

## Creating Patient Loyalty in the Emergency Department and Critical Care Units: An Analysis of the Key Drivers Influencing the Patient Experience

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### Abstract

The patient experience is widely regarded as strategically important to the healthcare industry. Leaders, staff and physicians are frequently working to improve patient satisfaction in their healthcare organizations. While there are various motivations for improving the patient experience ranging from impacting hospitals' financial performance to related higher quality outcomes and market share, excellence in the patient experience also represents a unique opportunity to restore compassionate care to the healthcare industry.

Our study was designed to ascertain the interactions or touchpoints that are most important to patients in two vital and high acuity areas of care: The Emergency Department and Intensive Care Units (ICU). Based on an analysis of 441 emergency departments and 40 critical care departments, our team was able to isolate aspects of the patient care experience that are important in creating loyalty to the organization where patients received care. The key drivers reflect the significance of patient perceptions of teamwork, caring and understanding by nurses and physicians, overall safety and discharge instructions. Our team is encouraged by these findings, as each key driver represents skills and competencies that can be cultivated in the Emergency Department and Intensive Care Settings. Improving these aspects of care can ultimately improve the patient-caregiver relationship and create a more rewarding environment in which to both deliver and receive excellent healthcare.

**Keywords:** Patient Experience; Emergency Department; Critical Care; Patient Loyalty; Intensive Care Unit; Patient-Centered Care

### Abbreviations

PRC: Professional Research Consultants, Inc. a United States firm dedicated to measuring and improving the patient, employee, physician and consumer/community experience in healthcare; HCAHPS: Hospital Consumer Assessment of Healthcare Providers and Systems Survey

### Introduction

The patient experience is defined as the sum of all interactions, shaped by an organization's culture, that influence patient perceptions across the continuum of care [1]. Improving the patient experience has been identified as a top priority for healthcare leaders [2,3]. The patient experience not only represents a fiscal consequence to hospitals in terms of payment reimbursement and market share, but it is also widely regarded as an important quality measure [4-6,10].

Hospitals with more satisfied patients (as measured by Hospital Consumer Assessment of Healthcare Providers and Systems or HCAHPS) have both lower readmission rates and mortality rates [5]. Additionally, more positive Yelp patient experience feedback has been correlated with lower mortality and readmissions [6]. Research also demonstrates that when patients perceive the quality of care received as excellent, they are 3.7 times more likely to recommend the hospital for care [7]. Staff and physician satisfaction have been linked to patient experience performance as well [11,12].

Both the Emergency and Critical Care departments represent some of the most intense and acute care environments where patients face potentially life-threatening illness and unique symptoms. These environments are also highly unpredictable and sometimes chaotic in that patients may arrive any moment by ambulance to the emergency department or have to be rushed to intensive care based on unexpected and sudden changes in patient symptoms [8-11]. To coordinate patient care and experiences in these settings, a number of professions are required to perform as a team, including nursing, medicine, imaging, laboratory, and pharmacy, among others [10].

Various literature reviews and studies have found that patient perceptions of care are highly influenced by staff and patient communication, wait times, compassion and empathy and confidence in caregivers [2,13].

Given the importance of the patient experience to the healthcare industry and the high stakes nature of the emergency and critical care environments, our goal is to quantify the voices of patients across the United States and understand drivers of patient loyalty following emergency department visits and critical care stays so that leaders, staff, and physicians can focus on the behaviors and processes that will make a difference.

### Materials and Methods

With permission from Professional Research Consultants (PRC), this analysis reflects the findings of patient experiences from 441 emergency departments and 40 critical care departments from January 01, 2016 to December 31, 2018 in United States hospitals.

