Nurse Managers' Positive Attitudes, Patient Care Transitions, and Clinical Nurses

Sadie Dyce, DNP, RN Perlita Cerilo, PhD, RN Erin Turner, DNP, RN James F. Bena, MS

Shannon L. Morrison, MS Lee Anne Siegmund, PhD, RN

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Article

Abstract

Inefficiencies in transitions in care impact the flow of patients from the emergency department to other units. Nurses' perceptions of patient transitions may provide valuable information to identify gaps in patient flow. This article reports findings from a cross-sectional study using the Hospital Survey on Culture of Transitions in Patient Care (H-CulT). The study aim was to describe nurse perceptions of patient transitions, and compare throughput metrics and nurse demographic characteristics. Linear regression models were used to evaluate nurses' perceptions related to demographics and throughput metrics. Alpha was 0.05. Of 148 surveys, 53.4% of respondents were white, 68.2% were non-Hispanic, and 82.4% were female. H-CulT subscale scores for *Busy Workload*, *Unit Leadership*, and *Priority of Patient Care* were higher for nurse managers compared to clinical nurses, revealing the importance of nurses' perceptions in these areas and an opportunity to engage clinical nurses in patient transitions.

Key Words: Transitions in care, patient throughput, nurses' perceptions, busy workload, nursing role

Historically, hospitals have encountered many barriers to transitions in care. These barriers potentially affect throughput metrics such as the time from admission to bed assignment, also referred to as "head in bed" (HIB). Barriers include lack of communication and other inefficiencies in emergency departments (ED) and hospital units, and the overall coordination of care among healthcare professionals within the organization (McClelland et al., 2017). Inefficiencies in intra-hospital transitions in care, referring to transitions from unit to unit, can heavily impact the flow of patients to inpatient units from the ED, where the majority of patient admissions (50-75%) originate (Bristol et al., 2020; Yarmohammadian et al., 2017).

Delays in transitions, or numerous intra-hospital transitions, can adversely affect patient outcomes (<u>Bristol et al., 2020</u>). In addition, researchers have found that low scores for handoffs and transitions in care might have implications for patient safety (<u>Ricklin et al., 2019</u>). Therefore, it was especially important to identify whether nurse perceptions of intra-hospital transitions in care, hereafter referred to as 'transitions in care,' were related to time to HIB. Determining nurse characteristics that are related to perceptions of transitions in care may also direct interventions to address inefficiencies in processes.

Background

A review of the literature included a search of PubMed and Google Scholar between

the years 2016 and 2022. The following search terms were included: transitions in

care, patient throughput, patient flow, ED overcrowding, nurses' role, nurse management, time to admission,

Delays in transitions, or numerous intra-hospital transitions, can adversely affect patient outcomes and perception. The literature primarily addressed transitions in care to home or to other facilities, rather than within the hospital. Due to limited research, the search was expanded to include the years 2014-2022.

Bed availability was identified as one of the primary obstacles to patient flow out of the ED (<u>Hurwitz et al., 2014</u>). In previous research, ED overcrowding and inefficiencies in patient throughput were major causes of delays in care, high mortality rates (20-30%), adverse patient outcomes, and prolonged lengths of stay (<u>Kiekkas et al., 2022</u>; <u>Yarmohammadian et al., 2017</u>). Researchers showed that ED nurses perceived a critical need for efficient outflow of boarded patients (<u>Van Der Linden et al., 2017</u>). We identified a need to examine nurses' perceptions of transitions in care from the ED to other hospital units, and between units, to uncover any barriers to effective and efficient patient throughput initiatives.

Bed availability was identified as one of the primary obstacles to patient flow out of the ED Nurses' perceptions of transitions in care may provide valuable information to identify gaps and disparities in patient flow among hospital units (McClelland et al., 2017). Previous research showed that clinical nurses and nurse managers have varying perceptions of factors affecting transitions in care. For example, clinical

nurses reported a busy workload as more overwhelming than did nurse managers (<u>Van Bogaert et al., 2017</u>). Additionally, unit leadership and clinical nurses perceived the necessity of organizational change differently, potentially affecting transitions in care (<u>Morsiani et al., 2017</u>). In a recent report, researchers surveyed nurses about organizational culture, job stress, and job control, and found racial and ethnic differences (<u>Nam et al., 2022</u>). This demonstrates the value of diverse perspectives of the work environment in which transitions in care may be perceived negatively by nurses, leading to moral distress (Humphries & Woods, 2016).

