

Physicians' Perceptions of Stakeholder Influence on Discharge Timing in a Children's Hospital

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Abstract

Attending physicians (N = 53) at a nonprofit, university-affiliated academic children's hospital completed a survey about how key stakeholders affect timing of patient discharge beyond attending assessment of medical stability. Physicians perceived families and hospital administration as more often having an impact on discharge timing than they should and perceived members of the care team and peer physicians/consultants as less frequently having an impact than they should. All but one physician reported discharging a patient either earlier or later than they felt was appropriate due to pressure from at least one stakeholder group; almost all physicians had done so in response to pressure from families. When physicians changed discharge timing based on stakeholder pressure, they tended to extend hospital stay except in the case of administrative pressure. These findings highlight the need for improvements in communication regarding discharge goals and for future research on how navigating competing interests affect physician stress.

Keywords

Hospital discharge, Length of stay

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Introduction

Length of stay or time to discharge is a crucial factor to consider when caring for a child in the hospital. Ultimately, attending physicians are responsible for determining the appropriate timing of discharge. For individual patients, providers must balance well-established risks of prolonged hospitalization, including hospital-acquired infections, severe deconditioning, thromboembolic disease, and iatrogenic complications,¹⁻⁴ with equally well-established risks of premature discharge, including morbidity and mortality related to decompensation outside of the hospital as well as complications and costs of hospital readmission.⁵

In addition to these well-established and competing medical risks, nonmedical factors influence timing of discharge. Notable are the needs and preferences of multiple stakeholders.⁶ First, as medicine has moved from a paternalistic model of care to one of patient-centeredness, the role of patients and families in overall care and in the discharge process has been increasingly acknowledged.^{7,8}

Due to social and cultural factors, such as religious practices or family expectations, patients and families may prefer either continued hospitalization or discharge to home, which may not align with the attending physician's assessment of a patient's medical needs. Second, as the medical complexity of hospitalized pediatric patients increases,^{9,10} assessments and recommendations from other care team members, such as nurses, social workers, and care managers, have become increasingly influential in determining timing of patient discharge. Third, particularly for children with a history of medical complexity or multi-organ dysfunction, peer physicians/consultants bring perspectives on in-hospital versus in-home

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management that can affect discharge timing. Fourth, from a hospital operations standpoint, the flow of patients between areas of higher and lower acuity is essential to ensure safety of all hospitalized patients as well as for appropriate resource allocation. For instance, when inpatient beds are lacking and patient transfer is delayed, the time patients spend boarding in the emergency department increases, which has been associated with negative outcomes.¹¹ Thus, hospital administrators, who oversee safety, resource allocation, and the financial interests of the hospital, also constitute a significant group of stakeholders who may influence timing of discharge.

In this study, we sought to evaluate the perspectives of attending physicians from one hospital on how these 4 stakeholders influence decision-making related to discharge timing beyond attending physicians' own determination of a patient's medical stability. Specifically, this study was designed to assess physician perceptions of the

1. Appropriateness of stakeholder impact on the timing of discharge
2. Frequency of stakeholder influence on the timing of discharge
3. Experience of and response to being pressured to shorten or lengthen patient hospital stay from each stakeholder group

Methods

From April to May 2018, surveys were distributed electronically to a convenience sample of attending physicians at a nonprofit, university-affiliated academic teaching children's hospital with a high Case Mix Index. At the time of the survey, 135 physicians spent time attending on inpatient services and thus were eligible to complete the survey.

Given that there is no existing survey that addressed the question of interest, the survey was developed by the team that included an investigator with extensive experience in survey design. Demographic questions included the following: years in practice, specialty, and amount of time per year spent caring for patients on an inpatient service. Four groups of stakeholders in the discharge decision-making process were identified: (1) "patient and family preferences" (families); (2) "other members of the care team (nurses, social workers, care managers)" (care team); (3) "peer physicians/consultants" (consultants); and (4) "administrative priorities (such as bed shortage, excess hospital days)" (administration). For the purposes of the survey, we used the term "administrative priorities" rather than administrators to focus respondents on processes instead of individuals.

All questions were framed in the context of influences on discharge timing beyond assessment of medical stability. For each stakeholder group described above, physicians were asked to rate how often each stakeholder group should influence discharge timing and how often each stakeholder group does influence discharge timing on a 4-point Likert-type scale (never, rarely, sometimes, often). For the purposes of analysis, answers were dichotomized into 2 categories ("sometimes" OR "often" = 1, "never" OR "rarely" = 0). For each stakeholder group, physicians also answered whether they had ever discharged a patient earlier than they felt was appropriate due to pressure from a member of each stakeholder group and if they had ever discharged a patient later than they felt was appropriate due to pressure from a member of each stakeholder group. The answers (yes, no, not sure) were dichotomized into groups according to physicians who endorsed changing discharge timing (in either direction) versus those who did not endorse having changed timing of discharge due to stakeholder pressure or were not sure. Furthermore, a sum was calculated to represent the number of stakeholders (out of 4 total) in response to whom each physician reported changing discharge timing in either or both directions. Data were analyzed with SAS 9.4 and SAS University Edition (SAS Institute Inc, Cary, NC).

