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An Ethical Case for Medical Scribes

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Abstract
This article addresses ethical concerns with the use of electronic health records (EHRs) by physicians in clinical practice. It presents arguments for two claims. First, requiring physicians to maintain patient EHRs for medically unnecessary tasks is likely contributing to increased burnout, decreased quality of care, and potential risks to patient safety. Second, medical institutions have ethical reasons to employ medical scribes to maintain patient EHRs. Finally, this article reviews central objections to employing medical scribes and provides responses to each.

Keywords: electronic health records; burnout; quality of care; patient safety; medical scribes

Introduction

The practice of modern medicine faces a crisis of time. Patients and medical institutions demand greater patient-centered care, which requires time and attention from physicians. Increasingly, physicians face growing bureaucratic demands on their time and attention, particularly in the process of maintaining electronic health records (EHRs) during and outside patient consultations. EHRs are an electronic record of patient health and "contain information from all the clinicians involved in a patient's care" as well as notes written by social workers, ethics consultants, and other legal documentation.[1] In contrast, the electronic medical record (EMR) functions as the digital version of a patient's health chart.

There are reasons to think that requiring physicians to maintain EHRs during and outside patient consultations is likely contributing to increased rates of burnout, decreased quality of care, and increased risks to patient safety. I argue that, where possible, medical institutions ought to employ medical scribes to maintain patient EHRs for any medically unnecessary clerical tasks. To more clearly understand the central problem in this discussion, I will first briefly outline the growing shift toward "patient-centered care" in medicine.[2]

The Importance of Patient-Centered Care

The term "patient-centered care" is employed in a variety of ways in medicine. I use the term to refer to a form of "deep respect for patients" combined with the motivation to "care for them on their terms."[3] On this account, "patients are known as persons in context of their own social worlds, listened to, informed, respected, and involved in their care—and their wishes are honored (but not mindlessly enacted) during their health care journey."[4] Medical providers have strong reasons to respect patient beliefs and values, while ensuring that patients have appropriate information to make properly informed decisions about their healthcare.[5] In theoretical discussions of medical ethics, these concerns are guided by a general respect for patient autonomy.

Since a central goal of medicine is to promote the welfare of patients, there are additional reasons to pursue a policy of patient-centered care. For example, physicians who are sensitive to and acknowledge

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patient expressions of emotions acquire more complete health histories.[6] Further, patients also seem to place more trust in physicians who appear to be concerned about their health, and they are subsequently more likely to adhere to treatment regimes.[7] Finally, there is growing evidence that active listening, a focus on patient narratives, and expressions of empathic concern are associated with increased patient compliance with treatment,[8] improved health outcomes,[9] and greater patient enablement.[10]

Given the benefits of patient-centered care, demand for such care will likely continue to grow.[11] However, good patient-centered care requires time and attention, and these resources are in increasingly short supply. While numerous causal factors constrain time in medicine, one pressing concern is the administrative and practical burdens generated by the adoption of EHRs systems.

Patient-Centered Care and EHRs: Three Problems

Problem 1: Patients versus Paperwork

As of 2017, 86% of office-based physicians and 96% of nonfederal acute care hospitals utilized some form of EHR.[12] Ideally, an EHR system should improve the workflow and economic efficiency of medical practice, allowing physicians and medical professionals to focus on providing optimal medical care. However, in actual practice, EHR systems have often produced serious problems for the practice of medicine.

According to one recent study, physicians spent "27.0% of their total time on direct clinical face time with patients and 49.2% of their time on EHR and desk work."[13] More recent research suggests a similar trend, with physicians "spend[ing] more than one-half of their workday, nearly 6 hours, interacting with the EHR during and after clinic hours."[14] One criticism from clinicians is that such systems often involve "pajama time," where many hours are spent outside of clinical consultation "entering data to satisfy billing and quality reporting requirements."[15] While some measure of paperwork is inevitable in any modern bureaucracy, this disparity seems particularly undesirable in medical practice.

