The Rise of the Medical Scribe Industry: 
Implications for Advancement of EHRs

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Conflict of Interest

George Gellert, MD, MPH, MPA
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Have no real or apparent conflicts of interest to report.
Agenda

• What is a medical scribe?

• What is the medical scribe industry and why has it arisen?

• What unintended consequences could result from the rise of the medical scribe industry for EHR product evolution or patient care?

• What is the alternative to a scribe industry?

• What are our individual and collective responsibilities to engage and drive EHR product evolution and refinement, and to prevent unsafe use of medical scribes?
Learning Objectives

1. Create awareness of the rapid rise of an unregulated medical scribe industry, and the intention/potential inevitability for scribes becoming an integral, permanent component of U.S. healthcare

2. Assess implications of the rise of the medical scribe industry for continued market and customer driven EHR product evolution, and to recognize that the medical scribe industry is essentially a workaround for physicians who refuse to use an EHR

3. Identify the substantial risk of functional use creep of medical scribes from clinical documentation to CPOE and associated risks to patient safety from unlicensed individuals issuing patient care orders without physician review of clinical decision support

4. Identify a rationale and strategy for ensuring institutional healthcare leader, physician and hospital engagement of the critical partnership with the EHR industry to ensure continued rapid evolution of EHR product offerings

5. Create awareness among healthcare leadership institutions, medical associations, and societies of their need to oppose use of medical scribes for CPOE among their respective members
Benefits Realized for the Value of Health IT - STEPS

S - Satisfaction: Patients will receive better care and be more satisfied if physicians not using non-clinical medical scribes for CPOE.

T - Treatment: With CPOE clinical decision support effectively disabled by use of a medical scribe unable to interpret clinical decision support, treatment outcomes and patient safety will suffer.

E - Electronic Information: Medical scribe industry is a reaction to poor perceived EHR usability - healthcare institutions need to maintain critical partnership with EHR manufacturers to drive usability improvement and reduce incentive to utilize medical scribes.

P - Population Engagement: At present growth rate, medical scribe industry can induce undesirable impacts on population health outcomes by inappropriate scribe order entry, and by impeding pace of EHR product evolution.

S - Savings: Strong EHR product evolution that advances EHR usability to advance ubiquitous physicians EHR use will improve clinical outcomes through rich application of the evidence base and CDS, thereby reducing preventable morbidity/mortality, medical errors, disease progression and associated costs.

http://www.himss.org/ValueSuite
A Background of Physician Dissatisfaction with the State of EHRs

• With federal MU incentives driving EHR adoption, physicians have grown increasingly concerned about time expended to enter patient information and manage care orders electronically.

• Physicians complain they spend too much time on electronic clinical documentation and order entry in CPOE because of the high volume of patient information and orders to be captured in the EHR.

• Some believe inferior status of EHRs is decreasing the quality of care, and because physicians see fewer patients a day, income may decline.
A Background of Physician Dissatisfaction with the State of EHRs

• Physician end users claim EHRs have “transformed them from clinicians into clerks”, and unintuitive organization and onerous navigation interferes with medical thinking.

• 2013 RAND: while physicians approved of EHRs in concept, and appreciated their future promise and remote access, current state of EHR technology has worsened physician satisfaction significantly.

• Physicians emphasize that EHR technology – especially user interfaces and usability – must improve.
What is a Medical Scribe?

• Use of medical scribes – unlicensed individuals (often college students) hired and trained to enter information into the EHR at the direction of a physician or other licensed practitioner – has grown dramatically

• A national industry and infrastructure with services in most states have emerged, with companies selling scribe services to physicians and hospitals, scribe training programs and schools, associations to support and certify scribes and to lobby, a medical scribe journal, etc.

• Studies have shown that use of scribes enabled physicians to see more patients per hour, thereby generating more revenue
What is Driving the Rise of a Medical Scribe Industry?

