WINTER 2022

PFQ



See It All

RTLS PROVIDES REAL-TIME VISIBILITY AND DATA TO MAKE THE RIGHT CALL EVERY TIME.

19

A QUARTERLY PUBLICATION FROM TeleTracking®

All Access. All the Time:
Geisinger Danville experiences positive outcomes throughout health system operations with RTLS.

The Ultimate Perspective:
Measurable efficiencies realized through increased data, knowledge and decision-making power.

CEO Message

RTLS SOLUTIONS EDITION

THE NEW PFQ IS FOCUSED ON INDIVIDUAL SOLUTIONS FOR TODAY'S BIGGEST CHALLENGES IN HEALTH CARE.

For five years, *Patient Flow Quarterly* helped educate, inform and elevate the conversation about health system operations and the benefits of a centralized approach to care to patients and caregivers. Just as your health system has continued to evolve, so have we—and that's why I'm pleased to introduce the new format for *Patient Flow Quarterly*. Issues will be released more frequently, and will focus on one specific solution to highlight what can be done today to address the demands of tomorrow.

For this inaugural issue, we will take a deep dive on Real-Time Locating Systems (RTLS) or "enabling" technologies. More than ever before, teams at hospitals and health systems are focused on finding ways to improve efficiency—which also improves quality, patient safety and the financial bottom line. RTLS or enabling technologies, provide hospitals with the visibility and actionable data that makes it possible for hospital personnel to manage assets, reduce costs and streamline operations.

In this issue of PFQ, Seth Hosteler (Lead Process Engineer, Care Support Services for Geisinger Danville) and Rob Teachout (Project Management, RTLS Workflow for TeleTracking), share their thoughts on how the ability to analyze data, and see where the asset needs are, positively impacts patient care, as well as overall healthcare operations.

We hope you enjoy this new approach and that it continues to help you ensure that no patient waits for the care they need.

Chris Johnson

CO-CEO AND PRESIDENT
TELETRACKING



Content Highlights

01

FEATURE

RTLS Spotlight

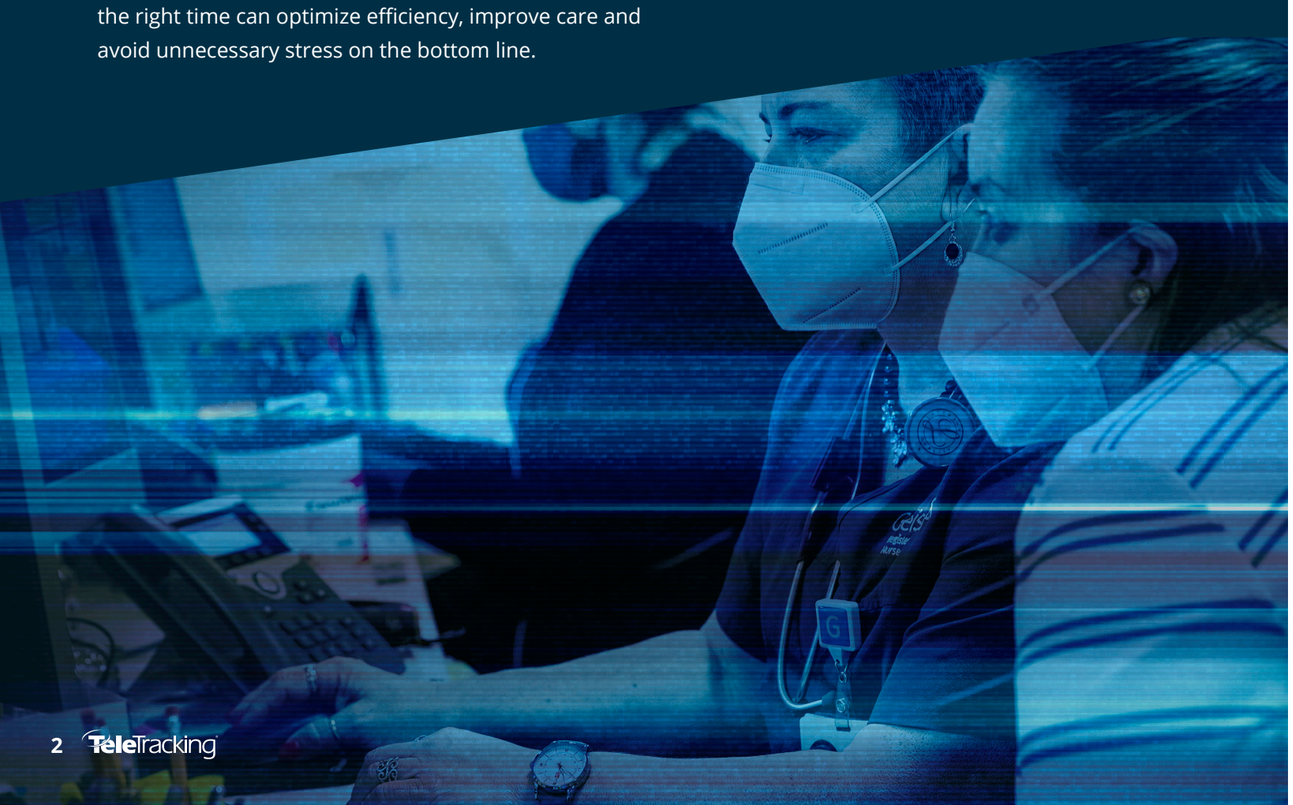
Take a deep dive into why the right data and visibility at the right time can optimize efficiency, improve care and avoid unnecessary stress on the bottom line.

