

# Improve Dx

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## Medical Scribes Improve Physician Satisfaction. Can They Improve Diagnosis, Too?

Susan Carr  
Newsletter Editor

As the demand for clinical documentation grows, physicians find themselves torn between attending to patients and recordkeeping, often working on computer systems that are distracting for physicians and patients alike. One way for physicians to manage this dilemma is to partner with a medical scribe who creates a record of patient visits in real time. When used effectively, scribes can produce detailed clinical notes, improve physicians' access to information such as laboratory and test results, and remove the distraction of data entry from the patient-physician encounter.

Although the use of medical scribes continues to grow, there is very little data about the effect this new role has on care delivery. The research

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that has been done so far has focused primarily on physician productivity, return on investment, and satisfaction of both physicians and patients.<sup>1</sup> Recently, individuals on the Society to Improve Diagnosis in Medicine's (SIDM) email discussion list discussed possible effects of the use of medical scribes on the diagnostic process.<sup>2</sup> While

there is not yet published research on this question,<sup>1</sup> the experience of individuals and organizations points the way toward future study and the most appropriate and effective use of this new member of many medical teams.

Medical scribes were first used in emergency departments to help physicians process information and document clinical encounters in an often hectic environment. Currently, however, the use of scribes has expanded throughout hospitals and most care settings.<sup>3,4</sup> Physicians face new requirements to track outcomes

and report quality measures, and the amount of data generated for and by patients continues to grow. The computerized systems that are supposed to help often don't and are usually cited as the main reason why physicians need help with clinical recordkeeping.

In *The New York Times*, Hafner observed, "For decades, physicians pinned their hopes on computers to help them manage the overwhelming demands of office visits. Instead, electronic health records have become a disease in need of a cure, as physicians do their best to diagnose and treat patients while continuously feeding the data-hungry computer."<sup>4</sup> At the moment, scribes can provide the cure. As current electronic health records (EHR) systems mature or are replaced with new systems that work better, the use of medical scribes will either evolve, or we will learn that this trend was a temporary "workaround" for a broken system.<sup>5</sup>

### Training and Certification

Scribes may be hired directly by providers and organizations or work for an independent company that contracts with hospitals, clinics, and physician practices. Regardless of the employment arrangement, scribes must receive training for the clinical environment, including medical terminology and regulations such as the Health Insurance Portability and Accountability Act or HIPAA, as well as the documentation system

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used by the practice. Scribes may achieve certification through the American College of Clinical Information Managers.<sup>6</sup>

In July 2012, The Joint Commission issued standards to clarify the roles and responsibilities of scribes and their employers. The Joint Commission defines a scribe as “an unlicensed person hired to enter information into the electronic medical record (EMR) or chart at the direction of a physician or practitioner (Licensed Independent Practitioner, Advanced Practice Registered Nurse, or Physician Assistant).”<sup>7</sup> In addition to listing required standards for things such as job description, training, competency assessment, and authentication protocols, the Joint Commission reversed a clarification it made in June 2011,<sup>8</sup> stating clearly that scribes do *not* have authority to enter orders.

While they clearly have no role in delivering patient care, scribes do share physicians’ access to patients’ personal health information (PHI).<sup>9</sup> With physician-level access to patients’ records in electronic systems, scribes may be the first to see alerts and warnings generated by clinical decision support software. How this situation is handled has important implications for care delivery and safety, and is but one indicator of complex issues that scribes and the providers and organizations they serve may encounter.

## Risks and Rewards for the Diagnostic Process

Many of the risks inherent in EHRs—entering data into the wrong field or the wrong patient record, inaccurate time stamps, misplaced decimal points—exist regardless of who is at the keyboard. Because physicians are required to review, amend, and authenticate records created by scribes, errors introduced by scribes have more potential to be discovered and corrected than errors introduced by physicians whose work is not double-checked. Scribes may also be less likely than physicians to introduce errors by copying and pasting information from one record into another. Although patients report satisfaction with scribes’ participating in visits, some physicians worry that patients may not be as forthcoming with information or frank during office visits when a scribe is in the exam room.<sup>5</sup>

Other aspects of a scribe’s involvement may have a positive influence on the diagnostic process. The SIDM email

discussion list and other anecdotal reports identify the following effects as potentially advantageous:

- Scribes can track down missing information such as lab and test results.
- Scribes provide a “second set” of eyes and ears, to augment the physician’s experience and memory.
- Relieved of the need to enter data into computers, physicians can give patients their undivided attention during exams.
- With the assistance of a scribe, physicians may be able to create more complete and timely clinical records.
- Supported by scribes in these ways, physicians may rediscover their “joy in work,” which can improve the safety and quality of the care they deliver.<sup>10</sup>

On the SIDM listserv, emergency physician Michael Kohn, MD, reports on his experience working with scribes and the positive effects he has seen regarding diagnosis:

*Using scribes has made my job easier and more enjoyable in many ways, but for this email list, the question is how using scribes might reduce diagnostic error. As mentioned above, they can remind me to check a lab or an x-ray. Taking an accurate history is important to making the diagnosis; the scribe writes down what the patient says in real time, both providing a second pair of ears and decreasing my reliance on my memory. Certain physical findings are also important to making the diagnosis; in the process of seeing as many as 30 patients on a shift, I might forget which patient had which finding, but the scribe made notes as I examined the patients. By decreasing the time I spend typing, the scribes free me up to focus on the patient, think harder, and use online decision-support tools.<sup>2</sup>*

Aside from the potential for increased use of decision support, the effects of the use of scribes on diagnostic accuracy are indirect and currently untested. Until research investigates these questions about scribes and the diagnostic process, physicians and organizations will have to proceed based on their best instinct and experience, which so far indicates that scribes increase physician satisfaction and allow them to devote more “quality time” to patients and the diagnostic process without harming the patient’s experience or introducing unmanageable risk.

