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Patient Experiences With Transfer for Community Hospital Inpatient Admission From an Academic Emergency Department

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Abstract

Emergency department (ED) crowding continues to be a major challenge and has important ramifications for patient care quality. One strategy to decrease ED crowding has been to implement alternative pathways to traditional hospital admission. Through a survey-based retrospective cohort study, we aimed to assess the patient experience for those who agreed to transfer and admission to an affiliated community hospital from a large, academic center's ED. In all, 85% of participants rated their overall experience as either great or good, 92% did not find it hard to make the decision to be transferred, and 95% found the transfer process itself to be easy.

Keywords

access to care, communication, challenges, emergency medicine, healthcare planning or policy, patient feedback, patient satisfaction, quality improvement

Introduction

Emergency department (ED) crowding continues to be a major challenge in the United States, with important ramifications for patient experience and care quality (1,2). As ED volume continues to grow, the number of patients who have been admitted to an inpatient service but have no bed available has increased significantly (3–5).

Given resulting deleterious effects on care quality, patient experience, and staff burnout, recent efforts have turned to decreasing the frequency and duration of ED boarding of patients (5–8). One strategy to mitigate ED crowding has been to leverage alternative pathways to care for patients who otherwise may have warranted hospital admission (8–10). These include ED-based and mobile observation units, "home hospital" programs, or from the academic medical center's (AMC) ED to a smaller, affiliated community hospital (CH) for inpatient care (11–13).

While evidence exists that such alternative pathways allow care to be delivered safely and efficiently (8), limited data are available regarding patients' own experiences with these alternatives, specifically transfer from an AMC ED to a CH for inpatient care. Through a survey-based retrospective cohort study, we aimed to determine whether patients who agreed to transfer and admission to a community affiliate hospital were satisfied with the transfer process and quality of care provided.

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Methods

Human Subjects Compliance and Study Site

This retrospective, Health Insurance Portability and Accountability Act-complaint study was approved by the Massachusetts General Hospital Institutional Review Board (IRB). The study was performed at a 995-bed quaternary care academic center and Level 1 trauma center. Approximately 111 000 ED visits occur at the institution annually. The secondary study site is a CH with approximately 310 beds, located 11 miles from the primary study site.

Study Design

This retrospective, qualitative cohort study was performed during the period between January 1, 2017, and May 1, 2018. Criteria for inclusion included all patients between January 2017 and May 2018 who presented to the AMC's ED and were subsequently transferred to the affiliated CH for their inpatient general medicine admission. The decision to admit patients from the ED was made per usual protocol by providers including attending emergency physicians, resident physicians, physician assistants, and nurse practitioners.

Exclusion criteria were as follows: patients admitted to the ED observation unit, patients whose care has already transitioned to an inpatient medical service despite remaining physically within the ED, patients requiring plasma exchange, patients with history of organ transplant, patients requiring specialized cardiology care not available at the CH, and patients with ophthalmologic or oncologic chief complaints.

Patients were verbally consented by either the ED clinician or, during certain times of day, an "Alternative Pathways Navigator" (a nurse practitioner) with specialized training responsible for facilitating alternative pathways to admission. Once a bed became available at the CH, verbal "pass-off" was given by telephone to the admitting provider and admitting nurse.

Study Protocol

Electronic medical record (EMR) review was performed by the authors, including an emergency physician (JS) and trained medical student (YB), and demographic information for each patient was collected, including sex, age, primary language, primary care physician (PCP) listed in the EMR and whether that PCP was within the health care network.

Further chart review was completed to collect additional data related to the patient's hospitalization including ED length of stay (LOS), CH inpatient LOS, whether the patient was readmitted to the hospital within 30 days, discharge destination, and whether an upgrade in level of care occurred during the hospitalization.

An IRB-approved recruitment letter with an attached paper survey and self-addressed stamped envelope returning to the principal investigator was then mailed to the primary addresses for the 92 eligible patients. Twenty-three surveys were returned during a 4-week period. The authors then placed calls to the home telephone numbers for the remaining patients using an IRB-approved script. Each patient was contacted up to twice by phone over a 2-week period. The study pipeline is detailed in Figure 1.