Results

Demographics

Overall, 53 physicians responded (response rate = 39%), a response rate that is consistent with other web-based surveys of physician attitudes.¹² Of the 53, 55% of respondents had been out of their last year of postgraduate training for more than 10 years. Seventeen percent of respondents were general pediatricians (either hospitalists or outpatient practitioners who also attend on inpatient services); 40% were subspecialists; 30% were intensivists (pediatric intensive care unit [ICU] and neonatology); and 13% were pediatric surgeons and orthopedists. Forty-seven percent of respondents spent more than 13 weeks per year on service.

Appropriateness and Perceived Frequency of Stakeholder Influence on Discharge Timing

A majority of physicians believe that families, the care team, and consultants should have an influence on discharge timing over and above the assessment of medical stability, and a majority perceived that these same groups do have an influence on discharge timing (Table 1). In contrast, a majority of physicians reported

Table 1. Perceived Influence by Stakeholder Group (N = 53).

Stakeholder Group	Should “Sometimes” or “Often” Influence Timing of Discharge, n (%)	Does “Sometimes” or “Often” Influence Timing of Discharge, n (%)
Care team	50 (94%)	47 (89%)
Consultants	49 (92%)	42 (79%)
Family	40 (75%)	45 (85%)
Administration	9 (17%)	22 (42%)

Table 2. Influence on Discharge Timing by Stakeholder Group (N = 52).

Stakeholder Group	Discharged Earlier Than Felt Appropriate, n (%)	Discharged Later Than Felt Appropriate, n (%)	Discharged at a Time That Felt Inappropriate (Either Direction), n (%)
Families	26 (50%)	48 (92%)	48 (92%)
Care team	7 (13%)	34 (65%)	34 (65%)
Consultants	11 (21%)	30 (58%)	32 (62%)
Administration	19 (37%)	4 (8%)	21 (40%)

that rarely or never should the administration influence discharge planning and that, in fact, the administration does less commonly influence discharge timing than the other groups of stakeholders. A larger percentage of physicians perceived that families and administration do influence discharge timing than believed these groups should influence discharge timing. In contrast, physicians believe that the care team and consultants should more often influence timing of discharge than they perceive that these groups do influence timing of discharge.

Perceived Effect of Stakeholder Pressure to Discharge

Physicians were asked to recall personal experiences responding to pressure from stakeholder groups. Fifty-two of the 53 physicians reported that they had discharged a patient either earlier or later than they felt was appropriate due to pressure from one or more stakeholders. On average, physicians reported changing discharge timing in response to pressure from 2.5 ± 1 (range = 1-4) of the stakeholder groups (Table 2).

Direction of the pressure reported when discharging patients differed by stakeholder group. Physicians more often endorsed delaying discharge longer than they felt was appropriate due to pressure from families, the care team, and from consultants. Physicians more often endorsed discharging a patient earlier than they felt was appropriate due to pressure from administration. However, given that general physicians were more likely to discharge at a perceived inappropriate time due to families, there were a greater number of physicians who reported discharging early due to pressure from families.

Discussion

This study is an initial attempt to describe the experiences of physicians regarding discharge timing in one hospital. In this context, the results indicate that physicians acknowledge the role of the care team, consultants, and families in the determination of discharge timing and less so acknowledge the role of hospital administration. Physicians reported that the 4 key stakeholders should have varying levels of influence on timing of discharge separate from attending assessment of medical stability, varying from 17% supporting input from administration to 94% for the care team. Notably, a greater percentage of physicians perceived families and administration as sometimes/often influencing discharge timing than reported that these groups should sometimes/often influence discharge timing. The reverse was true for the care team and consultants. The perception that stakeholders affect discharge timing to a different degree than they should indicates a need for improved communication between providers and stakeholders and reveals a potential source of stress for physicians. Similarly, all but one physician surveyed reported making what they perceived to be an “inappropriate” change in discharge timing in response to pressure from at least one stakeholder group. These results suggest an opportunity to enhance communication between physicians and other stakeholders in order to maximize physician and stakeholder satisfaction with discharge decisions.

