

Connected: Communicating and Computing in the Examination Room

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The use of electronic medical record (EMR) systems is growing in the United States. With the availability of health care computing systems, clinicians can now use computers in the examination room during the patient visit. The EMR gives almost instant access to a wealth of important health data and can help improve provider performance [1] and may help reduce medical errors [2].

While exam room computing may provide benefit to clinician, patient, and health system, there are potential adverse impacts as well. In a review of research on exam room computing, Sullivan and Mitchell [1] noted that doctors tend to talk slightly more while patients talk slightly less in the presence of a computer, a situation that could lead to decreased patient involvement in their health care. Further, using the EMR during the visit can interrupt the flow of conversation between clinician and patient [3]. In addition, patients have concerns about the confidentiality of the EMR [4-6].

With regard to exam room computing, patients have 2 critical questions: What are you doing (and what does it have to do with me)? And will my medical information be kept safe from prying eyes? Although these questions usually go unasked, the physician must anticipate and answer them.

Exam room computing is an innovation that offers many advantages to patients and clinicians; however, specific communication skills must be used both to capitalize on the opportunities for building strong clinician-patient relationships as well as to mitigate some of the challenges raised by the introduction of this technology into the clinician-patient relationship. There is a substantial body of empirical knowledge about effective clinician-patient communication skills [7]. Based on this knowledge, we describe a set of skills and strategies to guide exam room computing. These cluster around 3 steps that occur during the visit: Connect, Collaborate, and Close (Table 1).

Connect

Greet the Patient

The EMR, like the paper medical chart, can be a seductive draw when a busy clinician enters the examination room. Making a personal connection before turning to the comput-

er is critical for establishing an effective relationship. Greet the patient by name, make eye contact, shake hands, and discuss something about the patient as a person. For new patients, one might say,

"I understand you are here to discuss getting a mammogram. Before we get going on that, I'd like you to tell me something about yourself, as a person."

With a returning patient, clinicians can review a social note made at the last visit and say something such as,

"Last time you were here, you were going to have lunch with your wife at the new French restaurant. How was it?"

Introduce the Computer

Introducing the computer as a tool for the patient's benefit reduces patients' confusion about what the clinician is doing during the visit. A clinician might say,

"We now have these computers in the exam room that let us get any of the information that you and I might need from your medical record."

Referring to this device during the visit as "your record" rather than "the computer" makes it of personal value to the patient. The words "your record" should be used frequently in referring to the information on the computer.

Confidentiality

Often patients bring visitors with them into the examination room, such as friends, children, spouses, or other family members. Clinicians should introduce themselves and invite the visitor to introduce themselves in a way that identifies the visitor's relationship to the patient. There may be information in the EMR that the patient would not wish the visitor to see. For example, a teenage girl accompanied by her mother might have a medication list that shows birth control pills that were prescribed in confidence. Normalizing

From the Bayer Institute for Health Care Communication, West Haven, CT.

Table 1. Communication Skills for Exam Room Computing

Connect
Greet patient, person-to-person
Introduce the computer to the patient
Acknowledge companions and address confidentiality
Arrange the screen so patient can view the record
Collaborate
Tell the patient what you are doing on the computer
Ask the patient's permission to type notes as you talk
Use information from the EMR to let patient know you are aware of their health care (eg, recent visits, upcoming appointments, new prescriptions)
Use the information on the computer as an opportunity to share decisions with the patient (eg, pharmacy choices)
Talk to the patient about the information you are viewing and how that fits with your understanding and the patient's understanding
Invite the patient to view data on screen
Invite the patient's thoughts on what you view on the EMR
When frustrated with the EMR system, refrain from complaining to the patient
Close
Tell the patient you are logging off/securing computer for their privacy
Review the visit with the patient after you have finished with the computer
Inform the patient of the next steps at the end of the visit
Say goodbye, person-to-person

EMR = electronic medical record.

confidentiality helps the patient avoid a confrontation with their visitor. For example,

"Angela, I see you have brought your mother with you today. It is our policy to keep all medical information private except for the records of young children, so I will keep the computer screen turned so that it can't be seen. Is that all right with you?"

On the other hand, when the patient is alone or has provided permission, the screen should be turned so the patient can see the information. Or, the patient should be invited to sit where they can see the screen. It is important for patients to be able to view the computer screen [4,5]. Patients who cannot see the screen may feel uncomfortable or feel as if they are being "kept out" [4]. The objective is to increase the patient's sense of inclusion. This is especially valuable as one moves to the Collaborate step.

Collaborate

This step includes the use of communication techniques that encourage the patient to join the clinician as a partner in

developing a health care plan. Patients' level of involvement in their health care affect both patient satisfaction and adherence to the medical regimen.

Describe What You Are Doing

It may be risky to assume that the patient knows what the clinician is doing when the clinician turns to the computer. In a study of 39 videotaped doctor-patient visits with exam room computing [4], in the 302 times that the clinicians turned to use the computer, only 43 times did doctors explain why they used it. After the visit, patients who received no explanation frequently reported thinking that their doctor had been doing work unrelated to their clinical visit.

A bridging statement helps the patient make the same transition that the clinician has made in his or her mind:

"Let me look up your most recent lab results."