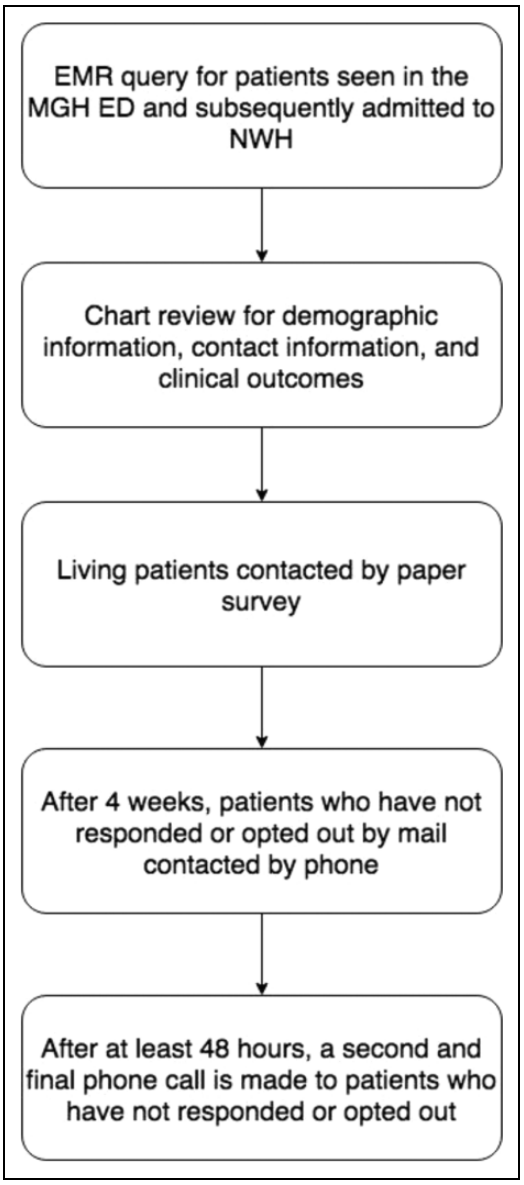

Figure 1. Study pipeline.

Results

Demographics and Outcome Measures

A total of 110 patients were identified as transferred for inpatient admission with 18 subsequently removed from the study for reasons including death in the interval period, primary language other than English, no actual transfer, or international address leaving 92 eligible participants.

Table 1. Survey Results.[a]

Survey question	Responses	Number (%)
Overall experience	Great	26 (65)
	Good	8 (20)
	Fair	3 (8)
	Poor	3 (8)
Hard to make decision	Yes	3 (8)
	No	36 (92)
Ease of transfer	Easy	39 (95)
	Difficult	2 (5)

[a]Percentages are given as a fraction of the total number of responses for each given question.

There were no significant differences in demographics or clinical outcomes among the initial cohort and those who ultimately completed the survey either by mail or phone with the exception of whether or not patients had a PCP listed in the EMR; all of those who ultimately completed the survey had a listed PCP. Hospital discharge diagnosis was also noted for each patient, with the most common being cellulitis, pneumonia, and congestive heart failure.

Survey Results

A total of 42/92 (46%) of eligible participants responded to the survey either by mail or phone. Some questions were left blank by study participants, resulting in a total of 39 entirely completed surveys; 85% of participants rated their overall experience as either great or good, 92% did not find it hard to make the decision to be transferred rather than stay to be admitted at the AMC, and 95% found the transfer itself to be easy. Quantitative survey results are shown in Table 1.

Qualitative comments were collected regarding each of the 3 quantitative survey questions in addition to a general prompt asking patients to describe any opportunities for improvement. Sample comments related to the decision to transfer included "[the AMC ED] was so busy that I was in the hall waiting all day . . . I was offered a 5 hours wait or [transfer to the CH] so I picked [the CH]" and "They just put me in an ambulance. I don't really think there was much to it." Sample comments related to opportunities for improvement largely related to capacity issues at the AMC itself, including "ER at [AMC] is busting at the seams. There needs to be a more streamlined admission process at [the AMC] itself" and "The reason for my transfer was that [AMC] didn't have any available beds. That is a huge issue . . . "

Discussion

This study aimed to qualitatively assess the experience of patients who were admitted directly from a tertiary care AMC ED to a community affiliate hospital for inpatient hospitalization. Our results demonstrate that the majority of patients rated their overall experience as either great or good, with only 16% stating it was fair or poor. Over 90% felt that it was not difficult to make the decision to be transferred; 95% found the transfer itself to be easy. These data are positive and illustrate the potential for leveraging alterative pathways to traditional hospital admission in improving the patient experience.

There were several common themes throughout patient comments. Patients overwhelmingly praised their inpatient experience at the CH and felt that the most negative portion of the experience was the often extended time spent in the AMC's ED. Specifically, several patients noted that they had been placed in hallway stretchers in the ED. Almost all patients left a comment stating that a major benefit of transferring was the decreased amount of time spent in the ED.

