

7 Ways RTLS Technology Increases Patient Volume and Improves Satisfaction

To survive in today's fee-for-service healthcare world, we have to see more patients, deliver higher quality and safer care, and improve customer service. Thanks to the RTLS, our clinic has become a model for how to do all of this really well.

**— Brett Daniel, MD
Medical Director,
Pacific Medical Centers
Canyon Park Clinic ²**

¹ "Leveraging Technology to Improve Patient Flow," *Revenue Cycle Management, Medical Group Practice Edition*, February 2011.

² "Medical Clinic Cuts Wait Time, Boosts Net Revenue with Real-Time Locating Solution," *Healthcare Industry Customer Solution Case Study*, Microsoft, January 2011.

Executive Summary

Federal healthcare reforms call for higher quality, safer patient care delivered with improved customer service. At the same time, declining reimbursements threaten clinic profitability, while the trend toward outpatient care is fueling the need to see more patients in less time.

Caught in the middle are medical practice managers, physicians and nurses struggling to realize the promised efficiencies of electronic health records (EHRs) while maintaining high levels of care.

As a result, clinics are searching out technology that can improve productivity and the patient experience. One innovation that addresses both challenges is the use of Real-time Locating Systems (RTLS).^{1,2}

An accurate RTLS can help practice managers and providers understand patient progression and staff workflows, and eliminate wasted time. RTLS can improve the patient experience and operational efficiency, impacting patient satisfaction.

This white paper explains what RTLS is and how it works, and seven ways it can increase patient volume while also improving patient satisfaction—including real-world examples.

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Introduction: What is RTLS & How Is It Used in Healthcare?

Just what is a real-time locating system? Think of RTLS as GPS for the indoors—a system that displays the real-time locations of people and things on a map (or in a list).

How does it work? Different RTLS solutions use different technologies to determine locations, but they all work in the same general way. Badges worn by people and tags affixed to equipment communicate with a sensory network of receivers installed throughout a facility (Figure 1).

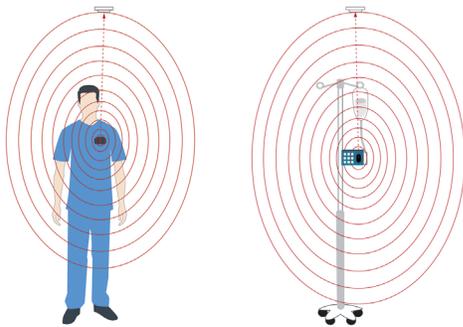


Figure 1: RTLS badges worn by patients and staff, and tags affixed to equipment, communicate with a network of receivers.

The sensory network (Figure 2) relays the location of badges and tags to software. Depending on the accuracy of the RTLS and the density of receivers, the reported location can either be general (“1st Floor” or “West Wing”) or precise (“Exam Room 8” or “Infusion Chair 2”). See note on RTLS accuracy at right.

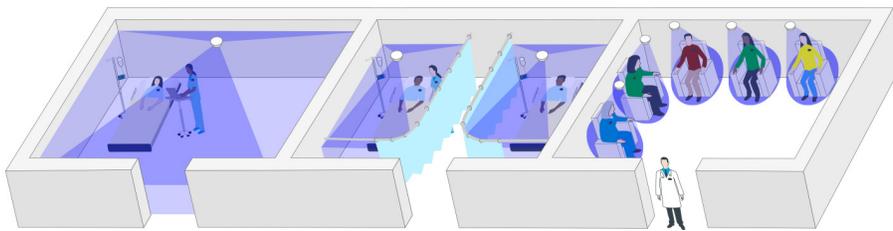


Figure 2: An example of an accurate sensory network that can locate people and equipment precisely at room-, sub-room, and chair-level.

This real-time snapshot of locations is displayed on workstations, mobile devices and overhead displays, for example in a list or on a map of the facility. The location information provides immediate and real-time operational visibility to all staff.