Physicians using scribes report improvements in work satisfaction:

• “Having a scribe has been life-changing” noted a Family Medicine physician

• “With a scribe, I can think medically instead of clerically” said an ED physician

• “Do it once, and you’re hooked” says one UCLA Geriatrician

• Scribes reportedly increase physician workflow productivity and efficiency, accuracy of clinical documentation and billing, patient satisfaction scores, revenue and profit margins
Scribe Industry Status in 2014

- At least **22+ companies** provide scribe services in **44 states**
- Scribe service vendors **train and certify scribes**
- The American College of Medical Scribe Specialists (ACMSS) -- a tax-exempt nonprofit organization -- represents 3000+ scribes and 300 hospitals (as of 2014) and lobbies for this industry
- Offers a Medical Scribe Certification and Aptitude Test ("**MSCAT**")
- Publishes the "**Medical Scribe Journal**"
### Table 1: U.S. Distribution of Medical Scribe Companies

<table>
<thead>
<tr>
<th>Company</th>
<th>Corporate Location</th>
<th>Total Locations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scribe America</td>
<td>Aventura, FL</td>
<td>443</td>
</tr>
<tr>
<td>TeamHealth</td>
<td>Fort Worth, TX</td>
<td>313</td>
</tr>
<tr>
<td>CEP America</td>
<td>Emeryville, CA</td>
<td>116</td>
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<tr>
<td>Essia Health</td>
<td>Woodland Hills, CA</td>
<td>37</td>
</tr>
<tr>
<td>Elite Medical Scribes</td>
<td>Minneapolis, MN</td>
<td>34</td>
</tr>
<tr>
<td>Emergency Medical Associates</td>
<td>Parsippany, NJ</td>
<td>27</td>
</tr>
<tr>
<td>Medical Scribe Systems</td>
<td>El Segundo, CA</td>
<td>23</td>
</tr>
<tr>
<td>eScribe</td>
<td>Williamsburg, VA</td>
<td>19</td>
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<tr>
<td>Scribe Connect</td>
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<td>18</td>
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<td>Scribe Solutions</td>
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<td>8</td>
</tr>
<tr>
<td>Scribe-X</td>
<td>Portland, OR</td>
<td>7</td>
</tr>
<tr>
<td>Emergency Scribe Consultants</td>
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<tr>
<td>MSA Florida</td>
<td>Tampa, FL</td>
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</tr>
<tr>
<td>Harper Associates</td>
<td>Framingham, MI</td>
<td>1</td>
</tr>
<tr>
<td>ProScribe</td>
<td>San Antonio, TX</td>
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<tr>
<td>American Scribes</td>
<td>Union City, NJ</td>
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<tr>
<td>Med-Scribe</td>
<td>Fairport, NY</td>
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<tr>
<td>Clear-Choice Transcription</td>
<td>Pittsburgh, PA</td>
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<tr>
<td>Precision Scribes</td>
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<tr>
<td>Scribe MD</td>
<td>Orange, CA</td>
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</tr>
<tr>
<td>scribeMR</td>
<td>Lino Lakes, Mi</td>
<td>1</td>
</tr>
<tr>
<td>Clinical Scribes LLC</td>
<td>Minneapolis, MN</td>
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</tr>
</tbody>
</table>

Total States with Locations 44
Total Locations 1058
Scribe Industry is Growing Exponentially

- CEO of ScribeAmerica, the largest US scribe company, estimated that 10,000 scribes were working in the US in 2014.

- Medical Scribe Systems currently operates in 100 hospitals nationwide, employs 2000 scribes (ranked by *Inc.* magazine as one of the fastest growing private companies in the US).

- According ACMSS, the number of medical scribes is doubling annually, with 20,000+ expected this year.
Scribe Industry is Growing Exponentially

- ScribeAmerica has > 5000 scribes in > 570 health care facilities across 44 states
- The industry “expects [its] ranks to swell to 100,000 by 2020”
- That is, within 6 years, there will be 1 medical scribe for every 7 physicians in the US
Medical Scribe Training and Certification

- A primary sponsor of the ACMSS appears ScribeAmerica, one of the largest scribe vendors.

- ACMSS 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”.

- Requirements: a high school diploma or GED but “each company sets their own criteria for hiring and selection process”.