02

CASE STUDY

Geisinger Danville

Learn how one health system is realizing the results and measurable benefits of RTLS in action.



What's Happening

JOIN US AT AN UPCOMING EVENT TO LEARN ABOUT HOW OUR PATIENT FLOW SOLUTIONS CAN HELP YOU ENSURE THAT NO PATIENT WAITS FOR THE CARE THEY NEED.

HIMSS 22



[02]

HIMSS22

March 14 — 18, 2022
Orange County Convention Center,
Orlando, FL
Booth 915

HIMSS22 is the can't-miss health information and technology event of the year, where professionals connect for education, innovation and collaboration.

Visit with TeleTracking experts and learn about the latest developments in patient flow. For more information, please click here.

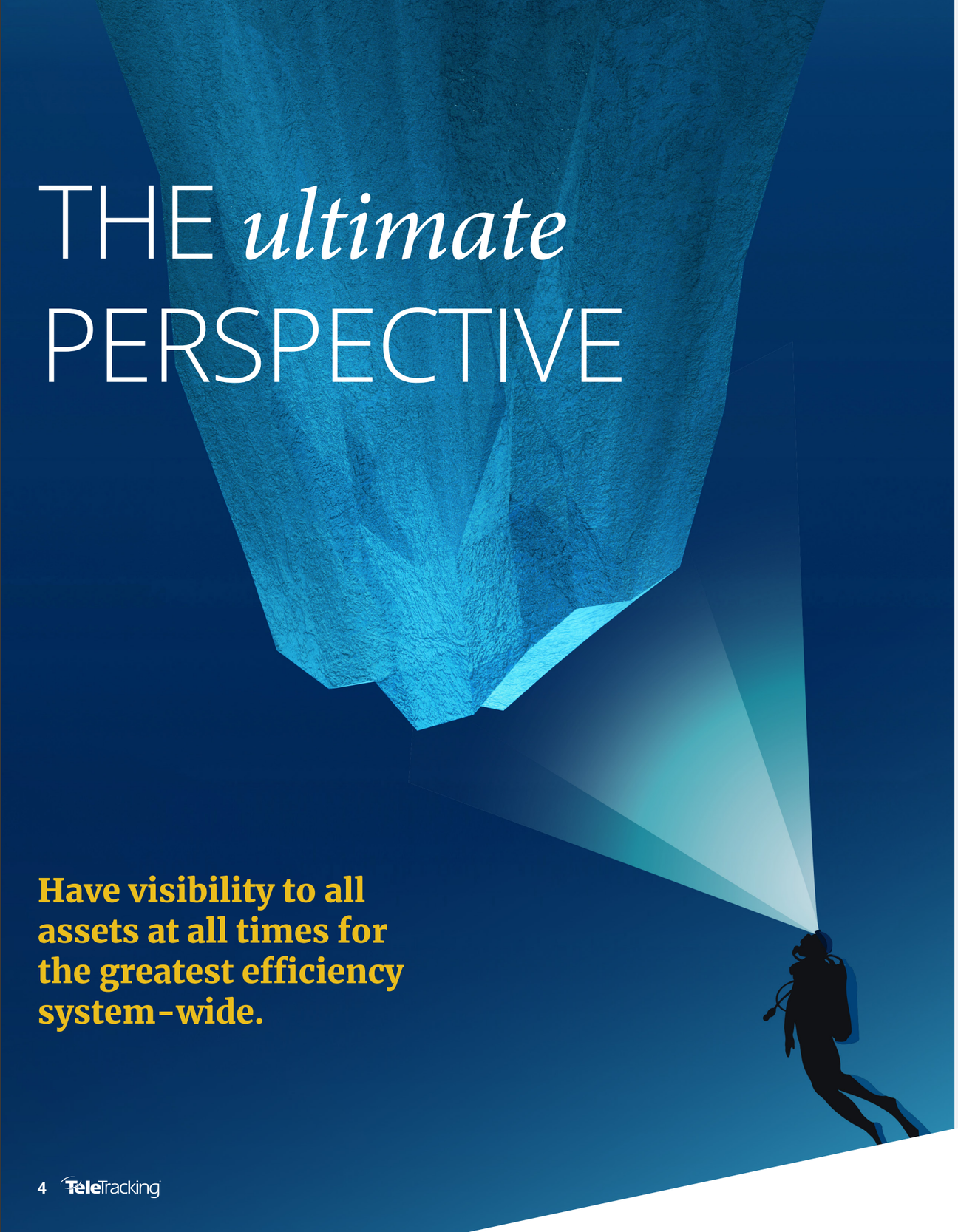
[03]

COMMAND CENTER SUMMIT

May 16 — 17, 2022
Grand Hyatt, Nashville, TN

Learn first-hand how the command center or clinical operations center approach to centralized care helps to provide the real-time clinical and operational insights. Hear how hospitals are predicting and managing demand while proactively assigning resources to enable the seamless delivery of care. Command Centers are all about enhancing the patient and care provider experience.

*For more information, visit 2022 Command Center Summit: Connected Care Delivery - BRI Network. Enter code **TT250** for $250 off the registration price.*



We fundamentally believe that it is unacceptable for patients to wait for the care they need due to operating inefficiencies and unnecessary cost barriers.

This is what we believe. Reducing this wait is what we work on every day at TeleTracking to solve. We also believe that Real-Time Location Systems [RTLS] play an important role in achieving that goal. Access to real-time visibility and data play an invaluable role in an overall, integrated patient flow strategy. For example, by being able to efficiently track patients, staff and equipment, and the visibility and actionable data that it provides, it's possible to decrease unnecessary cost, delays and underutilized assets.

01

Feature:
RTLS Spotlight

ALL EYES ON ALL ASSETS AT ALL TIMES

THE FOLLOWING SCENARIOS ILLUSTRATE THE MANY WAYS RTLS PROVIDES VISIBILITY AND A BETTER PATIENT AND CAREGIVER EXPERIENCE.

* **Discharge Efficiency:** At admission, the patient is assigned an RTLS tag. After they complete their care plan and achieve their discharge milestones, the tag is placed in a drop box that automatically registers the discharge in the TeleTracking system. EVS is notified that the room is ready to be cleaned and patient placement knows that the bed will be ready for a new patient. The process improves patient throughput and increases capacity, driving revenue opportunities

