LESSONS FROM COVID: How Real-Time, Targeted Alerts Help SNFs Identify Infections Days in Advance







LESSONS FROM COVID: HOW REAL-TIME, TARGETED ALERTS HELP SNFs IDENTIFY INFECTIONS DAYS IN ADVANCE

The need for skilled nursing facilities (SNF) to execute infection control through real-time monitoring and reporting has always been important — but the COVID-19 crisis has amplified that need to new levels. With heightened scrutiny and the new White House Coronavirus Commission for Safety and Quality in Nursing Homes, providers need to address and engage this dynamic with the right tools and controls.

This white paper will show how SNF operators can use real-time technology — including a new tool from Real Time Medical Systems (Real Time) — to reduce the risk of fast-spreading infections among residents and staff, and do so without inciting new government mandates. This tool enables proactive detection, giving operators a leg-up in this new world.

In the time of COVID, efficiency is of utmost importance."

Cassie Douglas, Corporate Director of Clinical Services, HCF Management and Real Time client



THE REAL TIME TOOL Delivering interventional analytics

The move from paper record keeping into electronic health records (EHR) created a new capability for health care professionals to store, transition and analyze the health and medical history of any given patient. But that information is only as valuable as the ease with which it can be accessed.

That is where Real Time comes in.

The company's dynamic software as a service (SaaS) application sits on top of an EHR and queries the medical record with key questions that unlock its information, giving clinicians and other health care professionals fast access to the clinical picture of a given patient. Real Time does not add any information into the EHR, so the tool is only examining the information that naturally exists in the health record.

If the clinician wants to know if a patient has a potential infectious disease, for instance, the tool continuously analyzes live data and documentation entered within the EHR on that patient looking for early signs and symptoms. It then triggers an alert, in real time, when the patient presents subtle changes in condition relevant to emerging infections.



KEY TERM: Interventional Analytics

WHAT IT IS: The next step beyond predictive analytics.

Interventional analytics is an analytical process, giving clinicians data that provides a line of sight to interventional moments.

Real Time delivers to the clinician an easily consumable picture of each patient, their subtle clinical changes and risk of admission and readmission. It then organizes this data in an efficient and effective way that empowers clinicians to quickly and accurately make informed care decisions. Because the solution analyzes live data within the EHR, it requires no duplicate data entry or change in the facility's current workflow.

"That process is what Real Time Medical Systems solution is doing from a technical perspective with patient data from the EHR," says Shane Dearing, executive vice president of growth at Real Time. The company provides clinical line of sight to interventional moments, giving clinicians actionable feedback in contrast to MDS and claims-based "predictive analytics" that do not include the patients in the facility at the time of review.

Real Time has a name for this kind of analytical process: interventional analytics. Think of it as the next step beyond predictive analytics.



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IMPROVING PATIENT CARE AND CLINICAL OUTCOMES Optimized information in real time

Skilled nursing facility (SNF) leaders typically begin their day with a meeting to review patient information, including any changes in condition that may have taken place. Using Real Time, SNF operators can access two key dashboards that review the clinicial status of their entire patient population, as well as drill down to individual patient data:

- **The clinical dashboard.** This dynamic dashboard provides a report on the patient's health over the past 24 hours.
- **The at-risk dashboard, or ProAct CARD.** The patent-pending CARD readmission risk score shows clinicians when patients are at risk for rehospitalization.

In the clinical report, there are a variety of clinical alerts about the patient, both simple and complex. These alerts are immediately sent to the clinical team, live, empowering the clinician to take prompt action on the right patient, at the right time.

Examples of these alerts include vital sign changes, pain, weight, falls, intake — and most recently added, infection risk.

"In the example of infection risk, if a patient has any one or more of the following infection risk alerts — temperature of 99.5 degrees or greater, pulse oximetry of 93% or less, respirations of 24 per minute or greater, pulse of 100 beats per minute or greater — they will appear on the clinical report, alerting the clinician to initiate timely interventions," says Cindy Kreider, Real Time clinical specialist.

In addition to that alert, the tool suggests AMDA and INTERACT IV evidence-based interventions, giving the clinician the steps needed to intervene.



\bigtriangledown THE REAL TIME SORT TOOLS

The clinician can easily filter patient detail in a variety of ways. The filters include:

- Unit
- Date of birth
- Room or bed
- Resident name, alphabetically
- Highest risk of rehospitalization (CARD readmission risk score)
- Risk level
- Payer

Optimized searching: keywords, timeliness, multiple updates per day

Once a clinician has received an alert about a patient, they can go deeper into that patient's record without reading the entire record. Real Time has built a system of keywords that signify when a patient is at risk and in need of an intervention.