Hospitals were early adopters of RTLS in the 1990s, and continue to use the technology to locate high-value assets and mission-critical devices, as well as to locate patients and personnel.³

Beyond basic locating applications, hospitals also use RTLS to ensure patient safety, document caregiver-to-patient interactions, and—most applicable to medical clinics—track patient flow for throughput management.⁴

RTLS Accuracy

RTLS vendors use different technologies, resulting in varying degrees of location accuracy. Some technologies, often used to track assets in large hospitals, isolate locations to large zones only. For example, systems that rely solely on Wi-Fi cannot achieve room-level precision as radio frequencies can pass through walls.⁴

At a minimum, optimizing patient flow and throughput requires an RTLS to accurately sense which room a patient or staff member is in. Some clinics should further consider the need to locate patients at a sub-room or chair-level.

³ “Taking the Pulse of RFID & RTLS in Health Care,” VDC Research, June 2012.

⁴ “Real-time locating systems (RTLS) in healthcare: a condensed primer,” *International Journal of Health Geographics* 2012; 11:25.

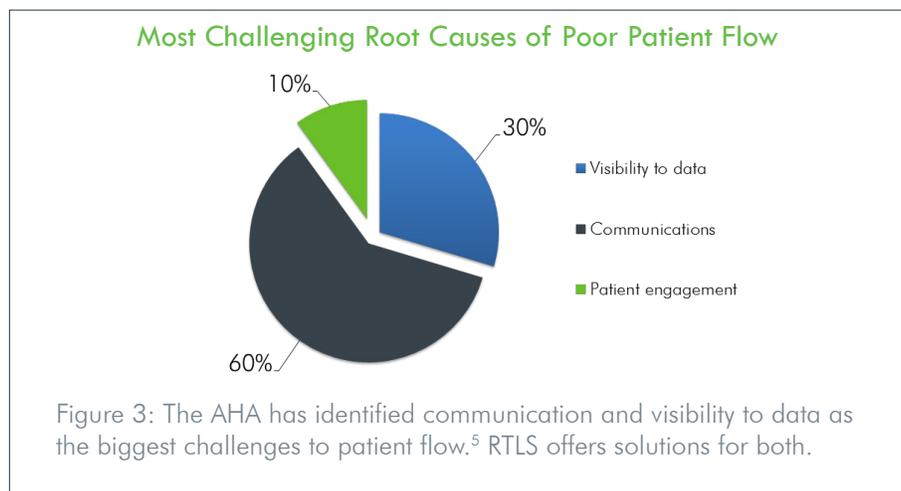
7 Ways RTLS Increases Patient Volume and Improves Satisfaction

1. By Expediting Patient Flow

According to an American Hospital Association assessment, the largest contributor to poor patient flow is communication. The second largest contributor is visibility to data (Figure 3).⁵

The ability to expedite patient visits with minimal delay allows practices to increase volume, while still providing a positive patient experience through a decrease in wait times, giving doctors more time to complete exams.

— L. Gordon Moore, former family physician turned clinical transformation consultant, as told to *Physicians Practice*⁸



This is true not only in hospitals, but also in medical clinics and ambulatory surgery centers. RTLS addresses both of these challenges—in addition to maximizing the efficiency of EHR adoption.

Better Flow Through Improved Communication

Clinic staff must ask and answer these questions for every patient:

- Which exam room is available?
- Where is the patient?
- How long has she been waiting?
- Have her vitals been taken?
- Are her diagnostic tests complete?
- Whose turn is it to see the patient?

Tracking down staff, placing phone calls or walking the halls to get answers wastes valuable time. Everything from patient rooming to room turnover is delayed.

RTLS automatically communicates this need-to-know information by passively tracking and displaying patient status and staff location. Staff no longer have to call down the hall or place phone calls to find a patient or caregiver. Because the software notes who has already been with the patient, questions about what should happen next are answered quickly and efficiently.

