (IRB) approved the exempt study. Prior to submission to the IRB, a facilitated review process was conducted by the hospital's research council members. Participation in the study was voluntary and anonymous. Participating or choosing not to participate in this study did not affect the participants' employment status. The email sent to all potential participants included a detailed explanation of the study along with the risks, benefits, confidentiality, and right to participate or withdrawal. Potential participants consented to partaking by clicking on a Survey Monkey link within the email.

Data Analysis

Data analysis included both descriptive and correlational statistics using SPSS IBM 25. Numerical values 1 through 6 were assigned to responses for Likert scales and demographic variables were summed in categories. Frequencies for demographic variables and for Likert scale responses were calculated. Likert scale responses were stratified to calculate frequencies and percentages of "favorable", "non-favorable", and "neither/I don't know" ratings for each question. Differences between demographic groups in question responses were tested with the non-parametric statistic, Kruskal-Wallis test. The non-parametric statistic Spearman rank correlation, or Spearman's rho, analyzed the bivariate correlation between each set of Likert scale responses to determine the strength and direction of the association or monotonic relationship. Likert scale responses were collapsed into the appropriate domains or subscales defined by the instrument developer (McClelland et al., 2017) and analyzed for monotonic relationships.

RESULTS

Participants

A total of 63 participants responded to the statements. Roles were collapsed into categories for descriptive analysis and Table 1 summarizes the respondents by primary work area and role. Registered nurses comprised the largest group of participants at 41.3% (26) with management/administrative roles the second largest at 27% (17). The most frequent primary work areas indicated included "other" at 33.3% (21), med/surg at 22.2% (14), and perioperative at 14.3% (9).

Analysis of years in their profession or specialty showed 33.3% (21) over 21 years with 23.8% (15) at 1-5 years and 6-10 years each, 11.1% (7) at 16-20 years, 6.4% (4) at 11-15 years, and 1.6% (1) at less than one year. The most frequent responses for years working at the

Table 1

Summary of Respondents by Work Location and Primary Role (N=63)

Work Area	RN	Support	Prof Serv	MD/NP/PA	Mngmt/Adm	Other	Work Area Subtotal (Percent)
Med/Surg	10			1	2	1	14 (22.2%)
Critical Care	1				1		2 (3.2%)
Emergency	3	2	1				6 (9.5%)
Perioperative	6			1	2		9 (14.3%)
Radiology				1	1		2 (3.2%)
Procedure Area	1						1 (1.6%)
Multiple Locations			1	3	3	1	8 (12.7%)
Other	5	3	1	1	8	3	21 (33.3%)
Role Subtotal (Percent of Total)	26 (41.3%)	5 (7.9%)	3 (4.8%)	7 (11.1%)	17 (27.0%)	5 (7.9%)	63 (100.0%)

hospital was 6-10 years at 27% (17), followed by 20.6% (13) for 1-5 years, 17.5% (11) for 11-15 years, 15.9% (10) greater than 21 years, and 9.5% (6) for less than one year and 16-20 years each.

Descriptive Analysis

The first research question queried the attitudes, values, beliefs, and practices related to patient care transitions in the sample. Descriptive statistics provided the foundation for analysis. Responses to the 23 statements were categorized as favorable, unfavorable, and neither/I don't know. Favorable responses represent the top two most desired for both the 5-point and 6-point Likert scales. Unfavorable responses represent the two least desired responses in the 5-point scales and the three least desired in the 6-point scales. With the responses for the negative statements reversed for analysis, frequencies were calculated for the three categories as seen in Table 2. The three statements in the unit leadership domain had the highest favorable responses with the second highest favorable responses for the six statements related to hospital leadership. The statements with the lowest favorable responses are included in the other units' culture, my unit's culture, and the priority of patient care domains.

The question with the highest favorable score of 85% was, "When I have concerns about decisions made by my unit manager, I feel free to approach him/her with my concerns." The lowest favorable scoring question (29.3%) was, "I am satisfied with the timeliness of the transfer of patients going to other units." The highest unfavorable score was 50% for the same question as the lowest favorable scoring question. The lowest unfavorable scoring questions at 5.2% was, "My supervisor/manager is responsive to staff suggestions for improving transitions in care."

Overall Grade for Patient Transitions in Care

Respondents were asked to give an overall grade to the organizations for transitions in patient care. Thirty five percent of the respondents indicated "A" (best) and none of the respondents marked "F" (worst). The remainder of the respondents indicated "B" (33.3%), "C" (23.3%), and "D" (8.3%) to this question. Spearman Rank Correlation was used to examine which of the other 22 statement responses covary with the overall grade for the organization. The significance level of $p < .001$ was used to identify the strength of the covariance.