Methods

We utilized a cross-sectional design with survey methodology to evaluate how nurses' perceptions of transition practices differed across units. We also considered whether these perceptions were associated with unit patient care metrics and nurse demographic factors.

Nurses' perceptions of transitions in care may provide valuable information to identify gaps and disparities in patient flow among hospital units

Sample

Using a convenience sample, survey invitations were sent to direct care registered nurses in the ED, intensive care unit (ICU), and medical-surgical, telemetry, and observation units of a hospital in Southeast Florida. No exclusions were applicable. The sample was 53.4% white, 68.2% non-Hispanic, and 82.4% female. Nineteen percent of the cohort were between the ages of 20-30; 35.8% were 31-40 years; 16.2% were 41-50 years; and 25.7% were over 50.

Ethics

This study was approved by the hospital institutional review board prior to data collection. Surveys contained a link to a secure survey management platform, which connected respondents to an information sheet and the survey. No identifiers were collected.

Measures

The Hospital Survey on Culture of Transitions in Patient Care (H-CulT), a 23-item survey, was used to measure how registered nurses perceived transitions in care at the study site (McClelland et al., 2017). Scores were compared to registered nurses' personal and job characteristics, and the time from admission order to transfer to the inpatient unit (HIB) for each unit examined.

The H-CulT survey measures staff attitudes, values, beliefs, and shared practices related to transitions in care and consists of seven subscales (McClelland et al., 2017). The My Unit's Culture subscale focused on perceptions of staff practices and their units' teamwork. Hospital Leadership referred to nurses' perceptions of the commitment by hospital leadership to transitions, including policies, procedures, and staff education. Other Units' Culture focused on the practices of other units, especially timeliness and effectiveness of transitions in care. Busy Workload included staff attitudes relative to work demands, influencing patient transitions. Unit Leadership assessed perceptions of unit supervisors' cognizance and support of nurses' transitions in care efforts. Use of Data referred to data compilation and tracking related to transitions in care. Finally, Priority of Patient Care addressed nurses' beliefs of what is best for the patient versus what is best for the hospital.

Responses were answered using a Likert scale from 1 (strongly disagree) to 5 (strongly agree). The H-CulT takes approximately ten minutes to complete. It was previously evaluated in 13 hospitals with 492 respondents, and

had a Cronbach's alpha of 0.88 (McClelland et al., 2017).

To compare registered nurses' characteristics to the H-CulT scores, we included an investigator-developed demographic questionnaire. Questions addressed age, race/ethnicity, role as a nurse, unit on which nurses practiced, and years practicing as a nurse. Time from admission order to HIB was measured by determining the average number of minutes from when admission orders were entered into the system, to transfer to each inpatient unit.

Data Collection Procedures

An email invitation was sent to all direct care registered nurses who worked in the ED and inpatient units. Emails contained a link (REDCap software [Research Electronic Data Capture version 5.8.2, 2015], Vanderbilt University) which included a survey packet with an information sheet, and a self-administered questionnaire that contained the H-CulT survey and the demographic questionnaire. Informed consent was implied when respondents elected to complete the survey.

Sample Size

In a preliminary study of the H-CulT survey, the mean (SD) of the total score across the development sample was 80 (12.6). Assuming use of a two-sided two-sample t-test with a Bonferroni corrected significance level of 0.0083, and that each of the five-unit groups contained at least 30 responders (totaling 150 respondents), there was at least 80% power to detect mean differences of at least 12 points between groups, which is similar to the size of the largest mean differences seen between roles in the development study for H-CulT. Power calculations were performed using SAS® software (version 9.4; Cary, NC).

Data Analysis

Subscale scores were calculated as [(# of questions in the subscale*sum of responses in subscale)/(# of questions answered in the subscale)] rounded to the nearest whole number. Scores were only calculated if more than 50% of the questions within a subscale were answered, and overall total score was only calculated for those with non-missing scores for all subscales. Subscale and total scores for those with missing responses were calculated by scaling the observed total score by the ratio of total and answered questions within the scale for that responder. Weighted averages of the HIB by unit type based on monthly summaries from each unit were calculated. The mean subscale score and H-CulT total scores for each unit were calculated.