⁵ "Patient Flow Challenges Assessment," American Hospital Association, 2012.

While technology can never entirely replace the need for face-to-face or phone conversations, it can facilitate them. RTLS allows staff to easily locate one another when direct communication is needed. Time previously wasted tracking down staff is eliminated when a doctor knows what room her medical assistant is in or what extension to ring for the nurse.

Craig Bunnell, MD, Chief Medical Officer of the Dana-Farber Cancer Institute, told the *Boston Globe* that improved communication among staff was an unexpected benefit of the clinic's RTLS. "When we started this [RTLS implementation], we thought we'd improve the efficiency of our care," he said. "I think it has improved the quality of care, and improved communication between team members."⁶

Better Flow Through Visibility of Data

A survey conducted by the Medical Group Management Association found that practices designated as "better performers" were more likely to say they paid close attention to patient flow.⁷

So how does a practice pay close attention? It all hinges on data about patient visits:

- How long do patients sit in the waiting room?
- How long do patients wait in the exam room?
- What is the average "door-to-doctor" time?
- What is the average overall length of stay?
- If we change a process, what impact does it have on throughput?

To obtain this data, patient flow experts often advise performing time studies to determine how long it takes patients to move through a practice.^{7, 8, 9}

While manual time studies can produce useful insights, they can be time-consuming, costly and difficult to perform on a regular basis.

With RTLS, a time study is automatically conducted at all times, behind the scenes, by passively monitoring the locations and interactions of patients and staff. A practice manager can run reports on average patient care milestones such as wait time, "door-to-doctor" time, exam duration, overall length of stay, for any given time frame. This data can be broken down by patient type, provider, or any number of variables, offering a previously unattainable level of business intelligence.

The data can be used to identify bottlenecks and tweak processes. And, because the RTLS continually monitors these milestones, improvement can be definitively measured.

"It's like having a bunch of Anderson Consultants in your ceiling tracking time," says Brett Daniel, MD, former Medical Director at Pacific Medical Centers' Canyon Park Clinic in Bothell, Washington.¹⁰

Canyon Park, a multi-specialty clinic that sees 300 patients per day, use RTLS data to improve patient flow and volume, as detailed in several publications, including the Medical Group Practice Edition of *Revenue Cycle Management*.¹

A previously unattainable level of business intelligence

With RTLS, a time study is being automatically conducted at all times.

Run reports on:

- wait time
- "door-to-doctor" time
- exam duration
- overall length of stay
- or any patient care milestone

Data can be drilled down by:

- specific patient
- patient type
- provider
- day
- time
- or other variables

⁶ "Location system aims to improve cancer care," *The Boston Globe*, Sept. 19, 2011.

⁷ "How to maximize patient flow through the office," *American Medical News*, Feb. 14, 2011.

⁸ "Patient Flow Primer — Get On Track and On Time," *Physicians Practice*, September 2011.

⁹ "Use of patient flow analysis to improve patient visit efficiency," *BMC Health Services Research*, January 15, 2007.

¹⁰ "Using RTLS to Enhance Your Patient-Centric Care Model and Achieve Operational Efficiency," American Hospital Association Signature Learning Series Webinar, October 6, 2010.

RTLS Results

After implementing RTLS, Canyon Park Clinic in Bothell, Washington:^{2,10,11}

- Doubled its number of monthly patient visits from 3,000 to 6,000
- Reduced overall length of stay from 70 to 46 minutes
- Improved overall patient satisfaction rating to 91% “excellent”
- Doubled its net revenue projections

[With RTLS] we are assured two things: one, skilled staff are not spending time on low-skill data entry tasks; and, two, there are no data collection errors. It's completely passive and it cannot be fudged or forgotten.

