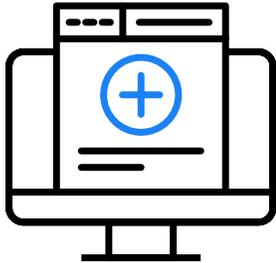




White Paper

# Avoiding the pitfalls of poor patient identification

Four reasons organizations can't turn a blind eye to patient identity management



## The average health system has 18 disparate EHR vendors in use across all affiliated providers

HIMSS Analytics  
May 2018

In the wake of digitization, healthcare's infrastructure has become a tangled web of disparate systems and applications. In fact, the average U.S. health system is running 18 different EHR vendors across its entire provider network<sup>1</sup>.

For many organizations, this volume of fragmented systems has become an infrastructure bottleneck, resulting in degraded data quality, care coordination gaps, medical errors and disruptive workflows. As interoperability and data sharing play a key role in public health response efforts for COVID-19, organizations must ensure their data is trusted, easily accessible, complete and correctly tied to the right individual.

To regain control over their burgeoning networks and improve the integrity of their patient data, forward-thinking health systems and HIEs have turned to enterprise person identification technology. Accurate identity data ensures every interaction in which data about an individual is captured—regardless of system or location—is linked correctly for a single, up-to-date view of one's care. This includes diagnosed medical conditions, lab work, imaging, diagnostic tests, medications, allergies and family medical history.

When a patient's data is trapped in various systems across the continuum, it can have potentially disastrous downstream clinical, operational and financial effects.

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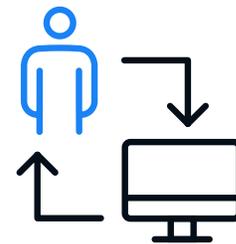
1. Sullivan, Tom. Why EHR data interoperability is such a mess, HIMSS Analytics LOGIC, May 2018 <https://www.healthcareitnews.com/news/why-ehr-data-interoperability-such-mess-3-charts>

# Four reasons organizations can't turn a blind eye to patient identity management

Gaps or errors in the patient identity management process can have serious consequences for patients. According to a recent survey, nearly 40 percent of U.S. healthcare providers have incurred an adverse event in last two years as the result of a patient matching issue<sup>2</sup>.

"Most organizations intrinsically know that they have a patient identity management problem – that's why they have health information management (HIM) departments dedicated to keeping their information as clean as possible," says Gevik Nalbandian, VP of Engineering at Rhapsody. "But not every member of the C-suite has a full understanding of the downstream ramifications and how extensive the effects can be.

"Patient safety concerns, coordination of care issues, and difficulties with population-based initiatives can often be traced back to issues with patient identity management," he said. "Assessing your workflows and health IT systems for underlying issues is extremely important – and you have to be aware of how these pain points manifest at the front lines."



## Nearly 40% of providers have experienced an adverse event in the last two years as a result of a patient matching issue

EHI and NextGate (now Rhapsody)  
February 2020

The disjointed, competitive nature of IT systems contributes to a proliferation of incomplete and inaccurate patient data that seeks to undermine care quality and safety, reliable reporting and analytics, and operational efficiencies. This white paper outlines the pitfalls of poor patient identification in four strategic areas needed to drive healthcare transformation and value based care.

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2. The State of Patient Matching in America, eHealth Initiative Foundation and NextGate, February 2020  
<https://bit.ly/310o4ru>

# #1 Managing populations at scale

Population health management is a high priority for most hospitals and health systems, especially those with an interest in the emerging value-based care ecosystem. With COVID-19, organizations must now also adapt their population health strategies to develop new approaches to managing populations most at risk for the virus.

The imperative to improve outcomes while reducing costs is pushing many healthcare organizations to think more proactively about preventing and managing chronic disease, trimming unnecessary utilization, and gaining visibility into patient behaviors outside of the four walls of the hospital.

“Whether you’re trying to improve coordination of care or reduce avoidable ED visits and readmissions, every organization needs to be able to identify their anticipated clinical needs and associated spending,” says Nalbandian. “You simply can’t do that if you have duplicate patients or records from individuals that are incomplete, outdated, or fragmented.”

Many healthcare organizations may be suffering from a data-driven Catch-22, Nalbandian explained.