Categorical variables were summarized using frequencies and percentages, and group comparisons used Pearson's Chi-square tests and Kruskal-Wallis tests for ordered variables. Continuous variables were summarized using means and standard deviations, and group comparisons used ANOVA tests. Pairwise comparisons, with a Bonferroni correction, were run if significance was observed for the unit group analyses. Subscale scores and overall H-CulT scores and demographic variables were compared using ANOVA tests and were described using means and standard deviations. Spearman correlations were run to compare unit HIB score and mean unit-level total and subscale scores of H-CulT.

Multivariable linear regression models were fit to evaluate whether the observed differences across groups on certain survey subscale scores remained after adjustment for race and experience, which differed across units. Parameter estimates with 95% confidence intervals are presented. Analyses were performed using SAS® Software (version 9.4; Cary, NC). A significance level of 0.05 is assumed.

Results

We distributed 570 surveys and received 148 surveys in return, for a response rate of 26%. Demographics and survey scores can be found in <u>Table 1</u>. Scores for *Busy Workload* (p = 0.031), *Unit Leadership* (p < 0.001), and *Priority of Patient Care* (p = 0.005) subscales were higher for nurse managers and assistant nurse managers compared to clinical nurses (<u>Table 2</u>). Older nurses (41-50 years old) had more positive perceptions of *Busy Workload* compared to 20-30 and 31-40 year olds (p = 0.009). No other subscales were significant for age or experience (p > 0.05).

Table 1. Nurses' Characteristics and H-CulT Scores

| | (N | Total (N=148) | | |
|-----------------|----|------------------|--|--|
| Factor | N | Statistics | | |
| Characteristics | | | | |

| | Total (N=148) | | |
|--|------------------|-------------|--|
| Factor | N | Statistics | |
| 31-40 | | 53 (35.8) | |
| 41-50 | | 24 (16.2) | |
| Over 50 | | 38 (25.7) | |
| Prefer not to answer | | 5 (3.4) | |
| Nursing role, n (%) | 148 | | |
| Manager, ANM | | 29 (19.6) | |
| APRN | | 1 (0.68) | |
| staff nurse | | 108 (73.0) | |
| Other | | 10 (6.8) | |
| Years have you practiced as a nurse, n (%) | 148 | | |
| A. 0-2 years | | 10 (6.8) | |
| B. 2-5 years | | 38 (25.7) | |
| C. 5-10 years | | 35 (23.6) | |
| D. Over 10 years | | 65 (43.9) | |
| H-CulT Scores , mean ± sd | | | |
| My Unit's Culture Subscale Score | 148 | 10.6 ± 3.0 | |
| Hospital Leadership Subscale Score | 148 | 20.9 ± 4.9 | |
| Other Units' Culture Subscale Score | 148 | 11.9 ± 3.2 | |
| Busy Workload Subscale Score | 148 | 9.4 ± 2.9 | |
| Unit Leadership Subscale Score | 148 | 11.6 ± 2.9 | |
| Use of Data Subscale Score | 96 | 7.9 ± 2.0 | |
| Priority of Patient Care Subscale Score | 105 | 5.5 ± 2.4 | |
| Hospital Culture of Transitions Survey | 80 | 77.6 ± 14.7 | |

ANM, Assistant Nurse Manager; Statistics presented as Mean ± SD, N (column %).

Table 2. The relationship between H-CulT subscale scores and demographic variables.

