

Improving the Emergency Department Patient Experience

The following summaries of recent resources and peer-reviewed articles describe the impact of various emergency department practices on the patient experience, patient safety, quality, and outcomes. Citations are linked to full-text articles [*] when available. [PG] denotes Press Ganey research.

COMMUNICATION—CARE COORDINATION / CARE TRANSITION

Study	Objective	Conclusion
<p>[*] McCarty, R. L., Zarn, J., Fenn, R., & Collins, R. D. (2015). Frequent ED utilizers: A case management program to address patient needs. <i>Nurse Management</i>, 46(9), 24-32.</p>	<p>To describe a case management program aimed at aligning high emergency department utilizers more closely with a primary care physician to improve care and reduce unnecessary emergency department visits.</p>	<ul style="list-style-type: none"> ■ An individualized case management program administered by nurse case managers in the emergency department decreases the number of subsequent emergency department visits by individuals selected for the program. ■ Reduction of emergency department visits by frequent utilizers may decrease overall operational costs and reduce patient census and waiting times. ■ Having patients return multiple times per day to the emergency department can be demoralizing to staff members' sense of efficacy. Having the ability to refer to the case management program improves staff morale by giving them an effective care option for their patients.
<p>[*PG] Press Ganey. (2015). Increasing value in the emergency department: Using data to drive improvement. South Bend, IN: Author.</p>	<p>To present research and strategies for optimizing the delivery of emergency care, including innovations in communication, care coordination, and resource management.</p>	<ul style="list-style-type: none"> ■ Long wait times and throughput delays exert less impact on emergency department patients' overall perception of care than the degree to which patients feel providers have done everything they can to care for them, to keep them informed about their care plan, and to communicate the reason for delays. ■ Aligning emergency department care with value-based principles requires innovations in communication, care coordination and resource management. ■ Optimizing emergency care demands an unprecedented level of teamwork and a deep understanding of patients' needs and how best to meet them.
<p>Limpahan, L. P., Baier, R. R., Gravenstein, S., Leibmann, O., & Gardner, R. L. (2013). Closing the loop: Best practices for cross-setting communication at ED discharge. <i>The American Journal of Emergency Medicine</i>, 31(9), 1297-1301.</p>	<p>To develop emergency department best practice guidelines for improved communication during patient care transitions.</p>	<ul style="list-style-type: none"> ■ Identified best practices for emergency department care transitions include: <ul style="list-style-type: none"> – Obtaining information about patients' outpatient clinicians – Sending summary clinical information to downstream clinicians – Performing modified medication reconciliation – Providing patients with effective education and written discharge instructions ■ These best practices establish core expectations for communication with downstream providers.

COMMUNICATION—DISCHARGE

Study	Objective	Conclusion
Samuels-Kalow, M. E., Stack, A. M., & Porter, S. C. (2012). Effective discharge communication in the emergency department . <i>Annals of Emergency Medicine</i> , 60(2), 152-159.	To review and analyze the existing literature and recommend best practices on communicating emergency department discharge instructions .	<ul style="list-style-type: none"> Emergency department patients need structured discharge content, presented verbally, with written and visual cues to enhance recall. Written discharge instructions need to be provided in the patient's language and at an appropriate reading level. Understanding of discharge instructions should be confirmed before the patient leaves the emergency department.

