

Understanding the Impact of Residents' Interpersonal Relationships During Emergency Department Referrals and Consultations

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Abstract

Background Communicating with colleagues is a key physician competency. Yet few studies have sought to uncover the complex nature of relationships between referring and consulting physicians, which may be affected by the inherent relationships between the participants.

Objective Our study examines themes identified from discussions about communications and the role of relationships during the referral-consultation process.

Methods From March to September 2010, 30 residents (10 emergency medicine, 10 general surgery, 10 internal medicine) were interviewed using a semistructured focus group protocol. Two investigators independently reviewed the transcripts using inductive methods and grounded theory to generate themes (using codes for ease of analysis) until saturation was reached. Disagreements were resolved by consensus, yielding an inventory of themes and subthemes. Measures for ensuring trustworthiness of the analysis included

generating an audit trail and external auditing of the material by investigators not involved with the initial analysis.

Results Two main relationship-related themes affected the referral-consultation process: familiarity and trust. Various subthemes were further delineated and studied in the context of pertinent literature.

Conclusions Relationships between physicians have a powerful influence on the emergency department referral-consultation dynamic. The emergency department referral-consultation may be significantly altered by the familiarity and perceived trustworthiness of the referring and consulting physicians. Our proposed framework may further inform and improve instructional methods for teaching interpersonal communication. Most importantly, it may help junior learners understand inherent difficulties they may encounter during the referral process between emergency and consulting physicians.

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Editor's Note: The online version of this article contains the focus group questions and a comparison of the study's findings to Giffin's Model of Interpersonal Trust.

Introduction

Both the Royal College of Physicians and Surgeons of Canada's CanMEDS framework and the Accreditation Council for Graduate Medical Education (ACGME) in the United States have identified the ability to communicate with colleagues as a key competency for all physicians.^{1,2} Few studies, however, have attempted to uncover factors that influence the interpersonal dynamics between the

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referring and consulting physicians,^{3,4} and these studies mostly focus on primary care referrals to specialists on a routine outpatient basis, not emergent consultations.

The referral-consultation process is influenced by the relationships among the participants. Most research on relationships during physician consultations has focused on quantifying and identifying communication problems.^{3–10} Research has explored nonemergent consultations by family medicine physicians^{3,4} and the attitudes of consultants during telephone-only consults.⁵ In the research on urgent or emergent consultations,^{8–15} most studies sought to define and quantify the emergency department (ED) consultation process.^{8–13} With the advent of the ACGME core competencies and Milestone Project,¹⁶ the teaching and learning of interpersonal and teamwork skills are increasingly highlighted. To our knowledge this is the first study that has explored interpersonal factors that may influence resident communication during the referral-consultation process within the context of the ED. The findings may help to clarify the social dynamics around their interactions with other residents and attending physicians.

Methods

We used a qualitative, grounded theory approach to examine transcripts from semistructured, moderated, focus group discussions. All participants provided written, informed consent. Participants were 30 residents (10 emergency medicine [EM], 10 general surgery [GS], 10 internal medicine [IM]) who participated in discipline-specific focus groups conducted between March and September 2010. Participants represented a convenience sample of residents recruited through the use of repeated contact in a modified Dillman method via e-mail.^{17,18} They were chosen because the 3 specialties interact most frequently within the ED at our institution. All participants had completed their first year of specialty training and had participated (ie, requesting or delivering consultations multiple times per week) in the ED referral and consultation process in the prior 12 months.

Data Collection

This study was conducted as part of a larger study examining the ED referral-consultation process. We explored the perceptions of residents during this crucial interaction. Our focus group templates (provided as online supplemental material) were designed via consensus among the investigators and piloted on a small sample of nonparticipating faculty members and residents who provided feedback to improve the protocol. Participants were discussants in semistructured focus groups; the 7 focus groups lasted 80 to 96 minutes. The group moderator asked a standard set of questions but was able to ask clarification questions or to prompt participants to explain

What was known

Communicating with colleagues is an important element of physician practice.

What is new

Familiarity and perceived trustworthiness of the referring and consulting residents are critical to the effectiveness of emergency department referrals and consultations.