Patients were surveyed following discharge from the Emergency Department and Inpatient Intensive Care/Critical Care Stay using a telephone methodology where an interviewer asks standardized questions reflective of patient loyalty in the emergency department and critical care environments. The survey used has 21 questions for ED and 25 questions for critical care (some hospitals also administer the HCAHPS questions in addition to PRC's loyalty questions). Stepwise multiple regression analysis was performed to determine the key drivers or most likely influencers of patient perceptions of overall quality of care. Patients report on each question with a rating of Excellent to Poor using a five-point scale:

- 5= Excellent
- 4= Very Good
- 3= Good
- 2= Fair
- 1= Poor

For the purposes of this study, our team analyzed the frequency of the measures identified as the #1 key driver and reported on the most frequent measures (based on a stepwise multiple regression analysis) for the emergency and intensive care environments. Broadly speaking, the survey instruments address aspects of physician care and nursing care specifically, while also asking the patient to reflect on the care team as a whole. In addition, questions address the physical environment, timeliness, safety, privacy, and discharge instructions experienced during the emergency department or critical care stay.

## Results

### Emergency department key drivers of patient loyalty

The key drivers that were most prevalent across emergency department patients are included in table 1.

Item Theme	Specific Item Text	% of time Item was the #1 key driver for hospitals	R-Sq Range (lowest-highest r-sq values for each measure)
Overall Teamwork	How would you rate the overall teamwork between the doctors, nurses, and staff?	25.6%	0.432 to 0.926
Doctor Understanding/Caring	How would you rate the doctors' understanding and caring?	12.9%	0.371 to 0.952
Discharge Instructions	How would you rate the instructions given to you upon discharge?	12.7%	0.355 to 0.909
Doctor Instructions/Explanations of Tests	How would you rate the doctors' instructions or explanations of your treatment or tests?	11.8%	0.309 to 0.877

**Table 1:** Patient experience key drivers for the emergency department environment.

As an output of the regression analysis, the r-squared values give us a measure to represent the range of the variance explained for the dependent variable, in this case, Overall Quality of Care. For instance, when we look at Overall Quality of Care for the emergency departments where the #1 key driver is Teamwork, we know that 43.2% - 92.6% of the variation we see in how patients rate the Overall Quality of Care can be explained by looking at how those patients responded to the Teamwork question (How would you rate the overall teamwork between the doctors, nurses and staff?). The #2 key driver is Doctor Understanding/Caring which represents 37.1% - 95.2% of the variation in patient's rating of Overall Quality of Care. Discharge Instructions as the 3<sup>rd</sup> key driver signifies 35.5% - 90.9% and Doctor Instructions/Explanations of Tests as the 4<sup>th</sup> key driver representing 30.9% - 87.7% of the variation we see in influencing ratings of Overall Quality of Care in the emergency department.

### Intensive care unit department key drivers of patient loyalty

Among patients of the inpatient intensive care units, the following key drivers had the highest frequency.

Item Theme	Specific Item Text	% of time Item was the #1 key driver for hospitals	R-Sq Range (lowest-highest r-sq values for each measure)
Overall Teamwork between Doctors Nurses and Staff	How would you rate the overall teamwork between the doctors, nurses, and staff?	20.0%	0.455 to 0.727
Overall Level of Safety	How would you rate the level of safety you felt while in the hospital?	15.0%	0.411 to 0.713
Nurses Understanding and Caring	How would you rate the nurses' understanding and caring?	12.5%	0.309 to 0.719

**Table 2:** Patient experience key drivers for the intensive care unit environment.

As an output of the regression analysis, the r-squared values give us a measure to represent the range of the variance explained for the dependent variable, in this case, Overall Quality of Care. For example, when we look at Overall Quality of Care for the intensive care units where the #1 key driver is Teamwork, we see that 45.5% - 72.7% of the variation we see in how patients rate the Overall Quality of Care can be explained by looking at how those patients responded to the Teamwork question. Overall Level of Safety (e.g. how would you rate the level of safety you felt while in the hospital?) as the 2<sup>nd</sup> key driver represents 41.1% - 71.3% of the variation in patients' response to Overall Quality of Care. Lastly, Nurses Understanding and Caring accounts for 30.9% - 71.9% of the variation in patients' ratings of Overall Quality of Care in intensive care units.

### Discussion

Throughout our analysis we have sought to find aspects of care that are powerful influencers of the patient experience in the Emergency Department and Critical Care units. The results of our analysis yield opportunities to create focus for patient experience improvement efforts in these environments. Our findings reinforce current healthcare industry priorities such as communication, safety, teamwork and discharge/readmissions. These key driver aspects of care can serve to provide guidance for hospitals who are struggling to improve patient experiences of care, elevate quality outcomes, increase loyalty, and drive market share.

