# Case Study: Taking a Role Virtual at Lee Health

Lee Health is the largest public health system in Florida, serving Lee County and the surrounding areas. With over 14,000 employees and 1,800 beds, the nonprofit system engages with more than 2 million patients each year through its four acute care hospitals, two specialty hospitals, multiple skilled nursing facilities, outpatient centers, and walk-in clinics. The system is governed by a 10-member elected board and has been in operation for more than 100 years.

Like many health care systems, Lee Health has persistent and acute challenges within its talent pipeline, especially among frontline staff. Compounding challenges from the ongoing pandemic, Lee Health's operations were dramatically affected during late September 2022's Hurricane Ian. The Category 4 hurricane killed more than [100 people](#) in Florida and likely permanently altered the landscape in coastal Lee County, home of Fort Myers, Cape Coral, and Sanibel and Pine Islands.

## A Role Ready for Change

In nearly all hospitals, some patients require more monitoring and support than clinical staff can provide. These patients may be at risk of falling; struggle with confusion or agitation; or be at risk of harming themselves or others. In those cases, the hospital provides an employee is who trained to observe the patient, notifying clinical teams of any issues. This role is typically in-person.

In Lee Health's case, about 70 beds typically require this role. The system had been exploring moving to virtual monitoring and observation for years. "The problem was that tech wasn't great eight years ago. We kept trying every year or two – we'd dust it off, ask is it viable. But we didn't have unified communications or the right workflow. The stars aligned about 18 months ago. The tech was right, we had the bandwidth," commented Jonathan Witenko, system director for virtual health and telemedicine with Lee Health.

Safety techs require a high school diploma and some on-the-job training. Several years ago, Lee Health elevated the role from a "safety attendant," supporting employees to gain CPR training, as well as training in crisis prevention, patient interventions, supporting patient mobility, and ethics training. The safety attendant role required very little education and training, and workers earned between $9 and 11 an hour. Safety techs, with additional training and responsibilities, earned between $12 and 15 an hour.

The system also struggled to retain safety techs and to keep up with the demand. Kristi McMillan, system director for resource management, overseeing internal staffing float pool for the system, attributes this to multiple factors. In addition to struggling to fill open roles, McMillan noted that COVID made the role less safe and required that techs wear PPE for extended periods.

While safety tech employee engagement scores were relatively high when staff was last surveyed, techs were dissatisfied with the lack of a defined career path and with the relatively low pay and lack of benefits the role afforded.

## Testing the Concept

Lee Health, which has many different facilities and moving parts, needed a unified system that could enable quick decisions, comprehensive information and, especially, clear communications between safety techs and clinical staff. Lee Health prioritized simplicity in technology and easy communication, recognizing that it had to work well and be useful in a clinical environment. Witenko said, "Who am I going to call when something goes wrong? Nurses didn't carry corporate cell phones, and there are so many complexities to communications."

Several factors clicked into place to enable a pilot to explore the feasibility of shifting the safety tech role from a physical presence in a patient room to a virtual approach, including leadership who saw the benefit of the program, emerging examples from elsewhere in the field, and the added sense of urgency created by the pandemic and staffing shortages. McMillan commented: "We had talked years ago, and the tech just wasn't there. It took telemedicine taking off to make it viable for us to do this. This is all coming at the right time to be able to watch more patients and make as many patients as safe as possible."

The team started small with a pre-pilot, using a limited number of people and low-tech solutions to test the concept: could they take the safety tech outside of the patient room? The team discovered that it was possible, and that patient care didn't decline as a result. De-escalation and many patient safety interventions, like fall prevention, could be handled through virtual monitoring. The concept test made it clear, though, that while moving to virtual for many patients was viable, there needed to be exceptions, including if the patient doesn't want it for good reason, if the patient is non-redirectable and needs a physical presence, if the family is opposed, or if there are psychological reasons.