As noted above, a quarter of physicians surveyed reported that families should “rarely/never” affect the timing of discharge beyond medical clearance by the physicians. Despite general acceptance and focus on family-centered care over the past several decades, the

apparent reservations regarding the influence of family preference on discharge timing may be related to the results showing that nearly all surveyed physicians reported discharging a patient at a time that the physician felt was inappropriate due to pressure related to patient and family preferences. These results indicate a worrisome mismatch between physicians and families in assessing pediatric patient readiness for discharge, and it suggests that attending physicians and families did not or could not successfully establish mutually understood or agreed-upon discharge criteria. The reasons for this gap in understanding are likely multifactorial. One qualitative study in adult patients identified several barriers to appropriate discharge communication, including time constraints, prioritization of emergency care, and lack of standardized discharge consultations.⁶ Supporting provider-family communication in order to bridge the gap between physicians and families is key, in that it is possible that a mismatch between physician assessment and family assessment of readiness for discharge has an impact on subsequent health care utilization. Studies of both hospitalized pediatric patients and healthy term infants and their families showed a correlation between patient and family discharge “unreadiness” and increased postdischarge resource utilization and symptom days.^{13,14}

In contrast to all other stakeholder groups, a minority of physicians reported feeling that the hospital administration should influence discharge timing. It is likely that physician providers feel that their goals and values are competing with those of the administration (eg, with providers obligated to prioritize individual patient needs and with hospital administrators obligated to prioritize systemic efficiency), but ultimately, both parties seek to provide high-value, high-quality, and safe care.¹⁵ Furthermore, physicians reported administrative priorities as being more likely to lead to an early discharge, which physicians may feel is riskier than continuing to monitor patients in the hospital. However, studies of early discharge practices for both adults and children have shown that length of stay for many common conditions can be shortened without jeopardizing patient outcomes.^{16,17} As such, there is an opportunity to provide more formal and comprehensive education to both attending physicians and to families about managing complex medical conditions safely outside the acute care setting. With improved education, physicians and families may more readily employ early and safe discharge practices. Avoiding prolonged hospitalization has benefits for the individual patient as well as for sick or unstable children by increasing bed availability. Inhibited patient flow through general wards beds has negative effects on ICU patients from a patient safety

perspective and on ICU providers from a stress and resource allocation perspective.¹⁸

Although we did not measure the impact of pressure surrounding discharge decisions on physician well-being and burnout, our results suggest it may be an important area of research to explore. Others have found that pediatric residents indicate an association between burnout and “discharging patients to make the service more manageable” and “feeling guilty about how a patient was treated,”¹⁹ and that stressful or controversial decision-making is associated with burnout, which, in turn, can have negative effects on physician efficacy and satisfaction.^{20,21} Thus, future research should explore how physicians experience pressure surrounding discharge decisions, and in particular, how making self-designated “inappropriate” discharge decisions affect physician stress and “regret” or vice versa.²² Regardless, we anticipate that implementing and/or expanding measures to support family-provider communication and agreement would not only have positive effects on patient and family satisfaction but would also improve physician self-efficacy and decrease burnout.²³

There are several limitations to this study. The survey was based on physician recall and self-designations of inappropriate discharge decisions. It is unknown whether the timing was, in fact, inappropriate or how often decisions were made that were deemed inappropriate. We also did not capture the outcomes of these decisions for patients or families. In addition, physicians from only one institution were surveyed, reflecting the distinct culture of that particular institution. By surveying other institutions, the impact of culture can be addressed. Surveying a single site also limited the number of respondents. With a larger and more diverse sample, it may be possible to assess other significant associations, such as differences in perceptions and experiences between physicians of different specialties and years of experience, which this study was not powered to assess. Our response rate of 39% was low, but it is consistent with other surveys of physicians. In addition, it is likely that physicians who attend on inpatient services with very little regularity chose to self-select out of participation because they felt the survey did not apply, which would result in a higher functional response rate.

Despite these limitations, our results highlight the opportunity to work toward safer, more cost-effective discharge and universally understood goals of discharge for pediatric inpatients. Enhancing communication between attending physicians and families will allow these groups to reconcile goals of hospitalization. In addition, education for providers with regard to hospital-wide safety issues affecting the well-being of multiple patients may improve understanding and acceptance

of the importance of administrative initiatives to promote patient flow. We also must further explore how physicians might better incorporate multiple stakeholders in decision-making so that length of stay can be shortened without compromising patient outcomes. It is hoped that by developing interventions to help attending physicians navigate these competing interests, physician well-being will be preserved.

Author Contributions

LMDB: Contributed to conception and design; contributed to acquisition, analysis, and interpretation; drafted manuscript; critically revised manuscript; gave final approval; agrees to be accountable for all aspects of work ensuring integrity and accuracy.

SEL: Contributed to analysis and interpretation; drafted manuscript; critically revised manuscript; gave final approval; agrees to be accountable for all aspects of work ensuring integrity and accuracy.

SLR: Contributed to conception and design; contributed to acquisition, analysis, and interpretation; drafted manuscript; critically revised manuscript; gave final approval; agrees to be accountable for all aspects of work ensuring integrity and accuracy.

TAM: Contributed to conception and design; contributed to acquisition, analysis, and interpretation; drafted manuscript; critically revised manuscript; gave final approval; agrees to be accountable for all aspects of work ensuring integrity and accuracy.

Declaration of Conflicting Interests

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

Ethical Approval and Informed Consent

The study was approved by the Columbia University institutional review board (protocol # AAAR2038), and filling out the survey was considered to indicate consent.

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