5 ways to optimize your EHR
EHRs were introduced with the best intentions to help cure at least some of the ills that plague the American healthcare industry. As patient records transitioned from paper to electronic, the plan was that coding and billing would become streamlined; patient data would be kept current and complete; and the groundwork would be laid for physicians to access and share records with patients and colleagues alike – building trust, transparency and a new era of collaboration. However, since the HITECH Act was enacted in 2009, in part to incentivize and thus stimulate EHR adoption, the switch to digital hasn’t gone quite as planned.

Physicians have largely borne the brunt of EHR downsides, spending hours sifting through mountains of electronic data, contending with multiple pop-ups and open windows, and drowning in unnecessary documentation. The extra data entry and administrative work required to navigate EHRs has often been cited as a leading cause of physician burnout, as was vividly illustrated in a 2018 Medscape survey. Of the 15,000 physicians asked, more than 40 percent reported feeling burned out, with 56 percent citing “too many bureaucratic tasks” as a contributing factor, and 24 percent pointing to the “increasing computerization of [their] practice.”

40% of physicians are feeling burned out.

Although EHRs have in many ways created an overabundance of patient data to input and sort through, there is one obvious information gap: images. While it would be difficult to argue that access to medical images is any less important than data like the patient’s vitals or medical history, they are nonetheless largely absent from the EHR. A radiologist report, while very informative, is a weak substitute for the real thing. It’s like asking a movie-goer to read a screenplay instead of watching the film...hardly the best user experience, and not likely to convey the same message or information.

Yet what appear to be flaws in the design and implementation of EHRs can also be viewed as opportunities for optimization. And that is what we explore in the pages to follow. Moving beyond the arduous (and expensive) task of implementation, this guide will focus on maximizing the EHR investment through an imaging lens, looking outside of the EHR “box” for ways to tell a fuller, more accurate patient story.
Aggregate

Why is aggregating data essential?
The road to vendor neutral archives (VNAs) is littered with outdated and unsecure storage methods. Legacy devices such as thumb drives, CDs, and even film stored in filing cabinets have made the consolidation and protection of sensitive imaging data next to impossible. Adding to the conundrum is the diversity of vendor PACS that have trapped patient data in silos across departments and facilities, a challenge felt acutely by organizations attempting to consolidate in the wake of mergers and acquisitions. Liberating images from their point of origin and storing them in a centralized archive is critical to ensuring accessibility to important patient data.

How can IBM iConnect Enterprise Archive help optimize your EHR investment?
IBM iConnect® Enterprise Archive can form the foundation of any sound enterprise imaging strategy. As the central repository for DICOM and non-DICOM images from disparate PACS, specialties and sites, this award-winning VNA paves the way to a consolidated view of a patient’s health record. With a universal viewer serving as a virtual bridge, IBM iConnect Enterprise Archive makes it possible to connect essential imaging data with the EHR, breaking down silos to create a single “source of truth” for each patient.

The bottom line
IBM iConnect Enterprise Archive consolidates and securely stores imaging data from disparate sources, so it can be connected to the EHR for a more comprehensive patient record.
Access

Why is securing access to images essential?
The EHR offers an embarrassment of riches when it comes to data, with information on everything from labs and medical histories to immunizations, progress notes and medications. But for many providers, one important component is missing: images. Relying on the reading physician’s report, rather than reviewing the actual images, means making decisions — sometimes life and death decisions — in the absence of critical data. However, with a universal viewer, the EHR can be image-enabled, allowing physicians not only to access original images, but to safely share them as well.

How can IBM iConnect Access help optimize your EHR investment?
IBM iConnect® Access is a zero-download web viewer that supports the image-enabling of other health IT applications, including the EHR. Available in any browser, it enables viewing of the patient’s entire imaging history using both DICOM and XDS standards. IBM iConnect Access liberates essential data, serving as a secure link between patient images and the EHR. In addition, it opens the door for collaboration and consultation with experts across town and across the globe.

