AN EXECUTIVE DISCUSSION

Leveraging technology to mitigate physician burnout

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Clinician burnout is a major threat to the U.S. healthcare system, both in the present and in the future. Demand for clinicians is rising with America's aging population, and with an already-established national shortage of doctors and nurses, it's crucial that the medical profession remains an attractive career path. Healthcare leaders must take steps to reduce the burden on clinicians, enabling them to practice to the top of their license and provide the highest quality of care.

On March 11, Modern Healthcare Custom Media spoke with four technology executives from leading healthcare organizations to discuss their challenges and best practices in harnessing the power of technology to optimize the clinician experience, in hopes of ultimately mitigating physician burnout and improving patient care.

How would you describe the current situation at your organization in regards to clinician burnout? What are the main causes of burnout at your organization? At what stage is your organization in addressing these challenges, and how are you using technology to do so?

Tanya Townsend: I think we probably all face a similar challenge in terms of the constant evolution and additions of continued regulatory requirements, reimbursement-related requirements and throughput requirements. These potentially burden our clinicians with additional hoops they have to jump through when doing their jobs. We're about two years into our massive Epic implementation for our EMR, and it's been a journey to get everybody on the same page utilizing the tools and also in our continuing efforts to enhance and optimize the system. I think we're in a pretty good place managing it as best we can. We have governance models, where clinicians can have a voice and participate in decisions, and certified "physician builders" who can make modifications to the system. We also have residents who are available and want to be a part of informatics, and they're out and about engaging in education and personalization to help each individual provider get to an optimal level of acceptance or comfort. Finally, in addition to rounding on a routine basis, we're now hosting what we call "happy hours," where clinicians can stop in and talk through some of their questions or frustrations, with the hope that we can do some immediate modifications right there with them.

Cara Babachicos: We just received HIMSS Stage 7 last summer, so it was kind of a big push to try to demonstrate our use of the system and ensure we're using it as best we can. We're doing some audits on the system and looking at having external folks come in and give us a different set of eyeballs, because even though we're getting great scores, we feel like there is still an opportunity to move the needle. One of the things that I would say we're starting to work more on is the integrated care record, because we find that a lot of times there's documentation that case managers are doing, nurses are doing and physicians are doing, but holistically they can't see it all and there's not a single narrative. A large push right now is on documentation. When we look at the patient experience, and we look at our throughput within the organization, we're finding that we need to make sure we're accurately documenting a patient's level of acuity.

Ashish Atreja: ICU innovation, with digital health, is allowing us to move from physician-centered care to patient-centered care. I think by moving to patient-centered care, it is taking the burden away from physicians and the care teams, and actually helping physician-centered care as well. Applying AI to clinician notes is one of the areas that we're investing in—it provides so much value for the physician burden. Additionally, if you use the same technology to capture and analyze patient notes on their disease before they come into the clinic, it can suddenly make the magic happen.

When it comes to clinician dissatisfaction with technology, how much of that sentiment do you see being related specifically to the Electronic Medical Record (EMR)? Seeing as it's such a critical tool in 21st century healthcare, how do we ensure adoption and make sure people are using it?

Bret Shillingstad: I think the biggest challenge for physicians is that EMRs were developed initially for primary care, and tools were secondarily built for specialty areas. The challenge that physicians face is there's very little content or personalization to make these platforms successful. Templates are great for post-op visits and common stuff, but there are times where you just need voice recognition or other tools for those really unique cases that you need to document. There is a battle between capturing discrete data—which is great for research—versus efficiency, which is free-flowing documentation. As AI and natural language processing continue to advance, we can use these technologies to mine text for more and more data to allow physicians to be more free flowing in their documentation and thought processes. I think this is a universal problem—without personalization and improving tools, all we really have is just a digitized medical record. We need to get it to every subspecialty where they're maximally efficient.

$4.6 billion
estimated annual cost of physician turnover and reduced clinical hours attributable to burnout.

Source: Annals of Internal Medicine

TT: Because most of our residents grew up with technology, they are quick to embrace and quick to offer advice. They're really excited to help support our EMR efforts and work with their peers and colleagues on implementation. Also, we now have tools built into our system to track productivity, which allows us to proactively target it. That's helpful because I think some of the dissatisfaction with the EMR isn't always heard; clinicians are not necessarily voicing those concerns or escalating where they should. It's helpful to proactively monitor through these productivity reports to see where the provider might be struggling, so that we can send out a resident or an informaticist to personalize their experience and coach them.

How are clinicians currently utilizing dictation, decision support and other documentation technologies at your organization? How widespread is the use of AI-enabled tools, such as those that enhance notes or offer clinical guidance?