| Factors | Priority of Patient Care Mean ± SD | <i>p</i> -value | Busy Workload Mean ± SD | <i>p</i> -value | Other Units' Culture Mean ± SD | <i>p</i> -value | Unit Leadership Mean ± SD | <i>p</i> -value |
|----------------|---------------------------------------|-----------------|----------------------------|-----------------|-----------------------------------|-----------------|------------------------------|-----------------|
| Nursing Role | | 0.005 | | 0.031 | | 0.63 | | <0.007 |
| Manager/ANM | 6.8 ± 2.4 | | 10.7 ± 2.5 | | 11.5 ± 3.1 | | 13.4 ± 1.4 | |
| Clinical Nurse | 5.0 ± 2.3 | | 9.1 ± 2.9 | | 11.9 ± 3.2 | | 11.1 ± 3.0 | |
| Other | 5.1 ± 2.4 | | 9.5 ± 3.5 | | 12.6 ± 2.2 | | 11.7 ± 3.6 | |
| Age | | 0.22 | | 0.009 | | 0.30 | | 0.45 |
| 20-30 | 4.7 ± 2.3 | | 8.4 ± 2.5 | | 11.6 ± 2.8 | | 12.0 ± 2.9 | |
| 31-40 | 5.4 ± 2.2 | | 9.0 ± 2.9 | | 11.5 ± 3.3 | | 12.0 ± 2.7 | |
| 41-50 | 5.4 ± 2.4 | | 11.0 ± 2.7 | | 12.5 ± 3.8 | | 11.7 ± 2.1 | |
| Over 50 | 6.2 ± 2.6 | | 9.7 ± 3.1 | | 12.5 ± 2.6 | | 11.1 ± 3.1 | |
| Race | | 0.038 | | 0.67 | | 0.013 | | 0.86 |
| White | 5.2 ± 2.2 | | 9.6 ± 3.0 | | 11.3 ± 3.3 | | 11.5 ± 2.9 | |
| Non-White | 5.4 ± 2.4 | | 9.2 ± 2.6 | | 12.9 ± 2.2 | | 11.8 ± 2.9 | |
| Other | 7.2 ± 3.2 | | 9.8 ± 3.6 | | 20.8 ± 6.4 | | 11.4 ± 3.4 | |
| Ethnicity | | 0.026 | | 0.021 | | 0.008 | | 0.74 |
| Hispanic | 4.7 ± 2.3 | | 8.4 ± 3.1 | | 11.4 ± 2.6 | | 11.9 ± 2.9 | |
| Non-Hispanic | 5.4 ± 2.2 | | 9.5 ± 2.8 | | 11.7 ± 3.2 | | 11.5 ± 2.9 | |
| Other | 7.1 ± 3.4 | | 10.8 ± 3.1 | | 14.1 ± 3.3 | | 11.9 ± 3.1 | |

ANM, Assistant Nurse Manager; SD, Standard Deviation Statistics presented as Mean ± SD, N (column %). p-values: ANOVA.

Post-hoc pairwise comparisons were done using *Bonferroni adjustment*.

Statistical significance was not observed for comparisons between unit HIB score and subscale, and total H-CulT scores. Correlations were in the small to moderate range for unit HIB and H-CulT subscales [rho (95% CI)]: *My Unit's Culture* [-0.36 (-0.87, 0.54)]; *Hospital Leadership* [-0.50 (-0.91, 0.41)]; *Other Units' Culture* [-0.46 (-0.90, 0.44)]; *Busy Workload* [-0.43 (-0.89, 0.48)]; *Unit Leadership* [-0.20 (-0.83, 0.65)]; *Use of Data* [-0.36 (-0.87, 0.54)]; and *Priority of Patient Care* [-0.43 (-0.89, 0.48)]. However, all observed correlations were negative, indicating that units with higher HIB scores (slower) tended to have lower H-culT scores (more negative perceptions).

In multivariable analysis comparing demographics and survey scores by unit, race (p = 0.003) and experience (p < 0.001) were significant (<u>Table 3</u>). Nurses on medical-surgical units had more experience (over ten years for 59% of respondents) compared to those on telemetry and observation units, where half of respondents had five years of experience or less. For *Hospital Leadership Subscale Scores*, ICU nurses' scores were lower compared to nurses from observation units (p = 0.008). For *Other Units' Culture Subscale Scores*, ED nurses had the lowest (most negative) perceptions compared to those who worked on ICU, telemetry, and observation; and telemetry and observation unit nurses' scores were higher compared to those of ICU and ED (p < 0.001). For *Busy Workload Subscale Score*, ICU nurses had the lowest perceptions compared to medical-surgical and ED nurses; medical-surgical nurses' scores were higher compared to ICU and telemetry; and ED nurses had the most positive

perceptions when compared to ICU and telemetry (p < 0.001). *Unit Leadership Subscale Scores* were significant overall (p = 0.025); however, pairwise comparisons were not significant. No other comparisons between demographic characteristics and subscale scores by unit were significant in multivariable modeling.