"Our standard clinical keyword alert report provides the clinician insight into key words that are present in the narrative documentation of the EHR," Kreider says. "The key words are typically associated with at-risk situations, or some type of focused follow up needed for the patient, allowing the clinician to initiate applicable interventions."

When the coronavirus pandemic began, rehabilitation provider HCF Management worked with Real Time to optimize its keyword pool to focus on COVID-19 symptoms, such as "shortness of breath," "fever," "vomiting." The keywords provide insight into patients, while the tool itself protects against the human error of not seeing those words in a patient's record.

"In the time of COVID, efficiency is of utmost importance," says Cassie Douglas, corporate director of clinical services at HCF, which has worked with Real Time since 2014. "We are entering data on a ton of residents, and it does no good to enter that data if time doesn't allow for a comprehensive review of it. This system from Real Time really helps to pull that and put it in a single report for you as opposed to having to go in and individually review every record."





IMPROVING PATIENT CARE AND CLINICAL OUTCOMES (CONTINUED)

Real Time also provides clinicians with one or two sentences before and after the keyword so they can see the context of how it was used. They also receive the author of the note from which the keyword came, as well as the date and time of the note, and the source.

"This way, our clinicians can decide if this is a patient where they need to intervene, rather than having to go chart by chart," Douglas says.

All of these capabilities are designed to improve a clinician's workflow through optimization, timeliness and multiple updates per day within existing clinical processes. The system is nimble, meaning that as government officials and regulatory agencies add requirements for reporting, clinicians using Real Time can quickly adjust.

"[This tool] has become an essential part of our days through the COVID pandemic," Douglas says.

One of the most recent additions that Real Time has made to its tool is around infection control and infection risk capabilities. That includes new infection risk keywords, which can quickly show clinicians which of their patients are at immediate risk for infections. This has a broad application, but also a specific one rooted in COVID-19.







IDENTIFYING EMERGING INFECTIONS DAYS IN ADVANCE

Transparency, prevention, monitoring — and reduced readmissions

With the COVID-19 pandemic at the center of all things health care, SNFs today are required to report a variety of elements aimed to monitor and prevent the spread of infectious disease, such as symptoms, diagnoses and test results, both positive and negative. SNFs must report these pieces of information to a variety of parties, including family members, state and local governments, the Centers for Disease Control and Prevention (CDC) — and the patient.

As the pandemic rages on, and as the risk of infectious diseases outside of COVID-19 increases — especially when merged with flu season — SNFs will need to have access to real-time data as they monitor signs and symptoms within patients, all for the purpose of proactively indentifying changes in condition and preventing future outbreaks.

That is a key benefit to the Real Time tool, specifically with the new infection risk capability.

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"In my opinion, this has helped build morale of our nursing management teams by giving them a resource," Douglas says. "It is a resource and a tool to help them manage their facilities more easily. We as an organization have appreciated Real Time's response time and collaboration and customer service throughout the years of working with them."

THE FUTURE OF INFECTION RISK CONTROL

How to stay a step ahead of new industry pressures

On both local levels and national levels, there is more focus than ever before on how SNFs operate, and what they are required to report. Along with requirements around reporting to family members, patients and the CDC, there are also additional requirements that are being considered jointly by CDC and the Centers for Medicare and Medicaid Services (CMS) to monitor signs and symptoms of infectious disease.

Dearing and Kreider believe that additional reporting requirements will ramp up during the 2020-21 flu season, with reporting potentially entering any number of other areas beyond just symptoms.

The challenge for SNF operators moving forward is not just about the categories of the reporting, but the combination of the specificity of the reporting and the expansion of agencies to whom a SNF must report. Facilities have multiple government agencies that they are required to report to. All of this creates a massive workload for the SNF.

"It's not easy for them to capture this data and send it to the government — and who does it? Who within the facility is responsible for it?" Dearing says. "When you account for the time, effort, energy and accuracy of data being reported from each SNF to the government, we can help make that process automated, more efficient, more accurate and redirect that time that otherwise would be spent on compliance for reporting to care for the patient."

In all these ways and more, SNFs will likely be held accountable by everyone from patients and families to government agencies and, possibly, attorneys. Thus, all of the capabilities and benefits of the Real Time solution are aimed at one goal: early identification of a change in patient condition and monitoring the risk of readmission for any given patient, keeping that patient out of the hospital after discharge and ensuring compliance.

"Ultimately, we appreciate regulatory efforts to improve care, but we know from experience the end result is more oversight, stricter monitoring and unfunded mandates," Dearing says. "Facilities are being asked to share more and more information about their patient population, with more and more stakeholders: local, state, federal, referring hospitals. Real Time positions those operators to have that information at their fingertips, providing them with an insight advantage for infectious disease, regulators and value-based purchasing partners alike."

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To learn more about Real Time's Interventional Analytics solution, visit **realtimemed.com**.