Limitations

The single modality of data collection and single-site setting limit generalizability.

Bottom line

Understanding communication dynamics may help junior learners navigate difficulties encountered during the referral process between emergency and consulting physicians.

their comments further. The moderator asked participants about various domains in the ED referral-consultation process, including (1) the structure of the consultation request, (2) techniques to facilitate a consultation, (3) feedback and communication after a referral, and (4) barriers to effective consultation. If they had not already commented on the topic, participants were asked if and how a preexisting relationship affected the referral-consultation process. All focus groups were conducted by a single moderator (T.C.), and were audiotaped. The transcripts were transcribed, and participants' identities were made anonymous before analysis.

Analysis

Transcripts of the source material were analyzed as a single group regardless of the training program. All transcripts were reviewed by 2 investigators (K.S., S.S.), and all relevant quotes were extracted. Disagreements were resolved by a third investigator (T.C.). Excerpts were then independently reviewed by 2 investigators (T.C., K.S.) and analyzed using inductive approaches associated with grounded theory.^{19–21} An index of themes was generated until a saturation point was reached and no new themes were generated. Investigators met repeatedly to review their analyses and determine the categories for themes, coalescing commonalities into common themes in an iterative fashion. Discrepancies were resolved by reviewing the original quotes in the context of the transcripts, discussing source material in the context of these themes, and arriving at a decision by consensus.⁵ To ensure trustworthiness of the analysis, an audit trail was created, and the final master set of themes and associated transcripts were reviewed by a third investigator (S.S.) who was not involved in the inductive process to generate them. Discrepancies noted during the audit were resolved via consensus.

TABLE 1 EXEMPLAR QUOTES FOR THEMES AND SUBTHEMES			
Theme	Subtheme	Participant Type	Quote
Familiarity	N/A	EM resident (EM-1)	"It's also nice to know the people who are your consultants . . . [P]eople are more receptive."
		GS resident (GS-1)	"I do feel that some of the senior [emergency medicine] residents . . . or residents when I was a junior [who] are now staff, I do feel that there is more of a working relationship."
	Exposures	IM resident (IM-1)	"[H]aving done an emergency room rotation as a PGY-1 raised the awareness of what the emergency room physicians do and their personal challenges."
	Time	IM resident (IM-2)	"I really think that familiarity . . . unfortunately . . . takes time to develop, but I find that . . . actually the easiest thing that facilitates is knowing who you're talking to."
Trust	N/A	IM resident (IM-3)	"It depends if you trust the person, if it's someone you know, and they [say], 'Oh, there is nothing at all.' Then I [say], 'Fine, I don't have to go look at it until I actually go see the person.'"
	Expertise	IM resident (IM-1)	"[It] might be a bit more specific for the junior house staff because I do not know them potentially as well, and I have to prod them a bit more . . . I actually want to know the specific vitals, whereas I would trust an [EM] staff who I know quite well; you don't have to tell me everything, 137/62 as opposed to vitals are stable."
	Reputation	IM resident (IM-5)	"I think that it's very much true the other way around. If you are rude, if you are disrespectful, I think that will invariably get around very quick. It probably already has."
		EM resident (EM-2)	"If you have to call somebody up who's kinda notorious for kinda being mean and rude and really aggressive toward consults it's anxiety provoking."
	Reliability	IM resident (IM-4)	"[There were] several times a situation when I was told, 'Oh that's a stable patient.' When I particularly [was at the] beginning of second year [it was], 'Stable patient, you can wait.' And then you come see and the patient [is] crashing. When that happens actually, I feel . . . really stupid because you're trying to trust your colleague, and it's complete mistrust."
	Alignment of interests	GS resident (GS-2)	"I had a patient one time that was very, very sick, and the emerg[ency] physician said: 'I'm here to help with the resuscitation.' And [the physician] did the intubation, and I put the lines."
		EM resident (EM-3)	"I think that is how we are sometimes perceived by consultants. We are people who make work for everyone else, basically, in [the emergency department]."
	Engagement	GS resident (GS-3)	"Sometimes junior learners . . . seem to express more interest about what's going on, or they come to you and ask: 'Hey, can you go through this x-ray with me?' So I obviously, I would respond more to [that person]."
		GS resident (GS-4)	"So I'm much more likely to give feedback if the emerg[ency] doc[tor] sort of says, 'Oh, how'd that patient do?' or 'What was that?'"
	Personability and likability ^a	IM resident (IM-2)	"The role of the communication and camaraderie is very important . . . Small gestures, such as an [emergency medicine] attending who has once bought us dinner, spoke miles for the communication and the respect between both sides. This includes camaraderie among the emergency room physicians and the [IM] residents."
		EM resident (EM-4)	"If we know, for example, that this person usually [fights] back and [tries to] defend or defer every case, we still consult them but that would give us [the feeling] 'Oh yeah . . . he's on.'"

