The Intelligent Hospital is here!
PeaceHealth’s new Sacred Heart Medical Center at RiverBend provides a great patient experience while increasing staff productivity and optimizing utilization of vital resources. With the Versus Advantages™ Real-time Locating System (RTLS), PeaceHealth:

- Automates patient flow and status with the help of Glance-and-Go™ virtual communication boards in the Emergency, Labor and Delivery, and Mother Baby Unit departments;
- Allocates appropriate staff based on availability and tracks resources in the Operating Room;
- Allows for visible, linear patient process flow automation of daily appointments at the Anesthesia Clinic;
- Provides real-time nurse location and patient call cancellation hospital-wide via real-time integration to the Nurse Call system; and
- Tracks and manages equipment according to unit and departmental equipment par levels.

The Path to Enterprise Locating
PeaceHealth Oregon Region first introduced Versus’ Real-time Locating System (RTLS) in 2006 as a test pilot in the emergency department of Sacred Heart Medical Center, University District. At the time, plans were already underway to include the Versus solution system-wide at the new Sacred Heart Medical Center at RiverBend, under construction less than five miles away.

Management at PeaceHealth understood the Versus solution would provide real-time situational awareness to staff and contribute to a positive patient experience—key to all design elements at the new facility.

As plans developed, PeaceHealth made an early decision to expand their RTLS implementation into the Anesthesia Clinic, which was moving to the new campus. The clinic was doubling in size, and staff would no longer be able to see all rooms from a single vantage point—an issue that Versus could easily solve.

Successful outcomes in efficiency, workflow automation, reporting and patient safety continue to drive the expansion of RTLS at PeaceHealth. Having implemented more than eight different use cases in the past six years, PeaceHealth is easily the most accomplished healthcare system in using RTLS to improve the patient care experience.

“It allows us to track you and your care to ensure that our physicians and nurses can give you the fastest, most effective care possible.”
Jill Hoggard Green, COO
PeaceHealth Oregon Region
Patient Flow Automation in the EDs
Many ED staff are familiar with the requisite greaseboard and share the same frustration PeaceHealth staff had with theirs. The key word here is “had.”

Before Versus, patient flow was captured manually, on a greaseboard (or two). But, as Marvin Hammerschmith, Regional Analyst at PeaceHealth recalls, the data was never current. “Even at University District, with only 12 patients at a time, that greaseboard was never up-to-date,” he says. “At RiverBend, we sometimes have 30 to 40 patients in the ED at one time. Really, I cannot even fathom keeping up with that on a greaseboard. Now, with Versus, information just flows automatically—and it’s up-to-date.” With Versus’ Glance-and-Go virtual communication boards, staff are able to simply look at a screen and identify next steps.

ED staff everywhere face a tough decision when they send patients out for orders and tests. They know the patient will be returning, but if they erase the patient’s room assignment and associated information, they risk losing valuable patient information—possibly even a forgotten patient. If they don’t make the room available for a new patient, patients in the waiting room are delayed care, wait time is increased and there’s a chance patients requiring care may leave.

Keep Patient Data with the Patient
By associating patient information to the patient (wherever he may be) rather than to the room, staff do not have to make this choice, and everyone benefits. With Versus Advantages, caregivers can easily view up-to-date information for all ED patients, including those in the waiting room.

- Patient name
- Patient’s current location
- Acuity
- Assigned caregivers

- Room status
- Total length of stay
- Lab orders and tests

At PeaceHealth Oregon Region, most ED visits start with orders and tests for patients. Staff then send patients requiring lab tests, urinalysis or imaging services outside the department. The room becomes available for a new patient and, at the same time, the patient’s physician and nurses can easily see the status of labs and orders. When the patient returns to the ED and is placed in an available room, Versus automatically picks up the room assignment, allowing caregivers to get to the patient more quickly.

Versus keeps up with the patient, even when the patient is not physically present in the ED. For example, knowing that 12 of 13 tests are complete allows the physician to view the results at the appropriate time, when it’s clear that tests are nearly complete. This piece has cut down on physician frustration and the time the physician spends calling the lab, calling X-ray, just trying to find out status and results. It has also cut down on the time the patient spends waiting to hear what the results are.