COMMUNICATION—PROVIDER

Study	Objective	Conclusion
[*] Sonis, J. D., Aaronson, E. L., Lee, R. Y., Philpotts, L. L., & White, B. A. (2017). Emergency department patient experience: A review of the literature . <i>Journal of Patient Experience</i> , 1-6.	To identify specific factors (e.g., communication , wait times, staff empathy) most commonly identified as influencing emergency department patient experience.	<ul style="list-style-type: none"> Staff-patient communication, wait times, and staff empathy and compassion are most commonly identified as influencing emergency department patient experience. Staff-patient communication is the most frequent theme in emergency department patient experience, underscoring the inherent value that patients place on appropriate and adequate communication. Emergency department patients who perceive that their providers are treating them with empathy, and are communicating with them adequately, may be less dissatisfied with other, less easily improved factors such as prolonged wait times and cramped spaces.
Tothy, A. S., Limper, H. M., Driscoll, J., Bittick, N., & Howell, M.D. (2016). The Ask Me to Explain campaign: A 90-day intervention to promote patient and family involvement in care in a pediatric emergency department . <i>Joint Commission Journal on Quality and Patient Safety</i> , 42(6), 281-285.	To quantify the impact of a specific package of communication improvement activities —the 90-Day Ask Me to Explain Quality Improvement campaign—on patient experience in a pediatric emergency department.	<ul style="list-style-type: none"> The Ask Me to Explain campaign (i.e., the use of signage and staff education on the importance of listening to patients) improves top-box patient satisfaction scores for caregivers' communication in the pediatric emergency department. The campaign has the greatest impact on patient perceptions of staff sensitivity to patient concerns and remaining informed about delays. The campaign's unified focus of managerial, frontline, and ancillary staff on improving a common goal, tracking progress, and holding each other accountable through continuous discussion around each metric being tracked allows for a noticeable change in unit culture.
Johnson, M. B., Castillo, E. M., Harley, J., & Guss, D. A. (2012). Impact of patient and family communication in a pediatric emergency department on likelihood to recommend . <i>Pediatric Emergency Care</i> , 28(3), 243-246.	To identify the specific emergency department patient experience variables that most strongly predict satisfaction as measured by the likelihood to recommend rating.	<ul style="list-style-type: none"> A strong correlation was found between nurse and physician communication variables and emergency department patients' likelihood to recommend. Keeping the patient informed was the communication variable with the strongest correlation to patients' likelihood to recommend. Increased daily census and increased median daily wait times did not impact study findings.

Locke, R., Stefano, M., Koster, A., Taylor, B., & Greenspan, J. (2011). [Optimizing patient/caregiver satisfaction through quality of communication in the pediatric emergency department](#). *Pediatric Emergency Care*, 27(11), 1016-1021.

To examine if **patient/family caregiver-provider communication** is associated with an increased frequency of the highest possible emergency department patient satisfaction scores.

- Achieving optimal patient/caregiver satisfaction scores in the pediatric emergency department is highly dependent on the quality of interpersonal interactions and communication.
- Wait time and other throughput variables are less important than perceived quality of the health interaction and interpersonal communication.
- Primary drivers of satisfaction and willingness to return or refer others to the emergency department include: being informed about delays, ease of the insurance process, overall physician rating, registered nurse attention to needs, control of pain, and successful completion of a post-discharge phone call to a family caregiver.

EVIDENCE-BASED LEADERSHIP

Study	Objective	Conclusion
McDonough, K. S., & Pemberton, M., (2013). Evaluation and development of an ED management model: An effort to optimize patient-centered care . <i>Journal of Emergency Nursing</i> , 39(5), 485-490.	To describe how the emergency department at Mary Washington Hospital improved employee engagement, patient experience, and left-without-being-seen rates by implementing an evidence-based leadership model .	<ul style="list-style-type: none"> ▪ After implementing the new leadership model: <ul style="list-style-type: none"> – Emergency department patient satisfaction scores increased from the 14th to the 99th percentile – Attrition of staff nurses reduced from a vacancy of 16 FTEs to 2 FTEs – Emergency department volumes increased – The percentage of patients who left without being seen decreased to below 2%

HANDOFF—BEDSIDE

Study	Objective	Conclusion
Kerr, D., McKay, K., Klim, S., Kelly, A. M., & McCann, T. (2014). Attitudes of emergency department patients about handover at the bedside . <i>Journal of Clinical Nursing</i> , 23(11-12), 1685-1693.	To explore patients' perspectives of bedside handover by nurses in the emergency department.	<ul style="list-style-type: none"> ▪ Study findings support bedside handover as an acceptable method of performing handover for patients in the emergency department. ▪ Patients perceived that participating in bedside handover enhanced individual care. ▪ Hearing handover conversations reassured patients about the competence of nurses and the continuity of care.

HANDOFF—ELECTRONIC

Study	Objective	Conclusion
Watkins, L. M., & Patrician, P. A. (2014). Handoff communication from the emergency department to primary care . <i>Advanced Emergency Nursing Journal</i> , 36(1), 44-51.	To evaluate the effectiveness of an electronic handoff communication template to notify primary care providers that follow-up care is needed for patients discharged	<ul style="list-style-type: none"> ▪ The study supports an electronic template as a useful form of handoff communication in the emergency department. ▪ After the electronic template, Emergency Provider Written Plan of Discharge (eEPWPD), was implemented, there was a 50% increase in the number of patients who received additional needed diagnostic testing post-discharge.

from the emergency department.

