

Point-of-care analytics critical to realizing full clinical value of electronic health records system, delivering the best care

Electronic health records (EHR) systems have long been considered a critical technological advance needed for healthcare providers to furnish more cost-effective, higher quality care.

But as our healthcare system rapidly evolves toward payment models based on measuring and paying for the quality of care provided to patient populations with chronic diseases, experts and healthcare providers alike are learning that an EHR system alone is not enough. Integration of a powerful analytics platform that can collect point-of-care data and feed it into an intuitive EHR system provides clinicians with more information to optimize point-of-care medical decision-making.

A robust analytics system also enables members of the clinical care team to better manage patient populations

and ensure that patients with critical medical needs are better engaged with their healthcare provider.

Patients at healthcare facilities with these robust systems receive better care during in-office visits and when being managed in-between visits. Clinicians better trust the data being used to drive their decision-making, and healthcare groups will be far better equipped to meet Population Health Management goals being driven by the Centers for Medicare and Medicaid Services and private insurance payers.

More accurate, efficient clinical documentation

One of the primary benefits envisioned in the transition to EHR use was that critical patient health details would not be “lost” to the clinician. Papers wouldn’t get misplaced, and information from other healthcare providers could be integrated into the patient’s electronic record.

In reality, early EHR systems were able to keep all of the patient’s health data, but the clinicians often found the EHR difficult to use for point-of-care data entry. The interface wasn’t intuitive and they struggled to connect with the patient while trying to complete the documentation.

Next-generation EHR systems have dramatically improved the documentation experience. The EHR automatically retrieves care plans from previous clinical encounters that are relevant to the reason for the patient’s current visit. This information is pre-populated into the current note for the clinician to review and modify as necessary with the patient.

In addition, relevant information such as lab and test results are also ported into the encounter where the clinician is able to review the results and add comments when analyzing the findings.

Clinicians can create custom templates for the types of patients they see most often, modifying the results based on the patient’s current state of health. This intuitive approach enables the clinician to spend less time hunting through the EHR for previous information about the patient and more time during the encounter engaged with the patient discussing the plan of care.

The powerful analytics backbone of the system enables the clinician to better access the most accurate data in real-time and use it to make better clinical decisions, including data that the patient may have collected off-site between face-to-face encounters.



Data facilitates more coordinated patient care

When a healthcare facility is able to collect a robust set of clinical data on each patient and has an analytics-backed EHR to manage patients across the care continuum, the result is better patient care.

A recent study found that EHR systems often lack interoperability and the ability to track patient care over time¹. As discussed earlier, the primary selling point of EHR systems was to make the clinician's encounter with the patient easier to manage.

Interoperability with other electronic systems and the ability to manage the patient across encounters weren't considered to be must-have features of most EHR systems – in many cases, it's extremely difficult to even attempt to integrate different systems offering this functionality into an established EHR system.

But when the healthcare organization has an analytics platform that is working in conjunction with the EHR, it's easier to facilitate better patient care. For example, the latest set of laboratory results is immediately available to the clinician within the EHR, instead of waiting for a fax or phone call.

¹"Electronic health records and support for primary care teamwork" *Journal of the American Informatics Association*, January 2015

Data facilitates more coordinated patient care, continued

As a result, the patient can get a necessary test ordered immediately, rather than waiting extra hours or days. The patient's care plan can be updated to reflect the medical decision making that has taken place without the patient even coming in for an appointment.

The next time the patient is seen, the clinician will have the most up-to-date information already populated into the note for that encounter.

Even more importantly, analytics are critical to performing tasks being required by more and more insurance payers and pay-for-performance initiatives. Without analytics that enable the entire care team to manage the patient, it's virtually impossible to be able to cost-effectively manage an entire patient population to measurable improvement.

Analytics that can produce actionable data enable much of the work of Population Health Management to take place outside of the presence of the patient and without personal involvement by the physician, a key factor in cost savings. This is true whether the medical group is managing patients with a chronic disease, or other population groups such as employees of the same company.

For example, if a medical group is managing its diabetic patients, the use of analytical tools across the patient population can prove helpful in a number of ways.

The practice can design interventions to help patients achieve progress toward these goals. For a diabetic patient who self-manages extremely well, the result may be fewer face-to-face encounters with the clinician.

Patients who are borderline uncontrolled can be contacted by nurses to provide educational guidance and material, and conduct interim checks of blood glucose. As these patients learn to manage themselves more effectively, these gains can occur outside of the presence of the physician, yet the physician still gains access to the data.

Patients with poor self-management won't be able to fall off of the radar screen of the practice, because these patients can be tracked using analytics and the clinical and non-clinical staff can devise more focused outreach strategies.