Next, the team expanded the pilot, involving more employees and purchase and implementation of supporting technology. The team viewed it as a low-risk, potentially high-reward situation. The initial plan was to do a 45-90-day pilot that would test whether patients could be safely attended virtually, and whether safety techs could effectively do the job. "We could have decided day one," commented Witenko. "We pretty quickly decided we could expand, but we had to get the equipment and resources to do it." At the height of the pandemic in 2021, the system ran into delays in procuring needed equipment to support the full implementation. Broader implementation went into effect in March 2022.

McMillan noted that the team took care to ensure that employees weren't shocked or surprised by the shift. "When we did the pilot, we didn't want to move people into a new role without really testing it. We over-trained so we made sure we had enough people to do every shift. We also weren't having employees do the new role 100% — we had them do one to two virtual shifts per week, alongside their regular in-person shifts. It was a shorter pilot than we

anticipated. And then the rollout to other campuses went faster because once they saw what others were doing, everyone really wanted it."

Virtual safety techs are now observing patients in all four acute care facilities. The final campus moved into implementation during Hurricane Ian, as employees were unable to physically get to patient locations. Each virtual safety tech can support up to eight patients via the hospital's new technology, supported by Caregility's IObserver platform, which enables virtual monitoring with continuous live video and audio connections.

## Building a Better Job

From a job satisfaction perspective, Witenko and McMillan have been thrilled with the response, if a little surprised. "I didn't anticipate this, from a psychological perspective," Witenko said.

McMillan and Witenko attribute this interest to a couple different factors, including physical safety and lower stress. But primarily, they believe virtual safety techs are enthusiastic about their new roles because it enables more interaction with more patients and, particularly, with peers. "Once they learn the software and do the job, they're interacting in a team. Originally, they were in a room with a patient, just you and a patient. You as a safety tech didn't have a team to interact with. Now they're in a room with two to four others, and they have a team of people to work with," commented McMillan.

At the launch of the pilot, McMillan and her team identified current safety techs who had good performance and "ticked all the boxes" required for the role. "When we initially said, okay, we're going to do this pilot, we were flooded with people who were interested. As we rolled it out and had to bring more people into this role, we have yet to have an issue with getting more people identified to do it," McMillan said. Existing staff are supporting this increased pipeline. "Once we rolled this out, the staff could talk to their peers about the role, the positive impact of it over being in person – they have been more than eager to take on the role," she added.

Importantly, because of the skills elevation, the role itself was reclassified. Prior to the virtual shift, safety techs were considered PRN, or as-needed employees, paid at a rate of $12 to 15 an hour. Virtual safety techs are now full employees, earning an average of $18.40 an hour. Lee Health has also elevated a new role to supervise and manage virtual safety techs, which earns a higher rate. The positions are also eligible for employee benefits. Currently, Lee Health employs 210 Safety Techs, 57 of whom are in the virtual role in staff or leadership positions. All of the virtual roles were promoted from the broader safety tech workforce.

Lee Health takes a pragmatic view of talent, understanding that folks in entry-level roles are going to move around. The team strives, though, to make sure that talented people stay in the system, even if they change roles. "Every couple months, we ask do we both think you're sitting in the right seat on the bus? We have a lot of seats – come tell me before you jump off the bus," Witenko commented.

The virtual safety tech role is no different. With a more skilled workforce, Witenko and McMillan expect turnover, but are making intentional effort to highlight the variety of roles available within the system. "There are a lot of young people in the position. This is a good starting position. They may be interested in health care, they may want to be a nurse. This is great insight into what a hospital is like. They can come in out of the gate, interact with patients," Witenko noted. Employees in the role are eligible for tuition support after 12 months of employment, when they can upskill or train into new roles in demand across the system.

While it is too early in the program's history to measure year-over-year retention, the team has seen positive signs. To date, one virtual safety tech and two leads have left their positions, a lower leave rate than the non-virtual role.

## The Upskilling Approach

Responsibilities for the virtual safety tech role required three upskilling priorities.

1. Computer Training – To assure virtual safety techs could use new platform and enter data into patient records, the new role required basic computer skills. Lee Health had little experience providing training in this area.