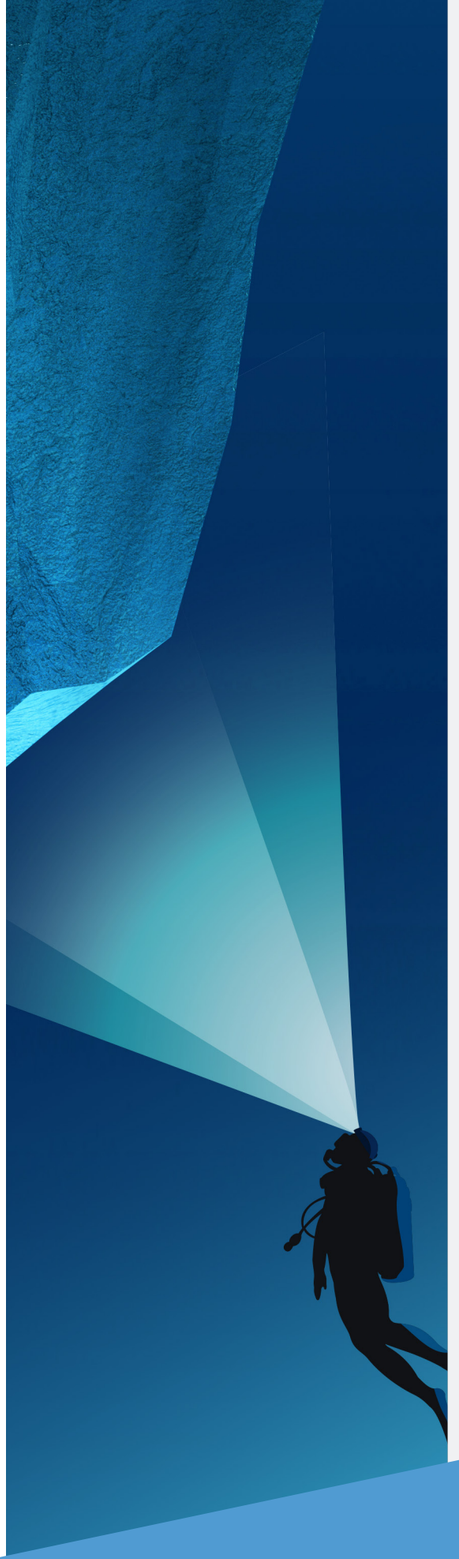
* **Tracking of high-value assets:** Tagging high-value equipment, such as IV pumps, means that it's possible to locate and maintain these assets in real time—which means staff saves time by not having to search for equipment and unnecessary capital purchases and rentals are avoided.

* **Tracking staff/patient interactions:** Real-time visibility of staff location makes it possible to have valuable insight into the frequency and duration of patient care. It also promotes patient safety by measuring rounding interactions between caregivers and patients and can pinpoint an infectious outbreak by capturing patient, staff and asset interaction—something that is essential with the continued impact of COVID-19.

* **Patient and staff alarms:** The RTLS tag notifies the care team when a patient leaves a specified area or is in an isolated area for too long. It's also possible to signal to the care team if another staff member needs assistance.

* **Temperature monitoring:** The pharmacy, food service, blood bank, and the operating room are areas where fluctuations in temperature and humidity can cause issues. Temperature tracking capabilities monitors temperature ranges from -200C to 200C and humidity levels from 0% to 100%, which allow for improved response times to potentially unsafe temperature and humidity ranges—ultimately improving patient safety and the financial bottom line.

* **Hand hygiene monitoring:** By placing a sensor on hand sanitizer and soap dispensers it's possible to track and monitor hand hygiene activity through staff ID badges. The system drives compliance—which can reduce infections and ultimately save lives.



The Bottom Line

RTLS enables the visibility and information it takes for hospitals to be ultimately most efficient system-wide. So, what are the real payoffs?

* Decrease lost bedtime by instantly discharging patients.
* Improve patient and staff satisfaction by decreasing equipment wait times.
* Avoid unnecessary costs by aligning purchased and rental equipment needs.
* Increase caregiver efficiency with real-time visibility into patient location and patient/caregiver interactions.
* Provide automatic reporting of patient, staff and asset interactions.
* Improve infection control by monitoring hand hygiene compliance.
* Avoid the loss of critical resources with automatic temperature and humidity monitoring capabilities.

GET AN INSIDE LOOK AT RTLS SUPER USERS AND BEST PRACTICES HERE

ALL ACCESS. *all the time.*

02

Case Study:
Geisinger Danville



Having the right information to make the right moves at the right time is more important than ever. RTLS enables one hospital to take control and see real operational impact.

