PERSPECTIVES

Preventing Communication Errors in Telephone Medicine

A Case-Based Approach

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Errors in telephone communication can result in outcomes ranging from inconvenience and anxiety to serious compromises in patient safety. Although 25% of interactions between physicians and patients take place on the telephone, little has been written about telephone communication and medical mishaps. Similarly, training in telephone medicine skills is limited; only 6% of residency programs teach any aspect of telephone medicine. Increasing familiarity with common telephone challenges with patients may help physicians decrease the likelihood of negative outcomes. We use case vignettes to highlight communication errors in common telephone scenarios. These scenarios include giving sensitive test results, requests for narcotics, managing ill patients who are not sick enough for the emergency room, dealing with late-night calls, communicating with unintelligible patients, and handling calls from family members. We provide management strategies to minimize the occurrence of these errors.

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Communication failures have been shown to play a key role in medical mishaps.[1] Telephone communication—the primary mode of communication between physicians and patients outside of the office visit—is rife with potential errors. These errors stem from both the inherent challenges of telephone communication and from the frequent disconnect between physicians and patients[2–4] because of a lack of visual cues, technical difficulties, and cross-coverage. In almost one third of telephone encounters, physicians and patients see the reason for the call differently,[2] with patients viewing a higher number of their calls as "true emergencies" than physicians.[3,4]

Communication errors in telephone medicine can result in adverse outcomes ranging from inconvenience and anxiety to serious compromises in patient safety. In 1 study using simulated patients, less than one half of resident and attending pediatricians took an adequate history, and more than one third made inappropriate management decisions.[5] In Internal Medicine, the literature on patient safety and medical errors regarding telephone issues has focused less on communication between physicians and patients and more on communication between physicians and answering services or lab personnel.[6,7]

Familiarity with common telephone communication challenges may help physicians decrease the likelihood of serious negative outcomes. We chose 6 common situations in adult medicine in which communication errors often occur. These were selected from a larger number that was culled during 7 years of teaching telephone medicine to Internal Medicine residents, attendings, medical students, and support staff, as well as from our clinical experience. Each challenge is presented as a case vignette, followed by a brief discussion.

CASE I. SENSITIVE TEST RESULTS

Dr. J.: Mr. H., I have your results. We can talk now or you can come to the office.
Mr. H.: Now would be great!
Dr. J.: Everything was normal except the hepatitis C test . . . it was positive.
Mr. H.: What does this mean?
Mr. H. listened to Dr. J.'s description and had no questions. When he came to the office a few weeks later, his fists were clenched.
Dr. J.: You look anxious.
Mr. H.: I haven't slept in weeks.
Mr. H. adds that he couldn't speak freely during the call; his children were in the room.

Challenge

Determine when and how abnormal test results can be given over the phone.

Discussion

Unable to see the patient's expression, Dr. J. assumed, incorrectly, that he took the news well. When calling with test results, the physician should first check whether the patient can speak freely. He or she should take time to listen and explain carefully because of the lack of visual cues that might indicate emotion.[8]

Most patients wish to be notified about test results. Most prefer doctor-initiated methods, such as a letter, call, or follow-up appointment.[9–11] For normal results, the telephone can be a useful mode of informing patients; such calls can often be delegated to nurses or other assistants.

When ordering a test for hepatitis C virus, HIV, or as part of a malignancy evaluation, it is most prudent to schedule an office visit soon after the test is completed. A call from the physician or other staff member to set up an appointment to review test results might prompt further anxiety. In 1 study, patients who were given a cancer diagnosis over the telephone were more likely to describe the interaction negatively than patients who received the diagnosis in an office setting.[12] If the result is normal, the scheduled visit can, in many cases, be cancelled. For a negative HIV test in a patient with no current

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HIV-risk behaviors, the telephone is a reasonable option.[13] Reportable results should be given in person.

An abnormal result that requires immediate attention should be given over the phone in most cases. For a result related to a chronic disease, such as the glycosylated hemoglobin, a telephone call is usually efficient and appropriate.

The physician should not give test results to a family member without the patient's specific request. Results should not be left on an answering machine; the physician should leave a message asking the patient to return the call.

