Chief Executive Officers’ Perceptions of Collective Organizational Engagement and Patient Experience in Acute Care Hospitals

Mary Lynn Lunn, PhD1,2, Andrea D Ellinger, PhD3, Kim F Nimon, PhD3, and Jonathon RB Halbesleben, PhD4

Abstract
The concept of employee engagement has garnered considerable attention in acute care hospitals because of the many positive benefits that research has found when clinicians are individually engaged. However, limited, if any, research has examined the effects of engaging all hospital employees (including housekeeping, cafeteria, and admissions staff) in a collective manner and how this may impact patient experience, an important measure of hospital performance. Therefore, this quantitative online survey-based study examines the association between 60 chief executive officers’ (CEOs’) perceptions of the collective organizational engagement (COE) of all hospital employees and patient experience. A summary measure of the US Hospital Consumer Assessment of Healthcare Providers and Systems survey scores was used to assess patient experience at each of the 60 hospitals represented in the study. A multiple linear regression model was tested using structural equation modeling. The findings of the research suggest that CEOs’ perceptions of COE explain a significant amount of variability in patient experience at acute care hospitals. Practical implications for CEOs and other hospital leaders are provided that discuss how COE can be used as an organizational capability to influence organizational performance.

Keywords
employee engagement, collective organizational engagement, HCAHPS, health care leadership, patient experience

Introduction
Hospital leaders are increasingly being challenged to motivate and engage members of their diverse workforces amid growing hospital staff shortages along with clinician burnout (1). Now, more than ever as hospital leaders endeavor to ensure the provision of care for patients during the ongoing COVID-19 pandemic, employee engagement has become even more crucial (2). Employee engagement refers to “the simultaneous employment and expression of a person’s ‘preferred self’ in task behaviors that promote connections to work and to others, personal presence, and active full role performance” (p. 700) (3). Much of the focus in the health care and seminal engagement literatures has been on individual engagement, such as the engagement of nurses and physicians (4–7). As engagement research has evolved, a new type of engagement has emerged—leaders can significantly enhance performance by also developing collective organizational engagement (8,9). Collective organizational engagement (COE), the collective engagement of the entire workforce, can be classified as an organizational property or capability that creates value for an organization (10). Collective organizational engagement can influence organization performance indicators such as return on assets, shareholder value, customer satisfaction, and brand equity (10).

1 Tulane University, Freeman School of Business, New Orleans, LA, USA
2 The University of Richmond, Robins School of Business, Richmond, VA, USA
3 The University of Texas at Tyler, Soules College of Business, Tyler, TX, USA
4 Dean, College of Continuing Studies, The University of Alabama, Tuscaloosa, AL, USA

Corresponding Author:
Mary Lynn Lunn, Tulane University, Freeman School of Business, New Orleans, LA, USA; The University of Richmond, Robins School of Business, 102 UR Drive, Richmond, VA 23173, USA.
Emails: mlunn1@tulane.edu; mlunn@richmond.edu
In hospital settings, chief executive officers (CEOs) have realized the many benefits of employee engagement for their organizations (11). Highly engaged hospital employees positively influence patient experience, patient safety, and quality of care (12). These outcomes have become important metrics in improving hospital care, under the Affordable Care Act (ACA) provisions (13).

Patient experience, an indicator of hospital performance from the patient’s perspective, has become a well-recognized, continuously monitored, critical domain of performance for hospital organizations (14) with the implementation of value-based purchasing (VBP). Value-based purchasing is an incentive payment program introduced by the US Center for Medicare and Medicaid Services (CMS) as a part of the (ACA) to disburse Medicare payments on the basis of quality of care (15). The CMS requires that acute care hospitals participating in VBP use the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey to measure patient experience.

The Beryl Institute, an organization dedicated to improving patient experience globally, defines patient experience as “the sum of all interactions, shaped by an organization’s culture, that influence patient perceptions, across the continuum of care” (16). Patient experience is one facet of quality of care and the domains measured by the HCAHPS survey, such as communication with doctors and responsiveness of hospital staff, impact the quality of care patients receive (15). Further, research has shown an association between patient experience ratings and positive patient outcomes (17,18).

It has been suggested that a patient’s experience is influenced by the engagement of caregivers and all hospital employees who play a role in that patient’s care (19,20). Further, physicians contend that provider and staff engagement lead to improved quality and patient experience outcomes (21). Thus, striving to collectively engage all hospital employees—from clinicians to housekeeping to cafeteria staff—may well have an effect on patient experience.

Despite the contentions that individual engagement is positively related to patient experience in hospital settings (19,22), limited empirical research examining the relationship between COE and patient experience has been conducted (23). Therefore, this study examines the direct effect of CEO perceptions of COE on patient experience in acute care hospitals, controlling for hospital size and profit status.

