

## Medical Scribes and Patient Safety

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### Perspective

Scribes have supported physicians for thousands of years.<sup>(1)</sup> However, little is known about how today's use of medical scribes may affect patient safety. What safety aspects should health care organizations consider when implementing and evaluating a scribe program?

### Background

Under pressure to treat more patients while completing time-intensive electronic health record (EHR) documentation, physicians and licensed independent practitioners have increasingly turned to medical scribes for documentation assistance during patient encounters.<sup>(2)</sup> In this sense, the use of scribes can be viewed as a workaround or unintended consequence of EHR use.<sup>(3)</sup>

Simply by virtue of their presence, scribes—silent though they may be—make the patient encounter more complex. Interposed between a provider and an EHR, a scribe is uniquely positioned to affect not only how and what information is captured, but also how providers think about and seek information during an encounter. They also may affect how patients interact with providers.

There are significant practice variations that can affect the quality of scribe work and ultimately patient care<sup>(4,5)</sup>:

- **Qualifications.** The rapidly growing medical scribe industry is unregulated: certification is not required, nor are there training standards for scribes (although some organizations—primarily scribe service agencies—offer to train and certify scribes [6]). As a result, scribes possess varying levels of documentation skills and clinical knowledge.
- **Responsibilities.** There is no standard job description for scribes. Depending on the organization, scribes may be unlicensed or licensed personnel; they may only provide documentation assistance or also perform clinical duties per preexisting professional qualifications (e.g., medical assistant, licensed practical nurse, clinical technician).

- **Employment relationships.** The type of scribe employment model may affect the ability of health care organizations to evaluate scribe performance and control scribe service quality; scribes may be health care organization employees, or contractors provided by scribe staffing agencies.

Despite these practice variations and the sensitive role scribes play in patient encounters, relatively little has been published about how the use of scribes may affect patient safety.

## What We Know About Scribes

Descriptions of scribe programs in the United States using unlicensed personnel first appeared more than 35 years ago.<sup>(7)</sup> However, the number of scribe-related publications increased significantly following enactment of the 2009 Health Information Technology for Economic and Clinical Health (HITECH) Act and the subsequent widespread implementation of electronic health records.

Initially, post-HITECH studies primarily focused on the economic impact of scribe programs in emergency departments.<sup>(8,9)</sup> In the late 2010s, researchers increasingly examined scribes in ambulatory settings.<sup>(10-12)</sup> In addition, more published studies explored associations between scribes and patient and provider experiences <sup>(13-15)</sup>, and publications began discussing the potential for "digital scribes"—artificial intelligence (AI) that goes beyond current voice-to-text technology—to further transform clinical encounters.<sup>(16)</sup>

While many post-HITECH publications have addressed patient safety issues associated with EHRs generally <sup>(17,18)</sup>, few publications have explicitly explored safety–scribe associations. We identified only three such studies that evaluated characteristics of documentation created by scribes <sup>(19-21)</sup>, and another one used a sociotechnical framework to explore the scribe phenomenon within a broader context.<sup>(4)</sup>

Studies have suggested that scribes can have a positive economic impact. Scribe America, the largest medical scribe staffing agency in the US, has stated that using scribes can support a culture of safety by enabling providers to focus on patients, improving communication between providers, and reducing documentation errors.<sup>(22)</sup> However, scribe skeptics have expressed concern that using scribes may inhibit patient communication, harm clinical reasoning, and reduce the effectiveness of clinical decision support tools.<sup>(23,24)</sup>

All of this raises an important question: In the absence of data about how scribes may affect patient safety, how should health care organizations proceed when implementing and evaluating a scribe program?

## Moving Forward

In 2018, The Joint Commission conducted an analysis to identify potential quality and safety issues related to documentation assistance practices. Based on its findings, The Joint Commission provided the following guidance <sup>(25)</sup>:

- **Definition.** Previously defined as unlicensed personnel who were not authorized to enter orders, a documentation assistant or scribe was redefined as "an unlicensed, certified, (MA, ophthalmic tech)

or licensed person (RN, LPN, PA) who provides documentation assistance to a physician or other licensed independent practitioner (such as a nursing practitioner) consistent with the roles and responsibilities defined in the job description, and within the scope of his or her certification or licensure."

- **Competencies.** Organizations must provide orientation and ongoing training for the role; the amount of training required will vary depending on individual previous training and experience. At a minimum, education or training should include medical terminology; the Health Insurance Portability and Accountability Act of 1996 (HIPAA); principles of billing, coding, and reimbursement; EHR navigation and functionality; computerized order entry, clinical decision support, and reminders; and proper methods for pending orders for authentication and submission.
- **Policy and procedure.** Each organization should have a policy/procedure regarding documentation assistance processes, including log-in procedures; scope of documentation assistance; requirements for provider review of information and orders; and order entry/submission.
- **Job descriptions.** These should include the minimum requirements needed to provide documentation assistance, the allowable scope of activities, and how performance and continued competence will be assessed. If contracting with an external agency for documentation assistance, health care organizations are responsible for ensuring the quality of the services provided.
- **Orders.** Personnel meeting the documentation assistant definition above may enter orders into an EHR at the direction of a physician or other licensed individual practitioner. Order repeat-back is encouraged, particularly for new medication orders. Documentation assistants not authorized to submit orders should "pend" them for certified or licensed personnel to complete. Transcribing orders into the EHR while providing documentation assistance is not considered a verbal order.

These recommendations address many of the sources of variation listed previously; a 2012 practice brief by the American Health Information Management Association (AHIMA) provides additional guidance.<sup>(26)</sup> Based on the experience of implementing and evaluating the 7-year-old medical scribe program at Oregon Health and Science University, we also offer these suggestions:

- **Hiring and workflow.** It is important to hire according to the needs of individual providers and clinics. Scribing is a highly interpersonal model; not all providers are well-suited to using scribes, and not every scribe–provider pair will be compatible. Some clinics are better served by unlicensed, single-role scribes, others by licensed, dual-role scribes.
- **Training and orientation.** In addition to the competencies listed by The Joint Commission, new scribes may need to be oriented to medical culture generally, and they should be specifically oriented to the department(s) and provider(s) they will serve. Professionalism is an important area of focus for models in which many of the scribes are intending to go on to careers in health care (such as premedical or prenursing students).
- **Ethical considerations.** Situations can arise in which a provider asks a scribe to do something outside the scribe's scope of practice. Because power differentials exist between providers and scribes, policies should clearly state how these types of situations should be handled, and scribes should be knowledgeable about how to report integrity and professionalism violations.
- **Provider training.** Providers need clear guidance and training on best practices when it comes to the use of scribes. It is particularly important for providers to supervise and review their scribes' work.

Clear communication and regular feedback are key elements of effective workflows.

- **Consistency.** The most successful scribe–provider pairs have consistent clinic schedules and workflows. Scribe workflows can be incredibly variable, depending on specialty and provider preferences. It is important to recognize that scribes are rarely interchangeable; substituting one scribe for another often requires significant additional training.
- **Collaboration.** Facilitating the most effective use of scribes requires collaboration among several health care organization stakeholders: administration to determine return-on-investment focus (patient volume, chart closure, etc.); EHR specialists and billing and coding specialists to ensure optimal workflow; and provider and scribe representation to share their perspectives.

The unique position occupied by medical scribes, variations in scribe practice, and the paucity of safety data regarding scribes make it challenging for health care organizations to develop, implement, and evaluate scribe programs, whether they are homegrown or contracted. Until there are better data, health care organizations may want to consider informally exchanging information about scribe program successes and failures to identify practices that appear to result in safer scribe systems.

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