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EMR Strikes Out

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During the fifteen years that I've been using some form of electronic medical records (EMR), I've made no secret of my ambivalent feelings about the technology. I've lauded EMR's ability to track patients' medications and active problems; a task that was almost impossible in the "bad old days" of paper charts. In that sense, electronic medical records have been a boon. And while these two extremely important functions have made my professional life much easier in many respects, I haven't found much else about the technology to cheer about.

I've despaired watching practitioners (including myself occasionally) focus on the computer and not the patient in front of us. I've screamed loudly that EMR technology is designed for billers, auditors and insurance clerks, and NOT physicians or other health practitioners. I've complained *ad nauseam* about the instability of our electronic systems, and how we're completely stuck in the face of system crashes; an inevitability akin to the sun rising in the East.

Now, in this age of COVID, I've found another major defect in our electronic medical records systems. EMRs supposedly document every step doctors or other health care workers take in treating a COVID patient, from medicines prescribed to signs of progress or setbacks. Data collected from large numbers of patients could quickly yield answers about which treatments are succeeding.

Type in an ICD-10, press a button and voilá, instant data analysis on all patients with this particular ICD-10 in their chart. In fact, over the past decade we've spent more than \$36 billion switching from paper to EMR, expecting, among other things, to harness volumes of medical data to reveal which treatments work best.¹

But the COVID-19 pandemic is bringing into stark relief just how far the nation is from achieving EMR's promised benefits. Every EMR I've used has been sold as an ideal research tool, tracking trends in our patient populations. Well, EMR hasn't worked as advertised during this

COVID crisis. Currently, it is almost impossible to get data on populations suffering from COVID-19.

An example: When President Donald Trump started touting hydroxychloroquine as “one of the biggest game changers” for treating COVID-19, researchers hoped electronic health records could quickly tell them if he was on the right track.

Yet pooling data from the digital records systems in thousands of hospitals has proved a technical nightmare thus far. That’s largely because software built by rival technology firms often cannot retrieve and share information to help doctors judge which coronavirus treatments are helping patients recover. Even if two different hospitals are using software from the same vendor, the two systems often can’t “talk” to one another, making data pooling almost impossible.² Wasn’t “Meaningful Use” Stage 2 (“Improves interoperability by adopting new and updated vocabulary and content standards for documentation and exchange”)³ supposed to have taken care of this problem by 2015? Obviously, we’re still having a lot of trouble achieving “interoperability.”

Another example of system failure: A number of physicians have noted that thrombo-embolic phenomena (blood clots, strokes, pulmonary emboli etc) appear to be more common in patients with COVID. Yet, we cannot harness that anecdotal, yet vitally important, observation into any kind of data analysis to ascertain if thrombo-embolism is part of the “COVID syndrome” and if we should be putting our COVID patients on thrombo-embolism prophylaxis.⁴

“I’m stunned at EHR vendors’ inability to consistently pull data from their systems,” said Dale Sanders, chief technology officer of Health Catalyst, a medical data analytics company. “It’s absolutely hampering our ability to understand and react to COVID.”⁵

This failure is difficult to understand considering that EMR supposedly documents every step health practitioners take in treating a COVID patient, from medicines prescribed to signs of progress or setbacks. But the plethora of proprietary EMR systems that can’t “talk” to one another make large scale studies almost impossible, at least until we get a national database.

In the meantime, we're stuck with systems that are clunky, time-consuming and present yet another hurdle to providing good care. Currently, clinicians typically spend an hour feeding documentation into a computer for every hour they spend with patients.⁶ In an overcrowded ER or ICU that time spent away from patients and on the computer can be fatal.

Physicians in the frontlines are relying more on Twitter and other social media among themselves to rapidly find what works and what doesn't in dealing with COVID-19.⁷ A cardiologist at Massachusetts General Hospital tweeted, "Why are nearly all notes in Epic* . . . basically "useless" to understand what's happening to patients during their hospital course?"⁸

We know that EMR's were designed specifically for billers and auditors, but we never expected our records systems to fail so miserably at the task they were "ostensibly" supposed to perform – providing a summary of patient care and patient progress.

In fact EMR systems have failed so badly in New York that Governor Cuomo issued an executive order at the end of March, 2020, that states, "*Health care providers are relieved of record keeping requirements to the extent necessary for health care providers to perform tasks as may be necessary to respond to the COVID-19 outbreak. . . .Any person acting reasonably and in good faith under this provision shall be afforded absolute immunity from liability.*"⁹ A system designed to expedite and improve the delivery of health care was officially recognized as an obstacle in delivering good care.

So now, as our frontline health workers have to contend with shortages in personal protective equipment, a lack of reliable, rapid COVID testing and overwhelming numbers of sick patients, we now have to contend with electronic systems that make our jobs even more difficult and dangerous to patients.

* Epic is the EMR system used by most large hospitals, health systems and large medical practices across the country

Sources

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