- After eEPWPD implementation, there was a 43% improvement in primary care provider follow-up with discharged emergency department patients.

LEAN PRINCIPLES

Study

Objective

Conclusion

[*] Goralnick, E., Walls, R. M., & Kosowsky, J. M. (2013, September 26). [How we revolutionized our emergency department.](#) *Harvard Business Review.*

To describe how Brigham & Women's Hospital emergency department used **lean principles** to improve the patient experience and operational efficiency.

- Streamlining emergency department front-end processes and reducing "door to bed" time allowed the use of waiting room and triage space for patient care.
- The average "door to bed" time declined from 65 minutes (FY09) to 22 minutes (FY13).
- Walkouts declined by more than 50%, from an average of 3.3% per month to less than 1.5%.
- Patient satisfaction scores have risen from the lowest quartile to as high as the 99th percentile, and have remained at or above the 90th percentile for 7 of the past 9 quarters.

OPEN ACCESS VISITATION

Study

Objective

Conclusion

Nuss, T., Kelly, K. M., Campbell, K. R., Pierce, C., Entzminger, J. K., Blair, B. K., . . . Walker, J. L. (2014). [The impact of opening visitation access on patient and family experience.](#) *The Journal of Nursing Administration, 44*(7/8), 403-410.

To describe how Baylor Health Care System implemented a system-wide approach to **open access for visitation** (focusing on inpatient and emergency units) and the impact on patient experience.

- A system-wide policy sanctioning the presence of a primary support person 24 hours a day, 7 days a week with patient permission enhanced the patient experience.
- As a result of open access visitation:
 - Patients and families felt more informed
 - Nursing staff were more courteous and respectful and explained things in a way that could be understood
 - Staff attitude toward visitors was markedly improved
 - Comfort and accommodations for guests were extended and improved

PAIN MANAGEMENT

Study

Objective

Conclusion

Fallon, E., Fung, S., Rubal-Peace, G., & Patanwala, A. E. (2016). [Predictors of patient satisfaction with pain management in the emergency department.](#) *Advanced Emergency Nursing Journal, 38*(2), 115-122.

To identify predictors of patient experience with **pain control** measured after emergency department discharge.

- Patients' perceptions that they receive enough analgesics and that staff members are helpful are modifiable predictors that can be improved by providing better patient-centered care, discussing patient expectations, routinely assessing patients' pain, and asking patients whether they need more pain medication.
- Dissatisfaction with pain control may be related to a lack of communication between providers and patients.
- Patients who report generalized pain—as opposed to pain in a specific location—tend to have poorer patient experiences. These patients may need additional assessment and monitoring to foster better patient experiences.

Schwartz, T. M., Tai, M., Babu, K. M., & Merchant, R. C. (2014). [Lack of association between Press Ganey emergency department patient satisfaction scores and emergency department administration of analgesic medications](#). *Annals of Emergency Medicine*, 64(5), 469-481.

To explore the relationship between Press Ganey emergency department (ED) patient satisfaction scores and ED **administration of analgesic medications**, including the amount of opioid analgesics received, among patients who completed a patient satisfaction survey.

- Overall Press Ganey ED patient satisfaction scores were not primarily based on in-ED receipt of analgesic medications or opioid analgesics; other factors appear to be more important.
- Satisfaction with physician and nurse care, satisfaction with information provided, and waiting time being less than expected are predictors of overall satisfaction score.
- ED clinicians can administer analgesic medications in the ED according to clinical and patient factors without being concerned about Press Ganey ED patient satisfaction scores.

Taylor, S. E., Taylor, D. M., Jao, K., Goh, S., & Ward, M. (2013). [Nurse-initiated analgesia pathway for paediatric patients in the emergency department: a clinical intervention trial](#). *Emergency Medicine Australasia*, 25(4), 316-323.

To evaluate the impact of a **nurse-initiated analgesia pathway (NIAP) intervention** for pediatric patients in the emergency department.

- The NIAP significantly reduced time to analgesia from 58 minutes to 23 minutes.
- The NIAP was associated with high levels of parental satisfaction.
- No adverse events were reported.

