Interfacility Transfers to General Pediatric Floors: A Qualitative Study Exploring the Role of Communication

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Abstract

Background: Children with special health care needs often require health services that are only provided at subspecialty centers. Such children who present to nonspecialty hospitals might require a hospital-to-hospital transfer. When transitioning between medical settings, communication is an integral aspect that can affect the quality of patient care. The objectives of the study were to identify barriers and facilitators to effective interfacility pediatric transfer communication to general pediatric floors from the perspectives of referring and accepting physicians, and then develop a conceptual model for effective interfacility transfer communication.

Methods: This was a single-center qualitative study using grounded theory methodology. Referring and accepting physicians of children with special health care needs were interviewed. Four researchers coded the data using ATLAS.ti (version 7, Scientific Software Development GMBH, Berlin, Germany), using a 2-step process of open coding, followed by focused coding until no new codes emerged. The research team reached consensus on the final major categories and subsequently developed a conceptual model.

Results: Eight referring and 9 accepting physicians were interviewed. Theoretical coding resulted in 3 major categories: streamlined transfer process, quality handoff and 2-way communication, and positive relationships between physicians across facilities. The conceptual model unites these categories and shows how these categories contribute to effective interfacility transfer communication. Proposed interventions involved standardizing the communication process and incorporating technology such as telemedicine during transfers.

Conclusions: Communication is perceived to be an integral component of interfacility transfers. We recommend that transfer systems be re-engineered to make the process more streamlined, to improve the quality of the handoff and 2-way communication, and to facilitate positive relationships between physicians across facilities.

Keywords: children with special needs; hospital medicine; patient transfer

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What's New

We developed a conceptual model for effective pediatric interfacility transfer communication on the basis of perspectives from referring and accepting physicians. Physicians perceived streamlined transfer process, quality handoff and 2-way communication, and positive relationships across facilities as integral components of transfer communication.

Regionalization of medical care is recognized to improve outcomes in pediatric patients.[1] Many hospitals lack pediatric specialists and resources, limiting their ability to provide definitive care to some pediatric patients.[2,3] Patients with specialized diagnoses, such as children with special health care needs (CSHCN), might therefore be directed to hospitals with specialized care. CSHCN who initially present to a local, nonspecialty hospital and require specialty care might experience a hospital-to-hospital transfer.

The decision to transfer a patient is most often for reasons indicating limited resources or expertise at the referring facility.[4] Although transfers are intended to improve patient outcomes, decision-making such as selecting the destination facility are not always on the basis of patient outcomes.[5,6] Other issues complicating the effectiveness of interfacility transfers involve verbal and written communication challenges between physicians, such as interpersonal conflicts and time-consuming processes.[5–7]

When patients transition between medical settings, communication can positively or negatively affect the quality of patient care.[8,9] Most research on communication during transitions focuses on the intrafacility (eg, emergency-to-inpatient or day-to-night

shift) or inpatient-to-outpatient handoff.[8–10] This body of literature shows that communication challenges exist during these handoffs, such as negative effect on patient care, interpersonal provider conflict, being time-consuming or inconvenient, or leaving physicians with unanswered questions.[9,10] It is likely that in the acute setting of hospital-to-hospital interfacility transfers similar and potentially heightened communication difficulties are encountered.

Improving processes of care requires understanding the perspectives of those involved in the system. Although qualitative research on adult interfacility transfers has been published, perspectives of medical providers on pediatric interfacility transfers is lacking.[6,11] Our objectives were to: 1) use grounded theory methods to identify barriers and facilitators to effective interfacility pediatric transfer communication to general pediatric floors from the perspectives of referring and accepting physicians of CSHCN, and then 2) develop a conceptual model for effective interfacility transfer communication. Physicians of CSHCN were the group of interest because of these children's needs for frequent hospitalizations and specialty care of a type or amount beyond that required by children in general.[12,13] Thus, CSHCN potentially have a greater need for interfacility transfers. Furthermore, there might be more information to transmit when these children with special needs are transferred, and failure to transmit such information might be more likely to lead to patient harm in this population. The experiences of physicians for this population of children might be applicable to improving the interfacility transfer experience for all pediatric patients, not just CSHCN.

METHODS

STUDY DESIGN

We conducted a single-center qualitative study using grounded theory methodology.[14] Two researchers (J.L.R., L.H.) conducted semistructured interviews with referring and accepting physicians. We developed an interview guide on the basis of a literature review of interfacility transfers.[4–7] Existing literature shows that interfacility transfer have challenges with physician-physician communication, decision-making that is not on the basis of optimizing patient outcomes, and conflicts and burdens to those involved in the process. Thus, interview guide questions focused on 3 major topic areas: 1) communication, 2) decision-making, and 3) the transfer process and roles of those involved. Initial interview guides were revised to include more specific questions on the same topics as initial data were analyzed and new categories of findings developed. Interviews were conducted within 45 days of the transfer. They were conducted in the hospital library, hospital office, or by phone. Interviews were audio recorded, professionally transcribed, and checked for accuracy by the researchers. Interviewers maintained field notes with informal contextual observations and/or verbal and nonverbal cues. We provided a $25 gift card to each participant who completed an interview. The institutional review board at the University of California, San Francisco, approved the study protocol.

STUDY POPULATION

The participants of interest were physician providers for CSHCN patients who experienced an interfacility transfer to a single-center tertiary/quaternary care children's hospital in California between July 1, 2014 and November 1, 2014. Physicians who referred and accepted these patients were identified from an existing hospital transfer center database that is continuously updated as new transfers occur. The database was screened daily for eligible patients. Patients eligible for the study were those aged 0 to 25 years with a chronic medical or behavioral condition, as defined by components in the CSHCN screener,[15] admitted to a pediatric general pediatric floor via an interfacility transfer. A child was screened positive with the CSHCN screener if they met 1 or more of the following: 1) limited/prevented in his/her ability to do things most children the same age can do, 2) needs/uses prescribed medications (other than vitamins), 3) needs/uses specialized (physical, occupational, speech) therapies, 4) has greater than routine need/use of medical, mental health, or educational services, and 5) needs/receives treatment or counseling for an emotional, behavioral, or developmental problem.

Interfacility transfer was defined as a transfer to the receiving hospital from a different facility's clinic, emergency department, or inpatient hospital. Affiliate hospitals were categorized as a different facility if their electronic medical record system was a system separate from the receiving hospital system. Referring and accepting physicians included fellows and attending physicians. These physicians were identified from the transfer center database and recruited for participation by phone, fax, or e-mail.

Demographic information of the physician participants and the transferred CSHCN patients was collected through surveying participants and through electronic medical record and transfer center database review. Physician demographic characteristics included age, gender, years of experience, clinical location type, training, transfer practices, and frequency of providing care to CSHCN. The hospital characteristics of transferring physicians' facilities included freestanding children's status and access to pediatric subspecialty care, teaching status, and urban versus rural location. Patient characteristics included age, gender, insurance status, primary reason for transfer, transport distance, originating unit type (clinic, emergency department, inpatient ward), and post-transfer service. To identify the CSHCN patients with increased medical complexity, we additionally recorded the presence of 1 or more complex chronic conditions using the International Classification of Diseases, Ninth Revision, Clinical Modification codes identified by Feudtner et al.[16]

DATA ANALYSIS

Data were analyzed in a multistep, iterative analytic process beginning with initial open-coding of the transcripts,