CB: We do use dictation, and it's just one of the tools in the toolbox among others that inform the content in documentation and help mine it. That can help as we look

Within only two weeks of using ambient clinical intelligence:

88%
increase in provider satisfaction scores for clinical documentation

Over 90%
of patients consented to use of the technology

Source: Nuance

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at a patient's history over a longer period of time. I think that's where people have started to become a little more aware of the potential for tools to examine what's in the medical record. In terms of using artificial intelligence, predictive algorithms may help us better understand when it is appropriate to discharge a patient, for example, are they likely to develop sepsis? I think it's important for us to incorporate those kinds of capabilities into the system, but with fine tuning, because over-alerting can be a problem too. You have to think about what kind of support you are looking for, and at what pivotal point do you want the provider to get involved in making a decision or changing a patient's care plan? It involves looking at care as a collaboration and considering how roles fit together.

TT: We have full voice recognition and dictation rolled out across our system. That has definitely been a major win with adoption as well as cost savings. We have several best practice alerts built into the system in support of using evidence-based medicine and continuously monitoring utilization of whether those alerts are being ignored or acted upon. But we're hoping to present clinicians with the right protocol at the right time for the right reasons, avoiding alert fatigue and frustration with the EMR. One of the more recent things we've done is implementation of a drug monitoring integration program with the state of Louisiana. Our goal there is to continue to fight the opioid epidemic and we just recently went live with that allowing us to share and access accurate information. Similarly, we have a tool that allows us to make sure that we have the most appropriate radiology imaging decisions to decrease costs and wasteful orders. We are integrated now on the payer side with both pharmacy and clinical documentation for more efficient experience with those payers, in hopes of expediting reimbursement and avoiding denials as well as duplication. Most recently, we've instituted some best practice alerts and telehealth workflows around Coronavirus screening. That was a good example of being able to very rapidly put in technology and utilize our EMR to help us with that screening.

BS: I would add that, one area where we've seen significant value add is using voice commands to navigate through the EMR. For example, "show me the last MRI of the neck or show me the CT of the head." That will save 10, 15 clicks. Or if you say, "close visit, level three," and that'll replicate 20 to 30 clicks. This makes it easier for the physician to use the technology, and eliminates work rather than creating it.

AA: The less we type, the better it is. Many physicians are not trained in how easy it is to customize using smart phrases and other tools. There is a lot of research around computer-human interactions that shows that in the early days of the EMR, doctors were not very good typists. Even if you're a good typist, the EMR requires so much interaction to make selections. At that point, we're basically looking at the computer and not looking at the patient. Some physicians realize it just takes so much away from the physician-patient interaction, that they will actually not do any documentation during the encounter and just talk to the patient, taking minimal chicken-scratch notes, instead having a scribe by their side to fill in those notes later on. But the quality of scribes is varied, so it's not a definitive solution.

Have any of your organizations experimented with Ambient clinical intelligence (ACI)? If so, how are clinicians and patients responding?

AA: Ambient technology is still maturing, and we're testing a lot of it. We had a very positive experience. I truly believe now it has become mature enough that it is gone beyond

For every hour of clinical face time, physicians spend nearly 2 additional hours on EMR and desk work within the clinical day. Outside office hours, physicians spend another 1 to 2 hours of personal time each night doing additional computer and other clerical work. Source: Annals of Internal Medicine

just taking what we want to say in a note, and analyzing it further. It's like a mini version of a clerk, actually taking a much deeper level of commands. It's pulling up data for reserves, ordering plans, ordering medication and really saving value beyond just converting what we want to say into text. We also felt that, in our pilots, the patient experience was improved, because clinicians were no longer tethered next to the computer. And, by just freeing the clinician from the chair, it opened up the exam space. Clinicians are now walking around and spending more time examining the patient. Ambient clinical intelligence is now within the dream of transformation, where it is up to us as CIOs, innovation officers and digital health officers to really now make it mainstream, structuring its value.

TT: We're certainly exploring it. The capabilities are really exciting to automate actions based on keywords, to help with streamlining and improving documentation, and even making it more accurate and discrete. I'm looking forward to what it offers.

What predictions do you have for the future? What challenges do you see on the horizon and what major goals are you setting?

CB: One of my mantras is never waste a good crisis. While COVID-19 is definitely a pandemic and something that we're all concerned about, I've recently seen groups mobilize and do things a lot more creatively. Some of these initiatives otherwise could have taken months or even years to put in place. It's exciting to see people being very innovative and open-minded, because we've got to get creative to stay healthy and to keep the population safe.

BS: Right now, encouraging more personalization and leveraging advanced technologies is important. We've seen about a 40% reduction in documentation time with personalization and leveraging technology, and about a 35% reduction in order entry time. So I can't emphasize personalization enough. I completely agree with Ashish that ambient intelligence is coming of age, and that's going to be something we see more of.

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