Medical Scribe Training and Certification

- Industry leader ScribeAmerica’s training program =
  - a “2-week orientation”
  - a supervisory period under a “highly experienced” medical scribe
  - and “periodic reassessment of the scribe’s effectiveness”
The Medical Scribe Industry is Unregulated

- **No agency** of state or federal government currently **monitors** – or **regulates** – this new health care industry’s growth, medical scribe training, performance evaluation or clinical activities

- **Many smaller and local companies** either do not have websites or advertise only as **medical staffing agencies**
The Medical Scribe Industry is Unregulated

• “Scribe Certification” requires that candidates pass a 90-day employment probation period and record 200 hours of clinical work

• 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”

... what regulators?
Who is Monitoring the Service Quality of the Rising Medical Scribe Industry?

Regulatory agencies have not prohibited the use of scribes:

• The Joint Commission (JC) does not endorse nor prohibit the use of scribes, except to note that “a scribe may not act independently when documenting dictation or other activities previously determined by a physician or other licensed practitioner”

• While the JC permits scribes assisting practitioners with EHR navigation, retrieval of diagnostic results and reports, documentation and coding, the use of scribes to enter orders in CPOE is prohibited, “due to the additional risk added to the process”
Who is Monitoring the Service Quality of the Rising Medical Scribe Industry?

The Centers for Medicare & Medicaid Services (CMS) 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.”
Query:

Besides the lack of third party, independent quality assurance and regulation, or impact evaluation, are there any other risks or downside associated with the emergence of the medical scribe industry -- and to scribes becoming an integral component of the nation’s health care system?
The evolution of a medical scribe industry should be viewed, despite the “relief value” claimed by some physicians, as what it truly is:

. . . a workaround or adaptation to the sub-optimal state of today’s EHRs, a state many physicians find unacceptable

However, like most technology, EHRs are not stagnant, but evolving . . .
Concern: EHR Product Advancement

EHR evolution is driven primarily by market pressure created when individual physicians, practices, hospitals and hospital systems demand that EHR vendors improve their product to meet their performance needs.

If physicians/hospitals use medical scribes as a workaround, dissatisfaction with the state of EHR technology will decline, reducing market pressure on industry to evolve EHR usability.
Concern: EHR Product Advancement

New product development and innovation – driven by customer demand – are more costly and initially less profitable than maintaining and reselling the same, suboptimal product.

By reducing market demand and pressure on the EHR industry for needed improvements, the medical scribe industry – and inadvertently its customers – may contribute to an unintended, undesirable outcome:

... deceleration and possible stagnation in EHR technology advancement
Concern: EHR Product Advancement

Should hospitals and physicians engage actions that undermine demand for – and the imperative for industry to deliver – EHR product excellence?

Use of medical scribes to relieve physicians from using EHRs may undermine the usual market forces driving product advancement by increasing physician acceptance of/satisfaction with an inferior product because “my scribe deals with it”
AMA: EHR Usability Priorities for EHR Makers

1. Enhance Physicians’ Ability to Provide High-Quality Patient Care.

2. Support Team-Based Care.

3. Promote Care Coordination.


5. Reduce Cognitive Workload.

6. Promote Data Liquidity.

7. Facilitate Digital and Mobile Patient Engagement.

An Alternative Way Forward

Without engagement/partnership of practicing physicians and CMIOs with vendors to drive EHR product improvement, the pace of EHR advancement will decelerate.

At CHRISTUS Health, we partnered with our physicians via recurrent, regular meetings dedicated to improving CPOE usability over the last 3 years -- with the objective of soliciting their needs, ideas, requests and recommendations -- and have driven these to our EHR vendor.
An Alternative Way Forward

Produced incremental but notable improvements in EHR usability, validating our physicians’ engagement in continuous EHR improvement.

Moreover, our physicians’ input has been incorporated by our EHR vendor into a highly progressive next gen EHR product that offers vastly improved usability and will go far toward meeting the needs of and -- satisfying -- our physicians.
An Alternative Way Forward

Through the replication of this process at hospitals and physicians’ practices across the nation, the EHR industry is receiving actionable, clinically informed guidance on how to make their products better.

The use of medical scribes to relieve physicians from using transiently unintuitive and time consuming EHRs threaten this process by effectively increasing physician acceptance of/satisfaction with the current inferior product status quo.
Another risk is unintentional – or intentional – *functional creep in how medical scribes are used*:

Although the JC prohibition on use of scribes for order entry is unequivocal, *many physicians still advocate use of medical scribes for CPOE.*
Concern: CPOE Functional Creep

Patients rely on physicians to understand what constitutes unsafe use of technology in health care delivery, including clinical information technology.