“Most organizations are adding more health IT solutions in order to get the insight they need about their populations. This is especially true in the face of the pandemic,” he said. “But as they build out their technology stack, they may be creating siloes that actually limit their visibility into the entire patient journey.”

The average organization has more than 15 different applications in use for patient management, Nalbandian noted. And they may not even be aware that these systems are not integrated seamlessly.

“Most people think, ‘Well, I have Epic or Cerner or MEDITECH – that’s just one system,’” he said. “They don’t really think about the fact that under that umbrella, they might have a dedicated EHR for their mother-baby unit or their cancer center or their physician offices, and those systems might not communicate very well, even if they’re from the same vendor.”

Population health management gets even more challenging when organizations begin to look at how social determinants of health (SDOH) affect outcomes.

“In order to reach beyond the borders of your campus and connect individuals with the services they need, the data on each of these individuals has to be accessible and reliable,” said Nalbandian. “And as organizations start to integrate more and more data sources from community and social service agencies, they need to make sure the right data is associated with the right person.”

Many community organizations do not use electronic health records and may be working with paper-based systems or basic spreadsheets that are not immediately compatible with more sophisticated health IT tools.

“How are you going to make sure the information is being inputted into the right place for the right person?” asked Nalbandian. “It becomes a lot more difficult to coordinate the care of individuals if you don’t have a identity management system for bringing disparate records together into a cohesive story of needs and services.”

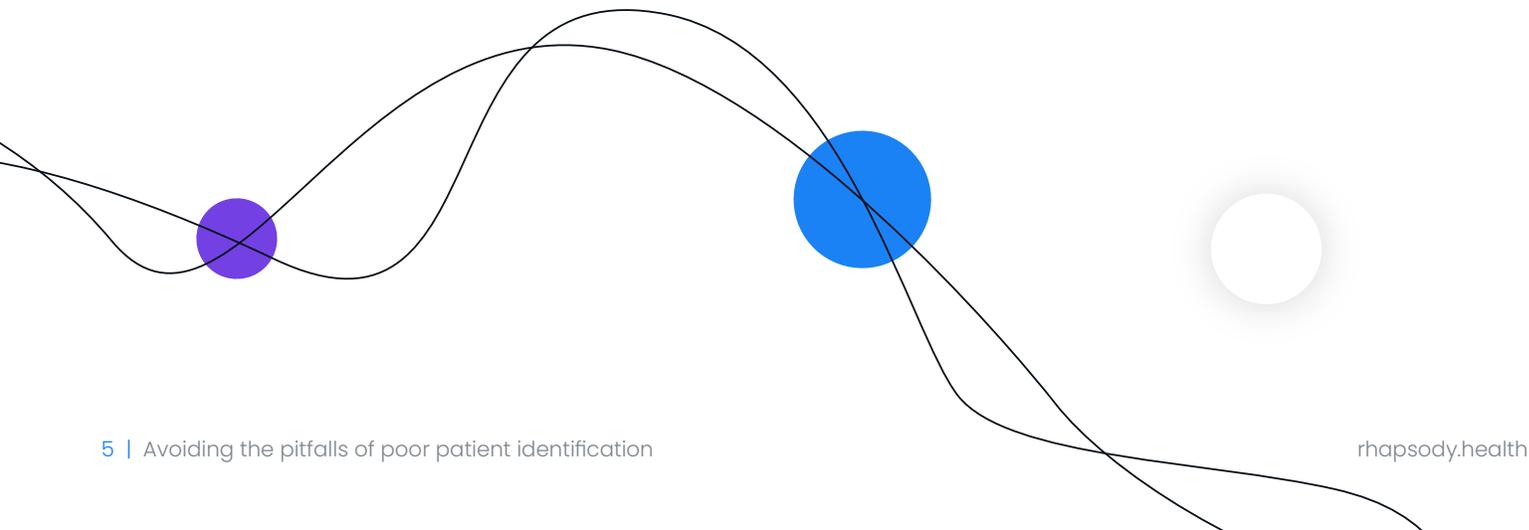
As organizations begin to connect data from these new partners and novel sources, an enterprise master person index (EMPI) can serve as a consistent platform for integrating patient records and tracking individual journeys across a complex network of community services and healthcare providers.