Table 3. Comparison of Nurses' Characteristics and H-CulT Scores by Unit

| | | ICU (N=26) | | MedSurg (N=61) | | Telemetry (N=26) | • | Observation (N=21) | | ED (N=14) | |
|---|----|------------------------|----|------------------------|----|-----------------------|----|------------------------|----|--------------|-----------------|
| | N | Statistics | N | Statistics | N | Statistics | N | Statistics | N | Statistics | <i>P</i> -value |
| Characteristics | | | | | | | | | | | |
| Age, n (%) | 25 | | 58 | | 26 | | 20 | | 14 | | 0.061 |
| 20-30 | | 5 (20.0) | | 8 (13.8) | | 9 (34.6) | | 5 (25.0) | | 1 (7.1) | |
| 31-40 | | 12 (48.0) | | 17 (29.3) | | 10 (38.5) | | 6 (30.0) | | 8 (57.1) | |
| 41- 50 | | 3 (12.0) | | 12 (20.7) | | 3 (11.5) | | 4 (20.0) | | 2 (14.3) | |
| 50 and above | | 5 (20.0) | | 21 (36.2) | | 4 (15.4) | | 5 (25.0) | | 3 (21.4) | |
| Race, n (%) | 26 | | 61 | | 26 | | 21 | | 14 | | 0.003 |
| White | | 18 (69.2) ⁴ | | 36 (59.0) ⁴ | | 11 (42.3) | | 5 (23.8) ¹² | | 9 (64.3) | |
| Non-white | | 4 (15.4) | | 18 (29.5) | | 13 (50) | | 16 (76.2) | | 4 (28.6) | |
| Other | | 4 (15.4) | | 7 (11.5) | | 2 (7.7) | | 0 (0.00) | | 1 (7.1) | |
| Ethnicity, n (%) | 26 | | 61 | | 26 | | 21 | | 14 | | 0.57 |
| Hispanic | | 8 (30.8) | | 10 (16.4) | | 6 (23.1) | | 3 (14.3) | | 3 (21.4) | |
| Non-Hispanic | | 13 (50) | | 44 (72.1) | | 17 (65.4) | | 18 (81.0) | | 10 (71.4) | |
| Other | | 5 (19.2) | | 7 (11.5) | | 3 (11.5) | | 1 (4.8) | | 1 (7.1) | |
| Nursing role, n (%) | 26 | | 61 | | 26 | | 21 | | 14 | | 0.88 |
| Manager/ANM | | 7 (26.9) | | 13 (21.3) | | 2 (7.7) | | 4 (19.0) | | 3 (21.4) | |
| APRN | | 0 (0.00) | | 1 (1.6) | | 0 (0.00) | | 0 (0.00) | | 0 (0.00) | |
| Clinical nurse | | 17 (65.4) | | 43 (70.5) | | 21 (80.8) | | 16 (76.2) | | 11 (78.6) | |
| Other | | 2 (7.7) | | 4 (6.6) | | 3 (11.5) | | 1 (4.8) | | 0 (0.00) | |
| Years as a nurse, n (%) | 26 | | 61 | | 26 | | 21 | | 14 | | <0.001 |
| 0-2 years | | 0 (0.00) | | 1 (1.6) ³⁴ | | 6 (23.1) ² | | 3 (14.3) ² | | 0 (0.00) | |
| 2-5 years | | 9 (34.6) | | 7 (11.5) | | 9 (34.6) | | 10 (47.6) | | 3 (21.4) | |
| 5-10 years | | 5 (19.2) | | 17 (27.9) | | 4 (15.4) | | 4 (19.0) | | 5 (35.7) | |
| Over 10 years | | 12 (46.2) | | 36 (59.0) | | 7 (26.9) | | 4 (19.0) | | 6 (42.9) | |
| H-CulT Subscale Scores Mean ± SD | | | | | | | | | | | |
| My Unit's Culture | 26 | 10.5 ± 2.9 | 61 | 10.4 ± 3.1 | 26 | 10.3 ± 2.4 | 21 | 11.9 ± 3.1 | 14 | 10.8 ± 3.9 | 0.38 |

