

## EMR Integration and Interoperability: The Need is Now

You don't need special glasses to see that yesterday's big focus on EMR data entry has been eclipsed by today's quest for EMR integration and interoperability to bring together and share disparate types of healthcare data from multiple systems. The need is now, given that Meaningful Use is in the rear-view mirror for most and the value-based payment challenges of MACRA, MIPS, and APM initiatives are either underway already or on the immediate horizon.

Fee-for-Service models are quickly giving way to new value-over-volume models where providers and ACOs are taking on greater risk in hopes of seeking greater rewards. The pillars of meaningful use – care coordination, patient engagement, and information exchange – remain part of the evolving landscape. New MACRA requirements are creating the need for more data review, exchange, and reporting from more savvy EMR users in more sophisticated EMR systems.

Navigating the MACRA requirements and assuming and managing increased risk sharing necessitate having meaningful data presented at the point of care; data that alert care providers about suspected conditions and support treating verified conditions. Today, providers are inundated with data and messaging not just from other care providers, but from patient portals and personal health records (PHRs). EMR integration with non-traditional sources, such as PHRs, health plan claims data, biometric devices, wearable tech, and other medical devices, has huge potential in identifying suspected medical conditions and pre-disease dispositions. Such data can better inform treatment regimens, but only if coupled with tools that can mine years of data in a longitudinal EMR record and present the data directly within the provider's workflow.

In the 1990s and early 2000s, integration and interoperability capabilities of EMR systems were further down on the list of "must have" functionalities when CIOs and other stakeholders were evaluating vendor systems. In the last five years, as the race to replace EMR systems has become the norm, both integration and interoperability are top-of-mind during vendor selection and evaluation.

Whereas integration and interoperability options in prior decades were largely limited to interface engines that needed dedicated IT staff and extensive customization, the last seven years have seen many new and existing companies offering middleware and cloud-based integration as service solutions. This myriad of options has given rise to an alphabet soup of data transfer standards (C-CDA®, FHIR®, HL7® Version 2.x, X12, and others) that seek to help deliver secure clinical information from multiple, disparate data sources. Understanding the processes for normalizing and vetting the data before they are accepted into an EMR system is key.

As advances in medicine and treatment progress, care providers need more sophisticated data analysis that is aggregated and presented to them in their workflow to better inform them about complex disease conditions and treatments. More and *better* data, delivered conveniently and expeditiously to the point of care – that is the promise of EMR integration and interoperability!