“A unified patient identity platform will give you the insight you need into the clinical and socioeconomic burdens facing the patients in your community so you can take steps to address them,” Nalbandian said.

**“It becomes a lot more difficult to coordinate the care of individuals if you don’t have a patient identity management system for bringing disparate records together into a cohesive story of needs and services.”**

**Gevik Nalbanian**

Vice president of software engineering,  
Rhapsody



## #2 Patient attribution for value-based care

Population health management initiatives are often tied to value-based financial models that can support a holistic, proactive approach to patient care.

In many of these models, including accountable care organizations (ACOs), providers are responsible for a defined group of patients, known as an attributed population. Participants can receive financial incentives for meeting cost and quality targets for this group – and may be liable to pay back losses if they fail to hit their goals.

Attribution algorithms can be complicated, and providers typically don't have much say in who ends up under their care. ACOs may become accountable for individuals without strong existing ties to their organization, making it difficult to track and manage their care.

"Patient attribution is a big issue for ACOs, because they're responsible for the outcomes of their attributed population no matter what," Nalbandian observed. "If you're not identifying every patient that's a member of your ACO, you've got two possible problems: either you're leaving credit on the table for the work you are doing or you're missing the opportunity to provide services to people that you're responsible for."

This is especially true if an ACO is struggling with one of the most common patient identity management concerns: duplicate records.

"Anywhere between 12 and 20 percent of records are duplicates in many organizations, which is obviously problematic for patient care," Nalbandian said. "Sometimes when I ask organizations about their duplicate record rate, they will say it's in the single digits. But oftentimes they are only looking in their main EHR for that number, not across all of the health IT systems in use."

"Every ACO will need to make sure it is managing its patient identities carefully to be certain it knows who to serve, how much they are spending, and how to best care for their attributed population so that they meet their goals."

## #3 Quality reporting

Whether or not an organization is participating in an ACO, it is likely to have an array of quality reporting obligations that depend on clean, complete, and trustworthy patient data.

“Accurate quality reporting has to start with having a reliable source of truth,” says Nalbandian. “Quality reporting and internal performance monitoring are always difficult. Sometimes they require thousands of hours of custom coding and data science work to create the necessary automation. The accuracy of the data you feed into those models is always the key issue.”

“If you are documenting on two different John Smiths in different care settings or within one care setting but at different times, your reporting is going to be skewed,” he said. “We’ve seen situations where patients have had seven fragments of their record worked on by different segments of a single organization. That’s seven instances of the same patient being reported.”

For large health systems that tend to have higher percentages of duplicate records, the effect of these duplicates can be enough to lose out on financial incentives or produce lower-than-expected quality scores.

“An EMPI can help you reconcile all those fragments so you know exactly how many of your John Smiths had positive outcomes and can report on that accordingly so that you are rewarded for the quality of your care,” said Nalbandian.

## #4 Patient experiences

No matter what financial models are in play, healthcare organizations simply cannot afford to deliver a poor experience for patients.

“The patient experience is incredibly important, yet most health systems are optimized to make things easier for their staff, not their consumers,” said Nalbandian.

“We’ve all been in the situation of going to the doctor, filling in a form, going down to the lab, filling in the same form, saying our address a hundred times and repeating our insurance information until we’ve memorized our ID numbers.

“Patients want speed, convenience, and privacy. They want seamless capabilities to share their information with the health system instead of the health system having control of who is seeing what data,” he continued. “While there are certainly good clinical safety reasons for confirming the identity of a patient who’s receiving a treatment, there are also some administrative areas where we can significantly streamline the process.”

A single platform for patient identity management can help to alleviate some of the common pain points along the patient journey.

A shared identity management platform across applications and care sites supports a smoother experience while creating trust between patients and providers that the right information about the right individual is being used across the entire health system.

# Taking the first steps toward improving patient identity management

For organizations experiencing one or more of these concerns, Nalbandian suggests a thorough assessment of existing processes and problem areas.

Organizations should make a concerted effort to bring all affected stakeholders into the conversation and take a holistic approach to implementing new workflows or procedures. CIOs and HIM directors should certainly be included in the discussion, but so should other key members of the C-suite, he added.