Researchers have found that CEO characteristics such as gender and tenure influence the experience a patient receives in the hospital (14). Another recent study provides initial evidence of a positive relationship between the behavioral integrity of hospital leaders, employee engagement, and service quality of hospital units (27). Thus, CEOs are uniquely positioned to influence, observe, and monitor the motivation and engagement of all hospital employees (10) so their perceptions of COE were considered for this study.

Engaging Everyone

The concept of an engaged workforce was introduced by Kahn (3) who defined employee engagement as “the harnessing of organization members’ selves to their work roles... physically, cognitively, and emotionally” (p. 694). Kahn acknowledged that employees must find meaning in their work, feel safe expressing themselves at work, and have time and energy to invest in their work to be engaged in their work. When employees experience these foundational conditions of meaningfulness, safety, and availability, their engagement has been linked to individual outcomes such as retention, discretionary effort, job performance, organizational commitment, organizational citizenship behavior (5,28,29 [p. 117]), and organizational outcomes including customer satisfaction, profitability, productivity, and safety (30,31).

Building upon Kahn, Barrick et al.’s (10) COE represents employees’ shared investment of emotional, physical, and cognitive energies within their organizational roles. In other words, COE is a conceptualization of employee engagement at the organizational level. It is believed that this collective or shared perception of engagement serves as a multiplier effect, enhancing employee motivation and creating value for an organization (10). When employees observe that their co-workers are engaged in their jobs and organizational roles, their own engagement and productivity are enhanced (10). Research by Barrick et al. (10) found that COE mediated the relationship between motivating work designs, human resource management practices, and CEO transformational leadership and firm performance (p. 115). Their research provided initial evidence that COE can be used as an organizational capability, which positively influenced firm performance as measured by return on assets suggesting that when all employees are making a concerted effort to engage in their work, organizational performance will increase.

The Patient Experience

The concept of patient experience can be compared to customer experience, a concept widely used in the marketing discipline and connected to service climate theory (32,33). This theory posits that the interactions between employees and their customers influence customer experience and that leaders’ behaviors can influence employees’ work
experiences and the way they behave toward their customers (32). Within the context of hospital organizations, service climate theory supports the premise that when all hospital employees are engaged, positive interactions with patients will occur that positively and directly affect patient experience.

Achieving high patient experience ratings can be challenging in hospitals where acutely ill patients are consumers. Care providers often contend with complex factors when providing service, often to diverse patient populations, that are unique to the hospital setting (34,35). Such factors include patients’ underlying fear for their safety, the effects of comorbid conditions, the necessity of making medical terminology both understandable and actionable, the involvement with family and often complex family dynamics, and planning for the transition of care outside the hospital. Additionally, research has shown that in large hospitals with very complex cases, HCAHPS patient experience ratings can be negatively impacted (36,37). However, many practices have been identified as effective antecedents to providing excellent patient experience (35).

Award-winning US acute care hospitals have realized that employee engagement positively influences patient experience and the hospital CEOs have implemented programs at these hospital facilities to enhance employee engagement and improve HCAHPS scores (38,39). Based on this previous research, it is anticipated that when an acute care hospital CEO perceives that a strong COE level exists, that hospital will have high ratings of patient experience as measured by the HCAHPS survey. Service climate theory contends that there is a positive effect when all employees of an organization are engaged as a group and that their combined investment of positive energy in their organizational roles will translate into positive interactions with customers and improved quality of service (33). Within the context of hospital organizations, service climate theory should support the premise that when all hospital employees are engaged, positive interactions with patients will occur that have a positive effect on patient experience. Thus, the hypothesis tested in this study was:

**H1:** Chief executive officers’ perceptions of COE have a direct positive effect on patient experience in acute care hospitals, controlling for hospital size and profit status.

The following hypothesized model was tested (Figure 1).

**Design and Methods**

A quantitative online survey-based design was employed using Qualtrics to test the aforementioned hypothesis and model (40). This study was approved by institutional review board of The University of Texas at Tyler.

**Sample and Population**

The target population for this study was US acute care hospital CEOs. To obtain variance in the responses (40) and to produce findings that may be generalizable to a broader population of acute care hospitals, hospital leaders from both for-profit and not-for-profit US acute care hospitals that participate in the HCAHPS survey program and VBP were invited to participate in this research. Currently, in the United States, about 2700 acute care hospitals participate in VBP, according to the CMS (41).

The sample frame for this study was all member CEOs of state hospital associations in the southeastern region of the United States with a total of 175 CEOs contacted. This region was identified and selected based on their participation in the CMS Hospital Improvement Innovation Network (HIIN) programs to improve hospital quality. In addition, 500 acute care hospital CEOs in the United States from regions other than the Southeast were contacted. These CEOs were clients of a US hospital consulting group which agreed to assist with this study by providing this listing. A total of 675 (175 from hospital associations, 500 from consulting clients) hospital CEOs were contacted; of this, 77 CEOs agreed to participate. After eliminating cases with missing data and outliers, the final sample size for the study was 60 CEOs representing 60 different hospital facilities.

