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Peers without fears? Barriers to effective communication among primary care physicians and oncologists about diagnostic delays in cancer

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Abstract

Objective—Relatively little attention has been devoted to the role of communication between physicians as a mechanism for individual and organisational learning about diagnostic delays. This study's objective was to elicit physicians' perceptions about and experiences with communication among physicians regarding diagnostic delays in cancer.

Design, setting, participants—Qualitative analysis based on seven focus groups. Fifty-one physicians affiliated with three New York-based academic medical centres participated, with six to nine subjects per group. We used content analysis to identify commonalities among primary care physicians and specialists (ie, medical and surgical oncologists).

Primary outcome measure—Perceptions and experiences with physician-to-physician communication about delays in cancer diagnosis.

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Correction notice This paper has been amended since it was published Online First. Owing to a scripting error, some of the publisher names in the references were replaced with 'BMJ Publishing Group'. This only affected the full text version, not the PDF. We have since corrected these errors and the correct publishers have been inserted into the references.

Contributors

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Results—Our analysis identified five major themes: openness to communication, benefits of communication, fears about giving and receiving feedback, infrastructure barriers to communication and overcoming barriers to communication. Subjects valued communication about cancer diagnostic delays, but they had many concerns and fears about providing and receiving feedback in practice. Subjects expressed reluctance to communicate if there was insufficient information to attribute responsibility, if it would have no direct benefit or if it would jeopardise their existing relationships. They supported sensitive approaches to conveying information, as they feared eliciting or being subject to feelings of incompetence or shame. Subjects also cited organisational barriers. They offered suggestions that might facilitate communication about delays.

Conclusions—Addressing the barriers to communication among physicians about diagnostic delays is needed to promote a culture of learning across specialties and institutions. Supporting open and honest discussions about diagnostic delays may help build safer health systems.

INTRODUCTION

Delay in the diagnosis of cancer is an important and understudied patient safety problem, given the potential consequences on patient outcomes.[1–3] The diagnosis process involves a complex series of steps, during which breakdowns can occur that can lead to delays.[4] The Institute of Medicine (IOM) recently recommended in its report, *Improving Diagnosis in Health Care*, that new approaches should be developed to encourage clinicians and organisations to learn from diagnostic delays as a means to reduce them.[1] While previous research has examined cognitive and system-based causes of diagnostic delays,[235–7] there has been relatively little attention to the role of communication and feedback between physicians as a mechanism for individual and organisational learning.

The diagnosis process in cancer offers an opportunity to examine how clinicians communicate with one another about errors or breakdowns in the system, since screening, evaluation, referral and treatment are often shared among physicians across specialties.[8] During the referral process, communication between primary physicians and specialists has been shown to be inadequate.[910] However, little is known about the extent to which there are inadequacies with regard to physician-to-physician communication about delays and other errors. Given the importance of team-based cancer care, barriers to open communication about problematic cases can undermine the ability of clinicians and institutions to learn and improve. These barriers can perpetuate conditions that facilitate delays.[8]

Institutions have a responsibility to encourage learning from delays and errors, and have an ethical obligation to disclose errors to patients.[1112] In meeting this obligation, physicians require an understanding of the event and therefore must communicate with the involved physicians. Gallagher and colleagues reported recommendations from an expert working group focused on the issues around physicians communicating with patients about their colleagues' errors. The authors named several potential barriers to physician-to-physician communication about errors including power differentials, norms of loyalty, risks to relationships, pragmatic concerns and possible legal liability.[13] However, there is little empirical evidence about the extent to which these or other factors represent physicians' perceptions of and experiences with communication and feedback about errors. Physicians'

openness and willingness to engage may vary. A better understanding of this issue is needed to inform interventions that facilitate disclosure of errors to patients while promoting organisational and physician learning.

To obtain insight into physicians' perceptions and experiences with feedback and physician-to-physician communication, specifically as it pertains to delays in cancer diagnosis, we conducted a qualitative study. We used focus groups with primary care physicians (PCPs), medical oncologists and surgical oncologists to explore two critical questions: (1) what are the barriers and facilitators to physician-to-physician communication about delays in cancer diagnoses? and (2) how can these barriers and facilitators be incorporated into a system response to improve communication and reduce delays?