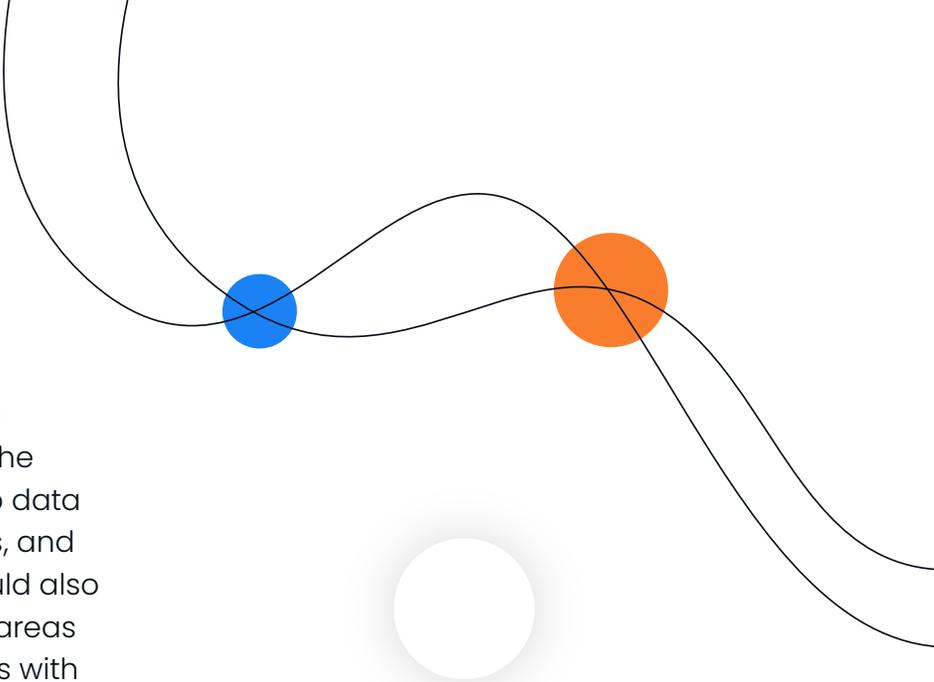
“One of the most important is your chief medical information officer (CMIO),” he said. “He or she is going to have great insights into patient safety, coordination of care, and physician burnout. They will provide a really valuable perspective on how these changes are affecting workflow and outcomes.

“The same goes with your chief nursing officer (CNO) or chief nursing information officer (CNIO), if you have one. Quality and patient safety are very important, and they will likely be able to point out more of those everyday issues that affect your front-line staff.”

Finance leaders should also be involved in any discussions, since patient identity management tends to have a direct impact on duplicate billing, incorrect billing, and denials.

“Your chief financial officer (CFO) can explain the revenue cycle impacts and identify opportunities to bring improvements to the financial operations of your organization,” said Nalbandian.

“And if your organization has an analytics or population health management team, it’s helpful to include those folks, as well. Everyone has a need for better data about patient populations to improve their operations. You simply can’t get good analytics without good source data. The old adage ‘garbage in, garbage out’ is still widely used for a reason.”



During these discussions, leaders should clearly identify each problem affecting the organization and be prepared to dig into data about duplicate record rates, data siloes, and health IT integration concerns. They should also be prepared to collaborate across their areas of expertise and support their colleagues with their individual needs.

“Each of your stakeholders is going to come at the issue from a slightly different perspective, but everyone is going to be looking for tools that will help make their jobs easier,” Nalbandian said. “They will all have that in common, so it’s a good starting place to begin talking about efficiency, accuracy, and the patient experience.

“The bottom line is that if you want the full picture of your patients and their activities, you need to have the full picture of how patient identity management is affecting your organization,” he concluded. “Bringing the right people to the table will help you assess your needs and your opportunities so that you can identify those symptoms of poor data quality and address the underlying causes as quickly and efficiently as you can.”

## About Rhapsody

Rhapsody is a digital health enablement platform company with healthcare integration, identity management, and clinical terminology solutions. Rhapsody enables care providers, health tech builders, and public health teams around the globe to save time, reduce costs, and speed time to value by accelerating the adoption of digital health innovation through interoperability. Rhapsody API-enabled solutions are flexible to meet customers where they are, deployable in a private cloud or a Rhapsody cloud.

For more information, visit [rhapsody.health](https://rhapsody.health).