Finn, J. C., Rae, A., Gibson, N., Swift, R., Watters, T., & Jacobs, I. G. (2012). [Reducing time to analgesia in the emergency department using a nurse-initiated pain protocol: a before-and-after study](#). *Contemporary Nurse*, 43(1), 29-37.

To test the effect of a **nurse-initiated pain protocol (NIPP) intervention** in the emergency department.

- After implementation of the NIPP, compliance with pain assessment increased from 58% to 95%.
- There was a statistically significant reduction in time-to-analgesia with the NIPP: 47% of patients received analgesia within 30 minutes after the NIPP was instituted as opposed to 20% meeting that criterion without such a protocol in place.

Steinberg, P. L., Nangia, A. K., & Curtis, K. (2011). [A standardized pain management protocol improves timeliness of analgesia among emergency department patients with renal colic](#). *Quality Management In Health Care*, 20(1), 30-36.

To evaluate the impact of a **formalized pain management protocol** on timeliness of analgesia in the emergency department.

- Implementation of the standardized protocol resulted in a 49% reduction in time to effective pain management.
- The protocol did not result in any increase in adverse effects.

Stephan, F. P., Nickel, C. H., Martin, J. S., Grether, D., Delpont-Lehnen, K., & Bingisser, R. (2010). [Pain in the emergency department: Adherence to an implemented treatment protocol](#). *Swiss Medical Weekly*, 140(23-24), 341-347.

To assess the adherence to an already implemented **pain management protocol** in an urban emergency department.

- Pain management protocols have proven benefits.
- Adherence to pain management protocols needs to be monitored regularly in order to optimize pain control.
- Ongoing education for nurses and emergency department physicians regarding interpreting a pain scale and uses and contraindications of analgesics (especially opiates) were essential to sustaining pain management practices.

PATIENT-CENTERED CARE

Study	Objective	Conclusion
<p>[*] Dudley, N., Ackerman, A., Brown, K. M., & Snow, S. K. (2015). Patient- and family-centered care of children in the emergency department. <i>Pediatrics</i>, 135(1), e255-e272.</p>	<p>To describe the present state of practice and research regarding patient- and family-centered care (PFCC) for children in the emergency department setting as well as some of the complexities of providing such care.</p>	<ul style="list-style-type: none"> Commitment to PFCC in the emergency department ensures that the experiences and perspectives of patients and families guide the practice of coordinated and culturally sensitive care that promotes patient dignity, comfort, and autonomy. PFCC respects the interdependence of child and parent, patient and family wishes for privacy, and the evolving independence of the pediatric patient. PFCC encourages collaboration along the continuum of care (prehospital, emergency department, hospital, and rehabilitation) and commitment to the importance of and communication with the patient's medical home.
<p>[*PG] Press Ganey. (2015). EDCAHPS early adopter study: Understanding patient-centered value in the emergency department. South Bend, IN: Author.</p>	<p>To provide insight into the important aspects of patient-centered care delivery in the emergency department.</p>	<ul style="list-style-type: none"> Patients' perception that emergency department nurses listened carefully to them significantly drives top-box ratings for Overall ED Experience and Likelihood to Recommend the ED on the Emergency Department Consumer Assessment of Healthcare Providers and Systems survey, independent of receipt of medication for pain. Patients' perception that emergency department caregivers did everything they could to help with pain has a greater influence on the emergency department patient experience than receipt of pain medication. Being kept informed about wait times has the same influence on the emergency department patient experience as receiving care quickly.
<p>Hearld, L. R., & Alexander, J. A. (2012). Patient-centered care and emergency department utilization: A path analysis of the mediating effects of care coordination and delays in care. <i>Medical Care Research and Review</i>, 69(5), 560-580.</p>	<p>To examine how patient-centered care might decrease emergency department utilization.</p>	<ul style="list-style-type: none"> Fostering fair and respectful relationships between patients and providers is an important way to decrease emergency department utilization. Emergency department patients reporting higher levels of patient-centered care were less likely to have experienced problems of care coordination. Higher self-reported levels of patient-centered care were associated with a decreased likelihood of having delayed care and fewer emergency department visits.