METHODS

Approach and study subjects

Between May and October 2015, we conducted seven focus groups with physicians affiliated with three New York-based academic medical centres: Memorial Sloan Kettering Cancer Center (MSK), Mount Sinai Medical Center (MSMC) and Weill Cornell Medical Center (WCMC). Focus groups offered an ideal method for an in-depth exploration of context-rich experiences and perceptions.[14] Focus groups were conducted separately by institution to take advantage of shared experiences and increase the likelihood of open discussion among participants. We also held separate groups for PCPs and specialists because the timing of their involvement in the diagnosis process could inform their experiences and attitudes around diagnostic delays. Three focus groups involved PCPs (one at MSMC; two at WCMC), three involved medical oncologists (one at MSK; one at MSMC; one at WCMC), and one involved surgical oncologists (MSK). The study was considered exempt research by the institutional review boards at each institution. Our methods are reported according to the COREQ (Consolidated Criteria for Reporting Qualitative Research) guidelines[15] (online supplementary table).

We recruited an intentional sample of subjects affiliated with academic institutions and ensured the balance of participants by gender and years of clinical experience. Physicians were eligible if they were at least 1 year out of their training. We invited potential subjects to scheduled focus groups via e-mail. Participants received a $100 gift card in appreciation of their time. For PCPs and specialists at WCMC and MSMC, we invited all members of each practice. For specialists at MSK, we recruited them based on their patients' cancer types to ensure diverse representation. A total of 51 physicians participated: 21 PCPs, 22 medical oncologists and 8 surgical oncologists. Overall, there were on average 7.3 subjects per focus group (range 6–9), with 55% female. Subjects had been in practice for an average of 12.8 years.

We developed a semistructured discussion guide using input from three key informant interviews (Box). A health services researcher or a PCP/health services researcher moderated each focus group. Each focus group lasted 1 hour and was audiotaped. Data saturation was achieved through a standard protocol of seven focus groups in which similar themes emerged repeatedly.[14,16]

Analysis

Discussions were transcribed by a professional transcription service. We coded the data using ATLAS. ti V.7.5.4 software (Berlin, Germany). We used content analysis to derive common themes directly from the data.[17] For this analysis, we focused on the key questions about perceptions of physician-to-physician communication about delays. Three authors took a sample of transcripts and independently generated a set of codes (ALS, EF and VP). Through the process of discussion, these authors compared and contrasted their codes and developed a formal code book. Then, all transcripts were coded by two authors (EF and VP), with additional authors (ALS, LR, MK and SW) conducting audits to ensure coding consistency. All differences in coding were resolved through discussion. The study team reviewed the findings to elicit broader themes (eg, benefits of feedback and communication). Our analysis focused on identifying commonalities among all participants, across institutions and specialties.

RESULTS

Our analysis identified five major themes in subjects' views and experiences of communication about cancer diagnostic delays: openness to communication, benefits of communication, fears about giving and receiving feedback, infrastructure barriers to communication and overcoming barriers to communication. The themes were well represented in comments of both PCPs and oncology specialists. (see online supplementary table for themes and sample quotes).

Openness to communication

Both PCPs and specialists were interested in receiving feedback about diagnostic delays. One PCP stated, "For me, if I were in the position where I made…a mistake or there was a delay or I could've done things differently that might have led [the patient] to more expedient care then I would want to know about it… so I can learn from it." Similarly, a specialist stated, "I would love to know if something happened with my patient and I would be very gratified in knowing that there's somebody taking care and wanting to establish a relationship."

Benefits of communication

Subjects recognised several benefits of communicating about diagnostic delays, including opportunities for learning, clarification and reassurance.

Learning opportunity—Participants generally agreed that feedback and communication about delays can help individual physicians to improve their practice or knowledge base. One PCP stated, "We don't get better unless we know the mistakes that we've made."

The participants also provided examples where feedback was received positively and led to change. A specialist provided an example: "A patient with resected sarcoma who's free of disease and is followed with scans comes back with a CT scan saying that there's a four-centimeter mass in the axilla which has increased from two centimeters on the last scan three months ago. And you go to the scan three months ago and there's no mention of any mass in

the axilla. So it's this case where, 'Oh, now—now we see it.' And that's a case where I did give feedback to the radiologist and that was incorporated into their QA process and their learning tools."

Another specialist shared, "It turns out that [the patient] has stage IV cervical cancer. And so I then went to the fellows, the residents and everyone … and I said, you know, just curious, when it came back as squamous, other than lung, did you ever have any thoughts, because it actually turned out to be cervical—and they were actually really open to hearing about it and thinking about it. And, you know, I mean from their perspective, they were like, wait, women die from cervical cancer? And in this country, probably not as much, but [this patient] is not from this country."

