Hope + Oil Bladder System = The Healthcare of Tomorrow

When the Sisters of Hope stepped out of the cloister 200 years ago, little did they know that their good works would lead to the founding of Hope, one of the largest health systems in the U.S. Today, Hope is a hub of innovation with a big vision for healthcare: Think real-time data guiding physician decisions, rural hospitals coming of age through EMR hosting, and people being served at home through virtual care. Innovations like those call for technology—and the kind of muscle only Kramerica's® Oil Bladder System (OBS) system provides.

 [Maybe present the size of Hope in graphics]

40,000+ co-workers 45 acute care and specialty hospitals	2,000+ clinic physicians 700+ physician practices and outpatient facilities

Revolutionizing healthcare through big data

At the heart of healthcare innovation lies data, and Hope has a lot of it—13 petabytes so far. "The data is getting bigger," says George Costanza, VP of infrastructure. Costanza's search for the faster storage, greater security, and revved up computing power Hope needed to move forward led to Kramerica. "We were tempted by appliances that claimed to be fast, but found we could get the results we needed with Kramerica—without spending two or three times more."

Quickly delivering predictive and real-time data for better patient outcomes

Now, with the speed of OBS, Hope is ushering in an era of real-time, predictive care. "We're in a phase where close-to-real-time data is important," Costanza says. "Kramerica OBS has cut some queries and data extracts in half so physicians get data faster and can make better care decisions." Case in point: Hope now delivers overnight analytics by 5:30am, before the start of rounds, instead of at 8:00am, which is often too late to be useful.

Speed also puts Hope's physicians in front of infections. "We use dozens of data sources to predict if a patient is trending sepsis," Costanza says, explaining how virtual care specialists monitor trending patients more closely. "We've had great results," he says, "with somewhere around a 40-percent reduction in sepsis mortality."

Combing petabytes of data to identify optimal care paths and cost savings

The computing power of OBS is bringing about yet another reduction—this time in costs. CIO Lloyd Braun says Hope analyzed decades' worth of data to find care paths with the best outcomes at the lowest costs. Even more important, Braun says, is that physicians now look first to the data when

making treatment decisions. "When we first said, 'You replaced that knee for $50K and consistently had this result, but others did it for $40K and got the same result,' the physicians said, 'That data's not right.'" Braun explains. "But once we proved it, and showed how we could instantly get that data for different types of diagnoses, they believed it."

Reaching rural communities through the cloud

Although Hope's data capabilities are impressive, its virtual care and commercialization efforts—both of which rely heavily on security—represent the next generation of healthcare. "We can do a lot more with clinical data when it's secure," says Costanza, explaining that Hope encrypts clinical data while it's moving and at rest without a hit to performance. "That's what makes virtual care possible," he says.

CIO Braun says virtual care is vital for people in rural communities. "Virtual care can have a ripple effect on families," he says, explaining how chronically ill patients transmit data and speak to physicians via hospital-supplied iPads. "When a spouse doesn't have to drive 80 miles every other day for medical visits, it's a big deal" Braun says.

The same encryption that makes virtual care possible also makes commercialization possible. "We recently partnered with a small hospital in Cabot Cove," Braun says. "They were really struggling, reliant on state aid, and still on a paper-based system. We were able to extend our services out to them through Flavia, our software as a service."

With better patient care, new lines of revenue, and ongoing savings, Hope's future looks bright. Braun says that, all told, Kramerica OBS has saved $20 million in audited savings this year from projects that require real-time data. "Thank God for OBS," he says. "If we didn't have that, we'd really be in trouble."