PATIENT FLOW IMPROVEMENTS

Study	Objective	Conclusion
<p>Chang, A. M., Cohen, D. J., Lin, A., Augustine, J., Handel, D. A., Howell, E., ... Sun, B. C. (2018). Hospital strategies for reducing emergency department crowding: A mixed-methods study. <i>Annals of Emergency Medicine</i>, 71(4), 497-505.</p>	<p>To identify strategies to reduce emergency department crowding among high-performing, low-performing, and high-performance improving hospitals.</p>	<ul style="list-style-type: none"> High performance on emergency department crowding metrics is associated with specific organizational characteristics, including executive leadership involvement, hospital-wide coordinated strategies, data-driven management, and performance accountability. It is the interplay of organizational characteristics that makes for successful strategy implementation. Attempts to reduce emergency department crowding depend upon a strong organizational culture; rather than

		adopting generic approaches, interventions should be selected and implemented to address the unique challenges of each hospital.
Davenport, P. J., O'Connor, S. J., Szychowski, J. M., Landry, A. Y., & Hernandez, S. R. (2017). The relationship between emergency department wait times and inpatient satisfaction . <i>Health Marketing Quarterly</i> , 34(2), 97-112.	To examine patient perceptions of emergency department (ED) wait times and inpatient experiences.	<ul style="list-style-type: none"> There is a statistically significant relationship between a very good ED experience and a very good inpatient experience. Consumers utilizing Hospital Compare data on ED wait times may have more accurate expectations regarding the amount of time they may spend waiting. Perceived wait times are a much stronger predictor of ED satisfaction than actual wait times. Hospitals should consider improving both their actual ED wait times and patients' perceived expectations of their wait times.
Sayah, A., Lai-Becker, M., Kingsley-Rocker, L., Scott-Long, T., O'Connor, K., & Lobon, L. F. (2016). Emergency department expansion versus patient flow improvement: Impact on patient experience of care . <i>Journal of Emergency Medicine</i> , 50(2), 339-348.	To compare the impact of emergency department expansion versus patient flow improvement on patient experience.	<ul style="list-style-type: none"> Process and flow improvement positively impact the emergency department patient experience to a greater degree than renovation and space expansion. Budget-neutral operational changes—such as establishing a Rapid Assessment Unit by repurposing space, expanding the role of staff, and eliminating waste—have a significant impact on efficiency without major capital investment.
Barata, I., Brown, K. M., Fitzmaurice, L., Griffin, E. S., & Snow, S. K. (2015). Best practices for improving flow and care of pediatric patients in the emergency department . <i>Pediatrics</i> , 135(1), e273-e283.	To provide a summary of best practices for improving flow, reducing waiting times, and improving the quality of care of pediatric patients in the emergency department.	<ul style="list-style-type: none"> Several points of impact can reduce emergency department boarding, improve pediatric patient safety, and promote effective, efficient, timely, and patient-centered care, including: <ul style="list-style-type: none"> 5-level triage system and nurse-initiated emergency care pathways during initial assessment without delay in seeing a provider Fast tracking and cohorting of patients Clinical pathways Responsive staffing as patients advance through the emergency department system
Goloback, M., McCarthy, D. M., Schmidt, M., Adams, J. G., & Pang, P. S. (2015). ED operational factors associated with patient satisfaction . <i>American Journal of Emergency Medicine</i> , 33(1), 111-112.	To determine operational factors and clinical characteristics associated with emergency department patient experience.	<ul style="list-style-type: none"> An emergency department door-to-doctor time of less than one hour and a length of stay of less than four hours are ideal operational metric goals to target in order to improve patient experience. Emergency department door-to-doctor time may have a slightly greater influence on patient experience than length of stay, suggesting that door-to-doctor time may mediate the effects of length of stay. Ensuring efficient operations are critical to high emergency department patient experience scores.
[*] Hwang, C. E., Lipman, G. S., & Kane, M. (2015). Effect of an emergency department	To examine if emergency department fast track implementation affects	<ul style="list-style-type: none"> The implementation of an emergency department fast track program was associated with statistically significant

[fast track on Press-Ganey patient satisfaction scores.](#) *Western Journal of Emergency Medicine*, 16(1), 34-38.

Press-Ganey scores of patient satisfaction.

improvements in seven dimensions of Press-Ganey patient satisfaction metrics.

- Fast track programs may play an important role in improving emergency department performance on CMS benchmarks of quality with lower acuity patients.

Marino, P. A., Mays, A. C., & Thompson, E. J. (2015). [Bypass rapid assessment triage: How culture change improved one emergency department's safety, throughput and patient satisfaction.](#) *Journal of Emergency Nursing*, 41(3), 213-220.