ED Stats at a Glance
PeaceHealth’s RiverBend ED has improved processes using data collected automatically by Versus to reduce:

- Decision to Admit Times to just 60 minutes (from a baseline of 90-120 minutes)
- Doctor to Bed by 52%, to just 18 minutes
- Average Length of Stay by 14%, to 3 hours, 18 minutes
Data for Process Improvement
With changes like these, PeaceHealth has made significant improvements. Joy Cresci, RiverBend and University District ED Director, notes, “With Versus, we’re able to automatically communicate when the patient’s ready to be seen by the physician, when the physician has orders and when the patient is ready for discharge. It’s been a very helpful communication tool.”

One of the biggest transformations is that PeaceHealth now posts ED wait times for both the University District and RiverBend on their website, in real-time. “Posting wait times allows us to quickly and easily communicate to our patients. It assures patients that we care about their time, while serving as a performance measurement for us,” says Steve Willis, HID Systems Analyst.

PeaceHealth is also using Versus Advantages to support process changes. For example, they have been evaluating the time between ‘decision to admit’ and ‘admit’ milestones. “I would look at the reports daily,” says Cresci. “I could send the data out to everyone, and it was extremely helpful, allowing us to make real-time changes.”

Most recently, PeaceHealth implemented rapid triage and quick registration. Communication of the registration flag through Versus has been an integral part of the process. They’ve also captured data to reflect reduced lengths of stay for patients.

Cresci confirms, “The reality is that the EDs would not be able to function without Versus. It’s very much a part of our workflow.”

Integration to Nurse Call
Throughout RiverBend, Versus provides staff location of nurses and CNAs to the West-Com nurse call system. This allows nurses to automatically cancel patient calls by their presence in the patient room since they are wearing a Versus badge. “With data collected by virtue of Versus Advantages, we were able to analyze how long it takes to answer a patient call,” says Willis. “With this baseline data, operations developed a new ‘hourly rounds’ process. Now, we run a report every month and every floor can compare themselves to the baseline data. Response times have improved by 5% to 12%.” PeaceHealth will point the Joint Commission to this data, and similar data, as evidence of improved patient care delivery.

Resource Tracking in the OR
The RiverBend OR tracks more than 350 pieces of equipment, including microscopes, open heart equipment, x-ray machines, CR, anesthesia carts and nearly everything that goes to ICU. According to Fina Riedberger, CHR Analyst for OR Services, “The CNAs really like it. It saves them time when they’re trying to find equipment that doesn’t get returned to the equipment room, which is especially important in our large OR. They don’t have to be running all over the place.”

Tracking assets also allows the Biomed staff to perform timely preventative maintenance. When they receive notification that maintenance is due, they simply identify the current location of the item using the Versus software, take it out of service and do the maintenance required.

Toward the beginning of 2009, RiverBend also began tracking staff in the OR, specifically for resource allocation. Riedberger explains, “ Knowing where staff is allows the OR to quickly adjust and find the right resource if one staff member needs a break or there’s been an add-on surgery, but someone’s out and needs to be replaced.”
PeaceHealth’s Path to Enterprise Locating

PeaceHealth started with a simple goal: to use RTLS to communicate patient location in its 35-bed emergency department and eventually in its new, eight-story, 1.2 million-square-foot facility that was under construction in nearby Springfield at the time.

Executive staff selected Versus for this purpose, but hospital management quickly discovered the true capabilities of the system. Soon the ED was automating workflow, displaying patient status and communicating in real-time to providers.

Almost immediately after the RTLS went live, other departments and sister hospitals began tours and made implementation plans for a variety of purposes—clinic workflows, staff assistance, asset tracking and more.

Versus suggested that PeaceHealth contract for an enterprise-wide license, instead of purchasing a system piece-by-piece for each facility. This allowed PeaceHealth to install the Versus Advantages™ system hospital-wide at their new facility and expand it at multiple locations in the hospital system—a key contributor to the ROI of the RTLS.

More RTLS Applications Than Any Other Health System

Leveraging a single platform, PeaceHealth has strategically deployed many different RTLS applications across multiple departments resulting in a positive impact on safety, satisfaction and situational awareness. In addition to saving patients and staff time, PeaceHealth has achieved millions in hard dollar savings—all while providing an outstanding healing environment for its patients. As Mr. Hammerschmith says: “We’ve seen the light—and it’s infrared!”