2. Electronic Health Records (EPIC) – Because the virtual safety tech has continuous access to a network computer, it just made sense to enable the position to support digital medical records. Prior to the virtual shift, techs would make notes on paper, and provide notes to a clinical staff member for entry. Witenko noted that this upskilling was "easiest and most familiar," as Lee Health supports training for EPIC for any position that engages with the records system.

    a. As a component of records training, techs also dove deeper into legal, patient privacy, and compliance issues.

3. Caregility iObserver – Virtual safety techs needed to learn how to use the platform. For this, Lee Health relied on training from Caregility. Witenko commented, "We needed to learn how to use this application, so we asked them to help us, train us, and then we are able to incorporate training on our own in the future."

To support the computer training aspect, Lee Health has taken a measured approach. Currently, at the point of hire, all new safety techs are given an assessment of basic computer literacy, which, once assured, is complemented by deeper training in platform use, word processing, Office tools, and other important skills. This has worked to date, particularly because all virtual safety techs have been internal hires – people promoted through the ranks. "We knew that this group had basic computer skills. We had a good feeling that whoever we picked would be able to learn. We focused on those folks who have computer skills, were already great safety techs, and had the ability to multi-task," commented McMillan. She also noted that staff who have moved into the virtual safety tech role are now able to exercise their skills. "The good thing about the new role – they are using their skills. Even though we wanted to make sure they had skills, they weren't using them all the time."

The newly required digital skill sets are influencing hiring decisions, even for traditional safety techs who are brought on to physically sit with patients. "We have fewer people who don't know anything about computers, and we're trying to hire smart. We're cognizant of the fact that we need people to be more computer literate, and that they're going to need more and more digital skills," commented McMillan.

To support staff to learn the Caregility software, the team initially worked alongside the vendor, but quickly took over training directly to link training to the work environment at Lee Health and to onboard new virtual safety techs at any time. As new virtual safety techs are onboarded, training is delivered in small groups of 5-8 people, prior to their transition into the virtual role. "It worked well with this size group. We could give that one-on-one personal attention," McMillan commented. The content is delivered first via a presentation, showing employees how to access the software, processes, and guidelines, and the presentation is immediately followed with supported practice for staff to work in the system.

Importantly, that learning experience is followed as quickly as possible by a hands-on, supported session. New virtual safety techs are scheduled to shadow an experienced employee, working in a real-time environment. Witenko commented, "Until you have an actual patient, it's different. It's hard to do game-time scenarios and simulations." New staff receive verification that they're ready to work by both the employee they are shadowing and by the team supervisor.

## Challenges and Concerns

In health care environments, privacy is always a concern, and Lee Health continues to train staff on the necessary requirements for patient privacy. However, they have not received any negative feedback or privacy concerns from patients. McMillan attributes this to the fact that if the patient was assigned a safety tech, someone was going to be in the room observing the patient in any case.

There have been some concerns raised by nursing staff, who are vigilant about patient privacy and about their own responsibilities. However, in the same way that a person in the room would avert their eyes or step away, the camera can also be redirected. Importantly, the observation system is a live stream and cannot record anything. "We've had to educate nurses – we're not here to watch you or evaluate, we're here to keep patients safe," said McMillan.

In reflecting on their experience, Witenko and McMillan were challenged by effectively communicating about the virtual safety tech program to nurses and administrators. This was a logistical and professional challenge. The team found that they needed to communicate continually about the new role and its value, ensuring that the many different nursing units across the system were aware and reminded about the program. In addition, the program needed to gain the confidence of clinical staff. "We thought it would be grabbed and overused. But some of our nurses truly believe that patients need that person in the room, so we needed to partner with the units to say, the camera can bring this value, this is what we're bringing to you," said McMillan.