It is not possible to monitor whether medical scribes are used for order entry by 680,000 US physicians.
Concern: CPOE Functional Creep

One anecdotal published account states scribes working at some of the nation’s largest scribe companies have been instructed by physicians to document certain activities -- such as counseling smoking cessation -- not actually performed.

To increase billable charges and/or avert administrative compliance pressure.

Scribes, wishing to retain their jobs, cannot ordinarily decline a physician’s directive to enter orders in CPOE.
Concern: CPOE Functional Creep

Although CPOE is one of the most disruptive health care developments in a generation, its purpose is the integrated decision support that increases patient safety and can improve clinical outcomes.

CPOE remains the best way to systematically incorporate the scientific evidence base and care standardization into medical practice –
**Concern: CPOE Functional Creep**

In order to **improve quality, reduce patient risk and substantial annual mortality** associated with preventable harm and errors

Many physicians appreciate that their decade+ of post high school training means that **only they can interpret CDS alerts**
Medical Scribes: Recommendations

1. Government (or an independent third party organization) should monitor and regulate the growth, the activities, and impact of the rising medical scribe industry.

2. Physicians, hospitals, all EHR industry customers should not allow medical scribes to become permanent workarounds to EHR use.

3. Instead, institutional and individual clinical leaders should recognize the imperative to continue the drive for EHR product evolution in their own -- and their patients' -- best interest.
Medical Scribes: Recommendations

4. The medical scribe industry should be more transparent about its activities, training/use of medical scribes, and monitoring of scribes activities

5. Given scribes’ fear of job loss from challenging a physician, a confidential hotline and web blog should be established where medical scribes can report without fear of reprisal when physicians direct them to complete activities they should not, such as CPOE, or fraudulent coding

6. Hospitals and physicians should strictly prohibit the use of medical scribes for CPOE, where they bypass the clinical decision support that is the rationale for CPOE and imperil the safety/quality of patient care
**Medical Scribes: Recommendations**

7. Other institutional leadership organizations, such as the **AMA and specialty medical societies and boards of certification**, should articulate **specific prohibitions** on the use of medical scribes for CPOE to their members.

8. An ongoing **education** campaign should be engaged to **create awareness and understanding among physicians and their leaders** of the risks that medical scribes pose if used for CPOE and if used as a permanent workaround to EHR use.
Conclusions

The risk of CPOE functional creep -- unintentional or intentional -- when using medical scribes is substantial and, when it occurs, is dangerous to patients.

Although many share frustration with the current state of CPOE technology, physician use of this EHR function remains essential to achieving distributed evidence-based medical practice.
Conclusions

Use of medical scribes is NOT likely to be temporary or transient solution, but rather will become a permanent service industry.

No doubt, the use of medical scribes is one way to light a candle rather than curse the darkness – it’s just the wrong candle!
We need CPOE to reduce the 210,000-440,000 deaths associated with preventable harm and errors occurring in U.S. hospitals each year –

Equal to a 9-11 mortality event every 3 to 5 days year round
Conclusions

If the airline industry had this safety record, with 1-2 planes crashing with total passenger mortality every week, all year round, would you fly home from this conference?

Physicians who understand this don’t ask why they have to do CPOE, or if they can use a medical scribe for order entry

The answer to today’s inadequate EHRs is not medical scribe support . . .
Conclusions

Instead, physicians should demand improved EHR products and should educate EHR vendors to understand how physicians think clinically and what they need for an intuitive, rapid and navigable user interface.

If normal market forces are vibrant, and physicians engaged robustly, EHRs will evolve VERY rapidly.
Conclusions

Even if EHR technology still requires an additional 30-45 minutes in a typical physician workday -- reducing patient throughput slightly to facilitate a more thoughtful and a safer care process . . .

. . . is the prevention of care delivery errors and inferior patient outcomes not worth it?
Benefits Realized for the Value of Health IT - STEPS

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Questions

Thank you for your attention!

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