



Case study

Urban Hospital Turns to Evolv Technology to Address Threats to ER Staff and Patient Safety

Organization Overview

ORGANIZATION: Urban Hospital in Large U.S. City

LOCATION: Midwest

BEDS: Around 300

SECURITY STAFF: Around 30

Solution Snapshot

Goals

- Stop nurses, doctors, and staff from being threatened and attacked with concealed weapons
- Eliminate situations where patients bring concealed weapons into hospital through the ER
- Implement touchless concealed weapons detection screening by pinpointing the area of body or bag where the detected threat was found
- Enable security officers to defuse situations quickly and easily in ER when a concealed weapon is detected

Solution

Teams Involved

- Evolv Technology Solutions Engineer

People

- Trained entire security staff on how to operate Evolv Express system
- Worked with security team to calibrate and configure Evolv Express system for optimal operation used at the ER entrance

Process

- Calibrated and configured single-lane Evolv Express® system

Technology

- Evolv Express single-lane system
- Evolv Cortex AI™
- Evolv Insights™

Outcomes



Detected a concealed handgun on first day implemented



Detected 7 handguns and 9 knives in less than 40 days



Enabled ER nurses and doctors—and hospital staff in general—to feel relieved and able to focus on patient care versus concern over their safety



Able to operate ER-based Evolv Express system with one security officer



Achieved rapid deployment window while training all hospital security staff (30-plus officers) to manage it



Flexibility to integrate future security investments, such as video surveillance and two-way radios, into Evolv Express system



Nurses, Doctors, and Staff Under Attack—and Scared

The hospital showcased in this case study possesses a storied history that dates back more than a century. Located in an urban center in a large U.S. city, the hospital must ensure that its staff, patients, and visitors are protected from violence in the surrounding community.

Facing an uptick in workplace violence and a hospital staff fearful for their own safety, the hospital hired a new Director of Public Safety who was given the charter to improve safety for hospital staff, patients, and visitors. At the time, the hospital had basic security systems and processes in place. "We were very short-staffed and had a lot of open positions," the Director of Public Safety says.

The new Director of Public Safety went to work immediately, implementing an aggressive recruiting program to build a professional security team and instituted new training procedures for officers. "Like many other hospitals over the past few years, our hospital had implemented a very hands-on security approach with incoming patients," the Director of Public Safety says. "Nurses and doctors were tired of getting attacked and were scared for their safety."

“

I've been waiting years for someone to invent a technology where you can just freely walk through the concealed weapons detector without needing to empty out your pockets and take everything out of your bags as part of the screening process.”

- Director of Public Safety

Expanded Team of Professional Security Officers

With the changes that the Director of Public Safety put into place, the hospital began transitioning towards a modern, safe, and welcoming environment for patients, visitors, and staff.

“The nurses, doctors, and staff know what to expect when the security team comes into a room,” he relates. “We have implemented categories of security codes that everyone knows. We want nurses and other healthcare staff to have the confidence to call officers for assistance to help deescalate situations before they become a problem. In addition, we now have a team of 30 officers who view their positions as a career and take great pride in how they execute their jobs, and have gone from three officers per shift to five.”

Despite all of these improvements, concealed weapons detection at the hospital entrances, especially the emergency room (ER), was a particular pain point. “About 80 percent of our patient admissions happen through the ER—which comes to around 200 each day,” the Director of Public Safety reports. “Even though we saw a measurable improvement in staff safety by increasing our number of officers, upgrading training for them, and implementing new security policies, we still had instances where concealed weapons made their way into the ER.”

While the Director of Public Safety wanted to implement concealed weapons detection for the ER entrance, he didn’t know of a viable solution at the time, but he immediately ruled out metal detectors. “The bottlenecking of employees and patients that occur with metal detectors simply is untenable in hospitals—not to mention the ER,” the Director of Public Safety says. “They also require more security staff to operate than what is feasible in healthcare.”

The impact on patient and visitor experience was also a key determinant. “It’s hard to create a welcoming and healing environment when your ER entrance looks like you’re going through airport security—an environment where patients and visitors must line up to walk through a metal detector before they can access the care they need or be with a loved one whose is experiencing a serious health-related event,” the Director of Public Safety concludes.

“

Word has gotten out in our community that you cannot come into our hospital and abuse our staff. You’re going to be held accountable. And if you elect to bring a concealed weapon into the ER, we will detect it and ask you to leave it in your car or our gun safe.”

– Director of Public Safety

14-Year Wait for a Solution Like Evolv Comes to an End

In February 2021, the Director of Public Safety went to a meeting and returned to find a brochure on his desk showcasing the Evolv Express system.