One central reason that physicians pursue medical careers is to effectively interact with and care for patients.[16] In order to properly provide care and treatment for patients, physicians need appropriate time and a suitable context, but the rapid growth of EHR technology has reduced the quality of these interactions. For example, one prominent concern from physicians about EHR technology is that the suboptimal design and time required to enter data regularly detracts from the face-to-face interaction that is required for a quality interaction with a patient.[17] Additionally, for those individuals who find personal and professional fulfillment in interacting with patients and providing care, research suggests that spending such large amounts of time on paperwork is frustrating and unfulfilling.[18] More alarmingly, there is evidence to suggest that these paperwork burdens are a central factor in the growing crisis of "burnout" in medicine.

Problem 2: Medical Paperwork and Burnout

Burnout in the workplace is often defined as a "psychological syndrome in response to chronic interpersonal stressors on the job."[19] It typically involves "an overwhelming exhaustion, feelings of cynicism and detachment from the job, and a sense of ineffectiveness and lack of accomplishment."[20] While many professions and workplaces are concerned about burnout, some have suggested that burnout among physicians has reached an "epidemic" level in modern healthcare.[21]

According to a recent study, both physician burnout and dissatisfaction with work–life balance increased from 2011 to 2015.[22] Additionally, the 2018 Mayo Clinic Proceedings found that 54% of surveyed physicians ($n = 6{,}695$) reported dealing with symptoms of professional burnout.[23] In another larger national study, physician satisfaction with EHRs was low, and those who used EHRs were "at higher risk for professional burnout."[24] Physicians themselves have also identified paperwork as a serious concern for the profession. For example, the top priority identified in the membership survey of

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the American Academy of Family Physicians for 2017 and 2018 was for the organization to reduce administrative burdens for physicians.[25]

Problem 3: Medical Error and Professional Loss

Physician burnout in medicine has several serious consequences. One is that patients may be more likely to suffer harm due to physician oversight or medical error. For example, a 2016 meta-analysis found that "[p]oor wellbeing and moderate to high levels of burnout are associated, in the majority of studies reviewed, with poor patient safety outcomes such as medical errors."[26] Another meta-analysis found that while the "effects are small to medium," burnout among medical providers "shows consistent negative relationships with perceived quality (including patient satisfaction), quality indicators, and perceptions of safety."[27]

Another negative consequence of burnout involves the personal and social loss of a physician leaving the profession as a result. Pursuing medical training requires great effort, financial risk and personal sacrifice. Consider the financial investment alone: according to the Association of American Medical Colleges, the "mean debt [for medical school] was $200,000 in 2018."[28] To forego a career due to unworkable conditions of employment or psychological distress is devastating, particularly considering the personal and financial investment required to be successful in medicine.

There are also serious economic costs to a medical practice when a physician leaves due to burnout. Herbert Fred and Mark Scheid estimate that the loss of a physician can cost a practice $500,000 to $1 million in revenue per year and that this is "even greater [for] high-paying specialties."[29] Further, it can cost an additional $90,000 to recruit a new replacement.[30] In addition, when a physician leaves a particular medical practice due to unmanageable work conditions, this simply shifts the burden onto the remaining practitioners, further exacerbating the situation.

An Ethical Case for Medical Scribes

The majority of office-based physicians and nonfederal hospitals employ some type of EHR.[31] Given the current use of technology in medicine, I will assume that EHR systems will continue to be utilized. I will also assume that we should avoid institutional practices which likely harm physicians and decrease the quality of medical care for patients. In this section, I will argue that since requiring physicians to maintain EHRs for medically unnecessary tasks likely harms physicians and decreases the quality of patient care, we should instead employ medical scribes to serve in this clerical role.

I have previously reviewed some of the evidence that burnout is increasing among physicians at an alarming rate. Further, while multiple factors contribute to burnout at work, the growing demands of EHR use are likely a central contributor to this burnout. In the absence of an intervention, we can expect burnout to continue among physicians. Given the moral and practical costs of burnout to medical practitioners and patients, the practice of medicine should work to mitigate this form of workplace distress. As I will argue below, if an effective and economically feasible intervention can improve patient care and decrease physician burnout, we should pursue that practice as an ethical imperative.

Many medical professionals enter medicine with the desire to promote health, or at least the assumption that they will be provided with a reasonable and safe context to provide healthcare. However, with growing bureaucratic burdens, there are situations where the practice of medicine makes it increasingly difficult to practically and psychologically maintain the expected workload.