**— Brett McGreaham
Former Supply Chain
Manager at Michigan's
Largest ASC¹³**

Two years after implementing the system, the clinic doubled its number of monthly patient visits, from 3,000-6,000¹¹, improving its overall length of stay metric from an average of 70 minutes down to 46. These gains enabled the clinic to double its net revenue projections.^{2,10}

Additionally, the improvements were made without sacrificing the patient experience—the clinic scores the highest among Pacific Medical Centers' 10 clinics for patient satisfaction, with a 91 percent “excellent” overall rating.¹¹

Better Flow Through EHR & Systems Automation

When *Healthcare IT News* interviewed five health information technology insiders about EHR usability, they found the number one concern is data entry. “Nobody wants to become a data-entry clerk,” says JiaJie Zhang, director of the ONC's SHARP project, charged with finding ways to make EHRs easier to use. “Their job is to take care of patients, and data entry so far is not optimized.”¹²

EHRs will always require some level of data entry—the key to optimizing the EHR is to automate every data point possible so that skilled, highly-paid staff are not doing tedious, non-patient-centric documentation.

RTLS enables such optimization by making EHRs, practice management systems and scheduling systems location-enabled. That is, the RTLS integrates with these systems, allowing patient location and patient-staff interactions to link with the patient record, eliminating routine data entry.

At the largest ambulatory surgery center in Michigan, RTLS integrates with SourceMedical Vision EHR™.

Brett McGreaham, the clinic's Supply Chain Manager at the time RTLS was implemented, explains the benefits: “By using [RTLS] to passively collect data and to examine and audit the data in the EHR, we are assured two things: one, skilled staff are not spending time on low-skill data entry tasks; and, two, there are no data collection errors. It's completely passive and it cannot be fudged or forgotten.”

The ASC's RTLS also pulls data from the EHR and integrates it into the patient flow software. Patient name, physician scheduled visit time, and related notes are displayed alongside the RTLS' running timer of overall length of stay and time at current stage. The integration ensures that data needs to be entered into only one system, not both.¹³

Thanks to these efficiencies and other benefits of RTLS, the ASC improved its average time in recovery by approximately 5-10 minutes. Former CEO Jim Stilley told *Becker's ASC Review*, “When you're talking about 18,000 patients [per year] times 10 minutes, that's a lot of time.”¹⁴

¹¹ “Washington State Clinic Doubles Visits With RTLS,” *RFID Journal*, March 27, 2012.

¹² “5 health IT insiders offer their takes on EHR usability,” *Healthcare IT News*, September 17, 2012.

¹³ “Patient Flow Matters in ASCs,” ASC Study, August 2012.

¹⁴ “5 New Ways to Cut Costs in a Mature Surgery Center,” *Becker's ASC Review*, June 19, 2012.

2. By Eliminating Wasted Staff Time Using Lean Principles

The concept of “lean management” or “lean thinking” is increasingly and successfully being applied in healthcare, with a goal of driving out waste so all work serves the customer’s (i.e. the patient’s) needs.¹⁶

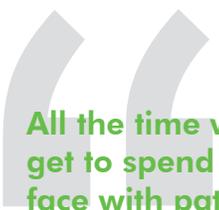
One of the leaders of lean thinking in healthcare, Virginia Mason Medical Center, uses RTLS to support lean methodologies at its Kirkland Clinic. “All the time we don’t get to spend face-to-face with patients is potentially wasted time,” Kim Pittenger, MD, told Microsoft’s Senior Director of Worldwide Health Bill Crouse, MD, in an interview with *Health Tech Today*. At the time Dr. Pittenger was Medical Director at Kirkland Clinic. Today he serves as Director of Quality and Innovation for Virginia Mason’s Department of Primary Care.

Of particular concern was the practice of “batching” indirect patient care. Waiting until the end of a day to do all indirect care at once not only caused doctors to stay late, Dr. Pittenger explained. It also presented the medical assistants (MAs) with a “huge batch” to process in the morning. This prevented the MAs from focusing on the current day’s patient care, and they began every day already behind.¹⁷

Virginia Mason uses RTLS to directly address the batching problem. Thanks to more efficient patient flow and the operational visibility RTLS offers, doctors and MAs are now able to identify periods of time between patients when they can perform 5-10 minutes of indirect care, such as patient documentation review of patients’ labs or tests.