Approach

(1) Clarify at the office visit how results will be reported.
(2) When ordering a test that might have significant results, schedule a follow-up appointment. Negative results can often be given via telephone.
(3) When calling with a result, ensure that the patient can speak freely.
(4) Do not leave results with family members (without specific permission) or on answering machines.

CASE II. REQUESTS FOR NARCOTICS

Ms. A. calls Dr. Q. on a Friday evening to ask for "just a few Percocets" because she strained her back lifting her nephew and "it's the only thing that works." She explains that she saw Dr. Q.'s colleague earlier that day but misplaced the prescription.
Dr. Q.: I suppose I can write you enough for the weekend. Let me talk to your pharmacist and I'll see what I can do.
Monday morning investigation showed that Ms. A. was never seen in his office.

Challenge

Be comfortable denying inappropriate requests.

Discussion

Dr. Q. tried to be understanding by providing a limited supply of the narcotic, but he should have either denied it completely or insisted that the patient be evaluated in person. Physicians should be familiar with typical warning signs of prescription drug abuse, such as demands for specific brand-name medications, frequent lost prescriptions, and attempts to acquire prescriptions from multiple providers.[14] Many practices deny after-hour requests for controlled medications by policy. This is especially important in large group practices where physicians on call may have no access to medical records. The increasing implementation of electronic medical records with home access is an effective way to thwart prescription drug abuse. Practices may also consider a list of patients with a history of proven prescription drug abuse.

"Controlled substance contracts" can educate patients in advance about policies regarding after-hours requests.[15] The covering physician should clarify that the patient's regular physician follows such a policy and then focus on other ways of helping. If the clinician does prescribe controlled substances over the telephone, small quantities pending visit or record review may satisfy both physician and patient.[16] Phrases such as "I wish I could, but . . . " make a patient feel heard when a physician finds it difficult to decline a patient's request.[8]

Approach

(1) Establish standard telephone policies about prescribing controlled (and other) medications. Routine use of "controlled substance contracts" ensures that patients are aware of these policies.
(2) Use phrases that maintain rapport and convey empathy such as "I wish I could, but . . . " when it is difficult to say no.

CASE III. THE PATIENT WHO IS NOT SICK ENOUGH FOR THE EMERGENCY ROOM

Mrs. G., a 78-year-old talkative widow with severe osteoarthritis calls Dr. N. reporting diarrhea since the prior night. After assessing her symptoms, Dr. N. tells Mrs. G. that she probably has a stomach flu.
Mrs. G.: (silent for a moment) . . . oh . . .
Dr. N.: You'll probably feel better within a day, but just in case, you should probably go to the emergency room tonight. If you don't go, make sure to drink plenty of fluids. Can you repeat back what I just said?
Mrs. G.: You want me to go to the hospital, but if I don't go, to . . . what was that again?
Dr. N.: To drink plenty of fluids.

Challenge

Recognize when a patient does not need emergency care but needs follow-up before an office visit is possible. Recognize the importance of repeating back instructions.

Discussion

Dr. N. believed that this was likely a self-limited gastroenteritis but feared missing a more serious illness. Sending a patient to the emergency room may be the safest option from a medicolegal perspective, but may be inconvenient and unnecessary. It can be difficult to make a triage decision in the moment; a follow-up call within a few hours can provide important information regarding the evolution of an illness.

Ideally, Dr. N. should have let Mrs. G. know what to expect and provided some reassurance. Almost half of patients surveyed about after-hours telephone encounters in one study reported that reassurance was more important than relief of symptoms.[2]

Dr. N.'s request for Mrs. G. to repeat back his recommendations was appropriate. When face-to-face communication is not possible, repeating back instructions can ensure comprehension and minimize the risk for errors.[7]

Paralanguage (tone, speech patterns, pauses, and pitch) can yield important information about a patient's feelings or intentions. A change in speech pattern can be a clue to emotion. When Mrs. G. became silent, Dr. N. missed an opportunity. He might have remarked on her silence as an invitation for elaboration or made a comment such as: "You sound apprehensive," or "I get the sense you might not understand exactly what I'm telling you." The physician should also be aware of her own paralanguage and its effect on a patient; a physician who speaks quickly or interrupts frequently, for example, may give the impression of being rushed and not listening.