This problem is compounded by other related issues. Patients increasingly desire more engaged attention and patient-centered care, while medical professionals are finding that patient satisfaction measures put increasing demands on the physician–patient interaction in daily care.[32] If hospital administrations continue to emphasize the promotion of patient-centered care, yet physicians are also

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required to maintain cumbersome EHR systems for medically unnecessary tasks, burnout and other attendant costs are almost inevitable.

While there are clear economic costs involved in this growing problem of burnout, there are further ethical problems with the present situation. Given the present burnout rates, it appears that many physicians are often required to work in psychologically unsafe work environments on a regular basis. While we might think that the consensual decision to engage in an otherwise risky form of employment ought to be respected on grounds of respect for autonomy, the case is much less clear in the regular practice of medicine. Most physicians did not clearly consent to practice medicine under many of the current conditions or to employ the cumbersome EHR systems.

Further, even if physicians consent to engage in a psychologically risky form of employment for economic benefit, the practice of medicine is not a merely self-regarding activity. Suffering burnout as a physician comes with the potential costs of death or injury to third parties. If we can reliably predict that an otherwise consensual activity will produce potentially serious harm to nonconsenting third parties, there may be good paternalistic grounds for restrictions on the former practice. Given that there is some evidence that burnout can indirectly harm patients, we have reasons to favor reasonable policies that mitigate that harm.

A distinct line of argument emerges when we consider time in medicine. Typical discussions of justice in medicine focus on the fair distribution of scare medical resources. Time is not typically considered to be a medical resource in the same sense as hospital beds or ventilators. However, the availability of time is a necessary condition for any practice of effective medical care. Presently, physicians ration the time that they spend with patients for numerous reasons.[33] Further, time with patients can be distributed in ways that are unjust. For example, it would be wrong for a physician to prioritize time spent with particular patients in proportion to the likely economic benefits to her local practice.

One concern with EHR systems is that they regularly require physicians to redistribute their time in ways that crowd out patient care. EHR entry during an appointment often breaks the attention of the provider. In some cases, the EHR becomes the focus of their attention throughout the patient interaction. Further, EHR maintenance can require many hours of work outside of patient care each day. To attend to these systems at the expense of other regular and urgent patients is an unjust use of a scarce resource.

Given the serious nature of this problem, I argue that medical scribes should be employed in clinical practice for any medically unnecessary clerical tasks. Before I detail the reasons for this claim, I will clarify the definition of "medical scribes" and how they are presently used in medicine. According to The Joint Commission, a scribe "may be an unlicensed…or licensed person…who provides documentation assistance to a physician or other licensed independent practitioner."[34] At a minimum, scribes have basic training in medical terminology, HIPAA regulations, billing and coding, and order entry. Further, they may "at the direction of a physician…enter orders into a[n] EMR."[35]

The modern use of medical scribes began in the mid-1970s, but their use in clinical practice has grown substantially since financial incentives for EHR use were included in the passage of the Health Information Technology for Economic and Clinical Health Act of 2009.[36] According to an estimate by American College of Medical Scribe Specialists (ACMSS), there will be approximately 100,000 medical scribes working in the US by 2020.[37] Scribes serve a wide variety of roles in clinical settings. During patient examinations, a scribe may accompany the physician into the exam to take notes and reference relevant information from the chart.[38] They may also work through and communicate to the physician a variety of reminders, warnings, and prompts generated by the EHR.[39] For example, the EHR might remind the physician about a relevant patient allergy, or missing test results.

In addition, scribes may also assist with more detailed charting (which a physician may otherwise have to complete later), manage lab and radiology results,[40] enter coding information for insurance,[41] and even assist with patient registration in some emergency situations.[42] Given the detailed nature of EHRs (which may involve medical, insurance, and legal documentation), many physicians who are not technically trained often struggle to balance their focus on clinical care with new or changing EHR interfaces and systems.

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Given the role that scribes can serve, consider some of benefits of scribe-assisted clinical practice. First, it allows the physician to focus entirely on the patient interaction. Without the management of an EHR system and the prompts in an examination, physicians can maintain relatively direct interpersonal contact with their patients. Given the growing emphasis on patient narratives and the importance of attitudes like clinical empathy, any approach that can improve the physician–patient interaction is highly desirable.