Richard Furlong, MD, a physician at Virginia Mason’s Kirkland Clinic, explained in an interview with *RFID Journal*: because he can check the RTLS tracking board to know which patients are ready to be seen; because he doesn’t need to track down his MA to ask which patient is next; because he knows when he has a few minutes to spare, he can take that time to respond to e-mails or place phone calls, further increasing efficiency.¹⁸

Dr. Furlong notes that if a doctor sees 20 patients per day and averages 5 minutes of indirect care between patients, he’s completed 100 minutes of work. That’s almost two hours he won’t be spending on batched care at the end of the day.¹⁹ And, because the MA is also able to complete follow-up work throughout the day, she can start the following day with a clean slate.



All the time we don’t get to spend face-to-face with patients is potentially wasted time.

—Kim Pittenger, MD
Virginia Mason¹⁷

¹⁵ “RTLS Outcomes and ROIs at Pacific Medical Centers,” Canyon Park Clinic Video Testimonial, December 2011.

¹⁶ “Going Lean in Health Care,” Institute for Healthcare Improvement White Paper, 2005.

¹⁷ “Medical clinic improves patient flow, increases revenues using smart technology,” Microsoft Developer Network Health Blog by Bill Crouse, MD, January 11, 2011.

¹⁸ “At Virginia Mason Clinic, RFID Eliminates the Need to Wait,” *RFID Journal*, Oct. 21, 2009.

¹⁹ “How RTLS Improves Patient and Staff Experiences,” Virginia Mason Kirkland Clinic Case Study, August 2010.

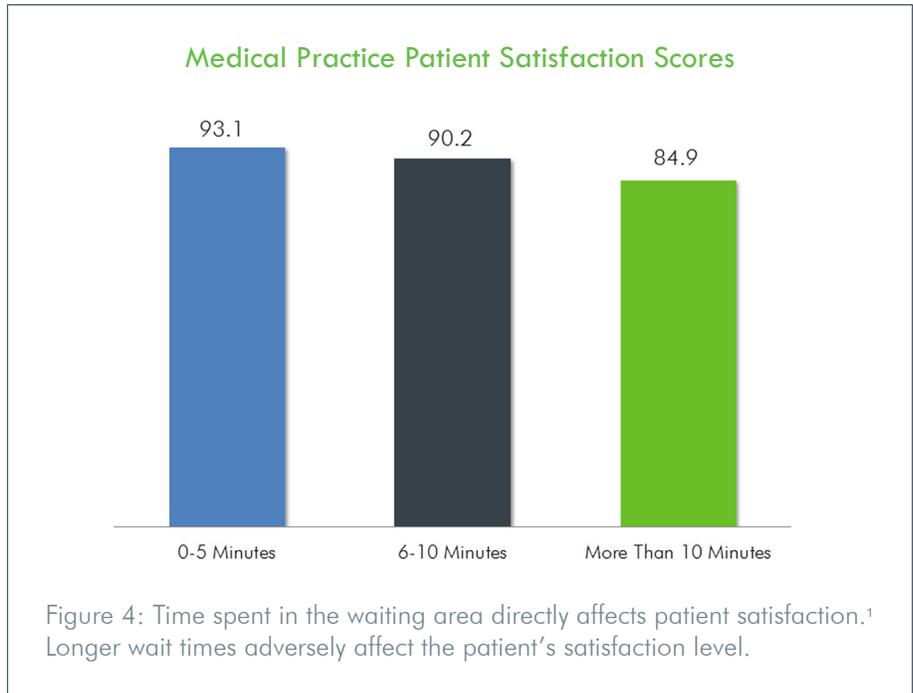
3. By Reducing Patient Wait Times (or Eliminating the Waiting Room)

Whether it's at the grocery store, the Emergency Department, or in a physician's office, nobody likes to wait.

