

WHITE PAPER | HEALTHCARE

Top Five Gaps in the Typical EHR Roadmap

Over the past two decades, health systems have spent a collective \$40 billion to implement electronic health records (EHR).¹

The ultimate goals are to standardize patient care while improving access, accuracy, and portability of personal health data. While every EHR-enabled health system has reaped value from standardizing certain content and workflows, EHRs are not the panacea the industry expected.

Five significant “gaps” still exist.



Top Gaps in an EHR Roadmap

Introduction:

Because of these gaps, healthcare providers still use paper forms and enter data manually at various points along a patient's continuum of care, greatly increasing the odds of errors. Fortunately, these issues can be solved. This report provides an overview of each gap and how best to address it. By closing these gaps, a health system can enhance its digital environment while reducing variability in care, improving quality, and increasing patient engagement and satisfaction.

Gap 1: Downtime, Business Continuity, and Disaster Recovery.

EHR systems may allow health systems to access clinical data for patients during system downtimes; however, the EHR systems typically only address a small portion of the needs for downtime workflows in clinical and registration environments, which may still rely on having network access. These limitations force health systems to fall back on paper for much of their needs. Reliance on paper-based forms and other nonstandard materials during clinical downtime — such as preprinted paper forms, CD-based collections of electronic forms, and intranet folders — persists, creating the risk of variability in care between regular EHR workflows and their downtime counterparts.

One example is the creation of patient identification wristbands. During downtime, health providers may be unable to access their barcoding system and instead rely on handwritten patient ID bands that may be unintelligible. This manual process is not only time consuming, but increases the risk of errors when administering medication, performing appropriate medical procedures or discharging infants. A recent survey of 503 nurses, physicians, and IT practitioners found that 63 percent of patient identification errors resulted from incorrect patient identification at registration.²

Health systems have spent billions on computerized physician order entry, but a system downtime that reverts to paper and manual processes can be completely foreign to the staff. Typically, more effort is spent training the staff to be compliant with EHR than preparing for downtime.

Cyber attacks, natural disasters, power outages, and many other unforeseen events can result in unplanned network outages. Health systems must be prepared to operate without

their network for several hours or even potentially multiple days. Regardless of network status, patients still need to receive the best care possible. Consideration should be given to how a health system reliably, accurately, and legibly identifies patients, as well as how compliant clinical documents will be distributed to support patient care during a network outage. Handwritten wristbands, patient information and preprinted forms are insufficient.

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Addressing the Gap

- Standardize downtime clinical documentation to match online workflows and deliver downtime content through an automated library to ensure only the most up-to-date and compliant forms are available and used.
- Provide registrars with the ability to produce a legible, printed patient wristband with required barcodes regardless of health information system or network availability status.
- Increase the staff training on downtime procedures and the paper processes associated with downtime forms.

Gap 2: Content Identification and Standardization Outside of the EHR System.

A significant portion of clinical documentation remains outside the control of the health system, with a majority originating from referring providers. The collection and tracking of this unstructured data becomes a major challenge for many systems. In a recent article, Kwi Holland, vice president of information systems at Knox Community Hospital stated, "As we planned our electronic medical records (EMR) implementation, it became clear that we needed a seamless way to manage all the unstructured data that's collected throughout a patient's stay if we were to realize the full benefits of our EMR investment."³

Top Gaps in an EHR Roadmap

Addressing the Gap

- Healthcare systems should perform an audit of their current clinical documentation with the objective of assessing and gaining visibility into materials — patient forms and clinical documents — in use and which workflows remain on paper; despite the standards introduced during the EHR implementation.
- Audits should be technology-enabled to allow for the ability to search and sort documents efficiently and should provide actionable information for decision making regarding content standardization and consolidation for each document.
- Once consolidated, healthcare systems should seek to manage the content as an asset. This entails investing in automated tools to control and govern the process of creating new assets and modifying existing content.

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Gap 3: Informed Consent Content and Workflow Standardization and Automation.

A study conducted by John Hopkins University found that signed consent forms were missing in two-thirds of scheduled surgeries, resulting in delays in 14 percent of all operative cases.⁴ Some EHR platforms have a rudimentary electronic signature component using HTML or similar forms. However, leveraging this component to address the need for consents does not address the need for two critical reasons. The first is a lack of flexibility in terms of business rules. For instance, some forms require additional signatures based on the answers to questions asked (interpreter signature if patient needs an interpreter as one example). Typical EHR platforms cannot handle such business rules, which leads to these documents being done manually. The second is a lack of procedure-specific information. These generic consents — or at best specialty-specific

consents — fail to adequately document the risks, benefits and alternatives for the actual procedure being performed.

