

IntelliDOT CAREt[®] System

Patient Safety and Compassionate Clinical Care at the Bedside



MED

LAB

BLOOD

VITALS

BREAST MILK

Keeping patients safe and providing compassionate care in a busy hospital are formidable challenges for nurses today, especially in light of the nationwide nursing shortage. This “day in the life” scenario is fictional, but based on the real daily experiences of IntelliDOT customers using our barcode point-of-care (BPOC) solution. See how a busy nurse enhances the quality of care and works productively with the CAREt System.



06:55

It's five minutes to seven on a Tuesday morning and it's going to be a busy shift today. The floor is 100 percent full. That means I'll be dealing with a lot of different medications and dosages – as well as degrees of illness and patient personalities. But I can rest assured that I will be administering the right meds and dosages – since the IntelliDOT CAREt System will check each medication, I can devote all of my energy to personally caring for my patient's needs at the bedside.

First thing I do is retrieve my wireless CAREt handheld BPOC device. It's all charged up and will last my entire 12-hour shift with even a few hours to spare. I scan my badge and then enter my password on the CAREt keypad and in seconds I'm logged in and ready to work. I enter my patient assignments on the computer workstation that is integrated with the CAREt System and I review and retrieve all the meds for my patients. I pick up my CAREt wireless handheld device and I'm ready to go.

CAREt is light years away from having to push that heavy computer cart from room to room. Sure, I had a laptop – but it wasn't all that reliable – so sometimes it was just faster and easier to scribble down notes on paper and enter the information into the laptop later in the day. Trouble is, sometimes those notes got lost or the nurse on the next shift couldn't read my handwriting. Both the patient and my job could have been in jeopardy.

That doesn't happen anymore with the CAREt System. Follow me on my rounds and you'll see why.

"What are you doing with my wristband? What's that gadget?" asks the patient in Room 203, a woman in her 60s. I get that question a lot.

"It's called the IntelliDOT CAREt System, Mrs. Beasley. When I scan the barcode on your wristband, CAREt confirms your identity immediately. It's wireless – like a cell phone – linking to the pharmacy system so I have an up-to-the-minute list of your medication orders and the correct dosages. What it means to you is that this system helps me be sure that I'm giving the right medication, the right dose, to the right patient, at the right time. I can also enter in all of the information on your vital signs too, and all of the information goes straight into your electronic medical record."

"With just that thing in your hand?" she asks. "What they can't do with technology these days! As long as it helps you get me well and back home, I'm all for it."

I head next door, to my next patient, Mr. Samuels. He is watching the morning news. "Good morning Mr. Samuels." He smiles and nods as he catches today's weather forecast. "I'm here to give you an insulin shot." First, I scan his wristband and then the med. The CAREt beeps and prompts me for the injection site. I'll document it by scanning a DOT on my Medication Administration DOT Sheet, which is like medical shorthand that captures information similar to a barcode. I scan the DOT which indicates Right Upper Arm. After giving Mr. Samuels his shot,



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I press the “OK” button on the unit to confirm that I gave the medicine. Before leaving the room, I ask, “Mr. Samuels do you need anything?” He just smiles and says, “A home cooked breakfast would be great!”

My next patient is a college student that just happens to be in pre-med. Just as I am about to get his medication ready I notice the new order notification flashing on the CAREt. The pharmacy has sent an alert that his physician has changed the pain medication.

I go to the nearest computer workstation and log on to the CAREt Manager Nurse Verification screen to compare the physician order for the new pain medication with the pharmacist’s order entry for the new dosage. The pharmacy can make a mistake too, or may enter a dose schedule that does not work for my patient. The CAREt System gives me an extra measure of confidence that my patient is getting the right meds and dosage on the right schedule.

Now that I have verified the new order I go to the medication cabinet and return with the revised dosage.

When I enter the room, my patient’s eyes light up when he sees me scan his wristband with CAREt. “That’s barcode point-of-care technology, isn’t it? BPOC? Cool! Too bad it doesn’t play MP3s, too,” he jokes. “But seriously, I know I feel a lot safer knowing that you’re confirming my identity and matching it to my med orders. Did you know that the Institute of Medicine reported that 770,000 patients are injured and more than 7,000 die due to medication errors?”

I nod that I am familiar with those statistics and I explain that improving patient safety is the main reason this hospital adopted the CAREt system.

“I’ve seen ads for the CAREt System in the journals, but this is the first time I’ve seen one in action. Could I watch while you enter my information?”

I let him see the screen as I scroll through meds. CAREt shows me the





19:00

name of the pain medication, the dosage, and the time that it was last administered.

“Cool,” he says. I agree. I finish up by responding to the CAREt’s automatic prompts to enter his vital signs.