This tells the patient what is happening. Turning to the EMR is an interruption, and the bridging statement brings the patient along in the process. Without the bridging statement, the patient may make other assumptions about what the doctor is doing, including something unrelated to the patient's visit.

Note Taking

Some clinicians find it useful to make notes during the interview. A proficient touch typist can take notes on a computer with no more loss of eye contact than with handwriting. Whether handwriting or typing, asking the patient's permission to take notes sets a tone of collaboration and respect. Of course, note taking during strong emotional moments for the patient should be avoided so the patient receives the clinician's full attention. On the rare occasion when a patient says that they do not want note taking, respecting that request is always in order.

Getting the Total Picture

Patients respond positively when the clinician is familiar with them personally and medically. For example, many EMR systems offer a summary screen that the clinician can view either in the room or prior to going in the room. Information about the patient's recent and upcoming health care, such as the reason they made the appointment, medications, recent visits in the health system (emergency departments or other clinicians), and upcoming appointments may all be available at a glance. This information enables the clinician to make comments that are both knowledgeable and personal:

"I see that you have been to the emergency department twice in the last few months for this problem. This must be quite worrisome to you."

The clinician can establish a closer relationship with the patient this way. The EMR establishes the visit within a wider context of everything taking place in the patient's health care.

Invite the Patient to View Data

Patients want to see the information that is on the computer, particularly trended health data such as blood pressures and other measures that are indicators of health or risk for certain diseases [8]. They are also interested in records and prompts for vaccinations, immunizations, and cancer screenings [8]. Sharing EMR health information is one of the advantages patients see in exam room computing. When clinician and patient consider health data together, this sets a strong collaborative tone, which supports the patient in being an active partner in curing and managing disease. EMR systems often provide opportunities to view trended health data together. With a few keystrokes, the clinician can present impressive color graphics that display summaries of important health parameters, such as blood pressure and lipid levels. When the clinician invites the patient to view the screen and says,

"Let's look together at how your cholesterol has been over the past few years,"

the clinician is also saying, "you are an important, active decision maker and partner in managing this condition." Viewing health data together is also a great opportunity to elicit the patient's thoughts about the condition and the treatment. When looking together at the display of health data in the EMR, the clinician can invite the patient's thoughts:

"What do you make of how your cholesterol has been going?"

Soliciting the patient's perspective gives the clinician valuable information about the patient's belief model regarding the condition and also communicates respect for the patient's beliefs. This respect is key to developing a collaborative relationship in which the patient becomes a partner in his or her health care.

Share Information About Choices

Information available through the EMR creates opportunities for offering the patient choices. Several drug choices might appear as the clinician selects a prescription for the patient. The clinician can say,

"It looks like we have several choices of medicines for helping lower your blood pressure. One medicine is taken once a day, but may give you this side effect. Another medicine is twice a day, but does not usually have that side effect. What makes sense to you?"

Involving the patient as an active decision maker will increase the patient's commitment to adhere to the treatment.

When the Computer Is "Slow"

Even with the current sophistication of both software and hardware, no EMR system runs perfectly all the time. Sometimes systems are slow, creating delays in moving from one task to another. Sometimes the entire system may not be operating just when the clinician is having a busy day in clinic. In frustration, it is tempting to complain in front of the patient about the system. Clinicians are wise to exercise caution about complaining in front of patients about any of their medical tools, including the EMR. Such complaints may engender a loss of confidence among patients that extends to their clinicians. When things don't go well, it is appropriate to have a more balanced comment such as,

"Having your electronic medical record available to us is wonderful. But sometimes we have to give it time to think."

Close

The Close is a transition from the visit to the next phase of health care. It involves several steps.

Secure the Patient's Records

Patients have concerns about the privacy of the EMR. In most EMR systems, the standard procedure is to secure the system whenever the clinician is away from the EMR. By making an explicit bridging statement about security, the clinician reassures the patient. Any unspoken worry that someone unauthorized may view the patient's records is addressed as a matter of procedure.

"I am securing your record so that all your information remains confidential."

Review the Visit

Turning away from the computer after securing it and reviewing the key points of the visit with the patient is another opportunity to involve the patient and connect personally. It also gives another opportunity to reinforce the patient's understanding of what was discussed during the visit.

Inform and Say Goodbye

While the clinician may feel that all of the tasks of the visit have been completed by this time, clarification of simple logistics such as getting dressed, going to the lab, or going to the pharmacy assure that the patient is not left in the awkward position of not knowing what to do next. Finally, making eye contact, shaking hands, and using the patient's name as you say goodbye ends the visit with a warm, personal note.

Summary

There is clear evidence that communication skills help clinicians and patients achieve important health outcomes [9]. More and more clinicians are using a computer to access patient records during visits. This addition to the clinician-patient relationship creates both challenges and opportunities for communication. The communication skills included in Connect, Collaborate, and Close can be taught to clinicians to assist them in using this new technology in medicine to build effective relationships with their patients.

The authors express their appreciation for the contributions and support from the development team at Kaiser Permanente, including Carol Donnelly, RN, Edward Mann, RN, ANP, Michael McNamara, MD, Kathy Poteraj, RN, Kim Ramage, Nan Robertson, RPh, and Robert Tull, PhD.

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