Abbreviations: N/A, not applicable; EM, emergency medicine; GS, general surgery; IM, internal medicine; PGY, postgraduate year.
^a See also the earlier quotes by IM-5 and EM-2 as they were double-classified under the Reputation subtheme but also apply to the Personability and likability subtheme.

Our study was approved by the Faculty of Health Sciences/McMaster University Research Ethics Board.

Results

Our findings are a synthesis of the perceptions of residents from all 3 specialty groups (EM, GS, and IM). We identified 2 dimensions of interpersonal relationships that our participants believe influenced the referral-consultation process: familiarity and trust. TABLE 1 shows example quotes that highlight the themes and subthemes described in this section.

Theme 1: Familiarity

Our analysis suggests that familiarity with another person is a time-dependent function that likely results from interactions over time. Familiarity is developed through extensive exposure that occurs when both parties are aware of each other (ie, not anonymous). Participants reported that more in-depth exposures, such as socializing outside of work, rotating through other services, and sharing educational experiences, helped develop familiarity. The EM residents also commented about the value of in-depth off-service experiences (eg, working with surgical colleagues

during an orthopedic rotation) as well as shared collaborative working experiences (eg, resuscitating a patient as a team with an internist). Familiarity is enhanced by repeated exposures over time. Residents commented that they became more collegial with colleagues after repeated exposure. More importantly, participants commented that with time they became more knowledgeable about the practice patterns and management styles of their colleagues. Participants stated that familiarity also helped to make it easier to talk to colleagues, specifically, that familiarity enhanced the receptivity and empathy of the listener because there was more mutual understanding. Residents commented that they were more likely to share discussions and engage in debriefing after the referral-consultation process with more familiar colleagues.

Theme 2: Trust

Six unique subthemes, which we merged into the single theme of trust, emerged during analysis: (1) expertise, (2) reputation, (3) reliability, (4) alignment of interests, (5) engagement, and (6) personability and likability.

Expertise The expertise and accuracy of the physicians (typically the referring physician) was a major theme identified in our analysis. Interestingly, consulting physicians were more likely to allow experts to use representative language to convey information (eg, describing a patient with a single word, such as “stable,” rather than asking for the particular vital signs). Nonexperts were described as being incorrect, being incoherent/inefficient, and requiring coaching. Nonexperts, on either side of the referral-consultation process, were required to provide more information.

Reputation Reputation was often stated to be important in determining trust. As with any working environment, colleagues discuss performance and experiences with one another. Consulting residents noted that they often knew about untrustworthy EM attending physicians by reputation. Similarly, EM residents commented that bad reputations of consulting physicians affected their trust.

Reliability Key dimensions under the theme of reliability included residents being helpful and consistent in their behavior (eg, practice patterns). For instance, participants described the phenomenon of having a good track record with a colleague. Residents valued colleagues that acted in predictable, dependable ways, such as being consistent in their description of patient status (eg, stability) and providing adequate support (eg, consulting physicians arriving to the ED promptly or emergency physicians stabilizing an unstable patient). A bad track record was described as past incidents when a resident colleague misrepresented the situation.