**Study Variables, Measurement Instruments, and Data Collection**

**Independent variable.** The independent variable used for this research was COE, which represents employee engagement at the organizational level. The Barrick et al. (10) COE scale (see Appendix) was selected to measure this variable, as it is a previously validated measure that operationalizes COE (10). The scale consists of 6 items, responses are measured...
using a 5-point Likert-type scale from “strongly disagree” to
“strongly agree,” and the coefficient 𝜉 reported by Barrick
et al. (10) was .82. With permission obtained from the author
and publisher, the referent in each of the Barrick et al.
(10) items was amended to refer to organizational employees
(see Appendix). This enabled the CEOs, who completed the
survey, to provide their perceptions of the COE of hospital
employees at the participating facilities. In this study, the
construct reliability for this amended measure was .87.

Data collection for independent variable. The online survey
developed to obtain CEO perceptions of COE was designed
to be completed in less than 5 minutes. It consisted of
questions to obtain informed consent, to confirm the hospital’s
reporting of HCAHPS scores, 2 questions related to tenure at the organization, and total years of experience as a hospital CEO, and the 6 amended Barrick et al. items (10). It concluded with 2 questions regarding hospital size and profit/nonprofit status and a request to provide the hospital name and state to enable the primary researcher to access publicly reported hospital data. As part of their participation, CEOs were also asked to forward a second online survey link to their respective executive leadership teams members. These members included chief operating officers, chief nursing officers, chief medical officers, chief information officers, quality officers, ethics officers, marketing vice presidents, and human resource directors reporting to the CEO. This second survey was designed to capture leadership team responses about CEO leadership behavior using the Managerial Practices Survey (MPS) of Yukl (42) along with the Barrick et al. items. Since not all hospital facilities for which CEO responses were received for the collective organizational survey had matched responses from their leadership team members for the leadership survey, leadership team response was selected as a control variable to account for any effects between hospitals in which the leadership team responded to the survey and those hospitals in which none of the leadership team members responded to the survey.

Dependent variable. The dependent variable in this research was patient experience. In US adult acute care hospitals participating in the CMS VBP program, patient experience ratings are captured by the HCAHPS survey. The CMS publicly reports HCAHPS survey results in Hospital Compare in 3 categories: top box, middle box, and bottom box. “Top box” scores represent the highest category and are calculated using an unrounded percentage of a hospital’s patients who chose the most positive response (ie, “always,” “yes,” and “strongly agree”) to HCAHPS survey items (43). The HCAHPS survey was developed by the Agency for Healthcare Research and Quality in partnership with the CMS and is in the public domain (41). The Cronbach’s 𝜉 reported by the CMS (44) from pilot study data was .80 or higher for the HCAHPS composites, except for the discharge information composite data, which was reported as an 𝜉 of .68 for the pilot. For this study, HCAHPS scores were collected from CMS HCAHPS public data files representing patient experiences at acute care hospitals that occurred between January 1, 2016, and December 31, 2016. Since CMS reports HCAHPS scores on a rolling 4-quarter basis, the scores for this performance period were not publicly available until the fourth quarter of 2017.

A summary measure of HCAHPS scores was used to assess the dependent variable in this study. The raw top box scores of 8 HCAHPS dimensions were averaged to calculate this summary measure (cf 33) to assess patient experience, similar to procedures developed by Elliott et al. (36) to average HCAHPS scores to calculate a summary measure for their research. Top box scores are used by the CMS to determine the VBP Patient Experience Domain Score used for calculating VBP payments. The use of top box scores was considered ecologically valid since these measures are used by CMS to calculate VBP payments to US hospitals (44) and since both hospitals and hospital consulting firms use these measures in practice when assessing patient experience (45). This is an interval level score that can range from 0 to 100.

Control variables. Hospital size and hospital ownership status (for-profit vs not-for-profit) were included as control variables in this research following previous research (36,37). Hospital size was measured by the number of beds the hospital has (<60, 61-200, or >200). This continuous variable was dummy coded into 2 hospital size variables (61-200 and >200), with the hospital size of 60 or less being the reference variable. Hospitals were categorized as for-profit or not-for-profit. Additionally, leadership team survey responses, also gathered during data collection, were added as a control variable. This was a categorical variable in which “1” indicated CEO responses that also had matched leadership team responses and “0” indicated those hospitals that had CEO responses but no matched leadership team responses.

Statistical Analysis

Structural equation modeling (SEM) was used to analyze the data in this study. After data cleaning and assumption testing, confirmatory factor analysis was conducted to examine construct validity and to assess the fit of the measurement model (46). Descriptive statistics including correlation coefficients, means, and SDs were reviewed to assess the condition of the data set (40).