Long wait times negatively impact patient satisfaction (Figure 4), referrals, and ultimately revenue.¹

I felt I had more time with my doctor and nurse to talk about my concerns.

— Phillip Strain
Virginia Mason
Kirkland Clinic Patient¹⁹



RTLS proactively monitors patient wait times so staff can address issues as they arise, decreasing overall wait times and improving patient satisfaction.

RTLS software displays wait times for each patient on workstations or overhead LCD screens, and generates automatic visual cues or alerts should a patient's wait time exceed a pre-established benchmark.

The Dana-Farber Cancer Institute's Yawkey Center for Cancer Care ensures patients never wait so long as to be forgotten.⁶ The RTLS automatically generates pop-up alerts and sends e-mails to caregivers when patients have exceeded 20-, 40-, or 60-minute wait times.

Virginia Mason Medical Center's Kirkland Clinic has eliminated the waiting room altogether.¹⁸ Upon check-in, patients are given a badge and room themselves, much like checking into a hotel. As they enter the exam room, the RTLS notes their presence, displaying the patient's name on an electronic board so staff immediately know where to go next (Figure 5).

Phillip Strain, a Virginia Mason patient, shared his thoughts on the benefits of RTLS: "I was impressed there wasn't a waiting room and I could walk straight to my exam room after checking in," he said. "I felt I had more time with my doctor and nurse to talk about my concerns."¹⁹

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RS	Room	Patient	TSLs	OLOS	Current Loc	Nrs	Phy	Nurse	Physician
	Exam 1	Smith, J		00:02	Exam 1				
	Exam 2	Rodriguez, I	00:04:02	00:15	Radiology			Taylor, F	
	Exam 3	Lee, K		32:18	Exam 3			Indra, J	Billington, J

Figure 5: This example of an electronic patient board populated by RTLS shows the patient’s assigned room, doctor and nurse (determined by presence in the room); current location; which caregivers are with or have seen the patient; the time since last seen (TSLs) and overall length of stay (OLOS).

Using RTLS, Pacific Medical Centers’ Canyon Park Clinic significantly reduced the size of its waiting room, increasing usable (and revenue producing) space.¹ The RTLS allows quicker rooming of patients and automatic notification to caregivers when their next patient is ready to be seen.

Thanks in part to the reduced wait times, Canyon Park, the first of Pacific Medical Centers’ clinics to implement RTLS, received the highest “excellent” overall rating in the health system, 85 percent, during the first year in its new building—a time that is normally an adjustment period to new space and workflows. The clinic improved even more in its second year, earning a 91 percent “excellent” rating overall.^{1,11}

4. By Enabling Better Communication with Patients

On days when longer wait times simply can’t be avoided, one method practices can use to maintain patient satisfaction is waiting room rounding. After a patient has waited 15 minutes (and every subsequent 15 minutes), staff should acknowledge that the patient is still waiting and provide an update.²⁰

RTLS directly enables this communication by tracking the wait times of individual patients and providing alerts when rounding is needed (Figure 6). Practices can also use RTLS reports to ensure rounding was performed.

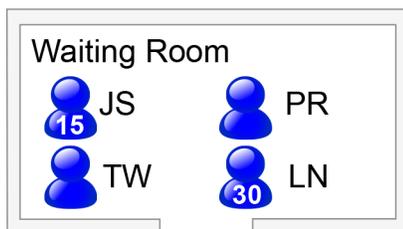


Figure 6: To enable waiting room rounding, RTLS can display the patients currently waiting and indicate when wait times have exceeded pre-established benchmarks (in this case, 15 and 30 minutes). The system can also send pop-up alerts to computers or e-mail reminders.