| | | ICU (N=26) | | MedSurg (N=61) | | Telemetry (N=26) | (| Observation (N=21) | | ED (N=14) | |
|--------------------------|----|---------------------------|----|--------------------------|----|--------------------------|----|--------------------------|----|--------------------------|---------------------|
| | N | Statistics | N | Statistics | N | Statistics | N | Statistics | N | Statistics | P-value |
| Hospital Leadership | 26 | 18.4 ± 6.1 ⁴ | 61 | 20.4 ± 4.9 | 26 | 22.4 ± 4.0 | 21 | 23.0 ± 3.9 ¹ | 14 | 21.4 ± 3.7 | 0.008 ^a |
| Other Units' Culture | 26 | 11.3 ± 2.2 ³⁴⁵ | 61 | 11.8 ± 3.7 | 26 | 13.3 ± 2.3 ¹⁵ | 21 | 13.5 ± 2.3 ¹⁵ | 14 | 8.9 ± 2.3 ¹³⁴ | <0.001 ^a |
| Busy Workload | 26 | 8.2 ± 2.4 ²⁵ | 61 | 10.1 ± 3.0 ¹³ | 26 | 8.1 ± 2.5 ²⁵ | 21 | 9.3 ± 3.2 | 14 | 11.2 ± 2.5 ¹³ | <0.001° |
| Unit Leadership | 26 | 10.5 ± 4.1 | 61 | 11.3 ± 2.9 | 26 | 11.8 ± 2.0 | 21 | 12.7 ± 1.7 | 14 | 13.0 ± 2.1 | 0.025° |
| Use of Data | 16 | 7.2 ± 2.6 | 34 | 7.9 ± 2.1 | 19 | 7.7 ± 1.8 | 14 | 8.4 ± 1.3 | 13 | 8.2 ± 1.7 | 0.52ª |
| Priority of Patient Care | 20 | 5.2 ± 2.0 | 41 | 5.4 ± 2.6 | 19 | 5.1 ± 2.5 | 14 | 6.3 ± 2.6 | 11 | 5.7 ± 2.0 | 0.64 ^a |
| Hospital Culture | 14 | 73.3 ± 10.3 | 31 | 76.4 ± 18.8 | 15 | 76.2 ± 9.6 | 9 | 88.2 ± 12.4 | 11 | 79.5 ± 11.2 | 0.17 ^a |

Statistics presented as Mean ± SD, N (column %). p-values: a=ANOVA, b=Kruskal-Wallis test, c=Pearson's chi square test, d=Fisher's Exact test.

ANM, Assistant Nurse Manager; SD, Standard Deviation

Discussion

In this study, perceptions of transitions in care were more positive among nurse managers than clinical nurses. Nurse managers' perceptions were significantly more positive for the *Busy Workload, Unit Leadership*, and *Priority of Patient Care* subscales. Nurses' perceptions of transitions in care also differed between units. At the study site, units have different admission and discharge processes, and various levels of care and competency, which likely influenced perceptions of transitions in care.

perceptions of transitions in care were more positive among nurse managers than clinical nurses.

We found limited research on *Busy Workload, Unit Leadership,* and *Priority of Patient Care* pertaining to nurses' perceptions of transitions in care. In addition, although no researchers examined the relationship between H-CulT subscales and nursing roles, some of the current findings were supported by previous literature.

(Morsiani et al., 2017; Van Bogaert et al., 2017; Van Der Linden et al., 2017). Our results also revealed an interesting and clinically important trend that showed when perceptions of transitions in care (all subscales) were negative, time to HIB was slower; however, these results were not statistically significant.

In multivariable analysis, we found significant differences in perceptions of transitions in care between both race and nurses' experience, by unit. These demographic characteristics may account for some of the differences in unit scores, which may not be actual departmental differences. Based on prior research in which authors reported lower job control among nurses in minority groups (Nam et al., 2022), it may be that occupational disparities explain some of the differences in perceptions of transitions in care. Nevertheless, no research was found to support the current findings in which differences were found in perceptions of transitions between racial/ethnic groups. Select subscale scores and associated factors are discussed below.

In univariable and multivariable analysis, no significant factors were noted for *My Unit's Culture* and *Use of Data* subscales. *Hospital Leadership* was significant only in multivariable modeling when hospital unit and demographics were included in the model. The most positive scores (highest) were in the observation unit, for the *Hospital Leadership* subscale. There is a paucity of research on observation units and

we found significant
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perceptions of hospital leadership; however, it was previously identified that strong, collaborative leadership is needed (Conley et al., 2017).

¹: Significantly different from ICU; ²: Significantly different from MedSurg; ³: Significantly different from Telemetry; ⁴: Significantly different from Observation; ⁵: Significantly different from ED. Post-hoc pairwise comparisons were done using *Bonferroni adjustment*.

Select Subscales

Other Units' Culture. We found that ICU nurses perceived Other Units' Cultures more negatively compared to other inpatient units, which may be due to differences in workload and patient acuity. Additionally, our results revealed that ED nurses' perceptions for Other Units' Cultures were more negative than medical-surgical, ICU, and observation unit nurses. The differences in perceptions may have to do with a difference in routines and processes. Furthermore, the type of patient care provided differs between units, especially when comparing ED to inpatient units. For example, medical-surgical, ICU, and observation units receive patients from the ED, while the ED nurses' job is to transfer the patient to the other units or home.