To describe the planning, implementation, and results of an **immediate bedding** process and its impact on door-to-triage time, door-to-room time, door-to-physician time, and patient experience in the emergency department.

- Immediate bedding decreases emergency department door-to-triage, door-to-bed, and door-to-physician times, thereby improving throughput.
- Having a greeter nurse in the emergency department waiting room results in more satisfied patients and fewer patients leaving without being seen.
- An immediate bedding process that includes a greeter nurse decreases the potential risk to patients because the first person emergency department patients encounter is a registered nurse, who can immediately recognize seriously ill patients and ensure prompt treatment.

[*] Sayah, A. Rogers, L., Devarajan, K., Kingsley-Rocker, L., & Lobon, L. F. (2014). [Minimizing ED waiting times and improving patient flow and experience of care.](#) *Emergency Medicine International*, 2014, 1-8.

To assess the impact of a **patient flow improvement** project in the emergency department.

- After implementing the improvement project, the following measurable improvements were realized:
 - Median door-to-provider times decreased from 69 minutes to 14 minutes
 - Median time in the emergency department dropped from 220 minutes to 130 minutes
 - Quarterly left without being seen rates dropped from 4% to 0.5%
 - Patient satisfaction increased from the 6th percentile to the 78th percentile
- Improvements were realized by implementing a comprehensive change in emergency department patient management including:
 - Minimizing the initial registration process
 - Implementing a rapid assessment area where all patients are evaluated by a clinician immediately following the abbreviated registration
 - Streamlining the handoff process for admitted patients

<p>Scrofine, S., & Fitzsimons, V. (2014). Emergency department throughput: Strategies for success. <i>Journal of Nursing Administration</i>, 44(7/8), 375-377.</p>	<p>To investigate the impact of emergency department innovations including immediate bedding, optimizing use of point of care testing, utilizing mid-level providers, and using nontraditional beds.</p>	<ul style="list-style-type: none"> Utilization of immediate bedding—where all processes are performed at the bedside including registration, initial nursing assessment, and medical provider first contact—bypasses the triage process, eliminates all steps from arrival to bed, and decreases total length of stay. Point of care testing decreases result time for laboratory testing, allowing for a more rapid disposition of the patient and reduction in the emergency department length of stay. Use of mid-level providers, such as physician assistants and nurse practitioners, allows emergency department patients to be seen and treated more expeditiously, which improves patient experience. The use of nontraditional beds, or temporary holding beds, for patients with minor complaints improves throughput times and reduces emergency department length of stay.
<p>Johnson, M., Sensei, L., & Capasso, V. (2012). Improving patient flow through the emergency department. <i>Journal of Healthcare Management</i>, 57(4), 236-243.</p>	<p>To examine the impact of managing patient flow through the emergency department.</p>	<ul style="list-style-type: none"> Wait time to treatment improved from the 9th percentile to the 55th percentile following the process change. After implementing the process changes, time-to-doctor improved from the 45th percentile to the 89th percentile. Overall emergency department satisfaction is in the top 5% compared to peer hospitals, and overall scores on all other patient satisfaction survey questions showed measurable improvement.
<p>Welch, S., & Dalto, J. (2011). Improving door-to-physician times in 2 community hospital emergency departments. <i>American Journal of Medical Quality</i>, 26(2), 1-7.</p>	<p>To examine the impact of prompts, training, and feedback on emergency department door-to-physician times as well as the impact on left without being seen rates.</p>	<ul style="list-style-type: none"> Door-to-physician times decreased to 31 and 27 minutes from 51 and 47 minutes, respectively, following the implementation of a protocol that included prompts, training, and feedback. Left without being seen rates at each facility fell by one third.
PHYSICIAN IDENTIFICATION BY PATIENTS		
Study	Objective	Conclusion
<p>Mercer, M. P., Hernandez-Boussard, T., Mahadevan, S. V., & Strehlow, M. C. (2014). Physician identification and patient satisfaction in the emergency department: Are they related? <i>The Journal of Emergency Medicine</i>, 46(5), 711-718.</p>	<p>To identify factors associated with improved satisfaction among emergency department patients and to test whether improving physician identification by patients leads to increased patient satisfaction.</p>	<ul style="list-style-type: none"> Overall patient satisfaction was higher among patients who experienced a shorter door-to-doctor time. Parents or guardians of pediatric patients had higher levels of satisfaction than adult patients. Overall satisfaction was higher among patients who correctly identified their physicians than among those patients who could not identify their physicians.