Second, employing medical scribes to maintain EHRs has a host of benefits for the physicians themselves.[43] Based on the evidence I have reviewed, a central source for physician burnout stems from the burdens associated with the time and effort required in maintaining the EHRs in addition to providing patient care. Employing medical scribes stands to mitigate this source of burnout by removing an unjustified burden on physician time, particularly the hours of work outside of clinical practice writing up notes or coding claims. As a result, physician satisfaction with their work will likely improve since they will have more time and resources to focus more directly on the practice of medicine. I will say more about this claim shortly.

Third, there are several broad benefits for the practice of medicine that will likely result from employing scribes. I have previously reviewed evidence that suggests that burnout is associated with increased potential harm to patients. By mitigating the source of burnout, the medical establishment can also mitigate at least one source of potential harm to patients. Further, since burnout is associated with the costly social and economic loss of physicians practicing medicine, any means of reducing that source of burnout (and economic loss) is highly desirable.

Objections and Responses

While the use of medical scribes is growing, the practice is not without critics. In the final section, I will outline several objections to employing medical scribes and develop responses to each.

Objection 1: Employing Scribes Disincentivizes EHR Improvement

One concern of critics is summarized by George Gellert, Ricardo Ramirez, and Luke Webster: "If physicians and hospitals use medical scribes as an effective workaround, dissatisfaction with the state of technology likely will decline, potentially reducing collective market pressure on industry to evolve EHR usability."[44] They continue: "The answer to today's inadequate EHRs is not scribe support. Instead, physicians should demand improved products, should educate vendors…and should clarify what is needed for an intuitive, quick, and navigable user interface."[45] David Bates and Adam Landman develop this concern, arguing that scribes are just one way to reduce the "documentation burden," which is mainly caused by poorly designed EHR systems.[46] They argue that scribes are "likely to be a short-term strategy, helping organizations that can afford it get through some of the current difficulties with EHR implementation."[47]

In response, continuing to rely solely on the feedback of physicians to improve EHR products may simply exacerbate the present situation. Consider that even the high levels of current dissatisfaction with EHR usability have not provided a particularly strong incentive for vendors to improve their products in these areas. One study reviewed 41 available EHR products are found that "14 (34%) had not met the ONC[48] certification requirement of stating their UCD [user-centered design] process, 19 (46%) used an industry standard, and 6 (15%) used an internally developed UCD process."[49] In addition, any solution that requires physicians to engage in clerical work that is unrelated to medical care will not mitigate the potentially grave costs of burnout and medical error that I have previously noted.

Rather than relying on busy physicians to pressure vendors to improve products, EHR usability standards seem to be a good candidate for greater governmental oversight and regulation. At least one author has suggested that EHR systems should be legally regulated as though they were a form of medical

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instrument. Given the potential impact on patient health and their ubiquity in medical interactions, this is an interesting argument that is worth further consideration.[50]

Instead of viewing scribes as a temporary measure, they can serve a novel and vital role in an ideal patient-centered form of medicine. Even an efficient software interface still requires that an individual spend time working with this interface during a clinical encounter. By passing the documentation work to a team member during this time, the physician can focus directly on the patient's needs and narrative. This shift in focus has measurable benefits. First, physicians who are sensitive to and acknowledge patient expressions of emotion acquire more complete health histories.[51] Second, engaging in active listening and focusing on patient narratives are associated with increased patient compliance with treatment.[52]

Finally, it is important to note that employing medical scribes is not inconsistent with continuing to provide valuable feedback to vendors to improve EHR products. Physicians would still interact with EHR systems to update and review patient EMRs and authorize/send standing orders. So, while scribes can serve an important role in helping to offset clerical burdens and mitigating burnout, they also importantly stand to provide a better context for physician–patient encounters.