During the patient visit, RTLS can help a provider focus on his patient, ensuring that he never has to leave the room to gather information or find missing equipment.

“If I’m in the room and I need something, I just press the patient’s button [on the badge],” Dr. Daniel explains about the RTLS at Canyon Park Clinic. “A big red pop-up comes up to all the computers in that work area that says I need assistance in that room. Someone responds quickly, I get what I need, I don’t have to leave the room, I get to stay with the patient and work on their problem, and I get to spend more time with them, with concentration on them.”¹⁰ (Figure 7)

Wait Time Challenges

One of the simplest process changes that a practice can make is waiting room rounding. Rounding costs nothing and has the potential to make a huge difference to patients’ satisfaction.²⁰

RTLS makes rounding even easier by tracking patient wait times and automatically alerting staff when rounding is needed.

²⁰ “Keeping Me Waiting: Medical Practice Wait Times and Patient Satisfaction,” Press Ganey White Paper, July 2009.



Figure 7: Example of an alert sent to workstations when a caregiver presses the badge button.

Further, RTLS is shown to improve communication with patients by giving staff more time. Because doctors, nurses and MAs no longer have to search for each other and equipment, and because they spend less time recording data now automated by RTLS, they are better able to promptly answer phone calls and e-mails from patients.^{11,18}

No longer are we waiting for patients to get roomed, which can really slow things down. They're there, ready to be seen.

— Brett Daniel, MD
Former Medical Director
Pacific Medical Centers
Canyon Park Clinic²¹

5. By Improving Room Turnover Times

When a patient's visit is complete, efficient flow and throughput depend on cleaning the room and readying it for the next patient as quickly as possible.

How does staff know when a room is ready for turnover and which rooms are open for the next patient? If the answer is some form of manual communication, how often is that communication delayed or forgotten in a busy practice?

RTLS enables faster turnover as the process is immediate and automatic.⁴ When a patient completes his visit, the badge is placed in a discharge cabinet. Sensing the badge there, the RTLS automatically and immediately changes the status of the patient's exam room to "ready for cleaning" and informs staff via visual cues on the electronic board or through alerts sent to mobile devices.

When the room is clean, the RTLS changes the room status based on a staff person exiting the room or pressing a "room clean" button on the wall.

With a glance at the RTLS software, staff know which room(s) need cleaning and which are ready for patients (Figure 8).

Exam 2	Exam 4	Exam 6	Exam 8	Exam 10	Exam 12	Exam 14
ALL, M BAR, J	ALL, M BAR, J	JEN, A WAL, J	JOS, H BAR, J		AND, R DAN, T	
WC	CD JB	JS	WM HJ		TS TD	
CLAYTON	DAVIDSON	JABIR	MYERS		SANDERS	

Figure 8: RTLS can automatically detect the status of exam rooms and communicate it in real time via software. In this example, rooms are occupied (yellow), in need of cleaning (red), or ready for a patient (green). Real-time status communication expedites turnover and patient rooming.

"The front office, when they're checking that patient in, assigns that patient a room. They can see it on the map," explains Dr. Daniel. "It's really helped keep the flow going. No longer are we waiting for patients to get roomed, which can really slow things down. They're there, ready to be seen."²¹

²¹ "Automating the Patient Visit with RTLS," Canyon Park Clinic Video Testimonial, December 2011.

6. By Finding Equipment Quickly

The cryogun that goes missing; the EKG machine stored in the wrong room; the new thermometer everyone likes to use—having to leave a patient to look for equipment is not only inefficient, but it detracts from the patient experience.

Tracking mobile equipment with RTLS can save time and money, and reduce equipment theft and accidental loss.⁴

With RTLS, caregivers can quickly glance at a computer screen to know the location of tagged assets (Figure 9), allowing them to quickly prepare for a visit or minimize time spent away from the patient.