Art Papier takes these thoughts a bit further and imagines a time when the scribe’s role might

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evolve into something quite different, with expertise and responsibility for developing the patient's history and physical, supported with software that offers advanced decision support:

*Larry Weed advocates that trained people working with the right software can be more than scribes.<sup>11,12</sup> They would be able to take a complete, guided history, do a directed physical exam, and enter problem-oriented data guided by the software. The clinician would have a thorough, reliable, complete data set, and a differential diagnosis. Imagine someone is trained to be really good at the physical exam, and the software is problem-oriented—they could produce a higher quality history and exam than most generalists produce today. There is simply no way that a generalist can perform a thorough, accurate history and physical for all the presenting problems of medicine. The shortcuts doctors take can lead to premature closure, decisions made with incomplete data, and misdiagnosis (Art Papier, MD, email communication, January 26, 2014).*



## Merging Policy, Practice and Technology: Paths to Improve Diagnosis

### KEYNOTE PRESENTERS

Lucian Leape, MD

Robert A Berenson, MD, FACP

Otis Webb Brawley, MD, FACP

Registration will open soon.

Visit [www.DEM2014.org](http://www.DEM2014.org) to learn more.

Unless and until that happens, and as long as EHR systems' usability problems persist, the use of medical scribes as currently defined will continue to grow. With careful study, it may be that the role of scribes can be leveraged to support physicians in diagnostic improvement.

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## Advancing Diagnosis in Education

Gurpreet Dhaliwal MD  
Robert Trowbridge, MD  
Co-Chairs  
SIDM Education  
Committee

The SIDM Education Committee formed in 2012 with the goal of identifying and developing resources for trainees, clinicians, and teachers that help improve diagnostic performance.

Last year the 20-member committee created the Clinical Reasoning Toolkit to assist trainees, clinicians, and teachers in learning more about diagnostic reasoning, cognitive psychology, and diagnostic error. The Toolkit was launched at DEM 2013 and has seen consistent use, with more than 400 page visits per month.

This year three subcommittees are examining three separate questions:

- What are the best available tools to assess and report clinical reasoning in the ACGME milestones format?
- Can we develop a national curriculum on clinical reasoning and diagnostic error that is endorsed by partner organizations and societies?

- Can we design a one-year fellowship that trains a residency graduate in advanced diagnostic skills and provides academic experiences focused on diagnosis and diagnostic error?

At DEM 2014 we hope to recommend assessment tools, present an outline for a curriculum, and report on the feasibility of a fellowship in diagnosis. Our long-term goal is to elevate diagnostic and clinical reasoning to a core science in health professions education, and we view each one of these projects as a step in that direction.

The Clinical Reasoning Toolkit is available from SIDM at <http://www.improvediagnosis.org/?ClinicalReasoning>.

## NEWS FROM THE FIELD

### How Well Do Doctors Know What They Know?

How Well Do Doctors Think They Perform on the General Medical Council's Tests of Competence Pilot Examinations?

A Cross-Sectional Study.  
Mehdizadeh L, Sturrock A, Myers G, Khatib Y, Dacre J. *BMJ Open*. 2014;4:e004131. doi:10.1136/bmjopen-2013-004131.

Self-confidence affects how individuals approach making decisions and performing tasks. Whether they overestimate or underestimate their abilities will affect the quality of the judgments and choices they make. These common dynamics affect medical practice and may contribute to poor clinical judgments, faulty decisions, and diagnostic errors.

Researchers in London studied how accurately physicians predicted their scores on pilot examinations offered by the General Medical Council (GMC) in preparation for a revalidation process that now applies to all doctors in the United Kingdom. The GMC's Tests of Competence pilot exam consisted of two parts: a multiple-choice knowledge test and a specialty-specific Observed Structured Clinical Examination (OSCE). Seventy-six percent (524) of the 689 doctors who volunteered to take the GMC's pilot exam also volunteered to participate in the study. They answered a questionnaire designed to record whether they thought they had overperformed or underperformed others who took the pilot exam.

Most participants performed significantly better on the OSCE than they had predicted. On the knowledge test, however, high achievers tended to underestimate their performance; conversely, those with relatively low scores tended to think they had performed better in relation to their peers than they had.

Beyond obvious concern for doctors who are overly confident, the authors also discuss the relative merits of different approaches to measuring self-perception of performance, such as self-assessment (used in this study), self-monitoring, and behavioral measures.

The implications of this line of research are important not only for improving diagnostic accuracy and delivery of care but also for anyone interested in honing self-awareness and improving performance.