The differences in perceptions may have to do with a difference in routines and processes.

In a 2017 report, researchers showed that ED staff perceived that poor transitions or ED overflow were attributable to poor time management of the clinical nurses, including slow inpatient discharge processes resulting in low bed availability (<u>Van Der Linden et al., 2017</u>). In the current study, the observation unit scored the highest

for *Other Units' Culture*, indicating more positive perceptions of transitions among other units. At the study site, observation is the smallest unit and yet most of the nurses in that unit responded to the survey, which may indicate a highly representative sample. Of note, the observation unit transfers patients to other units or home, but does not receive patients from other inpatient units.

Busy Workload. Researchers previously reported significant differences and priorities in nurse managers' commitment to organizational initiatives and indicated that they had different visions and purposes for implementing and promoting beneficial organizational changes compared to clinical nurses (Morsiani et al., 2017). In one report, clinical nurses reported an overwhelming workload with limited time to complete tasks, while nurse managers perceived workload as being focused on compliance with standardized policies and procedures for the organization (Van Bogaert et al., 2017).

In our study, ED nurses perceived *Busy Workload* more positively than other units and had the highest subscale scores of all the units. Among medical-surgical nurses, research showed that heavy workloads and rapid patient turnover in particular were associated with high perceived stress and intent to leave (*Phillips*, 2020). ED personnel may find a fast-paced atmosphere fulfilling, which explains more positive perceptions. Researchers observed that ED staff perceived increased workload as more rewarding, especially during low throughput (longer transit times) (*von Thiele*, *Hasson & Muntlin*, 2016). Thus, there may be inconsistencies in how ED staff and staff in other units perceive busy workload and how it applies to transitions in care. Our findings also revealed that ICU nurses perceived busy workload more positively than medical-surgical nurses, consistent with previous work that showed medical-surgical nurses perceived the busiest workload compared to other inpatient units (*Olender*, 2017).

Our findings showed age was positively associated with *Busy Workload*. The 41 to 50- year-old age group had more positive perceptions of busy workload compared to the 20 to 30 year-olds and the 31 to 40 year-olds. There may be generational as well as maturity differences between these age groups. Review of the literature revealed

ED personnel may find a fastpaced atmosphere fulfilling, which explains more positive perceptions.

that stressors associated with a *Busy Workload* may be ameliorated by experience (<u>Johnston et al., 2016</u>), supporting our observation of a positive association between years working as a nurse and positive perceptions of a busy workload in multivariable models. Since novice nurses can be of any age, it is also possible, in agreement with previous findings, that age was related to generational differences regarding expectations in the workplace (<u>Pyöriä et al., 2017</u>).

Unit leadership. It was not surprising to find that nurse managers had a more positive perception of *Unit Leadership* than clinical nurses. In prior research, nurse managers had different visions and purposes for implementing and promoting beneficial organizational changes compared to clinical nurses (Morsiani et al., 2017). This finding is supported by a recent study by Raffenaud et al. (2020), who found unit leaders were focused on the overall hospital priorities. In contrast, staff-level nurses were more focused on their unit work productivity (Raffenaud et al., 2020). Leadership may have a vested interest in patient flow, while clinical nurses tend to be more focused on their assignments.

Leadership may have a vested interest in patient flow, while clinical nurses tend to be more focused on their assignments.

Priority of patient care. Priority of Patient Care scores were lower for clinical nurses than nurse managers and assistant nurse managers; however, nurses' role was not significantly different between units, suggesting that these perceptions were similar for clinical nurses and nursing leadership across units. Other researchers found ED

staff perceived clinical nurses in other units had a lower priority of patient care (Van Der Linden et al., 2017).

Similar to current findings, others demonstrated that nurse managers perceived the unit environment in a more positive light compared to clinical nurses, which directly correlated with perceptions of quality of patient care (<u>Gormley, 2011</u>). Nevertheless, there is a need to explore perceptions of patient care priority among nurses, and the differences between nursing roles in these perceptions.

Study Limitations

This study had limitations. We used a cross-sectional survey design and data were self-reported. Thus, nurses' perceptions may not reflect actual practice. Further, self-report studies are subject to response bias, and those with strong feelings may have been more likely to respond. This study was conducted at a single facility, which may limit generalizability. The findings may not be representative for units with low response rates. Given that we compared units (n = 7) for the HIB metric, the sample size was small, resulting in a type II error.