Opportunity for clarification and reassurance—Both PCPs and specialists acknowledged that communicating about cancer diagnostic delays can serve as a two-way conversation and provide the opportunity for clarification or reassurance. A PCP said, "A patient of mine… an elderly woman…ended up having multiple myeloma and I feel like I missed it because she had a comprehensive metabolic panel that had, you know, a slightly elevated or somewhat elevated protein and her albumin was normal. …I have missed things and I do feel that …[it's] reassuring in speaking with the oncologist, and perhaps they're trying to make you feel better." A specialist said, "We always follow up with the pediatricians and we usually reassure them that… whatever guilt they feel for missing an abdominal mass for that long…that is what is the norm. If anything, we actually are usually reassuring to them."

Fears about giving and receiving feedback

Despite recognising the benefits, PCPs and specialists were hesitant about giving and receiving feedback or engaging in discussion about delays. They worried about the anticipated reaction, assignment of blame and risks to interpersonal relationships.

Anticipated reaction—PCPs discussed the complex emotions involved in cases that involved delays in diagnosis. One PCP speculated that "[In] our anxieties about how we've contributed to it, we're hearing it as an accusation…when [it is] in fact just the status update." Another PCP expressed the high level of sensitivity involved: "Because most of us feel terrible already when our patients have cancer, to have an oncologist call you and say, 'You're an idiot, how'd you miss this?' would be pretty devastating."

Specialists were ambivalent about providing feedback to other physicians. Some questioned the usefulness of providing feedback that would not have direct benefit for the patient, future patients or the physician. According to one specialist, "The patient's ship has already sailed…the things that we see are so uncommon, [providing feedback is] really of little benefit and of quite a bit of detriment."

Some anticipated that feedback would be met with a negative or defensive reaction by the referring physician. One specialist said, "It's very hard to initiate that sort of conversation with the outside person because at best they're going to be defensive, and worst, they're going to be hostile." Another specialist remarked that "many primary care physicians resent

specialists intruding on their patient care. And my bet would be that they would be so embarrassed that you'd probably never see another patient from them again."

Assignment of blame—PCPs were concerned that downstream providers will judge their practice without understanding the context or challenging circumstances. "In hindsight it's easy to say…I might have missed it, but at the time, they're presenting. That's why it's hard to point fingers because… it's not always easy to pick it up when the abnormalities are so subtle, especially in…very sick patients."

Specialists were reluctant to assign blame to other physicians involved in a delayed diagnosis and apprehensive about contributing to possible legal trouble. A specialist said, "I think many people are afraid to be judgmental… Maybe you would've done the same thing because you can't put yourself back in that situation— unless something's really egregious."

Risks to interpersonal relationships—Subjects discussed the incentive to provide feedback when they know that they will work with the referring physician again. However, they feared jeopardising a relationship by offending or embarrassing a colleague. One specialist said, "I think in the ideal world you would try to go back and educate physicians about what you think may have been a delay or an error. But in reality, that's—I don't think I have ever done that. I will talk to referring physicians about patient management things, but to give kind of negative feedback to referring physicians and things, it's 1) not conducive to building a practice, and 2) I'm not really sure that—you don't even know this physician is very receptive to you criticizing them about delaying your diagnosis. So I've never done that."

Infrastructure barriers to communication

Subjects also described infrastructural obstacles to communication between physicians about cancer diagnostic delays. They discussed the time involved in preparing for and having the discussion. A PCP shared an example: "I will very often send an email like via… the electronic health record system and, to other groups and they will not even respond. So then I'll try regular email, I'll try paging and, you know, at least I'll get a response then. So, you know, sometimes even getting a response from another department when you don't know somebody is a little difficult. So let alone like having the confrontational type of conversation."

Additional obstacles identified by subjects included use of different medical record systems, difficulty finding the right physician at another institution, inability to confirm if a note or message was received and lack of formal mechanisms for providing feedback. Specialists in particular often practice in professional silos or are affiliated with different institutions. Illustrating the logistical difficulty, one specialist said, "Starting out, I tried to call everybody's primary care doctor, not to give criticism, but just to make sure that they were aware of a diagnosis and what the plan was. And I wasted so much time leaving messages, waiting for a callback, trying to find the right number for somebody's office. And so unless it's really easy, I just assume that they get my letter and history and physical and get the information that way because it is far more challenging [to] actually [speak] with somebody

than anticipated." Another noted that '"he patient will specifically say, 'I don't want you to talk to this person.' That happens a lot."

