

## Ergonomics, Patient Care, Caregiver Satisfaction Drive EnovateIT's Mobile Device Agenda

IT leaders sometimes underestimate the importance of mobile devices in the success of their clinical systems projects. Nurses are too busy and too tired to use poorly designed computer carts and wall mounts, which sometimes leads to poor clinician adoption of point-of-care software applications. EnovateIT of Ferndale, MI is a proven market leader in mobile systems for healthcare, with over 40,000 devices implemented and improving the acquisition, interpretation, and transfer of patient data. Ron Sgro, president of the company, spoke to us about the company and its industry leadership.

### Give me some background on EnovateIT and your role in it.

In March 2008, we will have completed our fifth successful year in business. I, along with my two other partners Fred Calero and Craig Rose, formed EnovateIT with the requisite commitment to providing the healthcare market with tools for acquiring, interpreting and distributing clinical data and trying to do all that in the most efficient, and ergonomic way possible. We've been successfully involved with over 1,200 clients and we have created a number of different products through those relationships.

As president of EnovateIT, my roles involve building relationships, securing prominent partnerships, working with our talented sales team, and working with my partners on planning the future endeavors of our company.

### How important is the choice of mobile devices and related hardware to the success of clinical system projects?

In the 11 years that I've been involved in assessing the marketplace, I can say it's changing profoundly. When caregivers are evaluating mobile devices, most notably

carts, they look at things from both a subjective and objective point of view. Subjectively, it's typically the physical characteristics. Objectively, clinicians will evaluate them on criteria that make their jobs easier and more comfortable.

In terms of the development of our products, we try to make decisions that meet the needs of hospitals. We involve a number of focus groups to find out what is most pleasing for the majority. However, we recognize those needs may vary within the dynamics of each hospital.

For example, one CEO of a major hospital wanted a mobile cart to be all white. In his determination, white was the color that provided a sense of healthiness and cleanliness. So, it is very subjective.

## EnovateIT<sup>®</sup> FAST FACTS

### PRODUCTS

IT consulting, wall systems, point-of-care carts, medication carts, & articulating arms

### COMPANY

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### NOTABLE CUSTOMERS

Cleveland Clinic, Bon Secours Health System International, Duke University Health System, Henry Ford Hospitals, Scripps, Sutter Health, Stamford Hospital, Tri-Health, UCLA Medical Center, Yale New Haven Hospital

## How well do you feel the market is embracing wall workstations?

Very well. The market has asked for them. Wall systems today are taking on a more important role in hospital systems. We have seen a nationwide trend of converting semi-private rooms to private rooms. When this happens, a lot of hospitals are going with in-room computing devices and more hotel-like surroundings. Our customized wall stations are a perfect fit.

Hospitals are also looking to add medication storage into the systems for patient med dispensing. Our modular wall station design can accommodate most requests seamlessly.

## A recent report said 76% of acute care nurses using mobile clinical carts abandon them in the hallway because they're too large and bulky for the patient rooms. What do you believe are the most important factors for getting nurses to accept mobile technology?

I think there are a couple of factors. As hospitals begin to evaluate how they acquire, interpret, and distribute clinical data, they look at how a nurse functions within that whole process of collecting that information at the bedside. The current process may require a change due to the implementation of new clinical applications.

What I am beginning to better understand is that nurses are interested in having a product that enhances what they do, as well as minimizes any safety issues that might occur. Some simple examples would be the size of the cart, the cart's flexibility in an environment, its weight, how sturdy it is, and the simple ability to sit or stand while working in a correct ergonomic posture. We view all these things very seriously because it's important to the clinician.

Our cart should help them accomplish their goals, not exhaust them by lugging around something they don't want to use. We understand that nurses are dissatisfied with a majority of the mobile carts in their hospitals. Most of the early solutions out there are bulky, not adjustable, and have sharp edges.

## I bet yours don't have sharp edges.

That's right. Our cart is designed without sharp edges and it's one of the smallest, lightest, and most adaptable carts on the market. Get ready Inga, here comes the



advertisement! Our T5 has the correct ergonomic flexibility to be used from sitting to standing positions. You may not know this, but the best selling keyboard in the world, from Humanscale, is on this cart. With adjustable ergonomics, the keyboard has the ability to pivot 90 degrees from left to right, so when a nurse brings the cart into a patient's room, they have the ability to lock down the wheels and, whether they are in the sitting or standing position, they will have the ability to move the keyboard accordingly.

When you have more than 1,200 clients, they tell you what they like about certain solutions. When they tell you what they think needs to be improved, you take note. So we really listen and work with our customers very closely and to try to meet their needs as well as improve our products.

## What do you believe hospitals should look for in carts used for medication administration?

One of the crucial issues that hospitals face today is the delivery of medications to patients. What I mean by real



issues is that there are crucial areas in medication delivery where errors occur. One vital area involves medication storage units or transfer carts. When drugs are removed from these devices and delivered to the patient, it becomes an open loop system. It's in that last mile for the delivery of these meds that errors can and do occur. That endangers the completion of the Five Rights to delivery.

We believe that closing the loop in this last mile will have a greater impact on reducing errors. Enovate's solution is an intelligent medication cart that we will be showcasing at HIMSS.

### **Is the choice of devices driven by the applications that will be used on them?**

I think applications are very important. We do a good amount of consulting on a room-to-room basis. We need

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to know the physical limitations of the environment before any decisions are made. As I said before, hospitals have their own criteria. I am firm believer that hospitals today look at a variety of decisions to meet the needs particular to their clinicians. Many times, we see hospitals purchasing our T5 carts, medication carts, and our wall systems to provide a total solution based on that particular need.