The hypothesis was analyzed by testing a multiple linear regression model using SEM, according to procedures recommended by Schumacker and Lomax (46), to examine the direct effect of COE on patient experience in this research context (cf 46). β weights, path coefficients, and multiple 𝑅² were examined (47). Goodness of fit of the conceptual model was assessed using accepted fit criteria (46).
Results
Table 1 presents demographic information (region of the country, ownership status, and size) of the 60 different acute care hospitals in the study relative to the population data. The large percentage of hospitals in the Southeast was expected as Southeast state hospital associations were targeted in addition to those hospital CEO clients of a national hospital consulting company representing other regions of the United States. The CEOs who responded to the survey had an average of 11.84 years of experience as a hospital CEO.

Table 2 presents descriptive statistics associated with this study. The results of the implied correlation matrix showed that some pairs of variables exhibited a correlation of notable strength. The COE latent variable was positively correlated with the dependent variable patient experience (.42).

Table 3 shows a summary of the findings for the study, reviewing the direct effect of COE on patient experience represented by the HCAHPS top box summary measure. The regression model indicated that CEO perceptions of COE had a significant positive association ($P < .001$) after controlling for each of the other predictors in the model (hospital size, profit status, and whether the hospital CEO had matched data from leadership team members). Controlling for all other predictors, the unstandardized regression coefficient between COE and patient experience indicated that a single unit increase in COE scores corresponded with an increase of 4.48 in the top box summary measure.

The standardized regression coefficient estimates for the other predictor variables are also shown in Table 3. Profit status had a standardized coefficient of <.01, and leadership team response was weakly predictive of the patient experience measure (.27). However, both dummy coded categories of hospital size were more strongly predictive of the patient experience measure than COE, with a coefficient of -.58 for medium-sized hospitals (hospital size 2) and a coefficient of -.51 for large hospitals (hospital size 3). Both medium and large hospitals tended to have lower patient experience scores than small hospitals (ie, the reference category). Higher COE corresponded with higher patient experience scores, while hospitals with both CEO and leadership team responses also tended to have higher patient experience scores than those hospitals without matched responses.

The model fit indices confirmed a well-fitting model providing support for the hypothesis. Given the strong effect and well-fitted model in the study, there is initial evidence

### Table 1. Demographic Data.

| Categorical variables | Study data, n = 60 | Population data, n = 3894 |
|-----------------------|-------------------|--------------------------|
|                       | Percent total     | Percent total            |
| Hospitals by region   |                   |                          |
| Southeast             | 65.00             | 29.02                    |
| Midwest               | 18.34             | 24.88                    |
| Northeast             | 5.00              | 17.36                    |
| Southwest             | 3.33              | 15.00                    |
| West                  | 8.33              | 13.74                    |
| Hospital size         |                   |                          |
| Large                 | 38.34             | 35.11                    |
| Medium                | 28.33             | 34.28                    |
| Small                 | 33.33             | 30.61                    |
| Profit status         |                   |                          |
| Not-for-profit        | 76.67             | 58.50                    |
| For-profit            | 23.33             | 21.30                    |

### Table 2. Implied and Observed Correlations.

| Variables                        | M     | SD    | 1     | 2     | 3     | 4     | 5     | 6     |
|----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| COE                              | 4.35  | 0.47  | <0.01 | 0.01  | -0.23 | 0.19  | 0.38  |
| Leadership team responses        | 0.55  | 0.50  | <0.01 | -     | 0.10  | 0.02  | -0.03 | 0.28  |
| For profit                       | 0.23  | 0.43  | -0.06 | 0.10  | -     | -0.11 | 0.44  | -0.19 |
| Hospital (dummy) size 3          | 0.38  | 0.49  | -0.23 | 0.02  | -0.11 | -0.50 | -0.31 |
| Hospital (dummy) size 2          | 0.28  | 0.45  | 0.17  | -0.03 | 0.44  | -0.50 | -      | -0.27 |
| Patient experience               | 74.11 | 5.22  | 0.41  | 0.28  | -0.19 | -0.31 | -0.27 | -      |

Abbreviation: COE, collective organizational engagement.

*Correlations under the diagonal are implied, while those above the diagonal represent Pearson's.

### Table 3. Unstandardized (b) and Standardized ($\beta$) Regression Estimates.

| Outcome       | Predictor                  | b  | $\beta$ | r   | SE  | CR  | P   |
|---------------|----------------------------|----|---------|-----|-----|-----|-----|
| PE <- COE     |                            | 4.48 | .39     | .38 | 1.26| 3.56| .001|
| PE <- Leadership team responses | 2.83 | .27     | .28 | 0.94| 3.01| .003|
| PE <- Profit status | 0.04 | .00     | -0.19| 1.25| 0.03| .978|
| PE <- Hospital (dummy) size 3 | -5.43 | -0.51 | -0.31| 1.12| -4.84| .001|
| PE <- Hospital (dummy) size 2 | -6.66 | -0.58 | -0.27| 1.34| -4.98| .001|

Abbreviation: PE, patient experience.
of an association between CEO perceptions of COE and patient experience.