Evidence-based treatment, support

One of the biggest complaints from physicians in modern practice is the scarcity of time, and the pressure to make quick decisions during face-to-face encounters so that they can get on to the next patient.

Two areas where analytics can drive an improved point-of-care experience are clinical decision support and evidence-based recommendations for the physician, each of which can be customized by the medical group based on its identified goals for patient management.

1 Clinical decision support

A primary benefit of EHR systems from the beginning has been the assurance that the patient's clinical data is in one location, accessible to the physician. Modern systems have workflows built around the patient's condition(s) that make it easier to update the EHR. Analytics further aid the process by providing all of the relevant patient data to help guide the physician toward the best evidence-based treatment plan. For example, the patient's current renal function, as measured in the record, could guide the system to recommend a certain test or medication for the patient. The physician will vet the recommendation against the patient's clinical picture, but the decision support ensures the provider has the tools to make the best decision.

2 Evidence-based recommendations

Analytics data on an entire patient population is more than just being able to manage certain conditions from a population health perspective. It also gives the physician treating the patient real-time insights into how patients were treated for certain conditions, and how those patients responded to the treatment.

The physician is able to compare the patient's own health information to that of other patients with similar conditions and get recommendations for diagnostic interventions. These recommendations may prove to be more appropriate for that patient, or even more cost-effective ways to provide the best treatment and will help the physician to narrow down a handful of options to choose the best option.

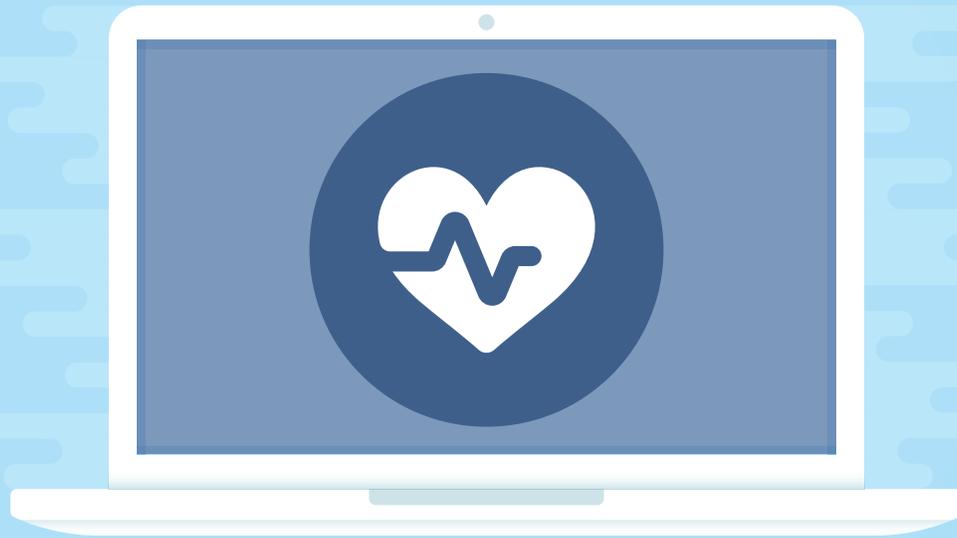


Patient Experience

Patients are too often frustrated by their experiences in the healthcare system. It can be difficult to get timely appointments and difficult to understand why clinical decisions are being made. Often, the patient is made to feel like a passenger in the management of their own health.

Analytics-driven patient management via the EHR helps bring the patient closer to the driver's seat. The patient's encounter is pre-filled with data and care plans from previous visits to make it easier for the clinician to show the patient how care is evolving over time. The patient is positioned to ask better questions.

In addition, an EHR with an integrated patient portal enables the patient to login at home to view care plans and become an active member of the care team. Patients can message physicians and other members of the care team with questions and use the portal as an opportunity to view care goals and better self-manage between appointments.



Conclusion

Healthcare providers have been collecting patient data for as long as there have been patients, but even in the early days of EHR systems, better ways to use this data to manage patient health have remained tantalizingly out of reach. Physicians made decisions based on their perception of experience and the relatively limited set of patient data available during the encounter.

The power of analytics means a new reality, where physicians can complete patient documentation more quickly and accurately, collaborate on care plan data with other providers, engage patients in remote access to medical information, better manage complex patient populations and improve population health.

These tools are here now, and medical groups are using them to improve decision-making, clinical outcomes and enhance patient engagement.

About MCIS, Inc.:

MCIS, Inc. was established from within the Marshfield Clinic Health System, and has been continuously developing an EHR for providers for over 30 years. The company understands the challenges that practices face, and empowers physicians to do what they were intended to do, which is practice medicine, with expert clinical decision support when they need it.

For more information, go to www.mcis.com.

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