

**Supplementary Table 1** Interview guide

	Question	Possible probes
1.	Describe your communication style with the patient during the visit? (when you greet them, how you interview them, etc.)	<ul style="list-style-type: none"> <li>• Consider your nonverbal communication as well as verbal</li> <li>• How did you develop your style? (medical school training?)</li> <li>• Do you communicate differently with a new versus established patient?</li> <li>• Do you alter your communication style based on patient characteristics? (age, gender, ethnicity, visit type, etc.)</li> </ul>
2.	Describe your experiences with electronic health records (EHRs)	<ul style="list-style-type: none"> <li>• How long have you used EHRs?</li> <li>• Positive/negative experiences?</li> <li>• Training?</li> <li>• How much time do you spend charting after a clinic half-day?</li> </ul>
3.	Describe your use of EHR while communicating with patient (multitasking)	<ul style="list-style-type: none"> <li>• Have you received any training (formal or informal) for integrating EHR use into your overall communication with the patient?</li> <li>• What are the main challenges of using the computer during the visit?</li> <li>• What is the influence of the computer and EHR on your nonverbal communication with the patient?</li> <li>• Do you think there is a better way to document during the visit?</li> <li>• How do you think patients feel about your use of EHR and/or the computer during the visit?</li> </ul>
4.	Describe how you conduct patient education in the visit	
5.	What are your thoughts on using EHR as a tool for communication and/or education	<ul style="list-style-type: none"> <li>• How do you use it?</li> </ul>
6.	Describe your screen-sharing behavior	<ul style="list-style-type: none"> <li>• Describe circumstances when you have shared the screen</li> <li>• Describe instances when you have avoided screen-sharing</li> <li>• What advantages and/or disadvantages do you perceive in screen-sharing?</li> </ul>
7.	Discuss the work system facilitators/barriers that influence your use of EHR to educate and/or communicate with patients	<ul style="list-style-type: none"> <li>• Organization</li> <li>• Individual</li> <li>• Task</li> <li>• Environment</li> <li>• Tools and technology</li> </ul>

**Supplementary Table 2** Codebook excerpt—codes related to screen-sharing

Codes	Description (followed by representative quotes)	Total interviews with this code	Total utterances with this code
Challenges to EHR use in patient encounters	Elements of physician–patient–computer triad that are challenging, including software, hardware, distractions, and maintaining engagement with patient ("...you may miss some of the nonverbal cues that the patient is telling you... the patient may feel like you're not really listening to him and just using the computer.")	21	25
Negative experiences—EHR impedes communication	Instances when EHR use impeded effective communication; includes unintended consequences ("...syphon through everything and find ... what's pertinent to what I need right there and then ... while the patient's sitting right there ... it just ... creates that – that awkward silence.")	21	25
Positive experiences—EHR improves communication	Encounters in which physician–patient–computer triad flowed smoothly ("we can have like better communication in terms of um, you know, they see what I'm seeing.")	21	30
Downsides of EHR use during encounter	Includes barriers of the work system (SEIPS) to using EHR as a tool for communication and/or education; also disadvantages of screen-sharing ("I think ... my skill level at using the EHR is a barrier. I'm not efficient yet where I can look up ... things real quick.")	18	60
Upsides of EHR use during encounter	Includes facilitators of the work system (SEIPS) to using EHR as a tool for communication and/or education; also screen-sharing advantages ("...just the physical setting of it... it's really just on a pivot ... right between us ... I think it's a very natural thing.")	18	51
Screen-sharing_ General	Includes examples, circumstances, factors associated with screen-sharing, trust ("it's important to show them ... what's important to us. Um, and by emphasizing what's important to us, we can show ... we can figure out what's important to the patient, and we can try to make a bridge between those two.")	21	43
Training for EHR-based communication with patient	Formal or informal training in which resident has learned strategies/skills for using the EHR as a tool for communication and/or education ("no, I haven't gotten any specific ... how you should use the EHS towards communicating with the patient.") ("I think some informal guidance, you know, from my preceptors and in medical school, things like that, you know, but, yeah, again, no formal programs, per se.")	21	24
Using EHR as a communication tool	How physician decides to use or not use EHR in encounter, descriptions of strategies, descriptions of situations ("I think it reinforces things ... it just kinda educates them about how bad their disease is as opposed to before, and so when they come back next time and find out, oh my creatinine doubled, now they know what that means.")	21	25

Abbreviations: EHR, electronic health record.