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As a result, informed consent documentation is typically among the last to be automated, meaning that content and processes often vary greatly between health system sites, departments and even physicians practicing in the same specialty. Automation is one of the most effective ways to standardize consent forms and ensure the documents are compliant while eliminating errors, decreasing legal exposure and reducing delays. It can also significantly reduce the need for printing documents and dramatically reduce costs.

In addition, standardized content that is written or approved by board-certified specialists also dramatically reduces risk of patients not being properly informed of nuances of the procedure including expected complications.

Addressing the Gap

- Implement a standardized library of procedural-specific consent forms authored and managed by physicians who are board-certified in the specialty.
- Leverage an electronic signature and data-capture tool designed for the complicated business rules imposed on the informed consent process and that enables a multi-use, multi-location physician workflow.
- Provide the ability for physicians to select certain types of content, while also standardizing and locking critical content such as material risks and known complications.

Top Gaps in an EHR Roadmap

Gap 4: Patient-Facing Documentation and Efficient Patient Check-In Processes.

Significant opportunity exists to improve patients' understanding of pre-visit paperwork, the efficiency of the check-in process and the organization of post-discharge instructions. Pre-visit instructions are usually paper-based and may not be specific to a particular patient's situation — potentially leading to confusion and mistakes. Patients who do not adhere to these instructions contribute to lost facility and provider time. Paper-based patient check-in experiences can also extend waiting times, leading to decreased patient satisfaction. Furthermore, upon discharge, patients may receive poorly organized paper-based instructions that don't specifically address their unique care needs, resulting in misunderstandings and otherwise unnecessary follow-up care. Even with a well-executed paper-based information delivery system, it is challenging to measure patient engagement and their understanding of the paper documentation. Follow-up calls and, in more critical situations, follow-up visits or even readmission to the facility may be required.

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Addressing the Gap

- Implement electronic forms and workflow solutions that automate the patient experience from pre-visit and check-in through discharge.
- Leverage systems that allow patients to securely check in for appointments while still at home, whether completing forms on a mobile device, adding electronic signatures to necessary forms, sending important documents straight to the EHR or receiving electronic post-procedure instructions via a computer or mobile device.
- Incorporate electronic forms solutions that integrate tightly with the EHR, thus removing the need for paper-based admissions processes, reducing errors arising from manual entry on paper forms.

Gap 5: Discharge Follow-Up.

Two very important questions for a provider after treating or interacting with a patient should be, "How are you doing?" and "How did we do?" Health systems often have clinical or administrative departmental staff, such as the emergency department, contact patients after discharge to check on them. The labor-intensive nature of this approach and low callback rates can prevent a health system from reaching all patients. Another common approach is using automated attendant calling services, which can have low response rates if not well designed.

Addressing the Gap

- Automated follow-up systems can help health systems greatly improve patient care follow-up. Given today's wide usage of mobile-based communications, systems can send patients an automated text or email hours after discharge with a short survey asking about their current state or health, questions they may have about discharge information, and satisfaction with their visit. This can notify medical personnel when a patient response or feedback is received, allowing them to respond promptly.
- Patients who don't respond to the electronic survey can receive a call via an integrated call center module.
- This two-prong approach increases response rates, improves patient care, and contributes to patient satisfaction. The technology can produce an activity report each month with any negative feedback routed to the right people for proper corrective action.

Conclusion:

While EHR has certainly helped health systems standardize the plan of care, several gaps still exist. Selecting a partner that is uniquely qualified to assist health systems with technology that automates documentation across the continuum of care will complement the EHR system, enabling it to achieve a more digital environment and allow its providers to better care for and engage patients.

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About Taylor Healthcare

Taylor Healthcare, a part of Taylor Communications, is a marketing and communications company serving the healthcare industry with a broad spectrum of tangible and digital solutions primarily in the acute, long-term care and payer markets. We help our customers standardize and manage communications across the continuum of care, enabling them to engage the right person with the right information at the right time to influence behavior and achieve desired outcomes.

Sources:

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