Discussion
The findings of this research support the hypothesis that was proposed and suggest that when acute care hospital CEOs perceived that hospital employees were engaged collectively in their work, their perceptions of COE explain a significant amount of variability in patient experience, which indicates that patients rated their experience at the hospital more highly, as evidenced by the HCAHPS scores received by the hospital. This research, on an under-examined type of engagement, suggests that individuals’ engagement throughout the organization influences service quality and that COE has a unique association with patient experience (23,27).

The findings are consistent with Barrick et al. (10) that COE is an organization-level construct that can be used to positively influence organizational performance outcomes. Barrick et al. (10) and other scholars have theorized that COE has an effect that is contagious and that the high engagement of one employee in a department may positively influence his or her co-workers to also become engaged, which can be instrumental in influencing performance outcomes such as customer service (31).

The finding that CEOs’ perceptions of COE has a positive association with patient experience is also consistent with Schneider et al. (33) service climate theory, which guided the hypothesis development for this research. Schneider et al. (33) espoused that employee interactions between their co-workers, leaders, and customers all influence customer experience. In this research, within acute care hospitals, customer experience was termed patient experience, and this study suggests that when CEOs perceive all hospital employees to be engaged, patient experience is positively impacted.

Additionally, in this study, hospitals with both CEO and leadership team responses tended to have higher patient experience scores than those hospitals without matched responses. As previous studies indicate, at hospitals in which the CEO and leadership team work well together, hospital employees are more likely to be engaged (48). Previous research has also shown that smaller hospitals and not-for-profit hospitals originally had higher HCAHPS scores and that larger hospitals and for-profit hospitals have had the most improvement in HCAHPS scores over time (13). The findings for this research resulted in a negative relationship between for-profit status and patient experience. Many not-for-profit acute care hospitals in the data set were identified as academic teaching hospitals, based on the hospital name provided by the CEOs, which are staffed by physicians and nurses dedicated to research, education, and providing the highest level of care possible (37). Teaching programs require that students in the health care professions complete quality-related learning projects as a part of their education (49). Further, academic medical centers often have access to the latest technologies and are able to provide integrated team-based care, which has been shown to improve communication and decrease medical errors (34), contributing to quality and patient perception of care.

The results indicate that hospital size has a strong association with patient experience. In comparison to hospitals with 60 beds or fewer, hospitals with 61 to 199 beds and those with 200 or more beds tended to have lower patient experience scores than hospitals in the reference category, suggesting that smaller hospitals are better able to control factors influencing patient experience. Smaller hospitals with a lower ratio of inpatient days to nurse staffing levels and an overall lower number of hospital employees tend to create an environment that discourages the formation of silos in departments, encourages cooperation between departments, and may result in employees in such institutions describing their workplace as a family environment (37).

Practical Implications
This research suggests that acute care hospital CEOs would be well advised to make both COE and patient experience an organizational focus, as this research suggests that their perceptions of COE explains a significant amount of variability in patient experience that is an important organizational performance outcome. Most hospital CEOs and leadership team members receive continuous updates on the results of employee engagement surveys (48). It is suggested that the results of a COE survey be added to these dashboard reports. In addition, hospital CEOs may want a dashboard report to include a side-by-side comparison of COE levels and patient experience results to assess this relationship over time.

It is also recommended that, through town halls, team huddles, and other communication channels, as well as through role modeling, CEOs emphasize and communicate the importance of having all hospital employees engage in their jobs and work together as a cohesive team to provide an excellent experience for patients. The CEOs should ensure leader accessibility and endorse upward communication mechanisms to encourage employees to voice their ideas and propose recommendations for improving engagement and patient experience (48,50). Especially in larger hospitals, where high patient experience scores are more elusive, CEOs must encourage the use of interdisciplinary care teams and promote communication between these teams (51).

Employee engagement improvement programs in hospital organizations abound, as do patient experience enhancement programs (52). A key implication of this research for hospital leaders is that employee engagement and patient experience enhancement initiatives should be strategically integrated. Hospital leaders should ensure that these 2 types of programs are designed in an integrated, coordinated effort and not developed in 2 separate silos within a hospital organization (31,53). In addition, many of the employee engagement improvement initiatives at acute care hospitals are focused on clinicians, especially nurses (54,55), often overlooking other key employees who augment patient
experience such as cooks, housekeepers, and those who work in billing and admitting (39). Thus, the intended target audience for these enhancement programs should be all hospital employees, who impact the care experience from admission to discharge, and not be exclusively designed for clinical employees.