### Emergency department

Emergency Departments should be focusing their improvement efforts on patient perceptions of teamwork, doctor understanding/caring, discharge instructions, and doctor instructions/explanations of tests, and when they do, they are likely to be rewarded with more favorable perceptions of the Overall Quality of Care as well.

### Teamwork

Patient perceptions of Teamwork (in particular, the extent to which patients could report "excellent" on the item: How would you rate the overall teamwork between the doctors, nurses and staff?) represents the number one key driver of the emergency department experience and accounts for 43.2% - 92.6% in the variation in patient's rating of Overall Quality of Care. Teamwork is frequently discussed in the literature as not only an important component to quality outcomes, but patient experiences of care as well [10,14-16]. Teamwork is considered critical in the emergency care environment; however, there are limited studies on the impact of how patients "perceive" teamwork amongst their care team [15]. In one study evaluating teamwork in the emergency department, patients were keen observers of certain characteristics including: coordination and communication, team processes, and team members relate to one another and the patient [17].

### Physician relationship and communication

Two of the top four drivers were related to patients' perceptions of the doctor: Doctor Understanding and Caring and Doctor Instructions/Explanations of Tests. These items rate the doctors' understanding and caring and rate the doctors' instructions of your treatment or tests, accounting for 37.1% - 95.2% and 30.9% - 87.7% of the variation in ratings of Overall Quality of Care respectively. These two key drivers highlight the importance of the patient/physician relationship in the emergency department. Given that physician-patient interactions typically represent a small percentage of time in a total emergency department visit, the finding indicates the heightened importance that those impressions and interactions are effective. Additionally, it appears important that entire care team help support physicians by also demonstrating understanding, caring and clear instructions/explanations [13]. Medical doctors are among the most trusted professions and it is not surprising that patients want to have excellent interactions with their physicians [18]. Opportunities for improvement center around communication and listening skills training, being sensitive to health literacy, and understanding patients' unique expectations for information and care participation [13,17,19,20]. Additionally, *Emergency Physicians Monthly* also noted that post-visit calls, especially from the physician, is another tactic to demonstrate a caring attitude that can make patients feel better about their overall experience [21]. Lastly, building and maintaining a therapeutic physician/patient relationship that reflects trust, caring, empathy, and respect is critical to achieving patient loyalty [22,23].

### Discharge instructions

Our findings that Discharge Instructions (in particular, the extent to which patients could report Excellent on the item “How would you rate the instructions given to you upon discharge?”) represents the third key driver of the emergency department experience and accounts for 37.1% - 95.2% in the variation in patients’ rating of Overall Quality of Care is consistent with the literature on the importance of preparing patients to leave the hospital. Patients’ understanding of their discharge instructions for home care, medications and signs/symptoms signaling a need to return to the emergency department have been demonstrated in studies to result in both patient experience and readmission consequences [24-27]. From the patient perspective, most patients cite their primary reasons for returning to the emergency department post visit as uncertainty or fear about their condition [28]. One study found that when patients had poor perceptions of involvement in care and in written discharge instructions, they experienced a 54% higher chance of readmission than did patients with positive perceptions of those aspects of care [24]. Discharge Instructions can provide patients with reinforcement of in-hospital education, a sense of safety, a resource document, information to contact appropriate personnel, and confidence-building [26]. Our research affirms the importance that patients have a sense of efficacy and clarity about discharge instructions, which has implications for staff helping patients feel prepared to leave the emergency department and for achieving patient loyalty and avoid unnecessary readmissions.

### Intensive care units

Our findings indicate Intensive Care Units should be honing their improvement initiatives on patient perceptions of teamwork, overall level of safety and nurse understanding and caring, and when they do, they are likely to achieve more favorable perceptions of the Overall Quality of Care.