Approach

(1) Use a "check-in" call when symptoms do not warrant emergency evaluation.
(2) Remember that reassurance is at least as important as symptom relief for many patients.
(3) Ask the patient to repeat back instructions to ensure comprehension.
(4) Be explicit about paralanguage (i.e., tone, speech pattern, pauses, pitch) when a patient's feelings or motivations are unclear, and be aware of your own paralanguage.

CASE IV. "INAPPROPRIATE" LATE NIGHT CALLS

3:30 a.m.:
Mr. W.: Doc, I can't sleep . . . my back hurts . . .
Dr. R.: Have you had back pain before? Is this different?
Mr. W.: I always have it to some degree . . . it's about the same.
Dr. R.: This couldn't wait? It's the middle of the night!
Mr. W.: I'm sorry, doc. I'll wait until the morning.

The next day, Dr. R. learns that Mr. W. had been hospitalized with a mild myocardial infarction. Dr. R. realizes that he never gave the patient the chance to mention his concurrent chest pain.

Challenge

Consider hidden concerns in calls that seem inappropriate.

Discussion

When a patient calls late at night with a seemingly petty concern, physicians might be tempted to reprimand the patient. Dr. R., feeling annoyed, interrupted Mr. W.'s story immediately; his brusqueness discouraged the patient from mentioning his chest pain. Patients should have the opportunity to describe the full chief complaint before the physician interrupts, even at the most inopportune times. The proportion of "serious" symptoms has been shown to increase as the hour becomes later.[17]

The question "Why are you calling now?" is critical. Careful questioning can reveal a variety of unexpected but meaningful responses, such as a patient calling with an important change in a chronic symptom, or an abused patient confiding fear of calling until her husband goes to sleep.

Approach

(1) Consider the possibility of a hidden concern, especially during late night calls.
(2) After the patient's first stated concern ask, "Is there anything else you want me to know about?"
(3) Allow the patient time to describe the full chief complaint before interrupting.

CASE V. UNINTELLIGIBLE PATIENTS

Dr. R.: . . . I didn't understand the question—can you repeat it?
Mr. B.: (mumbles unintelligibly) . . .
Dr. R.: I'm having trouble understanding you. I'm going to ask you to come to the office in the morning to see your regular doctor.

Dr. R. learns the next day that Mr. B. had been admitted to a hospital with anaphylaxis to a new medication.

Challenge

Transcend aural barriers to communication.

Discussion

Patients who are difficult to understand or hear (or who have trouble understanding or hearing) are particularly challenging on the telephone. This includes patients who are dysarthric, aphasic, hearing-impaired, non-English speakers, or developmentally disabled as well as patients who call from a noisy place or use voice vibrators. In these circumstances, the physician can consider asking whether another person can facilitate the call.

If this is not a possibility, the physician should be direct about the problem and the proposed solution. If an open-ended question provokes an unintelligible response, the physician should be frank about his difficulty in comprehending the patient and switch to a more directed style. It is helpful to summarize pieces of the story as they emerge in order to check for accuracy. Short, simple, repetitive statements should be used.[18] The physician should ask the patient to repeat any instructions. When a telephone operator reports difficulty in communicating with a patient, the physician should let the telephone ring for at least 1 minute to allow the patient time to reach the phone.[18,19]

If background noise or poor cell phone signal quality affects communication, the physician should request that the patient change location; if not, the physician should rule out an emergency and then suggest postponing the conversation.

When a non-English speaker calls, the physician might ask the patient to call back with a person who can translate (after grossly assessing the situation). Alternatively, a hospital or practice can set up an account with the ATT language line service (831-648-5871), which can arrange a 3-way call with an interpreter.

Approach

(1) Be frank about difficulties comprehending the patient.
(2) Use simple statements, directed questions, summarize frequently, and check with the patient for accuracy.
(3) Ask whether a family member or neighbor can "translate."
(4) Be familiar with the ATT language service.

