

Drivers of Patient Experience Variation

The following summaries of recent peer-reviewed articles describe the impact of various patient, provider, and outcomes variables (e.g., gender, provider empathy, length of stay) on patient experience. Citations are linked to full-text articles [*] when available.

Study	Objective	Conclusion
<p>Peng, F. B., Burrows, J. F., Shirley, E. D., & Rosen, P. (in press). Unlocking the doors to patient satisfaction in pediatric orthopedics. <i>Journal of Pediatric Orthopedics</i>.</p>	<p>To identify the major drivers of patient experience in pediatric orthopedics.</p>	<ul style="list-style-type: none"> ■ The key drivers of satisfaction in pediatric orthopedics are a mixture of the patient-physician relationship, overall cheerfulness of the practice, and interactions with the staff. ■ Patients and families seen in pediatric orthopedic outpatient clinics in an academic children's health system highly value meaningful interactions with health care providers. ■ Positive patient experiences are most influenced by professional courtesy, practice cheerfulness, and staff collaboration.
<p>Batbaatar, E., Dorjdagva, J., Luvsannyam, A., Savino, M. M., & Amenta, P. (2017). Determinants of patient satisfaction: a systematic review. <i>Perspectives in Public Health</i>, 137(2), 89-101.</p>	<p>To identify and review evidence regarding determinants of patient satisfaction between 1980 and 2014.</p>	<ul style="list-style-type: none"> ■ The strongest determinants of patient satisfaction across studies are perceptions of health service quality characteristics. ■ Among service-related determinants, health providers' interpersonal care quality is the essential determinant of patient satisfaction. ■ In order, the following are all positively and strongly associated with patient satisfaction: quality of health care providers' interpersonal skills, competence, physical environment of the facility, accessibility, continuity of care, hospital characteristics, and outcome of care.
<p>Mazurenko, O., Collum, T., Ferdinand, A., & Menachemi, N. (2017). Predictors of hospital patient satisfaction as measured by HCAHPS: A systematic review. <i>Journal of Healthcare Management</i>, 62(4), 272-283.</p>	<p>To review the patient satisfaction literature and to identify predictors of patient satisfaction based on measures from the HCAHPS survey.</p>	<ul style="list-style-type: none"> ■ Several patient- and hospital-level predictors are consistently associated with lower patient satisfaction: <ul style="list-style-type: none"> – Racial/ethnic minorities, women, and older patients (85 years and older) consistently report lower satisfaction with their care. – Safety net, larger (> 100 beds), and for-profit hospitals are associated with lower patient satisfaction. ■ Several market factors that represent the availability of market resources (level of per capita income, metropolitan status, etc.) are associated with lower patient satisfaction.
<p>McFarland, D. C., Shen, M. J., & Holcombe, R. F. (2017). Predictors of satisfaction with doctor and nurse communication: A national study. <i>Health Communication</i>, 32(10),</p>	<p>To examine county-level data including population density, population diversity, and hospital structural factors as predictors of patient satisfaction with doctor</p>	<ul style="list-style-type: none"> ■ County-level predictors should be considered when interpreting patient experience with doctor and nurse communication and designing multi-level patient-centered communication improvement strategies. ■ College education and White ethnicity are the factors that most strongly predict a favorable rating of doctor and nurse communication, respectively.