Table 2

Descriptive Statistics of Question Response Categories

	Favorable	Neither/ I don't	Unfavorable
Hospital Leadership			
At my hospital, there are clear policies and/or procedures describing safe and timely patient transitions in care.	70.7%	15.5%	13.8%
Training and education are provided on safe and timely patient transitions in care.	67.8%	18.6%	13.6%
At my hospital, transitions in care are viewed as a patient safety issue.	74.6%	8.5%	16.9%
Senior hospital leaders communicate the importance of safe and timely patient transitions in care.	75.4%	9.8%	14.8%
Senior hospital leadership encourages creativity and innovation to address problems with transitions in care.	71.2%	13.6%	15.3%
There are good hospital-wide processes in place for informing staff about new policies.	70.5%	11.5%	18.0%
Other Units' Culture			
Patient transitions in care going to other units are delayed because staff on other units avoid accepting new patients.	37.9%	29.3%	32.8%
Staff in other units delay receiving patient transfers until they can get caught up with their other work.	29.8%	31.6%	38.6%
I am satisfied with the timeliness of the transfer of patients going to other units.	29.3%	20.7%	50.0%
Please give your hospital an overall grade for patient transitions in care.	68.3%	23.3%	8.3%
My Unit's Culture			
In my unit, there are staff who will delay accepting transfers if it is close to the end of the shift.	49.1%	15.8%	35.1%
Patient transitions in care coming to my unit are delayed because staff on my unit avoid accepting new patients.	64.3%	23.2%	12.5%
Staff delay incoming patient transfers until they can get caught up with other work.	51.7%	17.2%	31.0%
Unit Leadership			
My supervisor/manager is responsive to staff suggestions for improving transitions in care.	82.8%	12.1%	5.2%
When I have concerns about decisions made by my unit manager I feel free to approach him/her with my concerns.	85.0%	3.3%	11.7%
In my unit, employees are rewarded for working together as a team for safe and effective transitions in care.	75.9%	13.8%	10.3%

	Favorable	Neither/ I don't	Unfavorable
Use of Data			
Data are collected related to patient transitions of care (turnaround times, analyzing patient flow sheets, etc.).	70.0%	18.3%	11.7%
Data are used to improve patient transitions in care (setting bench-marks, assessing trends over time, providing staff feedback on perfor-	63.9%	18.0%	18.0%
Busy Workload			
The level of my workload prevents me from completing effective and timely patient transitions in care to other units.	56.6%	30.2%	13.2%
In my unit, staff are often too busy to plan for upcoming patient tran-sitions in care.	55.2%	17.2%	27.6%
I do not feel a responsibility for a patient until they are on my unit.	65.5%	17.2%	17.2%
Priority of Patient Care			
Senior hospital leaders make decisions based on what is best for hos-pital finances rather than what is best for patient care.	42.6%	18.0%	39.3%
Supervisors/managers make decisions based on immediate needs of the unit rather than what is best for patient care.	50.0%	15.0%	35.0%

In this analysis, the responses to 13 statements of the remaining 22 covaried with the overall grade at the p < .001 level. A significant and positive correlation was found between the overall grade given to the organization and each of the six statements in the Hospital Leadership domain. The three remaining statements in the Other Units' Culture domain also showed significant positive correlations with the overall grade given. Responses to two of the statements in the My Unit's Culture domain had significant positive correlations with the overall grade, "In my unit, there are staff who will delay accepting transfers if it is close to the end of the shift" and "Patient transitions in care coming to my unit are delayed because staff on my unit avoid accepting new patients." The remaining two statement responses with significant positive correlations to the overall grade were, "The level of my work-load prevents me from completing effective and timely patient transitions in care to other units" and "Data are used to improve patient transitions in care."

Correlations between Statement Responses and Domains of Statements

Spearman Rank correlation for all statement responses showed positive significant correlations

between questions within domains as expected. Statement responses were examined for correla-tions using Spearman Rank correlation test by domains suggested by the instrument developer. Table 3 displays the results. It is notable that the Hospital Leadership domain showed positive correlations with five of the six other domain responses at p < .001. Although the Unit Leader-ship domain had the highest percent of favorable responses, the strength of the correlation with the other domains was substantially below that of the Hospital Leadership domain. An additional finding was the positive significant correlation of the Busy Workload domain with the domains of Other Units' Culture and My Unit's Culture. The Priority of Patient Care domain had the lowest correlations with the other domains and four of the six correlations were negative.

DISCUSSION

Delays in patient transitions are unquestiona-bly issues of patient safety and quality in hospitals. This study is unique in that it examines patient transitions through the lens of complex adaptive systems theory and the effect of organi-zational culture on performance. The hospital is acknowledged as an uncertain and unpredictable

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Table 3

Spearman Rank Correlation of Domain Scores (N=63)

Domains	1 Hospital leadership	2 Other units' culture	3 My unit's culture	4 Unit leadership	5 Use of data	6 Busy workload	7 Priority of patient care
1 Hospital leadership	-						
2 Other units' culture	.634***	-					
3 My unit's culture	.520***	.710***	-				
4 Unit leadership	.522***	.285*	.235*	-			
5 Use of data	.559***	.339**	.382**	.339**	-		
6 Busy workload	.523***	.484***	.617***	.321*	.330*	-	
7 Priority of patient care	0.211	-.312*	-.290*	-0.096	0.004	-.278*	-

$*p < .05. **p < .01. ***p < .001.$

environment in which professionals, each with unique knowledge and skills, must work in mission-driven teams to effect the care and services of multiple patients. Recognition of that uncertainty and unpredictability has led many healthcare organizations to seek a state of high reliability, sustaining high performance through effective management of unexpected events.