Overcoming barriers to communication

Subjects discussed facilitators to communication about delays, at both the individual and organisational levels. These included: ensuring that feedback is delivered in a sensitive manner, having existing interpersonal relationships, engaging in direct communication, having a supportive organisational culture and creating opportunities for communication.

Sensitive delivery—Subjects stressed that feedback should be delivered in a positive, non-judgmental manner. When providing feedback, one PCP shared, "When I contact them about misses…I always modulate the message, and you know, it's very collaborative, like, 'Was there something that we're missing together?' And they're very responsive, typically fellows…and I have to do a lot of this for other hats that I wear here where I have to tell people something that they don't want to hear but it's not necessarily punitive. It's like, 'Let's get better together'."

Another PCP gave an example of how communications about delays occurred in practice: "In the past we've had like a little bit of an email chain going from the people just to be like, 'Hey, FYI, this is what happens when a patient—' not with any like blame or to make anyone feel bad but to use it as like a learning tool of like, 'Hey, this patient that you saw, this was your thought process at the time but this is what ended up happening'."

Interpersonal relationships—Most subjects felt that it was easier to communicate about delays if there was an existing professional relationship with another physician. According to one PCP, "The people that I know, I'm much more apt to talk to. The people that I don't know I don't, especially if they're a community physician. I vote with my feet and I don't send patients to that person anymore. But if it's somebody that I feel like I can have that collaborative discussion and… say 'we're in this together over this oops.' But I'm not going to be in it together with somebody I don't know."

Seniority and medical specialty also played a role in physicians' ease of communicating about delays. One PCP said, "…that's easier for me coming from an attending perspective towards the residents than it might be for a colleague. Although…I think we should all be learning." One specialist said, "I think that's a little easier within a tertiary care center for people to feel open about admitting their mistakes… [The sub-specialist] to surgeon relationship… it's sort of a hierarchy where there's a mismatch and they're generally not going to feel comfortable discussing it because you don't really speak the same language."

Direct communication—Subjects generally favoured direct physician-to-physician feedback, rather than involving a third party such as a quality improvement representative. "I almost feel like there's like a professional responsibility to talk to somebody about it first rather than reporting it anonymously. If somebody saw a mistake that I made, … personally I would rather they let me know than find out from some third party who wasn't involved."

Organisational culture—Subjects noted that institutional and departmental cultures also play a role in perceptions of comfort giving feedback. One specialist said, “Because… if [a colleague] made a mistake I’d be like ‘Dude, what’s going on?’…within the department, we have that face to face contact, we know the personality, we know how that…physician will take it if I say something, whereas other departments… it’s going to be challenging.”

Creating opportunities for discussion—Subjects discussed the value of creating a formal opportunity to discuss delays and potentially learn from each other’s experiences. One PCP stressed that these conversations already happen informally: “I think we would discuss [these cases] among ourselves. Most of these cases we’ve already talked about, right, at lunch time or whatever.”

Another PCP described the usefulness of a formal venue: “I don’t think most physicians come up to me regularly and say, ‘Hey, I missed this case,’ you know. But I think… [when] we all feel like in a safe environment, we’re all willing to always talk about cases we’ve missed and—you know, things like M&M… but things like those, people feel more free, right, to talk about [delays].” Another noted the benefits for systems improvement: “I think there is a way of sort of discussing this stuff and then saying, ‘Yeah, that’s actually really ridiculous.’ Or, ‘That that’s an issue that we need to address’.”

DISCUSSION

This focus group elicited physicians’ perceptions and experiences with communicating about cancer diagnostic delays. A tension emerged between physicians’ valuing the opportunity to learn from mistakes and wanting to avoid difficult discussions. Subjects expressed reluctance to communicate if there was insufficient information to attribute responsibility, if it would have no direct benefit or if it would jeopardise their existing relationships. They were hesitant to assign blame, citing hindsight bias, collegiality and lack of information. They supported sensitive approaches to conveying information, as they did not want to elicit or be subject to feelings of incompetence or shame. Subjects also cited organisational barriers to communication about cancer diagnostic delays. Given physicians’ interest in receiving feedback about delays, institutions need processes or structures in place that can create a safe space for these important discussions and promote a culture of learning.

