Texting While Doctoring: A Patient Safety Hazard

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Texting while driving is associated with a 23-fold increased risk for crashing (1) and is illegal in most states (2). Using a cell phone while driving reduces the amount of brain activity devoted to driving by 37% (3). Multitasking is dangerous—cognitive scientists have shown that engaging in a secondary task disrupts primary task performance (3).

Might physician typing into electronic health records pose similar risks? As when driving, physicians also need to be alert to environmental cues and unexpected turns. Multitasking can undermine the core activities of observation, communication, problem solving, and developing trusting relationships. Although it can be argued that texting is unrelated to the task of driving and that typing may be part of the patient care process, we believe the issue of distraction is nonetheless relevant, especially given the realities of information chaos during the encounter (4). Problems in care have been documented (5).

Although there is a relative lack of observational data, in clinics across the country we have observed patients send signals of depression, disagreement, and lack of understanding and have witnessed kind, compassionate, and well-intended physicians missing these signals while they multitask. These physicians are concentrating not only on the patient but on typing the history, checking boxes, performing order entry, and other electronic tasks (6). One physician noted, "I am always multitasking . . . I am entering orders, checking labs, downloading information while I talk to the patient. It requires chronic hypervigilance, which is exhausting and demands conscious effort to stay in the 'present' with the patient" (Day S. Personal communication.). External forces drive this. Vendors market their electronic health records with the pitch that costs will be offset by a reduction in transcription expenses as physicians type their notes. Computerized physician order entry displaces to the physician clerical tasks once performed by others, increasing time commitment and cognitive interruptions (7).

Stage 2 meaningful use criteria (8) require clinicians to type in orders so that physicians view clinical decision-support reminders; however, most tests ordered in the primary care setting do not require nor can they be addressed by this system. We found that less than 0.1% of the tests ordered in our practice could potentially benefit from point-of-care clinical decision support, a function not yet available for these tests. We are concerned about the hazards of applying a work burden to 100% of orders when less than 0.1% might benefit.

Time motion studies in our practice demonstrate that an additional 3 hours per week of physician time is lost to order entry when physicians, rather than staff, perform these tasks. The time cost of this additional clerical work prevents physicians from "working to the top of their license," is a form of waste, and effectively reduces primary care capacity. Yet, this workflow is associated with penalties in stage 2 meaningful use reporting.

It is time to envision technologically supported, team-based models of care within a more sophisticated socio-technical framework. In these models, physicians give their patients undivided attention while other team members perform clerical and routine clinical functions, such as data acquisition, visit note documentation, and order entry.

Emerging innovative models hold promise. We have observed in other practices (6, 9) and developed our own collaborative care model in which nurses, medical assistants, or health coaches manage electronic information, thus allowing the physician to provide undivided attention to the patient. Practices using these new models report greater patient access, better staff and physician satisfaction, and higher-quality metrics.

To flourish, these new models need both new policies and new technologies, such as a team login to allow seamless collaborative documentation between nurse and physician, team signatures to empower nursing staff to sign off on much of the paperwork in the practice, and meaningful use policies that allow nonclinical staff to fully support care.

New payment models will also help. The current visit-based, fee-for-service model contributes to the pressures to "text while doctoring" as clinicians record history on billing templates, progress through drop-down boxes to justify a level of service, distractedly multitask, and thus give their patients only partial attention. In contrast, we visited a practice under a global payment model in which clinician revenue does not depend on recording the encounter in a visit-based, level-of-service framework. Documentation in this practice, done largely by health coaches, focuses on the longitudinal portions of the record (problem list, patient goals, social history, and medication history), that is, those portions of the record that are most useful for care coordination and long-term management.

A tsunami is approaching the U.S. health care system: an obese, aging population, many newly insured, and a delivery system with limited primary care capacity, low numbers of students choosing primary care, and increasing burnout. But the problem is not simply one of physician supply—it is also one of physician utilization, which could be at least partially addressed by changing how work is organized, tasks are distributed, and the enterprise is regulated. At a time when so many are calling for teamwork in health care (10), policies and technologies that support

teamwork, including team login, seamless transitions between users, clerical assistant order entry, and administrative regulatory relief, are desperately needed.

Reducing texting while doctoring will decrease the hazards of distracted physicians making perceptual and cognitive errors during the medical encounter. We believe it will also improve patient and physician satisfaction.

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