One of the key takeaways from the past 18 months of managing the challenges of COVID-19 is the importance of being able to access equipment quickly and easily in order to deliver effective, efficient care—and provide both patients and caregivers with a safe, positive experience. Real-Time Location Systems [RTLS] or Enabling Technologies is a solution helping to make improved efficiency and improved care possible.

TECHNOLOGY AND REAL-TIME VISIBILITY

Seth Hostetler, Lead Process Engineer, Care Support Services at Geisinger Danville has been using RTLS for more than a decade and knows first-hand the positive impact it has on overall health system operations. With training in industrial engineering, Hostetler joined Geisinger in 2011 as part of a newly formed process engineering team to support the supply chain, through a combination of process improvement, business intelligence, and technology deployment.

"We were looking for a technology solution that would give us real-time visibility into the assets that were available for patients as they were being admitted to our health system for care," explains Hostetler. "Team members would be readying rooms, checking the first closet they could find to see if they had the right equipment for the patient. They never knew how much they would find, they were wasting a lot of manpower searching for things, and equipment that could be helping a patient was simply being left idle."

TECHNOLOGY TRANSITIONS AND UNDERSTANDING WORKFLOWS

Using RTLS is a process improvement tactic. The Geisinger team began their technology transition by looking at and understanding the actual workflow of the asset classes they managed. One of the benefits of the RTLS is the real-time locating capability. For example, you can open the application, search for an IV pump, and find the closest one to a unit. However, early on the team realized that the asset flow they thought was occurring was actually not happening. The team thought that when a patient was discharged, the IV pump was removed from the room, taken to the basement to be cleaned and then put back into the central distribution to be reallocated. After reviewing historical data, they discovered that about 90% of those pumps were being cleaned in place. The team decided to support this process—ensuring that the cleaning process was done appropriately by educating the staff and examining the overall support process. It also helped clarify why central distribution didn't always have as many pumps to redistribute as staff members may have thought.

A similar situation emerged with capital overspend and IV pumps. The team had thought that more pumps needed to be purchased. However, with RTLS, they had the visibility needed to track use and realized that they actually had enough pumps in the system and just needed to review the process, improve the circulation of the pumps, and work with clinical partners on the nursing units to ensure that pumps weren't being hidden away on the units. RTLS also provides visibility into rental equipment. Over the last nine years, the team has been notified when a patient is done with a rental asset so that it can be returned and no extra days are paid for.

"An important benefit of the visibility RTLS provides is knowing when to remove the asset from the room. That's an education point that we've typically spent a lot of time on. The device doesn't necessarily need to wait until a patient is discharged in order to be removed from the room," explains Hostetler. "This frees up the asset faster—and then caregivers realize they don't have to set equipment aside in order to be confident they can find what they need. When the asset is tagged, caregivers find what they need and can manage emergent needs on the spot. Training our frontline staff to be able to look at and find the assets was important, but it was even more important to build trust—that when you request something, we're going to be able to get it to you quickly, because we can see where things are as opposed to when we had no visibility."

RIGHT-SIZING AND RETURN ON INVESTMENT

The visibility RTLS provides also has a positive impact on ROI. Around the time the team was launching RTLS,



Seth Hostetler (left) & Robert Teachout (right)

Seth Hostetler is the Lead Process Engineer, Care Support Services at Geisinger Danville. Hostetler has an M.S. in Industrial Systems Engineering and specializes in facility logistics, healthcare systems engineering, and lean methodologies.

Robert Teachout is the Project Manager, RTLS Workflow, at TeleTracking.

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they were also in the process of doing a full IV pump replacement. The prior pumps had reached their end of life and a new batch was being purchased for the two largest hospitals, so the team wanted to make sure they were ordering the right number. During the planning process, an audit showed that they couldn't account for more than 30% of the pumps. Before the audit, the team thought they needed 2,100 pumps—without the data RTLS provided, they would have purchased an additional 600 pumps—at a significant cost to the health system.