In their studies of highly reliable organizations such as aircraft carriers and nuclear power plants, Weick and Sutcliffe (2015) introduced the concept of mindfulness which they describe as the faculty to detect the early cues of the unexpected, to halt or contain its development, if possible, and, if not, to expeditiously restore the system functionality. Creating a collective mindfulness in complex organizations that encourages each employee to identify and correct errors or process gaps before they escalate into a crisis is the foundation of high reliability organizations (Weick & Sutcliffe, 2015). Leaders are encouraged to not set about attempting to change a culture but, rather, to seek to understand their organization's culture and then influence it toward greater mindfulness (Weick & Sutcliffe, 2015).

Mindfulness

The findings of this study suggest that the organization is well-positioned for leveraging

toward greater mindfulness. The highest favorable scores were in the Hospital Leadership and Unit Leadership domains, evidence of the potential of executives and middle managers to develop greater mindfulness in the execution of timely and safe patient transitions. Additionally, the lowest favorable scores related to the domains of My Unit's Culture and Other Units' Culture, suggesting a dissatisfaction with the process of patient transitions and, potentially, a readiness to engage in improvement strategies. The strength of the correlations (Table 3) of five of the six domains with the Hospital Leadership domain at $p < .001$ affirms the capacity of the executive role in moving the organization toward greater mindfulness at the study site.

Teamwork

A notable finding in the study involves the concept of teamwork. The lowest percentage of favorable responses was for the statement, "I am satisfied with the timeliness of the transfer of patients going to other units." Low favorable responses were also found in the Other Units' Culture domain related to staff delays in receiving patients and in the My Unit's Culture domain. The use of teams to achieve cross-functional objectives has flourished over time; however, any team's success is often limited by the nature of

reductionist organizations (McChrystal et al., 2015). Drayton (2013) and McChrystal et al. (2015) have expanded the concept of teams to a more innovative and organization level approach, "team of teams", to respond to the escalating change and uncertainty in today's organizations. The responses in both domains reveal a vulnerability in the effectiveness of the unit-based teams and of the larger "team of teams" in managing the complex processes inherent in hospitals today. Organizing, mentoring, and enabling mission-focused teams along with frequent interface with other teams can strengthen the resilience of the organization and successfully meet the challenges of change and uncertainty.

Limitations

Although the surveys were emailed to all employees excluding a small population, the survey response rate was lower than expected. Several factors contributed to this limitation. The study was announced at hospital wide meetings; however, the primary recruitment of participants comprised of emails via hospital employee distributions lists. One aspect that was considered by the research team was the fact that not all employees read their emails. Additionally, the study was scheduled to begin at the same time a category four hurricane was about to make landfall. The study was postponed and started a few weeks after the hurricane. Nonetheless, responding to a survey was not a priority for employees and most likely had a significant impact on the response rate.

Implications for Nursing Practice

High reliability health care reduces variability in care delivery to patients and their families and, therefore, improves quality and safety. The innate appeal of this outcome to all health care professionals is self-evident and markedly germane to transitions in patient care. However, to imbue high reliability on transitions in patient care and the many other complex processes inherent to care provision, nurses along with all other hospital personnel require education, empowerment, and guidance to adopt new approaches in effecting and managing complex processes. Developing mental models that replace a reliance on traditional cultural norms with attention to detecting early cues of potential process failures and intervening appropriately to circumvent delays is essential to building high reliability. Additionally, nurses and nurse leaders have prominent roles in building a "team of teams" organization, based on trust, respect, collaboration, and a preoccupation with the mission. The collective pursuit of what Weick and Sutcliffe (2015) refer to as mindful organizing can move an organization toward a foundation of resilience in the face of the unpredictable and uncertain nature of health care today.

CONCLUSION

The HCulT survey provides a constructive insight to the values, beliefs, and attitudes of hospital personnel about transitions in patient care. The results of our study revealed both strengths and weaknesses in the culture of transitions in patient care that can be used by the leadership in developing a more reliable and predictable experience for patients, families, and caregivers. As such, HCulT is a useful diagnostic tool for developing insights into organizational performance. Further research exploring the culture-performance link in transitions of patient care in various settings would provide greater understanding of the influence of micro- and macro- cultures on clinical operations within the complex environment of hospitals.

DECLARATION OF INTEREST

The authors report no conflicts of interest. The authors alone are responsible for the content and writing of the paper.

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