Alignment of Interests Alignment of interests facilitated the consultation process, and a lack of common ground and shared interests created tensions. Participants discussed incidents in which they were skeptical about the other party’s intentions and motivations. Skepticism led to mistrust. For instance, consulting residents commented frequently that EM physicians were “always leaving,” rushing to see other patients, or preferring to “dump” on consulting residents rather than transfer care of patients to their own EM colleagues. Participants perceived that more temporary physicians (off-service residents or *locum tenens* physicians) or “outsiders” lacked commitment and had poor intentions toward the system. Outsiders, such as EM physicians with temporary contracts or off-service rotating residents, were described as having little investment in or commitment to building relationships from the ED with other services and, therefore, were not trustworthy. As a counterpoint, having shared interests (ie, focusing on taking care of the patient) helped to develop a foundation for trust.

Engagement Behaviors described as demonstrating the engagement of physicians were also described as increasing perceptions of their trustworthiness. Behaviors such as actively asking for feedback or progress reports on shared patients helped build relationships. Feedback and progress reports were only shared spontaneously from consulting physicians to emergency physicians if the consultants decided that there was a good (ie, safe, trusting) relationship.

Personability and Likability Residents described being approachable, humble, personable, and sociable as important personal characteristics in establishing trust. Meanwhile, physicians who were rude, arrogant, standoffish, avoidant, obstructionist, or difficult were perceived as unlikeable. Residents reported that their actions deterred others from wanting to work with them (TABLE 1). Consulting residents also commented that verbal thanks, or gestures such as sharing food or buying coffee, were appreciated and developed their trust of EM attending physicians because they thought these tokens were manifestations of collegial respect.

Discussion

Interpersonal relationships can affect communication processes in all environments. Our findings reaffirm that interpersonal attributes such as trust affect ED consultations. Multiple researchers have suggested that trust is important during the referral-consultation process.^{4,6} One important model for understanding trust is Giffin’s Model of Interpersonal Trust, which originates from the social science literatures and focuses mainly on business interactions.²² The 6 factors of Giffin’s model are listed in TABLE 1, along with analogous themes from our study.²²

TABLE 2 EXAMPLE QUOTES FOR THE 4 TYPES OF WORKING RELATIONSHIPS	
Relationship Type	Description by Participant
Trustable and familiar source: optimal relationship	"It makes a huge difference, because when they know you they trust your clinical judgment, and that's when, really, the 10-second consult happens." —emergency medicine resident (EM-5)
Purportedly trustable but unfamiliar source: suboptimal relationship	Regarding emergency attending physicians: "You expect that all working professionals are at a certain standard, a minimal standard." —internal medicine resident (IM-6)
Untrustable but familiar source: suboptimal relationship	"Just because you know someone for longer doesn't mean that the information is going to get even more accurate, or your relationship is going to be better, but you do get a sense of mental triage." —internal medicine resident (IM-7)
Distrusted and unfamiliar source: inadequate relationship	"[W]hen I first started there was probably a little bit of a combination [of problems because] they don't know who I am, I don't know who they are, so we both are kind of asking each other a few more questions than we need to or being a bit more defensive." —internal medicine resident (IM-8)

Abbreviations: EM, emergency medicine; IM, internal medicine.

Notably, Giffin’s model serves to theoretically triangulate our findings, as the model aligns very well with our own subthemes of trust.

In the 1970s and 1980s , extensive work was done in social science fields around familiarity and trust^{17,23,24}; however, recent work is mainly found in the business literature.^{25–28} Applications range from increased effectiveness with e-commerce to contractual choices.^{23,25–27}