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1217-1224.	and nurse communication.	<ul style="list-style-type: none"> ■ Non-English speaking primary language is the factor that most strongly predicts an unfavorable rating of doctor communication. ■ Number of hospital beds and being foreign-born are the factors that most strongly predict an unfavorable rating of nurse communication.
McFarland, D. C., Shen, M. J., Parker, P., Meyerson, S., & Holcombe, R. F. (2017). Does hospital size affect patient satisfaction? <i>Quality Management in Health Care</i> , 26(4), 205-209.	To determine whether hospital size affects patient experience via HCAHPS and to evaluate which patient experience dimensions vary by hospital size.	<ul style="list-style-type: none"> ■ Larger hospitals receive lower patient experience scores when evaluated as an aggregate score (i.e., summation of all HCAHPS dimensions) and among most of the HCAHPS dimensions. ■ The HCAHPS dimensions related to not receiving attention (i.e., help as soon as needed), lack of hospital cleanliness, and poor doctor communication scored significantly lower for larger hospitals. ■ As hospital size increases, patients perceive the hospital to not provide attention quickly, to not be as clean, and to have poor doctor communication, whereas nursing communication scores actually increase.
MacAllister, L., Zimring, C., & Ryherd, E. (2016). Environmental variables that influence patient satisfaction: A review of the literature. <i>HERD</i> , 10(1), 155-169.	To explore how the physical health care environment may influence patient experience and outcomes.	<ul style="list-style-type: none"> ■ There are certain features of the spatial layout and environmental design in hospital settings that influence patient experience and outcomes. ■ The spatial environment of a hospital has an impact on interpersonal or relationship-based care. ■ Rooms with a view and lower sound levels improve patient sleep and pain levels, and reduce length of stay. ■ The spatial configuration of visibility, room handedness, and nurse's station location all contribute to falls, mortality, satisfaction of patients, and staff behavior.
Nichol, J. R., Fu, R., French, K., Momberger, J., & Handel, D. A. (2016). Association between patient and emergency department operational characteristics and patient satisfaction scores in a pediatric population. <i>Pediatric Emergency Care</i> , 32(3), 139-141.	To identify patient and operational characteristics associated with patient satisfaction scores.	<ul style="list-style-type: none"> ■ Emergency departments looking to increase satisfaction scores should focus efforts on decreasing door-to-room times. ■ Longer wait times reduce patient experience performance regardless of how severe the condition of the patient. ■ Patients who perceive their length of stay differently are less satisfied overall; patients with a larger difference in perceived/reported length of stay versus the actual length of stay on their chart have lower scores for overall patient experience and likelihood to recommend.
Singh, S. C., Sheth, R. D., Burrows, J. F., & Rosen, P. (2016). Factors influencing patient experience in pediatric neurology. <i>Pediatric Neurology</i> , 60, 37-41.	To identify the key patient experiences that lead to higher patient satisfaction in pediatric neurology.	<ul style="list-style-type: none"> ■ The overall mood and tone of the health care team has the most impact on the pediatric neurology patient experience. ■ Multiple individuals, rather than the individual care provider alone, are responsible for overall pediatric neurology patient experience. ■ Cooperative staff members, cheerfulness of staff members, and cleanliness of practice have the highest correlation with likelihood to recommend in pediatric

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<p>Iannuzzi, J. C., Kahn, S. A., Zhang, L., Gestring, M. L., Noyes, K., & Monson, J. R. (2015). Getting satisfaction: Drivers of surgical Hospital Consumer Assessment of Healthcare Providers and Systems survey scores. <i>Journal of Surgical Research</i>, 197(1), 155-161.</p>	<p>To describe clinical predictors of patient satisfaction in surgical patients.</p>	<p>neurology.</p> <ul style="list-style-type: none"> ■ Interpersonal provider-patient interactions have the greatest impact on Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey top box performance. ■ Initiatives aimed at increasing HCAHPS scores should include health care provider interpersonal communication training. ■ Other initiatives to improve patient experience should focus on decreasing unnecessary unit transfers, hospital environment, and racial sensitivity training.
<p>Kahn, S. A., Iannuzzi, J. C., Stassen, N. A., Bankey, P. E., & Gestring, M. (2015). Measuring satisfaction: Factors that drive Hospital Consumer Assessment of Healthcare Providers and Systems survey responses in a trauma and acute care surgery population. <i>The American Surgeon</i>, 81(5), 537-43.</p>	<p>To identify factors associated with trauma and acute care surgery patient experience as determined by Hospital Consumer Assessment of Healthcare Providers and Systems survey.</p>	<ul style="list-style-type: none"> ■ A patient's overall perception of his or her hospital stay is primarily tied to interactions with providers, especially being treated with respect by nurses and doctors and providers listening to what the patients have to say. ■ Speedy responsiveness, hospital environment, and pain control also contribute to improved patient experience. ■ Patient perception that the team is doing everything that they can for pain control is more important than actually achieving pain control. Patients want to know that health care providers care about them, which is also reflected in the importance of listening to them, treating them with respect, and taking the time to explain things to them.
<p>Danforth, R. M., Pitt, H. A., Flanagan, M. E., Brewster, B. D., Brand, E. W., & Frankel, R. M. (2014). Surgical inpatient satisfaction: What are the real drivers? <i>Surgery</i>, 156(2), 328-335.</p>	<p>To test the hypothesis that patient, surgeon, and outcomes variables are important drivers of inpatient satisfaction.</p>	<ul style="list-style-type: none"> ■ Several patient factors, expectations of patients with cancer, and postoperative complications are important and clinically relevant drivers of surgical inpatient satisfaction. ■ Independent predictors of dissatisfaction included younger patients, admission via the Emergency Department, chronic narcotic use, lesser severity of illness, unresected cancer, and severe postoperative complications. ■ Survey questions related to surgeon empathy and emotional intelligence also correlated positively with overall satisfaction.
<p>[*] Quigley, D. D., Elliott, M. N., Farley, D. O., Burkhart, Q., Skootsky, S. A., & Hays, R. D. (2014). Specialties differ in which aspects of doctor communication predict overall physician ratings. <i>Journal of General Internal Medicine</i>, 29(3), 447-454.</p>	<p>To determine the importance of various aspects of patient-centered communication to overall physician ratings by specialty.</p>	<ul style="list-style-type: none"> ■ The physicians' show of respect is the aspect of communication most strongly related to the overall physician rating for most specialties. ■ Three aspects of patient-centered communication—showing respect, providing easy-to-understand instructions, and spending enough time—vary by specialty in the extent to which they predict overall physician ratings, suggesting that patients value these aspects of communication differently depending on the type of specialty care they are seeking. ■ Specialists should target aspects of communication that are most important for their specialty.