Later that afternoon, a critically ill patient on my watch needs a blood transfusion. The phlebotomist arrives, draws the blood, and correctly labels any specimen collection tubes at the patient’s bedside using the CAREt and a portable printer. In the blood bank, laboratory personnel use CAREt to accurately match blood samples with the correct blood products. I get a notification on my CAREt handheld that the blood is ready for pick-up at the blood bank and I send one of the staff to get it. Once the blood arrives, I take the blood unit to the patient’s room. The CAREt handheld guides me through the checking procedures for safely transfusing the blood, including identifying a second nurse to witness the procedure. The safety checks are reassuring, since dozens of transfusion patients every year are injured by blood-related errors or adverse reactions. With the CAREt System the other clinicians and I are making sure that this patient doesn’t become another statistic.

Prior to the end of my shift, a reminder arrives on my handheld, prompting me to follow up with my patient who received a pain medication an hour earlier. I go and check on him.

Recording the pain scale is easy – I just enter the number on my keypad and I’m done.

At the end of my 12-hour shift I log out of the CAREt System. I also make some additional comments and notes in the CAREt System using the software on the network computer workstation. I’m tired, but very satisfied with my work today. Without the alerts in CAREt, my appendectomy patient would not have received the correct dosage of his pain medication. My blood transfusion patient could have suffered a transfusion error that could have been fatal. Throughout the day, all of my patients received better care because of the enhanced safety that CAREt provides.

The bottom line for me is that the CAREt System gives me the decision support so I can worry less about dosages and provide more compassionate care at the bedside. I’m more confident that I’m able to avoid medication errors and keep my patients safe. Plus, the CAREt handheld makes me so much more efficient. I can’t imagine doing my job without it. Now I can go home, and sleep soundly – with the peace of mind knowing that all my patients received the very best – and accurate – care from me today.



Our mission: preventing medication and other errors at the bedside

To improve patient safety by reducing the risk of bedside medical errors, IntelliDOT builds its BPOC solutions upon these core principles:

- Deep understanding of clinical process and workflow incorporated into intuitive software
- Ease of use to drive fast clinical adoption and high usability – typically exceeding 95 percent
- Ability to communicate with any pharmacy system and HIS
- Expert clinical implementation within 4-6 months – less than a third of the time required by competitors
- Affordability backed by comprehensive system guarantees to reduce cost of ownership

As a result, IntelliDOT differentiates itself as a best-in-class specialist in BPOC solutions. BPOC is our business – not just a part of it.



Patient safety and interoperability at

The IntelliDOT CAREt System is the first wireless, nurse-centric workflow manager to connect caregivers with the information systems they need at the point-of-care. Designed by nurses for nurses, the CAREt System provides a straightforward user interface that supports a comprehensive approach to medication safety and documentation at the bedside, in a variety of healthcare settings. The lightweight, wireless CAREt handheld enables nurses to perform safety checks and safely administer medications at the bedside with just one hand.

This single handheld solution covers the full spectrum of patient safety needs and brings interoperability to the bedside:

- **IntelliDOT Bedside Medication Administration™** – At bedside, easy-to-read screen prompts guide the nurse through medication administration workflows. The CAREt System verifies the “five rights” of medication management: right medication, right dose, right route, right patient, right time. Customized prompts and warnings also assure medications are administered and documented correctly.
- **IntelliDOT Phlebotomy Specimen Collection™** – At bedside, the CAREt handheld guides phlebotomists and nurses through safe and accurate specimen collection. Specimen labels are printed at bedside using a small portable wireless printer, eliminating confusion and mislabeling that can occur with labels printed away from the patient’s bedside.

- **IntelliDOT Mother-Baby Breast Milk Matching™** – Using the same CAREt handheld device and a small portable wireless printer, a nurse can print barcode labels for milk containers at the time milk is received from the mother or the mother can take and apply the labels at home. At administration, the infant’s ID band is scanned along with the breast milk container assuring positive identification and accurate feeding.

- **IntelliDOT Vital Signs Collection™** – Vital signs information or clinical documentation can be captured using the same CAREt handheld. The captured data can populate the eMAR or electronic flow sheets and/or print on separate patient-specific flow sheets.

- **IntelliDOT Blood Product Administration™** – Assists in positively identifying the correct blood product for patients and documenting relevant clinical data for the blood transfusion record. The CAREt System provides notification when blood is ready, when to begin the transfusion, and reminds the nurse to check patients at configurable time frames during transfusion and to return blood to the blood bank if the expiration time is reached.

Improving safety in the pharmacy

In addition to helping nurses at the bedside, the CAREt System also provides significant advantages when used in the hospital pharmacy. All barcode

point-of-care systems require the pharmacy to ensure that readable barcodes are on all medications dispensed to patients. IntelliDOT Bedside Medication Administration’s “Verify Item” feature enables the receiving technicians to check barcodes on all incoming medications. By simply scanning the items as they arrive, the pharmacy can easily determine whether a barcode on a new item is currently in the database and scannable. If it is not, an additional scan can add it. This process ensures that all medications will be safely screened at bedside.