Our subjects described many trepidations in providing and receiving feedback. For example, PCPs feared being blamed for a delayed diagnosis, and specialists worried that physicians receiving feedback could react defensively. Subjects also feared jeopardising their existing professional relationships, a finding echoed by Gallagher and colleagues.[13] It is unknown whether such negative reactions to feedback would be realised in practice, or the extent to which these reactions could be modified by employing a non-punitive and learning-oriented approach to the discussion.[18,19] Similar to the subjects’ fears about communicating with other physicians about errors, in other studies, physicians have expressed fears about disclosing errors to patients. For example, physicians have feared that disclosure to patients would increase legal liability but patients want physicians to acknowledge and learn from their mistakes.[20,21] Because fears can be a barrier to open communication, this research

should extend beyond physician to patient communication and include the impact of discussions among physicians.[91121–23] Existing research on communication among physicians has focused on communication about patient care decisions and transitions of care for shared patients.[1024–27] Another area of inquiry includes ‘curbside’ or informal consultations to obtain advice about a patient care issue, which have been perceived in a positive manner.[2829] Physicians’ response to unsolicited feedback and approaches to mitigating negative reactions require further attention.

The barriers to communication identified by the subjects raise the question of how to create an environment that supports individual and organisational learning about patient safety events. The complex and emotionally charged nature of this topic was evident throughout the discussions. Concerns about offending colleagues mirror the literature on physicians’ perceptions of and reactions to their own mistakes: physicians as ‘the second victim.’[1130–32] The IOM characterises effective feedback as being non-punitive, actionable, timely and individualised; coming from the appropriate individual or source; targeting behaviour for which the provider is accountable; and describing desired behaviour.[133] Oncologists should be trained to give feedback to their peers in a constructive and non-threatening way, continuing beyond feedback during formal medical education.[1334–36] Models for peer feedback to individual clinicians have been developed around behavioural issues, but these principles may be generalisable to feedback about delays.[333738] Framing the discussion not in terms of individual failure but as an opportunity to jointly identify systemic and cognitive vulnerabilities and next steps could be a productive and less threatening direction. Given the difficulties for individual physicians to initiate and navigate these discussions, institutions should play a role in facilitating them. For example, collaborative inquiry to take place in forums that bridge professional silos, for example, by including PCPs in tumour board or morbidity and mortality conferences for complex cases.[3940]

There are some limitations of this study. While the qualitative nature of our research allowed us to obtain physicians’ attitudes and perceptions, an inherent bias of focus group studies is that the findings reflect the opinions of a relatively small number of subjects.[17] We included physicians from academic medical centres because of the organisational emphasis on learning. However, it is unknown if the attitudes and perceptions we obtained extend to those of physicians practising in community-based settings and outside the New York City region with different patient populations. We also included physicians representing three specialties to capture perspectives of physicians practising in different care settings. We are unsure whether these views extend to other specialist groups involved in cancer diagnosis or specialists involved in the diagnosis of other complex diseases.

To develop individual and systems-wide solutions that foster communication among physicians about diagnostic delays, we need to encourage a non-punitive culture of open disclosure.[1112341] Avoiding a shame-and-blame approach creates an opportunity to introduce principles of safety science to medical professionals and reframe discussions about delays as opportunities to identify organisational and systems-wide challenges.[334243] Systems improvements that result can support patient adherence to recommendations, critical test follow-up and enhanced diagnostic reasoning. These actions can simultaneously advance safety culture.[12] Conversations about cases with potential delays need a safe space within

the practice, the hospital, the healthcare system or through such entities as patient safety organisations.[44] In parallel, we need to recognise the vulnerability of all parties involved in these conversations, and ensure that clinicians receive guidance and emotional support.

Addressing the barriers to communication among physicians about diagnostic delays is needed to promote individual and organisational learning and to support institutions' ethical obligation to disclose errors to patients. Supporting open and honest discussions about delays in diagnosis can help build safer health systems.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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Box Discussion guide

1. Think back to a case where you suspected that there was a delay in your patient's cancer diagnosis. What happened?
2. How do missed or delayed diagnoses typically come to your attention?
3. How often do you have a patient with a missed or delayed diagnosis that involved another clinician?
4. What do you typically do if you suspect that there was a delay in a patient's cancer diagnosis by another clinician?
5. Has any other healthcare provider given you feedback about a delay in a patient's cancer diagnosis that involved you personally?
6. What kind of information do you think would be most helpful to feed back to healthcare providers about the diagnosis process?
7. Is there anything else you'd like to add about the topic?