VIEWPOINT

## The Rise of the Medical Scribe Industry Implications for the Advancement of Electronic Health Records

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With federal meaningful-use incentives driving adoption of electronic health records (EHRs), physicians are increasingly concerned about the time spent documenting patient information and managing orders via computerized patient order entry (CPOE). Many perceive that the inefficiencies of EHRs are adversely affecting the quality of care, and because physicians see fewer patients per day, income may decline. Although physicians approve of EHRs in concept and appreciate their future promise, the current state of EHR technology has increased physician dissatisfaction.<sup>1</sup> Poor EHR usability, time-consuming data entry, reduced patient care time, inability to exchange health information, and templated notes are central concerns. Physicians emphasize that EHR technology-especially user interfacesmust improve, 1 and a new industry has emerged nationally to provide physicians with medical scribes.

Use of medical scribes—unlicensed individuals hired to enter information into the EHR under clinician supervision—has increased substantially.<sup>2</sup> Scribes reportedly enable physicians to see more patients; generate more revenue; and improve productivity, efficiency, accuracy of clinical documentation and billing, and patient satisfaction.<sup>2</sup>

At least 22 companies provide scribe services across 44 states (eTable in the Supplement). Organizations, mostly scribe service vendors, train and certify scribes, and there are dedicated medical scribe training programs. The American College of Medical Scribe Specialists (ACMSS), a tax-exempt nonprofit organization representing more than 3000 scribes and 300 hospitals nationwide, offers a Medical Scribe Certification and Aptitude Test (MSCAT) for certification and publishes the *Medical Scribe Journal*.<sup>3</sup> Certification requires that candidates pass a 90-day employment probation period and record 200 hours of clinical work.<sup>3</sup> The ACMSS, according to its executive director, "protects the medical scribe industry." The organization's president envisions ACMSS as a "brain lab...where companies can come together to work on national scribing standards and lobby regulators on behalf of the industry."3

The ACMSS, whose leading financial sponsor is ScribeAmerica, <sup>4</sup> states on its web page that "the process of selecting a potential Certified Medical Scribe is complex" and that "ACMSS provides the groundwork for excellence throughout the industry." Yet it also stipulates that "minimum requirements include a high school diploma or G.E.D. [and that] each company sets their [sic] own criteria for hiring and selection process." ScribeAmerica's training program involves a 2-week orientation, a supervisory period under a "highly experi-

enced" medical scribe, and periodic reassessment of the scribe's effectiveness. PhysAssist Scribes emphasizes that "great scribes aren't just born—they're made," so it established a "scribe university...a five-day training program unlike any other in the industry." PhysAssist was recently acquired by TeamHealth, one of the nation's largest providers of hospital-based clinical outsourcing.

Estimates on growth of the medical scribe industry, its constituent companies, or of its principal service are anecdotal. No agency of state or federal government currently monitors—or regulates—the growth or activities of this new health care industry. Many smaller local companies either do not have websites or advertise only as medical staffing agencies. The 22 companies listed in the eTable (in the Supplement), likely an underestimate of the industry's breadth, offer services in 1058 locations. The chief executive officer of ScribeAmerica, the largest US scribe company, estimates that 10 000 scribes are working in hospitals and medical practices around the country. 6 According to the ACMSS, the number of medical scribes has been doubling annually, with about 20 000 expected to be working by the end of 2014. The industry "expects [its] ranks to swell to 100,000 by 2020."7 If accurate, in 6 years, there will be 1 medical scribe for every 9 physicians in the country. One company, Medical Scribe Systems, currently operates in 100 hospitals nationwide and employs more than 2000 scribes. 8 The company was cited by *Inc*. magazine as one of the fastest growing private companies in the United States in 2014. 8 ScribeAmerica is purportedly the most successful US medical scribe company, with more than 5000 scribes in more than 570 health care facilities across 44 states.4