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<p>[*] Elliott, M. N., Lehrman, W. G., Beckett, M. K., Goldstein, E., Hambarsoomian, K., & Giordano, L. A. (2012). Gender differences in patients' perceptions of inpatient care. <i>Health Services Research</i>, 47(4), 1482-1501.</p>	<p>To examine gender differences in inpatient experiences and how they vary by dimensions of care and other patient characteristics.</p>	<ul style="list-style-type: none"> ■ Women reported less positive experiences than men on seven of eight measures of the Hospital Consumer Assessment of Healthcare Providers and Services survey (with the exception of Doctor Communication) and on both of overall assessments of experiences. ■ The largest gender differences were for Cleanliness of the Hospital Environment and two measures of communications regarding post-hospitalization care (Communication about New Medicines and Discharge Information). ■ The tendency for women to have somewhat worse patient experiences than men was more pronounced for women who were older, less healthy, more educated, non-Hispanic white, or who received care in a for-profit hospital. ■ Targeting the experiences of women may be a promising means of improving overall patient experience scores (because women comprise the majority of all inpatients). Improving female patient experience in the medical and surgical service lines, particularly with respect to Communication with Nurses and staff responsiveness, should be a priority.
<p>Lowe, D. A., Monuteaux, M. C., Ziniel, S., & Stack, A. M. (2012). Predictors of parent satisfaction in pediatric laceration repair. <i>Academic Emergency Medicine</i>, 19(10), 1166-1172.</p>	<p>To define the elements of care that are important to parents during a pediatric laceration repair and to determine the predictors of excellent parent satisfaction.</p>	<ul style="list-style-type: none"> ■ Provider performance, which comprises the elements of physician communication, caring attitude, confidence, and hygiene, was the strongest predictor of excellent parent satisfaction for pediatric patients with emergency department visits for laceration repair. ■ The predictors for excellent satisfaction with the procedure were both provider performance and cosmetic appearance of the wound. ■ Perceived length of stay did not load strongly on any of the factors and may be independent of parents' perceptions of other aspects of their medical care experience during a visit for laceration repair.
<p>Otani, K., Waterman, B., & Dunagan, W. C. (2012). Patient satisfaction: How patient health conditions influence their satisfaction. <i>Journal of Healthcare Management</i>, 57(4), 276-292.</p>	<p>To investigate how patients' health conditions influence the way they combine their health care experiences.</p>	<ul style="list-style-type: none"> ■ Among six attributes (admission process, nursing care, physician care, staff care, food, and room), physician care and food were more important for seriously ill patients than for less seriously ill patients. ■ Seriously ill patients were less likely to be disproportionately influenced by negative reactions to attributes than less seriously ill patients. ■ Seriously ill patients were less likely to rate overall quality of care better than less seriously ill patients and were less likely to recommend to others.

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<p>Greenslade, J. H., & Jimmieson, N. L. (2011). Organizational factors impacting on patient satisfaction: A cross sectional examination of service climate and linkages to nurses' effort and performance. <i>International Journal of Nursing Studies</i>, 48(10), 1188-1198.</p>	<p>To test the model that service climate would increase the effort and performance of nursing groups and, in turn, increase patient satisfaction.</p>	<ul style="list-style-type: none"> ■ By focusing on creating a climate for service, health care managers can improve nursing performance and patient satisfaction with care. ■ In units where management supported and rewarded employees in providing quality service, workgroups demonstrated increased effort in completing job roles. ■ Such units also directed increased effort towards going beyond their job duties and providing extra assistance to patients. ■ Nursing groups that are collectively motivated to provide technical care were perceived by patients to provide more effective technical care. ■ Patient satisfaction is dependent on nurses performing their job tasks effectively.
<p>Turchik, J. A., Karpenko, V., Ogles, B. M., Demireva, P., & Probst, D. R. (2010). Parent and adolescent satisfaction with mental health services: Does it relate to youth diagnosis, age, gender, or treatment outcome? <i>Community Mental Health Journal</i>, 46(3), 282-288.</p>	<p>To examine the relationship between youth and parent satisfaction ratings and the following youth variables: gender, age, primary diagnosis, and changes in functioning and symptomatology after six months of services.</p>	<ul style="list-style-type: none"> ■ In a large sample of youth receiving community mental health services, satisfaction with services differed as a function of the adolescents' clinician-derived primary diagnosis, age, and reported changes in symptoms and functioning. ■ Although significant, these variables accounted for only a small portion of the variance in satisfaction. ■ The relationship between parent and youth ratings of satisfaction was low but significant.