While the primary purpose of this study was to assess patient experience of this alternative pathway, information regarding operational metrics was also collected. Emergency department LOS was 11.25 hours, longer than the average ED LOS for admitted patients of approximately 8 hours; this may be because ED providers were more likely to offer the option to transfer to patients on days when the ED or hospital was particularly full, leading to longer ED stays for all patients. In contrast, average CH LOS was 3.85 days, shorter than the average AMC inpatient LOS of approximately 7.5 days. While this reduction may be largely explained by the diagnoses represented by this cohort, of which a large fraction were pneumonia, cellulitis, or another diagnosis requiring intravenous antibiotics or hydration without specialist consultation, it is possible that there are efficiencies in place at the CH that are not possible within the AMC.

Limitations

This study has several limitations including small sample size and a final survey response rate of 46%. The latter is a common limitation among survey studies with recent literature capturing response rates ranging from 3.6% to 16% (14). Patient experience survey data suggest typical ED response rates of only 10.0% compared to inpatient hospitalization response rates of 19.3% (15). Given that the only statistically significant difference between responding and nonresponding patients was the presence of a listed PCP in the EMR (with all responding patients having a listed PCP), it is likely that some of the nonresponding patients represent an underserved patient population without consistent access to medical care or housing, which likely contributed to the difficulty of contacting some study participants whose listed addresses were for temporary housing shelters.

Conclusion

This study demonstrates that admitting patients directly to a community affiliate hospital from a large, urban, academic hospital's ED resulted in generally positive patient experiences. While these initial results are promising, larger, prospective studies are needed to further assess the feasibility of

and patient experience with alternative pathways to hospital admission.

Authors' Note

Jonathan D. Sonis and Yosef Berlyand contributed equally to this work.

Declaration of Conflicting Interests

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References

1. Bernstein SL, Aronsky D, Duseja R, Epstein S, Handel D, Hwang U, et al. The effect of emergency department crowding on clinically oriented outcomes. Acad Emerg Med. 2009;16:1-10.
2. Miro O, Antonio M, Jimenez S, De AD, Sanchez M, Borras A, et al. Decreased health care quality associated with emergency department overcrowding. Eur J Emerg Med. 1999;6(2).
3. Lambe S, Washington DL, Fink A, Herbst K, Liu H, Fosse JS, et al. Trends in the use and capacity of California's emergency departments. Ann Emerg Med. 2002;39:389-96.
4. White B, Dorner S, Yun B, Lev MH, Bravard MA, Prabhakar AM, et al. Quantifying the operational impact of boarding inpatients on emergency department radiology services. Am J Emerg Med. 2018;36(12).
5. Fee C, Weber E, Maak C, Bacchetti P. Effect of emergency department crowding on time to antibiotics in patients admitted with community-acquired pneumonia. Ann Emerg Med. 2007;50(5).
6. Paul J. Medicine LL-TJ of emergency. Models for improving patient throughput and waiting at hospital emergency departments. J Emerg Med. 2012;43(6).
7. Richardson DB. Increase in patient mortality at 10 days associated with emergency department overcrowding. Med J Aust. 2006;184:213-16.
8. Bryant PA, Hopper SM. Alternatives to ward admission from the emergency department. J Paediatr Child Health. 2016;52:237-40.
9. Taylor DM, Bennett M. A paradigm shift in the nature of care provision in emergency departments. Emerg Med J. 2004;21:681-84.
10. Stuck A, Crowley C, Killeen J, Castillo EM. National survey of emergency physicians concerning home-based care options as alternatives to emergency department–based hospital admissions. J Emerg Med. 2017;53(5).
11. Varney J, Weiland T. Efficacy of hospital in the home services providing care for patients admitted from emergency departments: an integrative review. Int J Evid Based Healthc. 2014;12(2).
12. Shepperd S, Iliffe S, Doll HA, Clarke MJ, Kalra L, Wilson AD, et al. Admission avoidance hospital at home [published online ahead of print]. Cochrane Database Sys Rev. 2016;CD007491. doi:10.1002/14651858.CD007491.pub2
13. Caplan GA, Sulaiman NS, Mangin DA, Aimonino RN, Wilson AD, Barclay L. A meta-analysis of "hospital in the home". Med J Aust. 2012;197:512-19.
14. Pines JM, Penninti P, Alfaraj S, Carlson JN, Colfer O, Corbit CK, et al. Measurement under the microscope: high variability and limited construct validity in emergency department patient-experience scores. Ann Emerg Med. 2018;71:545-54.e6.
15. Press Ganey Associates. Obtained December 19, 2019. https://www.pressganey.com/

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