“I’ve been waiting 14 years for someone to invent a technology where you can just freely walk through the concealed weapons detector without needing to empty out your pockets and take everything out of your bags as part of the screening process,” the Director of Public Safety reveals. “I immediately called our system integrator and asked them to look into it for further detail.”

Shortly thereafter, the Director of Public Safety attended an Evolv event where he was able to see the Evolv Express system in action, meet with other Evolv healthcare customers, and ask them questions. “Several hospital security directors were on-site to test the Evolv Express system, and some of them were licensed to carry concealed firearms,” the Director of Public Safety relates. “We spent nearly an hour walking through the Evolv Express system, and it consistently alerted on those carrying concealed weapons but not those who weren’t carrying one. This process gave me assurance that the Evolv Express technology was the right one to ensure the safety of our hospital.”

The Director of Public Safety came back and spoke to the director of nursing about his experience, and they scheduled a visit at an Evolv customer so the director of nursing also could see the system in action. While the director of nursing was sold on the viability and need for the Evolv Express system, it would be a few more months before they could secure approval for the purchase, which was reinforced by a series of violent events both inside and outside of the hospital. “About three months before we got Evolv, we escorted a belligerent person out of our ER waiting room, and he got physical outside,” the Director of Public Safety describes. “He ran to his car and pulled up in front of the public safety door and started honking the horn—waiting on one of the officers to come out. Thankfully, none of us came out as he emptied a clip from his gun into the air.”

A second incident involving a handgun happened about a month later. “A patient in the ER pulled his gun on one of our officers and waved it at him in a threatening manner,” the Director of Public Safety relates. “The hospital determined that something needed to be done, and we received approval to acquire an Evolv Express single-lane system.”





A Unified Approach Leads to a Smooth Deployment

Evolv Express was configured and activated December 2021.

“It was truly a collaborative effort that included a personal touch by the Evolv teams who acted as if they were from one company,” the Director of Public Safety says. Calibration of the Express system took more work than anticipated due to electrical noise from the different systems in the ER. “But the Evolv team rolled up their sleeves and worked with us to resolve the problem,” the Director of Public Safety adds. “What has really impressed me is the artificial intelligence and machine learning that is built into the Evolv Cortex AI operating system. Within a couple of weeks, the system had learned its surroundings, and no further calibration has been necessary.”

Another part of the deployment process included training the security officers on using the Evolv Express system. “Everyone on the security team has been trained on how to operate the Evolv Express, and we are able to rotate officers throughout the day based on shifts and ER visitor and patient volume,” the Directory of Public Safety says. “The Evolv solutions engineer was very helpful in training our staff. The effectiveness of any technology solution is only as good as the people running it.

The Evolv Express system is really easy to use. The buttons on the bottom of the tablet screen are especially helpful in identifying a threat, helping us easily identify in the system if the detected item is a real threat or a false alarm. If it’s a threat, we just push the appropriate button to send an alarm to ACC so that cameras onboard the towers stream live video for greater situational awareness. Plus, unlike a walk-through metal detector that would have required three or four officers to manage it, we only need one for the Evolv Express system.”

The Director of Public Safety also likes the fact that the Evolv Express system is managed via wireless tablet. “Not only are unwanted wires and cords an eyesore, but they are a potential hazard for patients seeking care in an ER,” the Director of Public Safety observes. “The Evolv Express system further enhances the welcoming culture of the hospital while also ensuring that safety remains top of mind. As part of this process, we’re building an elevated desk for the officer managing the Express system. This further enhances the impression that we’re here to ensure the safety of everyone—patients, nurses, doctors, and other staff.”



In a little more than one month, we’ve detected seven handguns and nine knives attempting to enter our hospital. We actually caught our first handgun on the first day the system was live.”

- Director of Public Safety



Concealed Weapons Detection Out of the Gate

The initial results of Evolv Express have simply corroborated the hospital's decision to implement it.

"In a little more than one month, we've detected seven handguns and nine knives attempting to enter our hospital," the Director of Public Safety notes. "We actually caught our first handgun on the first day the system was live."

"The Evolv Express system doesn't look like a metal detector—which often heightens the dynamics of an already-stressful ER situation," the Director of Public Safety adds. "It makes the screening and detection process more casual and is much less likely to create friction like a metal detector. There are no pat-downs or physical searches of incoming patients with the Evolv Express system."