REDUCING PATIENT RISK AND MAXIMIZING UTILIZATION

"We have over 14,000 assets, divided into 160 asset classes, that we manage through our RTLS system, with pumps being far and away our biggest asset class," explains Hostetler. "With our feeding pumps for example, before RTLS, we were almost daily having incident reports being submitted that the nursing units weren't able to get those in a timely manner—and that turns into a patient safety risk. Now, we're going almost three full years without a report because we have the visibility to where these feeding pumps are. At the time of the purchasing decision, we were also able to prove that the feeding pumps were nearly 100% utilized and that made it a very easy purchasing decision for the hospital to understand that we were at the limits of what we could do with the equipment we had."

Using infrared light, it's possible to not only distinguish specific rooms where equipment is, it's also possible to distinguish the specific space in a split, semi-private room such as in the PACU, where simple curtains divide spaces; or when a patient is in a hallway bed. The ability to scale from a unit level coverage, all the way down to that specific bed, depending on what the business cases are in those different departments or different areas of the hospital was one of the things that ultimately led to Geisinger choosing RTLS.

"We like to joke that we help clients address the 'Four Hs'—hoarding, hiding, hunting, and hoping for equipment," says Robert Teachout, TeleTracking Project Manager, RTLS Workflow. "We always begin our work with an assessment that starts with us going room-to-room and documenting where the devices are located. It is common for us to come away from a hospital, learning that they are only using 35%-40% of their infusion fleet at any given time—which means the rest of that fleet is in some other state of transition. The data generated by RTLS also helps a health system look at seasonal peaks and valleys, determine when rental equipment needs to be brought in, when it can be returned to avoid unnecessary billing, and situations where equipment can be shared between units."

CULTURE AND EDUCATING CAREGIVERS

The shift to RTLS also involves a cultural shift. At Geisinger, they intentionally took a phased approach to their rollout by focusing on the heavy-use areas and the heavy-use asset classes first. And while the team couldn't meet with every frontline user, they did connect with unit desk clerks and nursing assistants to show them the benefits that RTLS provides regarding saving time and getting a patient they equipment they need in an efficient way. After the initial meetings, the team would circle back every couple of months to see if people had questions and remind them again about the benefits of the approach—which really helped drive adoption.

"Our supply chain distribution team and our clinical engineering biomed team both quickly adopted RTLS. They were now able to narrow in on the location of assets, saving a great deal of time," continues Hostetler. "Also, something that seems simple, but is impactful to adoption, is scheduling regular battery changes to ensure that the sensors are always working optimally, and users can count on accuracy."

KEEPING PATIENTS AND CAREGIVERS SAFE

RTLS is also being used to monitor staff hand hygiene. It has also been helpful with contact tracing when there have been COVID exposures, making it possible to really hone-in on where interactions between people occurred. Even before COVID, the patient and staff locating was valuable for infection control. For example, if a patient was admitted who then later tested positive for TB, staff can alert employee health about which staff members were in contact with that patient and ensure they get the proper testing to ensure employee safety.

LOOKING TO THE FUTURE

Geisinger continues to expand the use of RTLS, bringing on new asset classes that branch out beyond the traditional biomed uses. For example, over the past few years the IT group has deployed iPads for all inpatients. Those iPads are now tagged, making them easier to find—as well as the tag serving as a theft deterrent.

"We're continuing to build on the success we're having," concluded Hostetler. "For example, we're looking at groups like EVS to see if we can help improve efficiency by looking at their workflows and their equipment placement to improve the pathways that they take that will make their workday more efficient. Our goal is to continue delivering a better experience for our patients and caregivers by using RTLS to collect data, review it, and continue to use it to improve workflows."

TO LEARN MORE ABOUT OUR SUCCESS STORIES, VISIT:

teletracking.com

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Our Mission:

To ensure that no one will ever have to wait for the care that they need.

Where To Begin?

Our team is experienced in working with hospitals and health systems at every stage in the journey to centralized care.

Let's talk today about where we can start together to ensure you're set up for success today and for all that tomorrow may bring.

TeleTracking®

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FOR MORE INFORMATION PLEASE VISIT TELETRACKING.COM