CASE VI. GETTING INFORMATION FROM FAMILY MEMBERS

Dr. X. receives a call on Saturday.
Mrs. D.: Doctor, since my husband came home from the hospital yesterday, he's not himself. He's tired, not eating that much. But I don't think he needs to go back to the hospital—we have an appointment Monday with Dr. M.
Dr. X.: Why don't you put him on the phone.
Mrs. D.: Oh, he wouldn't want me to be bothering you. I think he's just worn out, but it could be me . . .
Dr. X.: I'd still like to talk to him.
Mrs. D. returns to the phone a minute later.
Mrs. D.: He's sleeping. I'd rather not wake him.
Dr. X.: Well, I suppose he's still recuperating. Call back if anything changes.
Later, Dr. X. learns that the patient was admitted the next day with urosepsis and delirium.

Challenge

Recognize the importance of speaking with the patient.

Discussion

Failure to collect available information can compromise patient safety. In this case, the physician's error lay in not insisting on speaking with the patient. His assumption that the patient was "still recuperating" was groundless. A few questions to Mr. D. to assess his orientation would probably have triggered suspicion that he was indeed quite ill.

In person, a patient's appearance can provide important clues to his health status. Without visual cues, the patient's words are far more critical. Information on the telephone received by a physician from others is hearsay until proven otherwise. There is no substitute for speaking directly with the patient (provided the patient is able to speak).

Approach

(1) Be cautious about interpreting information provided by others, especially on the telephone.
(2) Always speak with the patient directly.

CONCLUSIONS

Communication challenges can generate common and in some cases serious errors in clinical case management by telephone. The paucity of training in telephone medicine in residency programs may be a significant contributor to telephone communication errors. Although 25% of interactions between physicians and patients occur on the telephone, only 6% of residency programs teach telephone medicine.[20,21] Textbooks, books of protocols, and review articles designed for internists exist but are not widely available to residents and physicians.[22–25] Physicians in practice and in training can benefit from regular review of telephone cases, both for educational purposes and for making practice policies.[25]

Case vignettes such as those presented here can formulate part of a curriculum either in telephone medicine or in medical errors. A brief curriculum for residents in telephone error prevention might include discussion of typical and challenging cases such as those described in this manuscript, with a focus on identifying specific individual and systems approaches that could reduce or prevent such errors.[26] Audiotaped vignettes are excellent triggers for discussion. In our experience, residents are enthusiastic about case-based discussions of errors in clinical management by telephone and vignettes frequently prompt discussions about key issues. Simulations of medical events with scripted dialogue (in which participants read the script aloud and then discuss it) have also been described as an effective mode of teaching about patient safety. Simulations minimize emotional threats to trainees and serve as a comprehensible and engaging means of addressing systems issues.[27] A curriculum in telephone error prevention could be evaluated using standardized patients in an objective structured clinical examination.[28] For practicing physicians, continuing medical education courses on patient safety might be expanded to include telephone cases such as those presented in this paper.

Asynchronous communication using technologies such as e-mail, web-based communication, and telemedicine is becoming increasingly popular between physicians and patients.[29] Some principles discussed here, such as how and when to notify patients of significant test results to ensure confidentiality and avoid excess stress, are relevant to e-mail and web-based communication, as are establishing standard practice policies for prescribing controlled medications outside the office visit.

In other situations, what works on the phone may not fit into the framework of other non face-to-face technologies. With e-mail, for example, clues to a patient's emotion that might be uncovered through careful listening are unavailable. The asynchronous nature of e-mail and web-based communication makes it difficult to follow the evolution of an acute illness over a short period of time.

In addition to preventing management errors, good doctor-patient communication has been associated with many other clinically significant benefits, including enhanced diagnostic accuracy[30,31] and improved patient satisfaction,[32] whereas poor communication has been associated with increased risk of malpractice lawsuits.[33,34] Telephone communication will remain a major part of doctor-patient communication for the foreseeable future, despite the advances in other distance technologies. Recognizing and learning about communication challenges in telephone medicine is essential for good clinical practice.

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