Currently, the hospital has just one officer managing the Evolv Express system in the ER at a time. "Unlike a metal detector where you don't know where the person may have the weapon concealed on their body, and the interaction can escalate quickly, the Evolv Express system tells us exactly where it was detected—their hip, waist, and shoulder," the Director of Public Safety continues. "Our officer asks the incoming patient to step over to the side and questions what they have on a specified area of the body. The officer then offers to store the weapon in our gun safe and gives them a key so they can retrieve it when they leave the hospital or for them to store it in their vehicle."

Nurses, doctors, and other staff are thrilled with the introduction of Evolv at the hospital. "In the past, we had instances where we would run a patient through a cat scan and only discover then that the patient had a weapon concealed on them," the Director of Public Safety comments. "There is a tremendous sense of relief among our nurses and staff in general, as they know that we can effectively prevent weapons from entering our hospital through the ER now. They no longer need to worry about going into a room with a patient and being confronted with a weapon."

“

There is a tremendous sense of relief among our nurses and staff in general, as they know that we can effectively prevent weapons from entering our hospital through the ER now. They no longer need to worry about going into a room with a patient and being confronted with a weapon.”

- Director of Public Safety

The Safety of Staff Will be Protected

The hospital is now working with other hospitals in its healthcare network to implement some of their best practices across other hospital emergency departments and perhaps even other entrances.

And when additional Evolv Express systems are deployed across the hospital's network, the Director of Public Safety looks forward to integrating data analysis into day-to-day decision making. "We're currently not using analytics from Evolv Insights, but we certainly will do so if we are running multiple Evolv Express systems," the Director of Public Safety explains. "Understanding patient flow, system detection performance, alarm statistics, and detection settings down to five-minute intervals will be critical for everything from staffing decisions to what sensitivity settings to use."

The Evolv Express system provides the Director of Public Safety the flexibility to integrate other security capabilities, such as Motorola Solutions Avigilon Control Center (ACC), which is currently deployed at the hospital as its video security management system. Cameras mounted on top of the Evolv Express towers can feed real-time video footage to the hospital's central security operations center. These can be integrated with Avigilon Control Center and Motorola Solutions' two-way radios for real-time text messages and/or text-to-voice alerts to all security staff.

"The integrations between the Evolv Express and security technologies from Motorola Solutions make us really excited about what's next for the hospital," the Director of Public Safety says.

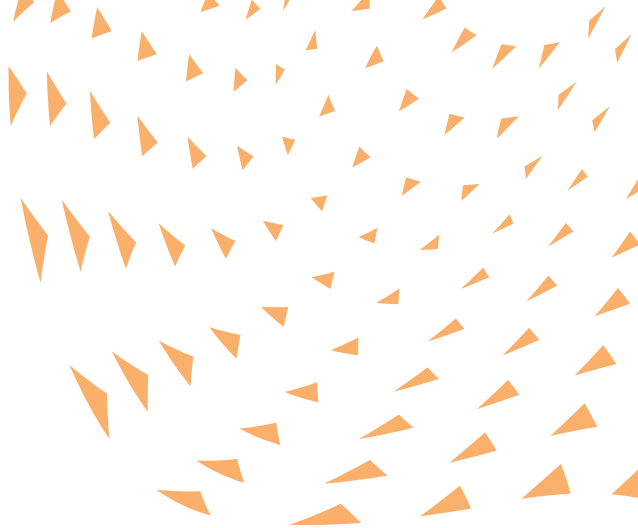
"Facial recognition and the ability to create watch lists and generate real-time alerts when different situations occur is also something we find compelling." Through the different technology integrations, the Director of Public Safety can take immediate action when those on the watch list are identified. Potential use cases include, terminated or suspended at-risk employees entering the facility, persons with orders of protection or restraining orders prohibiting them from the workplace of the petitioner, individuals with trespass orders, and persons who have committed acts of workplace violence in the past.

The Director of Public Safety concludes by noting, "Word has gotten out in our community that you cannot come into our hospital and abuse our staff. You're going to be held accountable. We will press charges if you do so. And if you elect to bring a concealed weapon into the ER, we will detect it and ask you to leave it in your vehicle or our gun safe. At the same time, we want to maintain a healing and caring environment. The Evolv Express system eliminates the anxiety a walk-through metal detector creates while enabling our ER doctors and nurses to focus on the healthcare needs of our patients."



It's hard to create a welcoming and healing environment when your ER entrance looks like you're going through airport security—an environment where patients and visitors must line up to walk through a metal detector before they can access the care they need or be with a loved one whose is experiencing a serious health-related event."

— Director of Public Safety



Contact us to learn more about how to protect
your patients, staff, and facilities.

info@evolvtechnology.com **+1 781.374.8100**



+1 781-374-8100 | info@evolvtechnology.com
©Copyright 2022 Evolv Technologies, Inc. All Rights Reserved.