To build trust in the program among nurses, McMillan and Witenko worked to educate staff about the technology itself – what the camera can do – while highlighting the people behind the camera. They also emphasized that the additional capacity provided by the virtual move would enable more patients to have the care they needed. "We stressed that this allows us to watch more patients. Rather than having one person in a room, now we have a 6-1 ratio. That is additional safety for your patients. There are also parts of the software that we didn't have – the ability to allow a family member to call in and converse with the patient. There are benefits to having that camera. And with COVID and infectious disease – if we didn't have a safety tech who was fit tested, a patient might go unwatched or a unit would have to pull its own staff. Now, we can go in and keep that patient safe and the staff member safe," commented McMillan.

Scheduling also posed a challenge for McMillan in particular, who is responsible for deploying supplemental inpatient nursing staff across the system. Moving the role from a PRN, where workers could determine their own availability, she has found the need to build different mindsets with staff. Full-time virtual safety techs work 36 hours per week, and those shifts aren't voluntary.

That said, the benefit of having virtual workers does mean that McMillan can look across the system to find capacity when it's needed. "That is the beauty of having monitoring on multiple campuses. If Gulf Coast runs out of monitoring space on campus, another can pick it up. If you had a physical person and they ended up not needing them, the employee might just go home while another campus that has need has a patient that goes uncovered. By sharing monitoring capability, we have so much more coverage to keep patients safe," she said.

The new system provides a significant upgrade in data collection capabilities, with virtual safety techs able to note interventions directly in records in real time. Prior to the shift, safety techs completed a form when there was a significant episode, rather than entering data regularly into the patient record. As a result, measuring the impact of the shift on outcomes has been difficult without clear pre- and post-shift data. While the program is selling itself through cost savings, worker satisfaction, and increased flexibility and capacity, Lee Health is not yet able to show direct outcomes on patient care. However, the program has significantly reduced the cost per hour per patient of providing attendant services. The virtual model operates at a cost per patient of about 20% of the in-person approach, even with higher wages and investments in technology.

## What We Learned

The program has been successful in its short tenure, reducing costs while enabling more patients to be observed and improving job quality for dozens of employees. Other employers interested in shifting practice can learn lessons from Lee Health's experience.

### Dual Roles

The first lesson is the value of moving in lockstep, never moving tech forward without people, or vice versa. Witenko and McMillan are on different teams, with Witenko leading systems

and McMillan leading workforce. It is clear that the two work together well, and frequently, and that there is a great deal of trust between them. They also bring different skill sets to the table, with systems engineering and workforce leadership combining to create solutions that lead to both operations and personnel wins. Working across teams undoubtedly led to a better solution than a single team working alone.

**Timing Is Everything**

Rather than implementing a clumsy tech solution, the team waited until the technology caught up to the real needs of the system and the people within it. Witenko indicated that Lee Health understood years ago that the system would recognize financial returns from shifting the Safety Tech role to a virtual model. Instead, the team waited for the right product that would meet both business objectives and ensure patient safety with streamlined communications and accessible software.

**Intentional Job Improvements**

Lee Health recognized the shift in work and responsibilities. In shifting the safety tech role to virtual, Lee Health created a significantly better job. In addition to increasing hourly wages, the role is benefit-eligible, has predictable shifts, and has the companionship and connection employees wanted. The virtual role is also safer, keeping employees from being exposed to contagious diseases. Workers are being more intentionally connected to upskilling and educational opportunities, supported to grow into new roles across the system.

**The Right Roll-Out**

Rather than going all-in on virtual, Lee Health has eased in, leading to manageable change, continuous learning, and the development of an effective policy environment that balances patient care and operations decisions. Specifically, the team added facilities one at a time, allowing for effective piloting and local adaptation. They created organizational policy that creates a default for virtual observation but enables clinical staff to make what they believe is the best decision for their patients and ensures that patient safety is the priority.

## Conclusion

Lee Health's experience in shifting an in-person role to a virtual environment while preserving patient safety and improving job quality is a positive one. Supported by effective upskilling and thoughtful implementation, Lee Health realized financial benefits and created new capacity to support patients and clinical staff.

## Acknowledgements

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