The bottom line
IBM iConnect Access enables critical connections between patient images, EHRs and care teams, helping to create a more complete patient record.
Integrate

Why is integration with the EHR essential?
In the rush to develop the first/newest/best health IT solutions, the need for interoperability has often been overlooked. The ability to “play nice” with other systems is rarely the priority it should be, leading to significant barriers to the exchange and sharing of healthcare data. For those considering new technologies, the importance of vendor neutrality and interoperability with the EHR cannot be stressed enough. Indeed, seeking out solutions that integrate well with the EHR is one of the most logical ways to optimize that monumental investment.

How can an integrated solution like Merge Cardio help optimize your EHR investment?
Merge Cardio™, Watson Health’s Best in KLAS cardiovascular information system (CVIS), is an excellent example of a solution designed to communicate and integrate with other health IT systems. For example, Merge Cardio can be launched within the Epic EHR, providing the ability to take measurements, link to images and view the full clinical report. This seamless integration with the EHR means greater access to the comprehensive patient record, which can in turn facilitate more informed and confident patient care.

The bottom line
Those seeking to get the most out of their EHR need to consider factors like integration, vendor neutrality and compatibility before investing in new solutions for cardiology or any specialty.
Why is data summarization essential?
With so much data stored in the EHR, it’s no wonder that physicians feel overwhelmed. Successfully sifting through that much patient information takes time, focus and, let’s face it, a fair amount of luck. And because 80 percent of EHR data is unstructured,\(^2\) the task of finding exactly what’s needed can simply be out of reach. Being able to quickly search, prioritize and summarize the relevant data in the EHR is crucial — not only to avoid physician burnout and frustration, but to ensure providers have access to the best possible data as they make important decisions for their patients.

How can IBM Watson Imaging Patient Synopsis help optimize your EHR investment?
Patient Synopsis is a radiologist-trained AI tool that extracts relevant data from the EHR and projects it in a single-view summary in sync with PACS. It considers structured and unstructured data in 12 discrete categories, including labs, vitals, social and family history, medications and referring physicians’ notes to compile information pertinent to the current study. Because it is launched directly from a PACS, users can readily dig deeper into the patient record, clicking on chart or lab notes and other findings surfaced through Patient Synopsis.

Summarize

The bottom line
Patient Synopsis minimizes the need for endless (and sometimes fruitless) searches in the EHR, providing critical patient context for reading physicians.

Why is data alignment essential?
The struggle to align patient data is a persistent issue that vexes physicians and can jeopardize the delivery of quality patient care. At its core is the fact that what appears in the clinical report (as dictated or written by the physician) doesn’t always make it into the problem list. Since coding of the problem list is manual, inevitably data falls through the cracks, creating potential gaps in patient care and lost revenue due to inadequate documentation and follow-up.

How can IBM Watson Imaging Clinical Review help optimize your EHR investment?
Clinical Review, an AI-enabled data review tool, scours the clinical report for findings that may not have been added to the problem list. Through a retrospective examination of radiology and cardiology reports, Clinical Review surfaces data that was missed, then alerts the user (typically in a quality or patient safety role) to the potential inconsistencies. With this practical AI solution, a task that would manually be akin to finding a needle in a haystack becomes thorough, methodical and precise.

The bottom line
Clinical Review helps achieve a reliable patient record by enabling the reconciliation of discrepancies across multiple data sources.
Thinking outside the EHR

EHRs, like all healthcare technologies, will continue to evolve and improve, but users don’t have to wait for the next upgrade to start moving the needle. The imperatives to aggregate, access, integrate, summarize and align data within the EHR can be readily addressed — now — with the right solutions and vision.

To learn more about how Watson Health can help optimize your organization’s EHR, visit merge.com/contact.

Watson Health Imaging, a segment of IBM Watson Health, is a leading provider of innovative artificial intelligence, enterprise imaging and interoperability solutions that seek to advance healthcare. Its Merge branded enterprise imaging solutions facilitate the management, sharing and storage of billions of patient medical images.

With solutions that have been used by providers for more than 25 years, Watson Health Imaging is helping to reduce costs, improve efficiencies and enhance the quality of healthcare worldwide.