POST-DISCHARGE CONTACT

Study	Objective	Conclusion
<p>Biese K., LaMantia, M., Shofer, F., McCall, B., Roberts, E., Stearns, C., ... Busby-Whitehead, J. (2014). A randomized trial exploring the effect of a telephone call follow-up on care plan compliance among older adults discharged home from the emergency department. <i>Academic Emergency Medicine</i>, 21(2), 188-195.</p>	<p>To investigate whether emergency department post-discharge telephone calls would improve discharge care plan adherence.</p>	<ul style="list-style-type: none"> Patients who received a post-discharge phone call by a nurse were more likely to follow up with their medical providers within five days of their emergency department visits.
<p>Guss, D. A., Gray, S., & Castillo, E. M. (2014). The impact of patient telephone call after discharge on likelihood to recommend in an academic emergency department. <i>The Journal of Emergency Medicine</i>, 46(4), 560-566.</p>	<p>To assess the impact of post-discharge telephone calls on emergency department patient satisfaction.</p>	<ul style="list-style-type: none"> Study findings support post-discharge phone calls as an effective strategy to improve emergency department patient satisfaction. Post-discharge calls to emergency department patients were strongly associated with improved patient satisfaction as measured by likelihood to recommend. The strong association between post-discharge calls and patient satisfaction remained after controlling for waiting time, total length of emergency department stay, and acuity (as assessed by triage class).
<p>Guss, D. A., Leland, H., & Castillo, E. M. (2013). The impact of post-discharge patient call back on patient satisfaction in two academic emergency departments. <i>The Journal of Emergency Medicine</i>, 44(1), 236-241.</p>	<p>To determine the impact of post-discharge telephone calls on emergency department patient satisfaction.</p>	<ul style="list-style-type: none"> Findings demonstrate a strong association between post-discharge calls to emergency department patients and their subsequent satisfaction as measured by patients' likelihood to recommend. There was a dramatically higher overall database emergency department ranking for patients who received a phone call after their visit.
<p>Patel, P. B., & Vinson, D. R. (2013). Physician e-mail and telephone contact after emergency department visit improves patient satisfaction: A crossover trial. <i>Annals of Emergency Medicine</i>, 61(6), 631-637.</p>	<p>To determine how post-visit patient-physician contact by e-mail or telephone affects patients' satisfaction with their emergency department physician.</p>	<ul style="list-style-type: none"> Post-visit patient-physician contact is a valuable practice to improve emergency department patient satisfaction. Patient satisfaction was higher when emergency physicians contacted patients briefly after their visit, either by e-mail or by telephone. Higher patient satisfaction was observed equally among patients contacted by e-mail and those contacted by telephone.

ROUNDING

Study	Objective	Conclusion
<p>[*] Reimer, N., & Herbener, L. (2014). Round and round we go: Rounding strategies to impact exemplary professional practice. <i>Clinical Journal of Oncology Nursing</i>, 18(6), 654-660.</p>	<p>To detail six rounding methodologies implemented within the inpatient, emergency department, and ambulatory patient care areas at Lehigh Valley Hospital, and their positive outcomes.</p>	<ul style="list-style-type: none"> Positive outcomes associated with the rounds were achieved for patient, employee, and physician satisfaction, as well as for clinical quality indicators. The overall trend for falls, pressure ulcers, and catheter-associated urinary tract infections decreased. Patient satisfaction with attention to special or personal needs and adequate precautions to protect safety increased.
<p>Meade, C. M., Kennedy, J., & Kaplan, J. (2010). The effects of emergency department staff rounding on patient safety and satisfaction. <i>The Journal of Emergency Medicine</i>, 38(5), 666-674.</p>	<p>To test the effectiveness of three different emergency department rounding techniques.</p>	<ul style="list-style-type: none"> Three rounding techniques were tested: rounding every 30 minutes, rounding every hour, and rounding every hour with an individualized patient care (IPC) tactic. Rounding every hour with an IPC was most effective. Rounding every hour with an IPC reduced: <ul style="list-style-type: none"> Left without being seen rates by 38.7% Leaving against medical advice rates by 34.5% Fall rates by 38.9% Call light usage rates by 35% The percentage of family members and patients approaching the nursing station to make inquiries about the patient's care by 39.5% Patient satisfaction ratings for overall care and pain management significantly increased.