Limitations
As with all research, there are some limitations associated with this study. Data were collected exclusively from CEOs within acute care hospitals in the United States, predominantly in the Southeast region of the United States, reducing the generalizability of the findings to other leaders, other types of hospitals and organizations, other regions of the United States, and those hospitals and organizations beyond the US context. It is also possible that bias could have been introduced from the CEO participants in the Southeast region given their participation in the CMS HIIN programs, along with the CEOs sourced through the national consulting company’s listing as they were clients of this consulting organization which has some expertise in employee engagement among the many services they provide. Additionally, this study examined engagement at the collective organizational level and not at the individual or team levels. Beyond this under-examined type of engagement, it is also possible that other predictor variables may influence patient experience, such as service climate, organizational culture, and program implementation (10). Another limitation involves CEOs responding to the survey at one point in time during the fourth quarter of the year and using objective performance data captured for that year. While the HCAHPS survey represents the industry standard in measuring patient experience in the United States, there are additional well-accepted patient experience measures used in other countries. Lastly, given the design of this study, causality cannot be inferred. In this study, the direct effect of COE on patient experience only suggests that this type of engagement explains a significant amount of variability in patient experience.

Conclusion
Acute care hospitals in the United States have experienced challenges associated with health care policy reform (56) and the ongoing turmoil of the COVID-19 pandemic has considerably overburdened hospitals as they continue to strive to improve quality and patient experience under these conditions. Scholars have acknowledged that, while hospital leaders are pursuing approaches to improve patient experience, they must also consider how to create a healthy organizational environment for their employees and to ensure that their work is meaningful, which is well-established precursor to engagement (57). Overall, research on engagement has demonstrated the many positive benefits it has for individuals and the organization. However, the focus on COE has not been given adequate attention. The findings from this study offer initial insight about how focusing on the COE of all hospital employees, not just that of clinical staff, may be a way to positively influence patient experience. With global trends focusing on patient-centered care, which embraces patient engagement and the active involvement of their caregivers (17,57), and recognizing that all hospital employees play a part in the provision of patient care suggests the need for leaders to promote COE to enhance patient experience.

Appendix
(Note: Permission from the Academy of Management to republish has been obtained.)

Barrick et al. (2015) Collective Organizational Engagement Scale

1. My co-workers and I really “throw” ourselves into our work.
2. I find nearly everyone devotes a lot of effort and energy to our work.
3. My co-workers and I gain considerable pride from performing our jobs well.
4. Nearly everyone at work feels passionate and enthusiastic about our jobs.
5. Performing work in my work area (as a whole) is so absorbing that we often forget about the time.
6. My co-workers and I tend to be highly focused when doing our jobs.

Responses are measured using a 5-point Likert-type scale, ranging from 1 = “strongly disagree” to 5 = “strongly agree.”

Amended Collective Organizational Engagement Survey
In this hospital:

1. Employees really “throw” themselves into their work.
2. I find nearly everyone devotes a lot of effort and energy to their work.
3. Employees gain considerable pride from performing their jobs well.
4. Nearly everyone feels passionate and enthusiastic about his or her job.
5. Performing work is so absorbing that employees often forget about the time.
6. Employees tend to be highly focused when doing their jobs.

Responses are measured using a 5-point Likert-type scale, ranging from 1 = “strongly disagree” to 5 = “strongly agree.”

Authors’ Note
This study was approved by the institutional review board of The University of Texas at Tyler (IRB #F2016-32). Participants, who were hospital leaders, provided non-written informed consent by answering a survey question in the online survey that was implemented using Qualtrics. HCAHPS scores were obtained through the
publicly available data at CMS.gov. Therefore, no patient data was gathered directly, and patient informed consent was not needed for this study.

Acknowledgments
The first author would like to extend her sincere thanks to Dr. Jana Stonestreet (Ph.D., M.S.N., R.N.), U.S. state hospital associations in the Southeast and Southwest, and many others in the medical community who played a part in this research, especially the CEOs and members of leadership teams who responded to the surveys administered in this study. As an alumna of the University of Texas at Tyler, the first author would also like to acknowledge the late Dr. Jerry W. Gilley, former Department Chair and Coordinator of the Doctoral Program in Human Resource Development at The University of Texas at Tyler, who served on her dissertation committee.

The authors would like to express their gratitude to Dr. Tom English, The University of Alabama, for his helpful insights on an earlier version of this manuscript which was developed from the first author’s dissertation, along with their appreciation to the editorial team and anonymous reviewers who generously provided thoughtful feedback during the review process.

Animals were not a part of the study.

Informed consent was obtained from the participants in the online survey for their anonymized information to be used in this study. Patient informed consent was not applicable.

Declaration of Conflicting Interests
The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding
The author(s) received no financial support for the research, authorship, and/or publication of this article.