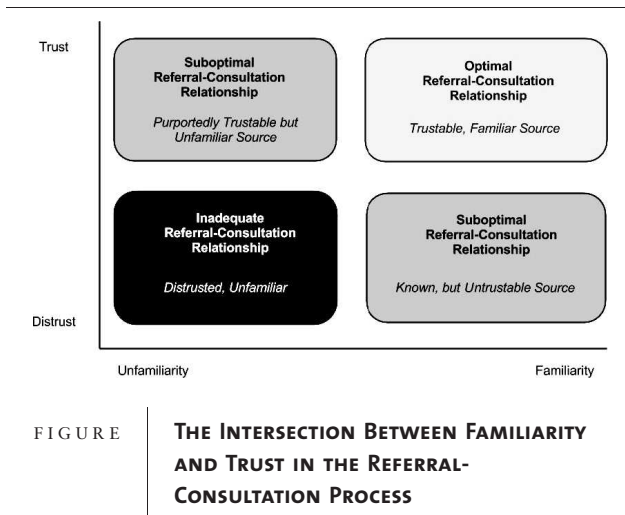
One of the main findings of our study was the link between familiarity and trust. In many ways, participants spoke of these 2 concepts concurrently. Multiple participants commented that being familiar with a colleague was almost synonymous with increased trust. An example of this is the following quote from an IM resident:

I find [trust and familiarity have] changed substantially from the beginning of my R2 year to the end of my R3 year...now they’re very quick encounters and I get the information really quickly...we’re usually on the same page, whereas when I first started there was probably a little bit of a combination [of problems because] they don’t know who I am, I don’t know who they are, so we both are kind of asking each other a few more questions than we need to or being a bit more defensive. But once you know the people it’s very fast and you just go back and forth...You don’t need a new set of vitals. They just said stable; I’m OK with that.

Part of this quote is shown in TABLE 2, however, the depth of the quote in totality more fully describes the concurrent nature of familiarity and trust. In the typical academic teaching center there are implicit social structures and role definitions that may artificially generate trust or mistrust. For instance, by virtue of their role and relative expertness alone, an attending physician is trusted more

than a medical student. Within the social dynamics of the referral-consultation process, trust and familiarity are related and create different relationships due to varying familiarity and trustworthiness. The 4 possible types of working relationships that develop are detailed in the FIGURE. Our model is meant to be a dynamic one; individuals may change over time in the way they regard a colleague or regard themselves. As learners gain familiarity with other physicians in the system, and as their trust is gained (eg, gain source credibility with seniority or prove track record over time), the learner will work toward a more optimal working relationship. TABLE 2 shows example quotes that highlight the 4 proposed types of working relationships. Our model (FIGURE) is compatible with previous research including that of Luhmann, who distinguishes between and makes the link between familiarity and trust, stating that “trust has to be achieved within a familiar world, and changes may occur in the familiar features of the world which will have an impact on the possibility of developing trust in human relations.”²⁴

Our findings can provide a conceptual framework that may help us to better prepare junior learners. Social forces such as trust are known to be affected by source credibility,¹⁷ but once source credibility has been determined, learners may benefit from understanding how they can improve their own credibility and determine when they can trust others. Our findings complement recent work on standard approaches to ED consultations^{13,14}; they also suggest a theoretical framework for interventions. By developing a nomenclature and framework for the elements of trust during the ED referral-consultation process, we might be able to develop methods to enhance the learners’ experiences. Such interventions may include joint social activities to enhance familiarity or shared academic programming to enhance trust. Our findings may also serve as a theoretical foundation for the success of long-standing traditions such as off-service rotations, which have



not had much empirical basis in the past. Further studies are required to develop measures to quantify familiarity and trust (as well as its subthemes) and determine how best to manipulate these outcomes for enhanced learner experience and patient care outcomes.

Our use of a single modality of data collection (semistructured focus group discussions) and the single-site setting limiting generalizability are the primary limitations of our study. In addition, the focus group moderator and lead investigator (T.C.) was an EM resident at the time of this project, which may have resulted in inadequate metaposition (ie, analytical distance from the subject matter). Finally, this study was completed as a planned subanalysis of the transcripts of a larger study regarding the ED referral-consultation process. Our analyses may have been affected by respondents' answers to other questions regarding mechanics and process, conflict, hierarchy, urgency, and institutional issues.

Conclusion

Our findings suggest that the ED referral-consultation experience may be substantially altered by the familiarity and perceived trustworthiness of parties involved. Our results provide an initial evidence-based conceptual framework for understanding the complexities of inter-physician communications between referring and consulting physicians in the academic ED involving learners. Our framework may further inform instructional methods for improving the referral process between emergency and consulting physicians.

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