The Joint Commission neither endorses nor prohibits the use of scribes, noting that scribes may not act independently when documenting dictation or other activities determined by a physician. Although scribes can assist practitioners with EHR navigation, retrieval of diagnostic results, documentation, and coding, allowing scribes to enter orders in the patient's electronic record is prohibited "due to the additional risk added to the process." The Centers for Medicare & Medicaid Services stated, "We disagree ... that anyone should be allowed to enter orders using CPOE. This potentially removes the possibility of clinical decision support and advance interaction alerts being presented to someone with clinical judgment, which negates many of the benefits of CPOE." 10

With problems associated with EHRs so substantial—and physicians' experiences using medical scribes so positive—are there any risks engendered by the rise of a medical scribe industry and its potential for becoming in-

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tegral to US health care delivery? Despite scribes' reported value, this industry should be viewed as what it is: a workaround or adaptation to the suboptimal state of today's EHRs.

Electronic health records, like most technology, are not static but are evolving, although not as rapidly as desired. The evolution of EHR is driven primarily by market pressure created by individual physicians, practices, and hospitals as vendors endeavor to satisfy their customers. 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. New product development, innovation, and continuous refinement driven by demand are more costly and initially less profitable than maintaining and reselling the same, suboptimal product. By reducing market demand and pressure on industry for needed improvements, the medical scribe industry (and inadvertently its customers) may contribute to an unintended, undesirable outcome: a deceleration and possibly stagnation in EHR technological improvement. Although progress may be incremental, should physicians engage in behavior that undermines demand—and the imperative for industry to deliver—for EHR excellence? Use of medical scribes to relieve physicians from using EHRs may limit this process by increasing physician acceptance of and satisfaction with an inferior product.

Another risk is unintentional or intentional functional creep in how medical scribes are used. Although the Joint Commission prohibition on use of scribes for order entry is unequivocal, some physicians still advocate use of medical scribes for CPOE. The Joint Commission cannot monitor whether medical scribes are used for order entry by US physicians. Patients rely on physicians to understand what constitutes unsafe use of technology in delivering health care, including clinical information technology. According to an anecdotal account, scribes working at some of the nation's largest scribe companies reportedly have been instructed by physicians to document certain activities, such as counseling smoking cessation, not actually performed to increase billable charges, to avert administrative compliance pressure, or both. Scribes, wishing to retain their jobs, ordinarily cannot decline such directives to enter orders in CPOE.

For physicians who regard CPOE as clerical, use of medical scribes for order entry could be rationalized. Even physicians who understand that prohibition may, under pressure of a busy practice, ask a scribe to enter verbal orders. There is a substantial risk of unintended functional creep, of letting scribes enter verbal orders, rather than having another licensed user enter orders.

Although CPOE is perhaps one of the most disruptive health care developments in a generation, its primary purpose is the integrated decision support that increases patient safety. It is the best way to systematically incorporate the scientific evidence and care standardization into medical practice, improve quality, and reduce patient risk and the substantial annual mortality associated with preventable harm and errors. Many physicians appreciate this and would never use medical scribes for order entry, recognizing that the decade of post-high school training physicians undergo means that only they can appropriately interpret decision support alerts. Although many share frustration with the current state of CPOE technology, this function of the EHR remains instrumental to achieving distributed evidence-based medical practice.

The answer to today's inadequate EHRs is not scribe support. Instead, physicians should demand improved products, should educate vendors to ensure that they understand how physicians think clinically, and should clarify what is needed for an intuitive, quick, and navigable user interface. If such usual market forces are vibrant, and physicians engaged robustly, EHRs will evolve rapidly. Yet even after a decade of use, some EHRs and CPOE may not compete with the speed of a paper checklist, and may never. But if EHR technology evolves and requires only 30 additional minutes within a physician's typical workday, reducing patient throughput slightly to facilitate a more thoughtful care process, is preventing potential error-related bad outcomes not worthwhile?

The use of scribes can pose potential risks to patients if they are allowed to enter orders into the EHR, and the risk of use creep is high. The medical scribe industry may impede the technological evolution of EHR products by undermining market demand for needed improvement, and it is unlikely that scribes will be used only as a temporary solution. The rise of the medical scribe industry should not be a substitute for much-needed EHR innovation and transition to more highly effective and more functionally efficient EHR systems.

## ARTICLE INFORMATION

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