Consequently, I think that device choices should be driven by software applications. Our role always involves our ability to consult on these issues

with our clients. We usually arrive at a decision that everyone values.

### **How are you addressing ergonomics in cart design, especially when nurses are the primary users?**

I think the term ergonomics has become a market spin word. It's a shame because I feel it's important to the clinician, whether they know it or not. Working with Humanscale, a giant in the area of ergonomic design, Enovate has learned how important true ergonomics have become.

Typically we go into the field, sit down with nurses, doctors, and their IT departments, and try to develop products based on their input. There are certain requirements that have to be met. We take size into consideration, mobility, and we certainly look at aesthetics.

We try to understand what the hospital is not only doing in the short term, but long term. In other words, is the cart you're going to use today just for nursing documentation or will other applications be added later? There is no point in having to acquire a new set of mobile carts in a year or two just because your IT consultant didn't ask the right questions. It's a waste of everyone's time and the customer's money.

### **How do you believe your products impact caregiver's satisfaction and patient care?**

When you're dealing with clinical information, it's important that it's in the right individual's hands at the right time so that proper decisions and assessments can be made to diagnose and treat the patient. That's our goal for all our products.

As we move towards total automation in healthcare, we will be witnessing some amazing improvements to patient care. The more EnovateIT cares for the caregiver, the more the caregiver recognizes that we're in this together. As a result, as our products mature, the clinicians get the right tools and the patient receives the best care. In the end, I





hope to look back and say it was well worth the time and effort, because we're seeing improvements in all these important areas.

### **What do you think motivated Omnicell to buy Rioux Vision?**

I think they are trying to close loop the system from the medication storage unit to the patient's room, which I mentioned earlier. Rioux has a medication cart solution that may augment the capability of Omnicell. I can't speak for those companies, but in my opinion, providing a solution to reduce medication errors could have been one of the reasons driving the purchase.

### **Do you expect to see software and dispensing system vendors integrating directly with the electronic systems on mobile carts?**

Yes, I do. I believe that it plays a vital role. When integration occurs, the

ability for errors and adverse drug events should be reduced dramatically.

### **I've heard that EnovateIT wants to be more environmentally responsible as a green manufacturer.**

We're looking for sustainability in all of our products. For example, the T5 cart is constructed of more than 50% recycled materials by weight and is itself 95% recyclable.

We found a carbon-neutral manufacturer to make our wall station designs come to life. That was very exciting to see. All MDF panels are manufactured with recovered and recycled wood fibers and all offal lamination is bailed then recycled through a local plastics recycling company for reuse. Nearly all of the packaging material is recycled.

### **Do you see much of a demand for green or is it just the right thing to do?**

**If hospitals want to provide an intuitive patient room solution, our wall systems can now accommodate medication storage. Our new med storage system can be locked down, making it more efficient for dispensing meds in the patient rooms and minimizing the amount of potential errors that can occur.**

adjustability. Many of the clinicians we have spoken too have been asking for this type of product.

### Do you have any other big plans for HIMSS?

Our booth design is new, with a different layout and projected video. If your feet hurt from walking around the miles of booth spaces, stop by and take a seat in the Humanscale chairs. Give your feet a break. They're extremely comfortable.

I'd like to leave one final thought. We are extremely excited to get feedback from the public and the hospitals that we've invited. Their feedback is so vital in making our products successful. Our ultimate goal is to give caregivers the best tools to create the best care. So the feedback that we will be collecting at HIMSS is

very important to us. HIMSS is going to make 2008 an exciting year for us, and looking at the business plan going forward, we think 2009 will be even better.

Thank you for this opportunity, Inga, and I hope to see you and Mr. HIStalk at HIMSS.

## THE BOTTOM LINE

Poorly designed carts are a waste of money. They'll rarely leave the nurses' "cart corral."

Implementing electronic medical records, CPOE, or electronic medication administration records? Don't underestimate the impact of device options on eventual project success.

Carts are not a commodity. Consulting services, customization, and hospital experience all add value that impacts caregiver satisfaction and care delivery.

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Both. There is definitely a shift in materials specified. It's also the direction most markets are headed. Hospitals and consultants want to feel good about their decisions. Sustainability can only help. We want to stay competitive within the market, but sustainability is the avenue we want to travel. It's just the right thing to do.

### What are some of the new products you're going to be introducing over the next year?

We will be introducing our new intelligent medication cart at HIMSS. It has some unique features when compared to its competitors. One involves patient-specific, single-drawer unlocking. I won't go into any more information about it right now, but I'm sure we'll release something to HIStalk before HIMSS. We're very excited about this cart.

We will continue to show our wall systems, which will include our new modular design for medication storage. If hospitals want to provide an intuitive patient room solution, our wall systems can now accommodate medication storage. Our new med storage system can be locked down, making it more efficient for dispensing meds in the patient rooms and minimizing the amount of potential errors that can occur.

With regards to our partnership with Humanscale, we'll have our new Phase Three T5 point-of-care cart, which will have updates to the med drawers, cable management, and power. The new power management system enables the IT staff to view any cart's power anywhere, anytime. It also sends an e-mail alert to the IT staff when the power supply is running low. The technician can view settings and statistics with the new graphical visualization dashboard.

Humanscale also has developed the V2 and V3 articulating arms that we will be showing as well. I've been told by my partner Fred Calero that the V3 has amazing featherweight