Supervision: A 2-Way Street

We commend Singh et al1 on their thought-provoking and important work. While we certainly agree that patient handoffs are rife with the potential for error and patient harm secondary to breakdowns in communication,2 laying the onus of supervision squarely on the attending physician is an issue we call into question.

The struggle between resident autonomy and the duty to supervise is constant, with trainees wishing to assert their independence and the hidden curriculum reinforcing their actions.3 Levels of supervision have been defined within specific specialties, such that there is a graded amount of attending physician involvement: direct, which requires the physical presence of the attending physician during the key aspect of patient care; participatory, with faculty providing oversight before or during the care of the patient; and indirect, which involves the faculty reviewing the care given to patients by examination of medical records or discussion of treatment plan.4 It is important to note that indirect supervision, which is most commonly adopted and used in nonprocedural specialties, can be misperceived as a lack of supervision in some cases. In these instances, residents may actively discourage involvement by the attending physician. In fact, an overly involved attending physician is perceived as invasive and having a lack of faith in the team's clinical competence.5 Moreover, the Accreditation Council for Graduate Medical Education stresses providing and promoting resident autonomy in clinical care.6 The control of the struggle between autonomy and supervision lies squarely with the resident physician, since they choose to engage their attending physician in their decision making. Often it is not that the attending physician is not participating in decision making because of a failure to supervise, but that they are not aware of the decisions being made by their resident.

Our work has shown that residents will often adhere to a “hierarchy of assistance” in their clinical decision making, whereby they first review literature and then approach colleagues, subspecialty fellows, and finally, their attending physician. The adherence to this hierarchy can contribute to delays in indicated care and adverse patient outcomes. Fear of repercussion and of revealing gaps in their fund of knowledge are 2 reasons residents cite as deterrents for soliciting attending physician-level input into decision making. Attending physicians serve the dual role of supervisor and evaluator. While we agree that graduate medical education reform should focus on explicitly training attending and resident physicians to be effective supervisors, it is equally important to encourage residents to seek attending physician-level input when managing uncertainty during clinical decision making.

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Resident Supervision and the Electronic Medical Record

The interesting report by Singh et al2 adds important data to understanding the factors behind errors in various training settings. It shines a bright light on factors related to teamwork, specifically, errors involving lack of supervision. This report also shows that errors occur in a variety of patient care settings. Patient care involving computer-based medical records may have unique error characteristics. However, an integrated electronic medical record may also offer new opportunities to both instruct and supervise trainees.

A result of the increased fragmentation of patient care is that the instruction and supervision of trainees has become more complex. Communication between trainees and supervisors historically occurs in person or over the telephone, but now it also occurs virtually via text messaging and secure e-mails.

The electronic medical record allows trainees to review patient results on their outpatients and then forward their supervising attending physician the plan of care or other action taken by the trainee. The supervising attending physician can both review and easily document supervision of the trainee’s actions. Traditional resident sign-outs have recently been reported to have numerous errors related to medications.2 The electronic medical record allows for more consistent and ac-
accurate handoffs because the up-to-date patient information is available in real time.

The electronic medical record can also be linked to search engines and clinical practice guidelines and include other instructional material for both trainees and their patients. This allows them to more efficiently learn or review medical information in real time while the patient is in front of them.

Preferably, we will directly supervise our trainees in real time during patient encounters in a variety of clinical settings as often as possible. However, the complex nature of 21st century medicine including telemedicine, instant messaging, and newer “e-mail your physician” options require use of additional novel methods of supervision. By using the “cc” option of the electronic medical record, our trainees can gain practice in nondirect patient care aspects of medicine while being appropriately supervised, and that supervision is easily documented.

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In reply

Farnan and colleagues highlight an important and delicate challenge for the supervision of medical trainees: determining the appropriate degree of oversight and involvement. An extremely “hands-off” approach, which was evident in some of the cases we examined, poses patient safety risks. Very close oversight, on the other hand, demeans the trainee, impedes learning, and stifles the development of independent clinical skills.

The “indirect supervision” to which Farnan and colleagues refer may be a useful strategy in negotiating between these undesirable extremes. Kennedy et al have recently proposed a new conceptual framework of clinical oversight by senior physicians to ensure quality of care. In this framework, supervisors may engage in various types of oversight, including “responsive oversight” (triggered “double checking” of patients’ clinical condition) and “backstage oversight” (monitoring of which the trainees were unaware, such as checking laboratory values), which may occur even when residents discourage involvement by the attending physician. This work also acknowledges that when supervisors encounter a situation that exceeds a trainee’s competence, they move beyond clinical oversight to direct patient care.

Trainees who resist supervision or do not involve attending physicians when they should pose a special challenge. Although we do not specifically discuss this behavior, our data show some evidence of it. For example, several of the breakdowns in information transfer between trainees and attending physicians tied back to failures on the part of the trainees to seek input from attending physicians.

Hence, we agree with the general point by Farnan et al that attending physicians cannot and should not shoulder direct responsibility for every lapse involving trainees. Our data highlight inadequate supervision of junior residents by senior residents as one source of problems. Moreover, attending supervisors lack clearly defined standards and best practices articulating what constitutes adequate supervision, especially in nonprocedural specialties. In addition, with resident autonomy in clinical decision making must come a degree of responsibility. However, we believe that the assertion by Farnan et al that control of the autonomy-supervision struggle lies squarely with the resident physician goes too far. Attending physicians and hospital management are the leaders of the environment in which training occurs. They run training programs and must ultimately accept responsibility (though not always legal liability) for the quality of care delivered through such programs. Avoiding this reality reduces the prospects of achieving the twin objectives of high-quality care and training excellence.

Brickner et al highlight the opportunities that introduction of an electronic medical record may present for improving supervision and training. As in other areas of quality improvement, realization of such benefits depends on overcoming the inevitable challenges associated with introduction of new technologies. Although our article did not specifically address this issue, previous work has shown that critical information transmitted through electronic medical record systems may, for example, not always generate an adequate follow-up action by physicians.

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Acid Suppression Not the Only Culprit of Community-Acquired Pneumonia

We read with great interest the article finding an increased risk of community-acquired pneumonia (CAP) with the use of proton pump inhibitors. While an association was found in a significant number of patients, a direct causal relation-