New York Encourages EHRs, But Scribes Still Being Used to Alleviate Technology's Burdens

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As a part of the NYC Health + Hospitals $1 billion IT platform rollout, the initiative has debuted Epic EHR—a cloud-based EHR software—across 19 facilities in New York City, including those in Brooklyn. Examples like this prominent project encourage the widespread adoption of EHR technology, and yet these systems have led to a number of unintended consequences—particularly a negative effect on doctor satisfaction and practice workflow.

Medical practices have tried many different solutions to help alleviate the burden, and one of the most common solutions is the adoption of medical scribes. Scribes are now the fastest growing medical field. However, in spite of this rapid growth, there is little standardization in training scribes or defining their appropriate function with the EHR.

Though studies have lauded the potential benefits of scribes for nearly 30 years,[i] the number of scribes is rapidly increasing today because of the need to untether the doctor from the EHR. According to one survey, nearly 20 percent of physicians now use scribes, with 10 percent planning on hiring scribes in the near future.[ii] Estimates suggest that the number of scribes will grow almost five-fold by 2020 to over 100,000, with one scribe for every nine physicians.[iii] Reports document scribe use in almost every practice setting and across a wide variety of specialties.

How does this affect the delivery of care? A number of studies suggest that scribes can enhance physician efficiency, improve physician satisfaction, and increase billing in a variety of clinical settings. Patient satisfaction can also increase, due to improved physician-patient interactions during office visits.

A Lack of Training and Standardization
In spite of the rapid growth and potential benefits of scribes, the healthcare community has generated very little regulation or standardization for scribe training, and researchers haven't conducted any assessment of scribes' ability to safely interface with the EHR. Recently, The Joint Commission stated that, at a minimum, all scribe-generated orders must be signed by a provider prior to implementation and that organizations must document the competency of scribes for the functions the organization deems appropriate.[iv]

The Joint Commission also went so far as to require authentication of all EHR entries from a licensed practitioner.[v]

Scribes are considered a distinct group, but that group's composition is varied. Scribes have a wide variety of backgrounds, including premed students and certified medical assistants.

Dedicated scribe organizations, which provide scribes for individual practices and healthcare organizations, may train recruits on basic medical terminology, note structure, documentation, and EHR basics. Other scribes may receive on-the-job training from the doctor who is their employer. There is no licensure requirement for scribes. Most healthcare organizations set up their own training that is

specific to local clinical workflows and dependent on the level of scribe functionality deemed appropriate by the organization.[vi]

Once embedded in the organization, scribes may perform a variety of functions, including doing pure transcription of the encounter, using templates or macros within notes, placing orders, finding information in the EHR for the doctor, or even responding to patient messages.6 Unfortunately, few rules or standards currently exist that designate appropriate scribe activities.

Survey Shows Variable Roles and Functions
To better understand the role and functionality of scribes, The Doctors Company, the nation's largest physician-owned medical malpractice insurer, and Oregon Health and Science University (OHSU) conducted a national survey of The Doctors Company's members. This survey, with 335 respondents, suggested that scribes are supplied from different sources, have disparate backgrounds, and their training is highly variable:

- 55 percent of scribes are trained by the doctor.
- 44 percent of scribes have had no prior experience.
- Only 22 percent of scribes have had any form of certification.
- Around 24 percent of practices that use scribes hire them as employees.
- Nearly 13 percent of practices use scribe staffing agencies.

The study also revealed wide variability in the tasks scribes are performing, including pure note writing, data entry (such as updating allergies), data extraction (such helping the doctor find information in the EHR), and order entry. A survey of a cohort of risk managers across the U.S. found a similar variance in scribe activities but significant differences between the two groups in what is considered in-scope for scribes.

The chart below shows the percentage of respondents in both groups who identified particular activities as appropriate for scribes.

Scribe Activity	Doctors (%)	Risk Managers (%)
Entering history	85	87.5
Entering review of systems*	77.8	62.5
Entering vitals*	89.8	79.1
Entering allergies	89.8	87.5
Entering labs*	83	54.2
Entering medications	84.7	79.2
Entering physical exam	61.3	66.7
Entering orders*	47.2	25
Entering imaging*	76.1	54.2
Entering progress notes	63.1	62.5
Entering care plan	60	62.5
Assisting in EHR navigation	86.3	91.7
Locating information in EHR	87.5	91.7
Responding to patient messages*	44.9	20.8
Performing research*	60.2	23.5
Providing translation services*	64.8	20.8
Signing physician notes	11.3	8.3
Workflow optimization*	78.4	58.3
Participate in decision making*	15.3	0

*Statistically significant (Chi-Square) differences noted.

The Risk of "Functional Creep"

The combination of rapid growth in scribe use, lack of standardized training, variability in scribe experience, and variability in both EHR exposure and EHR workflows raises the concern that scribes may introduce potential negative unintended consequences to either workflow or documentation. Only one study to date has been conducted on the quality and accuracy of scribe-generated notes. To address this, OHSU is currently investigating the use of virtual, video-based simulation to assess the quality of scribe-generated notes and to provide practice-specific training.

In addition to concern over the wide variance in scribe activities, healthcare providers are worried about "functional creep"—scribes being granted the authority to perform more complex functions in the EHR over time. Scribes will slowly assume more and more complex EHR tasks, such as order entry, data finding, data interpretation, and entering of other data elements besides general notes. Given the already large number of negative safety issues associated with these complex EHR functions, it's

imperative that the healthcare community create methodology to ensure scribes can be effectively trained and their competency assessed for safe and effective use of the EHR.

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