ORCID iD
Mary Lynn Lunn, PhD https://orcid.org/0000-0001-8671-8475

References
1. Lown BA, Shin A, Jones RN. Can organizational leaders sustain compassionate, patient-centered care and mitigate burnout? J Healthc Manag. 2019;64:394-412.
2. Gierlinger S, Barden A, Giammarinaro N. Turned upside down: the role of New York patient experience leaders during COVID-19. J Patient Exper. 2020;7:287-90.
3. Kahn WA. Psychological conditions of personal engagement and disengagement at work. Acad Manag J. 1990;33:692-24.
4. Barbagliotti AL. Work engagement in nursing: a concept analysis. J Adv Nurs. 2012;68:1414-28.
5. Christian MS, Garza AS, Slaughter JE. Work engagement: a quantitative review and test of its relations with task and contextual performance. Personnel Psychol. 2011;64:89-136.
6. Rao S, Ferris TG, Hidrue MK, Lehrhoff SR, Lenz S, Hefferman J, et al. Physician burnout, engagement and career satisfaction in a large academic medical practice. Clin Med Res. 2020;18:3-10.
7. Rich BL, LePine JA, Crawford ER. Job engagement: antecedents and effects on job performance. Acad Manag J. 2010;53:617-35.
8. Stewart GL, Courtright SH, Barrick MR. Peer-based control in self-managing teams: linking rational and normative influence with individual and group performance. J Appl Psychol. 2012;97:435-47.
9. Shuck B, Osam K, Zigarmi D, Nimon K. Definitional and conceptual muddling: identifying the positionality of employee engagement and defining the construct. Hum Res Develop Rev. 2017;16:263-93.
10. Barrick MR, Thurgood GR, Smith TA, Courtright SH. Collective organizational engagement: linking motivational antecedents, strategic implementation, and firm performance. Acad Manage J. 2015;58:111-35.
11. Adelman K. Promoting employee voice and upward communication in healthcare: the CEO’s influence. J Healthc Manage. 2012;57:133-47.
12. Buhlman N, Lee TH. When patient experience and employee engagement both improve, hospitals’ rating and profits climb. Harv Business Rev. 2019. Accessed September 28, 2020. https://hbr.org/2019/05/when-patient-experience-and-employee-engagement-both-improve-hospitals-ratings-and-profits-climb
13. Elliott MN, Lehrman WG, Goldstein EH, Giordano LA, Beckett MK, Cohea CW, et al. Hospital survey shows improvements in patient experience. Health Aff. 2010;29:2061-7.
14. Galstian C, Hearld L, O’Connor S, Borkowski N. The relationship of hospital CEO characteristics to patient experience scores. J Healthc Manage. 2018;63:50-61.
15. Centers for Medicare and Medicaid Services. The hospital value-based purchasing (VBP) program. 2021. Accessed February 25, 2021. https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Value-Based-Programs/HVBP/Hospital-Value-Based-Purchasing
16. The Beryl Institute. Defining patient experience. 2021. Accessed March 3, 2021. https://www.theberlinstitute.org/page/DefiningPX
17. Larson E, Sharma J, Bohren MA, Tunçalp O. When the patient is the expert: measuring patient experience and satisfaction with care. Bull World Health Organ. 2019;97:563-9.
18. Wang DE, Tsugawa Y, Figueroa JF, Jha AK. Association between the centers for Medicare and Medicaid Services hospital star rating and patient outcomes. JAMA Intern Med. 2016;176:848-50.
19. Spiegelman P, Berrett B. Patients Come Second. An Inc. Original; 2013.
20. Bredimus B. Changing culture to drive nurse engagement and superior patient experience. Nurse Lead. 2019;17:395-8.
21. Cardarelli R, Slimack M, Gottschalk G, Ruszkowski M, Sass J, Browne K, et al. Translating provider and staff engagement results to actionable planning and outcomes. J Patient Exp. 2019;7:534-40.
22. Hilton N, Sherman RO. Promoting work engagement: one medical center’s journey. Nurse Lead. 2015;13:52-7.
23. Neubert MJ, Hunter EM, Tolentino RC. A servant leader and their stakeholders: when does organizational structure enhance a leader’s influence? Leadership Quart. 2016;27:896-910.
24. Duberman TL, Sachs RH. From Competition to Collaboration: How Leaders Cultivate Partnerships to Drive Value and Transform Health. Health Administration Press; 2019.

25. Amernic J, Russell C. CEO Speeches and safety culture: British Petroleum before the Deepwater Horizon disaster. Crit Perspect Account. 2017;47: 61-80.

26. Baird K, Kirby A. Engaging leaders in the patient experience. Healthc Execut. 2014;29:62-5.

27. Prottas DJ, Nummelin MR. Behavioral integrity, engagement, organizational citizenship behavior, and service quality in a healthcare setting. J Healthc Manag. 2018;63:410-24.

28. Sekhar C, Patwardhan M, Vyas V. Linking work engagement to job performance through flexible human resource management. Adv Develop Hum Res. 2018;20:72-87.

29. Saks AM, Gruman JA. What do we really know about Employee Engagement? Hum Resour Dev Q. 2014;25:155-82.

30. Harter JK, Schmidt FL, Asplund JW, Killham EA, Agrawal S. Casual impact of employee work perceptions on the bottom line of organizations. Perspect Psychol Sci. 2010;5:378-89.