Future Research

Although not statistically significant due to the small number of units, there were clinically significant findings regarding time to HIB; therefore larger studies examining this metric related to perceptions of transitions in care are needed. Researchers should also examine the impact of interventions that improve engagement in transitions in care processes, including nurse champions. Leadership-driven initiatives, including multidisciplinary rounding, bed-board management programs, and well-structured admission and discharge processes, have improved throughput metrics (Walker et al., 2016) and should be considered for future research or quality improvement processes.

Conclusions and Implications for Nursing Management

The significance of H-CulT subscales as they relate to nursing roles reveals the importance of nurses' perceptions of these constructs (*Busy Workload, Unit Leadership,* and *Priority of Patient Care*) and the nurses' role in improving transitions in care processes. Utilizing nurses' valuable insights, we can better address transitions in care. It may be that differences in perceptions between clinical nurses and nurse managers reveal an opportunity to improve transitions by improving clinical nurse perceptions through education.

Results of this study reveal the need for nursing management to use opportunities to educate clinical nurses about the importance of hospital-wide operations related to transitions in care. Our findings showed that clinical nurses may see transitions in care in other units as less effective compared to leadership, which dictates the need

Utilizing nurses' valuable insights, we can better address transitions in care.

for hospital-wide education of clinical nurses and the importance of working as a team to facilitate patient transitions in care. Education should include exposure to the patient transition processes from the ED to other units, and the rationale for expediting admission and discharge processes. Nursing management can promote engagement in patient transitions by using nurse champions who engage, educate, and motivate peers for optimal transitions in care (Miech et al., 2018).

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Authors

Sadie Dyce, DNP, RN

Email: <u>dyces@ccf.org</u>

Sadie Dyce is an Assistant Nurse Manager of the Telemetry Unit at Cleveland Clinic Weston, Florida. Dr. Dyce's interests include nurses' engagement and retention. Dr. Dyce was a co-investigator on a study examining disruptive behavior in the workplace. She is actively involved in the Research Café, a journal club at the Cleveland Clinic Weston.

Perlita Cerilo, PhD, RN

Email: cerilop@ccf.org

Perlita C. Cerilo is a Nursing Operations Manager at Cleveland Clinic Weston. Dr. Cerilo's interests include patient safety, fall prevention, and improving hospital throughput. Dr. Cerilo has recently published a pilot study on the use of multimodal intervention in fall prevention among older adults 65 years and older. She is currently a co-

investigator on pre- and post-Covid-19 door-to-needle time for stroke patients, and a study on factors affecting the length of stay in an Observation Unit.

Erin Turner, DNP, RN

Email: <u>turnere@ccf.org</u>

Erin Turner is the Associate Chief Nursing Officer at Cleveland Clinic Weston, FL. Dr. Turner's research interests include nurse engagement and hospital efficiencies. Dr. Turner has conducted research on disruptive behavior in nursing, critical thinking of nurses, and communication amongst the healthcare team.

James F. Bena, MS

Email: <u>benaj@ccf.org</u>

ORCID ID: 0000-0002-7592-0480

James Bena is a principal biostatistician in the Department of Quantitative Health Sciences. He provides statistical support to investigators from a wide variety of research areas including Nursing Research, Vascular Surgery, and Endocrinology. He also leads a team of applied biostatisticians and statistical programmers that collaborate with research personnel in more than 15 departments and centers at the Cleveland Clinic.

Shannon L. Morrison, MS

Email: Morriss2@ccf.org

ORCID ID: 0000-0002-9507-1762

Shannon Morrison is a Statistical Programmer in the Department of Quantitative Health Sciences in Cleveland Clinic's Learner Research Institute. She received her BA from the College of Wooster and her MS from the University of Akron. Her areas of expertise include data management, manipulation, cleaning and organization to aid in statistical analysis.

Lee Anne Siegmund, PhD, RN

Email: <u>siegmul@ccf.org</u>

ORCID ID: 0000-0002-9606-306X

Lee Anne Siegmund is a Senior Nurse Scientist in Cleveland Clinic's Office of Nursing Research and Innovation. Dr. Siegmund mentors nurses in their research and also conducts her own research. Her interests include frailty and physical activity for older adults. She most recently published research on physical activity and social isolation as predictors of depression among older adults during COVID-19, and is developing a model and midlevel theory for care of the frail older adult.

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