### Teamwork

Among intensive care unit patients, perceptions of Teamwork (in particular, the extent to which patients could report “excellent” on the item: How would you rate the overall teamwork between the doctors, nurses and staff?) represents the number one key driver of the ICU experience and accounts for 45.5% - 72.7% in the variation Overall Quality of Care ratings. Similarly to our findings in the Emergency Department, Teamwork is an important component of the experience for these critically ill patients. Teamwork and interprofessional collaboration are not only essential for achieving patient loyalty but also for the safest, quality outcomes [29-30,32]. In the intensive care unit, patients and family members must clearly understand how their diverse care team contributes and works together [31]. Additionally, patients and their family members want to see attributes such as effective communication, care coordination, involvement in decisions, and clear explanations [31].

### Safety

The second most notable patient experience driver was perceived level of safety (e.g. How would you rate the level of safety you felt while in the hospital?). Perceptions of safety account for 41.1% to 71.3% in the variation in patients’ rating of Overall Quality of Care. It is a fundamental need for ICU patients to feel safe. While the research is limited, studies indicate patients’ perceptions of safety are highly influenced by their loved ones and their perception of having their individual needs, beliefs and desire for information met [33,34]. Out of necessity, care teams often prioritize keeping patients alive and safe, and opportunities exist to meet the psychological needs as well [35]. Given the critical nature of patient conditions in the ICU, the emotions and fear that accompany severe illness demonstrate the need for reassurance and creating loyalty by demonstrating diligence for safe care to both patients and their family members.

### Nurses’ understanding and caring

Nurses’ Understanding and Caring was the third driver uncovered in our analysis accounting for 30.9% to 71.9% of the variation in patients’ rating of Overall Quality of Care. Given the time and duration in the ICU, frequency of communication with nurses is high, and nurses are typically more visible since the units are more contained spatially. Patients want to have an excellent relationship with their nurses and they, like physicians, are among the most trusted of professions [18]. Many times, communication is limited for patients be-

cause of the nature of critical illness (sedation, fatigue, artificial airways, and/or mechanical ventilation) [36]. The degree to which nurses can demonstrate empathetic and caring behaviors with patients and their family members can increase participation, identify concerns and provide support during a traumatic experience [35,37,39]. Healthcare quality is highly determined by the quality of the relationship between patients and nurses and the absence of effective communication can lead to negative outcomes [38]. This finding indicates staff must be cognizant of their interactions with patients both at the bedside and throughout the unit to demonstrate caring and understanding behaviors and communication.

### Practical implications

Our research has uncovered key drivers that influence patient loyalty in the emergency and critical care settings. More research is needed to uncover how patients recognize attributes identified: Teamwork, Safety, Caring and Understanding by Nurses and Physicians, Discharge Instructions and Instructions/Tests. It is likely that working on any one of these aspects of care identified as key drivers will improve patients' overall perceptions of the care they received in the emergency department and critical care areas and support quality/safety outcomes.

Patient perceptions of teamwork and coordination of care amongst caregivers were determined to be most important in both the Emergency and Critical Care settings. This is not surprising: the level of acuity for these patients requires teamwork from a myriad of healthcare professionals. The implication is that teamwork must be displayed and evident in interactions with patients.

As organizations look to establish patient loyalty and build climates of compassionate care, we recommend creating awareness of the attributes that are statistically proven to be more important to patients when evaluating their healthcare. Creating patient loyalty depends on relationship-building, communication skills, and working together as a care team. These are skills and behaviors that can be developed and reinforced to improve patient experiences of care and support quality outcomes. Through competency development and skill mastery, leaders, staff and physicians can become more proficient and consistent in actively exhibiting teamwork, safety, understanding and caring, and discharge information. However, our research cannot replace taking the opportunity to connect with each patient on a personal level to understand their needs and expectations for care so the care team can listen, learn, and serve best.

### Conclusion

Across our analysis of patient feedback from their stays in the Emergency and Intensive Care Department environments, we have found that patients consider the importance and quality of their interactions with their care team important and quality of their interactions with their care team. Given the unpredictable clinical circumstances in these acute care settings, these behaviors uncovered as key drivers can elevate the staff to excellence in patient experience performance.

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### Conflict of Interest

No conflicts of interest exist.

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