Objection 2: Function Creep—Dishonest EHR Entry

One concern with employing scribes to maintain EHRs involves "unintentional or intentional [function] creep in how medical scribes are used."[53] First, critics are concerned that busy physicians may ask scribes to enter verbal orders into the computerized patient order entry even when such requests are otherwise prohibited. More seriously, they note anecdotal accounts of scribes being asked to "document certain activities, such as counseling smoking cessation, not actually performed to increase billable charges, to avert administrative compliance pressure, or both." For those scribes who fear losing their jobs, they "cannot decline such directives."[54]

The first concern may be alleviated by the fact that the Joint Commission (2018) now allows for scribes to "enter orders" at the "direction of a physician" or other licensed practitioner.[55] In cases where the scribe is not authorized to submit an order, it is left pending until it is submitted by the relevant medical authority. However, critics seem rightly concerned about *deceptive* entries on the part of a scribe at the direction of a physician. For the sake of the argument, let us grant that such practices occur when scribes are employed. This is a troubling state of affairs, though it is not entirely clear why it counts against the practice of employing scribes in medicine.

The fact that an unscrupulous (or busy) physician would order a scribe to engage in what might amount to insurance fraud counts against the physician's character, not the use of scribes generally. After all, the physician will likely still be approving the final medical record and relevant orders. Further, granting that these anecdotes of dishonest behavior are accurate, employing scribes actually serves to *highlight* otherwise hidden ethical violations in clinical practice. While there might be strong practical incentives to follow these dishonest orders, there will also be evidence—in term of testimony and potentially electronically—were a case to be developed against a particularly unscrupulous physician.

Objection 3: Disruption of Physician–Patient Interaction

A third concern is that introducing a scribe into the physician–patient encounter may be disruptive and produce less ideal care since patients may be hesitant to "fully disclose sensitive information."[56] After all, some patients may be hesitant to explain personal issues with an additional audience. Since I have argued that medical scribes stand to improve the physician–patient relationship, some response to this concern is required.

It seems reasonable that at least some patients may not consent to share information in front of a scribe. In such cases, asking the scribe to leave during a portion of the interaction would be justified. But, so long as the scribe is bound by the same HIPAA regulations as other medical professionals, it seems unlikely that most patients would object to the use of a scribe any more than they would object to sharing

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awkward symptoms with a receptionist or nurse. Recent research supports the claim that in both emergency and primary care settings, patients seem to be comfortable with medical scribes.[57]

While there is not a great deal of research available on how scribes affect the physician–patient interaction, what exists suggests a positive impact. In a recent yearlong study involving 18 primary care physicians who employed scribes, researchers found that using a scribe resulted in physicians spending more than 75% of their time interacting with patients as well as completing relevant paperwork by the next day. Further, 61% of patients indicated that the scribe had a "positive bearing" on their visits, with approximately 2% indicating a negative bearing.[58]

Objection 4: The Cost of Medical Scribes

A final concern with employing medical scribes is that they will be cost prohibitive for already economically burdened practices. Bates and Landman note that one study[59] showed that introducing an additional patient could offset the cost of a scribe, but that "given reimbursement and practice differences across specialties, self-funding may not be feasible for all practices."[60] It does seem reasonable to think that in smaller practices, the economic costs might be burdensome.

We might grant that there is not a single general prescription for every practice given practical limitations.[61] However, what may not always be factored into concerns about practice costs are the longer-term costs of emotional burnout, increasingly dissatisfied patients, and potential medical errors.

Consider again the AMA estimates that the loss of a physician can cost a practice between $500,000 and $1 million in lost revenue per year.[62] This includes a physician who does not leave the practice entirely, but scales back their work to part-time.[63] This particular issue is serious enough that the AMA has even designed a calculator for practices to weigh the expected costs of medical burnout alongside the cost of possible interventions, and the expected return on investment.[64] Given these expected financial costs, it will typically be reasonable to employ entry-level scribes for most practices.

Conclusion

There is growing evidence that the crisis of time in medicine is unsustainable. I have surveyed the evidence that EHR use by physicians is likely producing alarming rates of burnout, decreased quality of care, and risks to patient safety. There are strong ethical reasons to provide healthy work environments for medical practitioners, especially given the additional potential for risks to patients. As such, if the practice of requiring physicians to maintain patient EHRs harms physicians and decreases the quality of patient care, then we should not maintain that practice. Instead, I have argued that medical practices have reasons to employ medical scribes to maintain patient EHRs for any medically unnecessary clerical tasks. Additionally, I have argued that these measures need not be temporary, nor are they suboptimal with respect to the practice of good medicine. Instead, I have argued that they stand to improve the context of the physician–patient relationship generally.

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