SCRIBES

Study	Objective	Conclusion
<p>Shuaib, W., Hilmi, J., Caballero, J., Rashid, I., Stanazai, H., Tawfeek, K., ... Gaeta, T. J. (in press). Impact of a scribe program on patient throughput, physician productivity, and patient satisfaction in a community-based emergency department. <i>Health Informatics</i>.</p>	<p>To report the implementation of a scribe program in the emergency department (ED) of a community hospital and its impact on patient throughput, physician productivity, and patient satisfaction</p>	<ul style="list-style-type: none"> Scribe use in community EDs is feasible and results in improvement in overall door-to-doc time, door-to-room, and doc-to-admit disposition times. These are important throughput metrics in a community-based ED where there are no residents to decrease the documentation burden on physicians. Scribes can influence the physician's productivity by checking back with the physician when lab or imaging results are back, or when a patient bed is ready. This allows the physician to maintain a consistent workflow without jumping back and forth between patient charts.
<p>Bastani, A., Shagiri, B., Palomba, K., Bananno, D., & Anderson, W. (2014). An ED scribe program is able to improve throughput time and patient satisfaction. <i>The American Journal of Emergency Medicine</i>, 32(5), 399-402.</p>	<p>To examine the impact of a pilot program using scribes in the emergency department on throughput time and patient satisfaction.</p>	<ul style="list-style-type: none"> Despite a 7.5% increase in patient volume, all emergency department throughput metrics improved after the scribe program was implemented. After scribe program implementation, overall door-to-doctor time improved from 74 to 61 minutes. Computerized physician order entry (CPOE) initially had a detrimental effect on emergency department patient satisfaction. After scribe program implementation, patient satisfaction increased to pre-CPOE levels.

SIMULATION-BASED STAFF TRAINING

Study	Objective	Conclusion
Sweeney, L. A., Warren, O., Gardner, L., Rojek, A., & Lindquist, D. G. (2014). A simulation-based training program improves emergency department staff communication . <i>American Journal of Medical Quality</i> , 29(2), 115-123.	To evaluate the effectiveness of a simulation-based staff training program to standardize the emergency department patient encounter.	<ul style="list-style-type: none"> After simulation-based communication training using Project CLEAR!, significant overall improvements were found on emergency department staff perceptions of the quality of communication among staff members. Staff members' respect and support of each other showed significant improvement after completion of training. After training completion, staff perception of the overall quality of the communications between providers and patients showed a significant improvement.

TEAMWORK

Study	Objective	Conclusion
Martin, H. A., & Ciurzynski, S. M. (2015). Situation, Background, Assessment, and Recommendation-Guided huddles improve communication and teamwork in the emergency department . <i>Journal of Emergency Nursing</i> , 41(6), 484-488.	To examine the impact of a joint patient evaluation using the Situation, Background, Assessment, and Recommendation (SBAR) communication technique followed by a structured huddle on communication, teamwork, and nursing satisfaction in a pediatric emergency department.	<ul style="list-style-type: none"> It is optimal to use structured communication techniques, such as huddles and the SBAR framework, to promote improved communication between staff members in the emergency department, an environment where information needs to be relayed quickly. A joint patient evaluation followed by a structured huddle improves communication, teamwork, and nursing satisfaction between emergency department nurse practitioners and registered nurses. A joint evaluation followed by a huddle is an effective protocol for determining an emergency department patient's treatment plan that could also potentially increase patient safety.
Kipnis, A., Rhodes, K. V., Burchill, C. N., & Datner, E. (2013). The relationship between patients' perceptions of team effectiveness and their care experience in the emergency department . <i>The Journal of Emergency Medicine</i> , 45(5), 731-738.	To examine the relationship between patients' perceptions of teamwork and care experience in the emergency department.	<ul style="list-style-type: none"> Patient satisfaction and willingness to adhere to treatment recommendations are highly correlated with patients' perceptions of emergency department teamwork. Patients who rated teamwork highly were also more likely to be highly satisfied with their overall care, pain or discomfort care, and to report more confidence/trust in their provider and a greater likelihood of following recommended treatment. Patients' ratings of teamwork effectiveness were most highly correlated with confidence and trust in their providers.