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BUSINESS & LEGAL ISSUES FOR HEALTH SYSTEM LEADERSHIP

Interoperability Is An Ethical Issue

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When medical devices don't talk, patients lose.

Healthcare is about making decisions. Do I need to see a doctor? What's ailing my patient? What are the appropriate tests and procedures necessary to find out? What's the right treatment plan? Having the right information readily available is essential for everyone to be able to make the best decisions.

But, too many times, it doesn't happen. For the right information to be available when and where it is needed requires people and systems to talk to one another. For too many years, our information systems have not consistently met this goal. Sharing and using information across multiple technologies is referred to as interoperability, and for too long we have failed to achieve it to the desired degree.

In healthcare, we all want two-

way, plug-and-play interoperability — the ability for the technologies we use to seamlessly exchange information. We want it to be easier; we want it to be less expensive; and we know it will be safer for our patients and the people who care for them.

When it comes to getting technologies to share data, healthcare organizations grapple with layers of complexity and redundancy. The current tools don't enjoy the simple data portability like that of email or a USB drive. Picture a patient in a hospital bed surrounded by monitors, an infusion pump, a ventilator and a pulse oximeter.

This equipment is typically purchased from different manufacturers and each comes with its own proprietary interface technology. This means hospitals have to spend scarce time and money setting up each technology in a different way instead of the devices being equipped with a consistent means for connectivity.

Furthermore, hospitals are usually forced to invest in a separate "middleware" system to pull together all these disparate pieces of technology to feed data from bedside devices to EHRs, data warehouses and other applications that aid in clinical

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decision-making, research and analytics. Many, especially older, devices don't even connect; they require manual reading and data entry. This lack of plug-and-play interoperability can compromise patient safety, impact care quality and outcomes, contribute to clinician fatigue and waste billions of dollars a year.

As healthcare professionals, and as an industry, we can no longer accept the status quo. It is possible to have real-time, two-way, low-cost, standards-based connectivity that enables improved decision-making and assures safety at lower cost. The technical capability exists. However, a byproduct of our fragmented national healthcare system is that vendors lack incentives to make their technologies work in a plug-and-play manner.

Some efforts are underway to address aspects of the interoperability challenge, particularly data exchange among EHRs. However, solutions need to be

nationwide in scale and take into account the full range of data sources. Integrating medical devices, a source of objective biometric and clinical data, in a plug-and-play way needs to be a national priority. The entities buying, deploying and using these technologies — hospitals and health systems — must unite to solve their shared technical challenges and work with vendors to compel change.

We have an ethical obligation to develop and implement plug-and-play clinical devices and information technology systems. Potential improvements from doing so include avoiding or reducing adverse events, transcription errors and redundant testing. Clinicians will benefit from reduced alarm fatigue and time spent manually entering information. Our patients will benefit from decreased length of hospital stays through our ability to improve the speed of information transfers and lower costs related to integrating and maintaining technologies.

We must make it easier for healthcare professionals to perform the work they're passionate about — taking care of people. We must make sure data gets to our researchers so they can discover the next wave of cures and clinicians can continue to refine best practices. Above all, we must do our utmost for our patients. ■



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