

## Connecting the continuum: Machine learning and AI are the keys

In today's healthcare environment, health systems, ACOs and skilled nursing facilities have limited visibility of patients as they transition between care settings, such as from the hospital to a post-acute facility, or from post-acute to home. Siloed information systems prevent organizations from sharing the data and analytics that can enhance the quality of patient care and avoid unnecessary costs, including readmissions.

The good news is that technology is paving the way for greater integration and visibility into patients' clinical status. *Becker's Hospital Review* recently spoke with Anthony Laflen, director of solution design, acute and payer, with Collective Medical, a PointClickCare company, to discuss the value of data in the post-acute care arena and how software is transforming the patient experience.

### Data visibility is the key to assessing and improving patient care

Historically, hospital software platforms haven't communicated with the IT systems used by skilled nursing facilities. Further downstream, skilled nursing home platforms typically don't communicate with home health agency IT systems.

"Some markets have adopted solutions that address these issues, but by and large, the system is broken," Mr. Laflen said. "Piecing different platforms together is difficult and expensive, and it's only recently become possible. This is problematic, because patient visibility is how you assess and impact patient care. If you can't understand the root cause of an issue with live data, it's impossible to intervene or educate your partners."

Fortunately, it's becoming more common for hospital systems to share their data. This is due in part to software enhancements, government-led efforts to encourage information sharing and improve interoperability, as well as acquisitions made by larger healthcare players.

According to Mr. Laflen, "When hospital systems open a portal and push data directly into the post-acute electronic health record platform, it brings tremendous value. You'll see a massive reduction in medication errors, fewer keystroke errors and better handoffs when patients move from one setting to the next. It's an exciting time."

### Healthcare software advancements facilitate data flow and connected care

In 2010, Mr. Laflen worked for Marquis, an operator of skilled nursing facilities. At that time, Marquis tracked and analyzed hospital readmissions for its patients using Excel spreadsheets. Hospitals were excited to see this information since most organizations were using outdated Medicare claims data to understand readmission trends.

"We had to explain that the Medicare data that hospitals and health plans were using to make assessments was 18 to 24 months old," Mr. Laflen said. "Bringing our spreadsheet to the table demonstrated our willingness to be transparent. We became the preferred providers in most markets by being open and transparent."

Around that same time, Mr. Laflen learned about Collective Medical's care coordination platform that showed- in real time- when SNF patients were bouncing back to the ED or admitted to the hospital. (The platform allows care managers to track when patients are visiting any acute or post-acute facility that participates in Collective's national network). Marquis was one of the first groups to sign on to the Collective platform.

"We wanted to be alerted and intervene if patients were readmitted. If it was clinically appropriate, we would tell emergency department physicians to send patients back to our skilled nursing facilities rather than admit them to the hospital. Thanks to the data sharing through Collective Medical, we drove our readmission rates at Marquis from the low 20 percent range to the single digits and we did it in less than two months," Mr. Laflen said.

### The journey to connected care continues with enhanced data sharing, machine learning and AI

PointClickCare's recent acquisition of Collective Medical provides a single pane of glass for care managers, showing what's happening in real time at skilled nursing facilities.

"When you take Collective Medical's network breadth and marry it with PointClickCare, which is the leading EHR provider in the skilled nursing setting, it's exciting," Mr. Laflen said.

Collective Medical has around 3,000 hospitals and over 6,200 other nodes in its network, as well as 100 percent of the national health plans. PointClickCare has over 22,000 customers, and around 97 percent of all U.S. hospital discharges to a skilled nursing facility are to a facility using PointClickCare's EHR.

Looking ahead, Laflen sees opportunities for optimizing patient length of stay in post-acute facilities. Many risk-bearing entities, such as ACOs, try to restrict the amount of time that patients spend in post-acute settings, in hopes of achieving an optimal length of stay that minimizes unnecessary costs. However, when

ACOs attempt to manage length of stay without access to real time clinical data, they risk discharging patients prematurely. If unstable individuals are discharged home or to the community, they may end up back in the hospital.

To address this challenge, PointClickCare and Collective Medical are leveraging machine learning and AI. "Our machine learning models will tell you based on live data what is happening with individuals," Mr. Laflen said. "They predict whether the probability of an incident has increased, and they can alert caregivers in both skilled nursing and hospital settings. It's groundbreaking." ■



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