Icon	Tag ID	Type	Current Location
	19645	Cryogun	Exam 10
	25944	EKG	Exam 2
	27622	Thermometer	Exam 8

Figure 9: RTLS displays the location of key equipment in computer software, allowing caregivers to eliminate wasted time spent searching. Iconography allows staff to easily distinguish between types of equipment.

7. By Creating a Quieter Environment

Healthcare environments are notoriously noisy, causing serious impact on patients and staff. While noise tends to be more of a problem in hospitals, outpatient clinics still face patient annoyance and privacy issues. For staff, noise can lead to an increase in perceived work pressure, stress, fatigue, and burnout.²²

Because RTLS enables more efficient communication and conveys information automatically, noise is noticeably reduced in a clinic setting.

“With RTLS, everyone knows where everyone else is and where all the tagged assets are,” explains Linda Eremic, Director of Primary Care and Shared Services for Pacific Medical Centers at the time they implemented RTLS. “The result is an efficient flow of people, and a surprisingly quiet clinic.”²

“We started with 3,000 visits a month, and now we’re close to 6,000 visits a month, and the clinic is still really quiet,” Dr. Daniel said of the Canyon Park Clinic.

“People are always saying, ‘Oh, you must be slow today.’ We say, ‘No, we’ve had 350 patients through the door today.’ It’s just the way the clinic is built. With [RTLS], and without all that hall traffic, it just makes a really quiet place, because patients come in and go to their room.

“People remark on it being kind of a spa-like sensation, which is very different than the hectic nature of a lot of clinics. People see it as a relaxing place.”¹⁵

With RTLS, everyone knows where everyone else is and where all the tagged assets are. The result is an efficient flow of people, and a surprisingly quiet clinic.

— Linda Eremic
 Director of Primary Care and Shared Services (Retired)
 Pacific Medical Centers²

²² “Sound Control for Improved Outcomes in Healthcare Settings,” Center For Health Design Issue Paper, January 2007.

Conclusion

Any technology will promote itself as a positive contributor to operations; however, it comes down to real results. At clinics around the U.S., RTLS is proven to reduce patient wait times, improve patient flow and increase throughput—all while increasing communication and creating a quieter and more satisfying experience for both patients and staff.

In the words of Bill Crouse, MD, Senior Director of Worldwide Health at Microsoft, “If you are not planning for the use of [RTLS] technology in your hospital or clinic, you are missing a huge opportunity to lower costs, increase revenues and deliver better, more satisfying care.”²³

Full length case studies of clinics highlighted in this paper can be found at versustech.com/rtls-case-studies. To schedule a personalized demonstration and see how RTLS can positively impact your practice, visit versustech.com/demo.



If you are not planning for the use of [RTLS] technology in your hospital or clinic, you are missing a huge opportunity to lower costs, increase revenues and deliver better, more satisfying care.

— **Bill Crouse, MD**
Senior Director of
Worldwide Health
Microsoft²³

²³ “Thinking Beyond the EMR: Why location, tracking and sensing technologies may provide a higher, faster rate of return,” Microsoft Developer Network Health Blog by Bill Crouse, MD, May 21, 2009.

About Versus Technology, Inc.

Founded in 1988, Versus pioneered the concept of automated patient flow in clinical environments using RTLS. Today, hundreds of healthcare facilities improve patient flow and asset management while enhancing communication and operational efficiency. As a member of the Midmark family, Versus contributes to a unique offering of clinical workflow solutions that encompass consulting services, RTLS technology, medical equipment, diagnostic devices and design assistance that helps health systems rethink the delivery of care.

Versus Fast Facts

- More than 850 facilities around the world benefit from Versus-supplied location information
- More than half a million Versus RTLS components help facilities worldwide to find the resources they need
- Versus tracks more than one million patients annually
- 80% of automated nurse call systems are automated with Versus RTLS
- Versus covers 200,000 critical care beds
- Millions of dollars and thousands of hours in operational efficiency have been saved in facilities across the U.S.

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