31. Saks AM. Translating employee engagement research into practice. Organ Dynam. 2017;46:76-86.

32. Bowen DE, Schneider B. A service climate synthesis and future research agenda. J Serv Res. 2014;17:5-22.

33. Schneider B, Macey WH, Young SA. The climate for service: a review of the construct with implications for achieving CLV goals. J Relation Market. 2006;5:111-32.

34. Senot C, Chandrasekaran A, Ward PT. Collaboration between service professionals during the delivery of health care: evidence from a multiple-case study in U.S. hospitals. J Operat Manag. 2016;42-43:62-79.

35. Vogus TJ, McClelland LE. When the customer is the patient: lessons from healthcare research on patient satisfaction and quality ratings. Hum Res Manag Rev. 2016;26: 37-49.

36. Elliott MN, Cohea CW, Lehman WG, Goldstein EH, Cleary PD, Giordano LA, et al. Accelerating improvement and narrowing gaps: trends in patients’ experiences with hospital care reflected in HCAHPS public reporting. Health Serv Res. 2015; 50:1850-67.

37. Al-Amin M, Schiaffino M, Park S, Harman J. Sustained hospital performance on hospital consumer assessment of hospital care providers and systems measures: what are the determinants? Jo Healthc Manag. 2018;63:15-28.

38. Merlino JI, Raman A. Health care’s service fanatics. Harv Bus Rev. 2013;91:108-16.

39. Ryan AM, Krinsky S, Mauer KA, Dimick JB. Changes in hospital quality associated with hospital value-based purchasing. N Engl J Med. 2017;376:2358-66.

40. Hair J, Black WC, Babin BJ, Anderson RE. Multivariate Data Analysis. 7th ed. Pearson; 2010.

41. Centers for Medicare and Medicaid Services. CMS hospital value-based purchasing program results for fiscal year 2020. 2019. Accessed September 28, 2020. https://www.cms.gov/newsroom/fact-sheets/cms-hospital-value-based-purchasing-program-results-fiscal-year-2020

42. Yukl G. Effective leadership behavior: what we know and what questions need more attention. Acad Manage Perspect. 2012; 26: 66-85.

43. Centers for Medicare and Medicaid Services. Hospital CAHPS (HCAHPS). 2020. Accessed March 15, 2021. https://www.cms.gov/Research-Statistics-Data-and-Systems/Research/CAHPS/HCAHPS1

44. Centers for Medicare and Medicaid Services. HCAHPS three-state pilot study analysis results. 2003. Accessed October 1, 2018. https://www.cms.gov/Medicare/Quality-Initiatives-Patient-AssessmentInstruments/HospitalQualityInitiatives/Downloads/Hospital3State_Pilot_Analysis_Final200512.pdf

45. Betts D, Balan-Cohen A, Shukla M, Kumar N. The Value of Patient Experience: Hospitals with Better Patient-reported Experience Perform Better Financially. Deloitte Center for Health Solutions. 2016. Accessed April 5, 2021. https://www2.deloitte.com/us/en/pages/life-sciences-and-healthcare/articles/hospitals-patient-experience

46. Schumacker RE, Lomax RG. A Beginner’s Guide to Structural Equation Modeling. 3rd ed. Routledge; 2010.

47. Kline RB. Principles and Practice of Structural Equation Modeling. 3rd ed. Guilford Press; 2011.

48. Berg D. Practitioner application: transitioning to a new facility: the crucial role of employee engagement. J Healthc Manage. 2018;63:77-8.

49. Kahn JM, Maurer AR, Wartman PS, Sachs BP. A case for change: disruption in academic medicine. Acad Med. 2014;89:1216-9.

50. Holland P, Cooper B, Sheehan C. Employee voice, supervisor support, and engagement: the mediating role of trust. Human Res Manage. 2017;56:915-29.

51. Capp R, Misky G, Lindrooth R, Honigman B, Hardy R, et al. Coordination program reduced acute care use and increased primary care visits among frequent emergency care users. Health Aff. 2017;36:1705-11.

52. Owens K, Keller S, McDonald A, Eggers J. The imperative of culture: a culture on workforce engagement, patient experience, physician engagement, value-based purchasing, and turnover. J Healthc Leaders. 2017;9:25-31.

53. Fletcher L. The everyday experiences of personal role engagement: what matters most? Human Res Develop. 2017;28:451-79.

54. Boamah S, Laschinger H. Engaging new nurses: the role of psychological capital and workplace empowerment. J Res Nurs. 2015;20:265-77.

55. Collini SA, Guidroz AM, Perez LM. Turnover in health care: the mediating effects of employee engagement. J Nurs Manage. 2015;23:169-78.

56. Livingston S. Industry reacts to Medicare for all traction. Modern Healthc. 2019;49:0016.