Halting the increasing risk of medication errors

A 2006 report from the Institute of Medicine (IOM), *Preventing Medication Errors: Quality Chasm Series*, found that medication errors lead to more than 1.5 million preventable patient injuries each year. At the very least, these harmful medication administration errors extend the patient length of stay, resulting in increased operating and liability costs for hospitals. Medication administration errors can virtually be eliminated by using an effective barcode point-of-care (BPOC) solution, as recommended by the IOM in its landmark 1999 report, *To Err is Human: Building a Safer Health System*. To date, only 18 percent of U.S. hospitals have adopted these products due to inadequate design, hard-to-use systems, poorly executed and incomplete implementations, and low adoption rates by clinicians.

the bedside: The IntelliDOT CAREt System

Moreover, the Joint Commission on Accreditation of Hospitals (JCAHO) calls for strict standards for patient identification prior to administering medication or procedures. These include following a standardized approach to identifying patients across the continuum of care. The practices of paper-based tracking of medication administration and follow-up notes, and inconsistent methods of patient identification have been condemned by the JCAHO as serious threats to patient safety.

Beyond barcode scanning

The CAREt System helps hospitals and clinicians overcome these challenges with its effective data capture and intuitive technology that deliver benefits like these:

- Enhanced patient safety and quality of care
- Increased nurse satisfaction
- Elimination of serious errors
- Improved bottom line as a result of reduced risk and liability

The CAREt System goes beyond traditional barcode scanning to give nurses added flexibility and provide added safety measures. When additional information or tasks need to be captured at the point-of-care, nurses can quickly document them by scanning small two-dimensional workflow DOTs – a kind of medical shorthand.

The “DOT” symbol is built on IntelliDOT’s patented “Documentation of Treatment” system that enables hospitals to create

Key features

- Purpose-built custom handheld communication device
- Rugged, dependable and designed for the harsh healthcare environment
- Easily cleaned and disinfected
- 12+ hour battery life
- Enhanced clinical workflows – eliminates workarounds
- Scans all 1D and 2D barcodes
- RFID and Bluetooth functionality
- Embedded HL7 interface engine

Unique attributes

- Communicates with any Healthcare Information System (HIS)
- High user adoption (95+ percent) due to ease of use
- Scalable platform – additional solutions/capabilities extend off our integrated software and hardware
- Complete system guarantees – no surprises
- Affordable – average payback is less than 12 months
- Clinical expertise and proven implementation methodology – on time and within scope

Big advantages

- Eliminates medication errors at the bedside
- Enhances patient safety and nurse efficiency
- Ensures collection of the full spectrum of patient data
- Easy to use, lightweight handheld device – learn in just one shift
- HIPAA compliant and helps hospitals comply with JCAHO standards
- Eliminates need for heavy, bulky computer carts





About IntelliDOT

IntelliDOT is a leading provider of wireless, handheld, barcode point-of-care (BPOC) solutions that connect to any healthcare information system to improve patient safety and nurse workflow. When using the IntelliDOT System, nurses can easily manage all tasks associated with five rights medication administration safety checks and related documentation. Additional modules include specimen collection, blood product administration, mother-baby breast milk matching and vital signs collection. IntelliDOT was founded in 2002 and is headquartered in San Diego.

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customized documentation and communication applications simply by scanning a conveniently placed DOT symbol.

By scanning a DOT, nurses complete documentation, communicate with others and carry out tasks using a simple point-and-scan workflow model, with no typing on computer keyboards or navigating complicated screens on a PDA. This facilitates quick, one-handed documentation at the bedside around customized operations and commands tailored to specific patient care needs and all JCAHO requirements.

Wide acceptance by GPOs

Currently IntelliDOT is the only barcode point-of-care solution on contract with the majority of the leading Group Purchasing Organizations (GPOs). In 2006 IntelliDOT was chosen by Health Management Associates, a 60-hospital for-profit healthcare system representing over 9,000 beds, as its sole source and exclusive supplier of barcode point-of-care solutions. More than 40 successful installations, two new hospitals implemented each month, and an extensive list of new client orders are all proof that clinicians are enthusiastically accepting IntelliDOT across the country.

Learn more about patient safety with IntelliDOT

Medication errors can be eliminated – right at the bedside – with the advanced BPOC technology in CAREt. Designed by nurses for nurses and easy to use, the CAREt System puts the entire spectrum of patient safety in the palm of your hand.

Learn how your organization can improve patient safety with CAREt at www.intellidotcorp.com or e-mail information@intellidotcorp.com.