

Case study

Southern Ohio Medical Center

Southern Ohio Medical Center Enables Better Patient Care in Ohio by Creating by Prescribing Non-invasive Security Screening with Evolv

Southern Ohio Medical Center

FOUNDED: 1954

EMPLOYEES: 3,000 (full- and part-time staff)

PHYSICIANS AND SPECIALISTS: 250+

SECURITY TEAM: 25+

BEDS: 216

BEDS: Portsmouth, Ohio
WEBSITE: www.somc.org

Solution Snapshot

Goals

- Help staff in Emergency Department feel safe when delivering care
- Extend security screening to the main hospital entrance and during after-hours for everyone—patients, visitors, and staff
- Ensure security screening is non-intrusive and does not slow the speed of patient ingress and care
- · Minimize friction of secondary checks by pinpointing the location of threats
- Select a vendor with long-term market commitment
- Identify a technology that will differentiate between gurneys, wheelchairs, and other medical equipment and actual threats
- Enable security staff to focus on interactions with incoming patients, visitors, and staff rather than the technology

Solution

People

- Evolv worked with the Security Operations team and Access Control to schedule Express system deliveries and configurations
- Evolv team provided same-day deployment and training support
- Evolv Solutions Engineer assessed preliminary deployment configuration and recommended optimization adjustments

Process

- Online training through Evolv Academy made available to Security Operations staff before Express delivery
- Trained principal stakeholders on using Evolv Insights® analytics

Technology

- 2 Evolv Express[®] Single-lane Systems
- Evolv Insights

Outcomes



Identified weapons on two individuals within the first hour of deployment



Generated very positive feedback from staff, patients, and visitors



Screened everyone entering hospital 24/7—at main entrance and ED



Created inviting, non-intrusive screening experience for rapid patient ingress



Trained security staff to differentiate between weapons and wheelchairs, gurneys, cellphones, and car keys



Achieved seamless deployment of Express systems at ED and the main hospital entrance



Used Insights analytics to demonstrate security posture to executive staff and board



Antiquated Walkthrough Metal Detectors Ruled Out Last Second

Four or five years ago, SOMC considered proceeding with walkthrough metal detectors.

However, they ultimately concluded they weren't a fit for their environment. "We were very close to rolling out an implementation," recalls David Hall, SOMC's Manager of Security Operations. "But the entire process was very invasive. Everyone who goes through a metal detector must remove everything from their pockets and go through it multiple times. The high volume of nuisance alarms was something we didn't want to deal with."

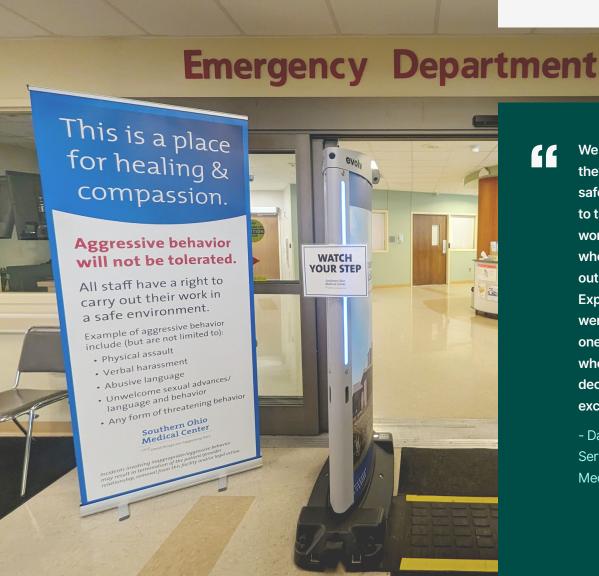
A Rise in Gun Violence Prompts Hospital Executive Staff to Take Action

Southern Ohio Medical Center (SOMC), located in Portsmouth Ohio, only screened random patients and family members entering the Emergency Department (ED). No security screening was used for the main entrance to the hospital and, for afterhours entry, no screening took place at all. Plus, when screening occurred in the ED, it was manual and only involved hand-held metal detectors.

In 2022, the hospital's medical director and executive team challenged the security services team to identify ways to harden the facility against mass shootings and other potential acts of violence.



Read the Gun Violence Awareness Survey



We had a lot of ED staff telling us they were very concerned about safety. They wanted to be able to take care of patients and not worry about their safety. Indeed, when the ED nursing staff found out that we were putting the Express systems in place, they were very excited. I remember one of the nurses in the meeting where we announced the decision pumping her fist and exclaiming, 'Yes!'"

Evolv as a Way to Reduce Violence in **Healthcare Workplaces**

Violence in the healthcare workplace and the risk this created for SOMC healthcare providers and staff was the driver behind the mandate from SOMC's executive team and medical director.

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Reaching the decision to implement Express systems involved a thorough search. "We had a couple of critical requirements," Hall says. First, SOMC wanted a screening solution that was not evasive and did not impede access to medical triage. "Security screening could not delay patient care," Hall explains. "This was a non-negotiable." Second, SOMC needed something that would scale, enabling the hospital to screen everyone who entered its facility—patients, visitors, and staff." While screening at the ED entrance was a priority, getting a solution in place at the main entrance was also important.

After hearing about Evolv from Peter Keller, their Director of Materials Management, and having

references to gauge their experience with the Express. "I not only reached out to the references they gave me, but also spoke to some customers they didn't provide me," Hall says. "I wanted an objective assessment—the good and the bad. The feedback was fantastic. Every reference was very positive about both the technology and the relationship they have with Evolv."

Another selling factor to Hall was his daughter. "My daughter, who lives in Cincinnati, visited one of the local museums," he notes. "When I found out from the Evolv team that it has an Evolv Express system, I gave her a call to ask her about the experience. She initially didn't know what I was talking about. Her response was, 'What weapons detection system?' I sent her photos of the Evolv and it finally rang a bell, telling me, 'Oh, that's what it was."

initial demos with Evolv, Hall reached out to multiple



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Evolv and EMTALA

The Emergency Medical Treatment and Labor Act (EMTALA), passed in 1986, serves as a federal directive emphasizing unrestricted access to emergency healthcare. This act was a result of Congressional intervention, and its primary aim is to guarantee that every individual reaching an emergency department is provided with a pertinent medical examination and essential stabilizing care, regardless of their ability to pay, and without delay. At its core, it mandates that hospitals must offer essential medical services to those entering the emergency room. This includes immediate health assessments and stabilization of any emergent health issues.

Hospitals instituted security measures, such as traditional walkthrough and handheld metal detectors, to ensure safety from potential threats. Yet, these mechanisms can inadvertently create barriers to immediate medical care. Delays caused by the detection of everyday metal items people carry can be detrimental, especially for those with lifethreatening conditions.

The Evolv Express provides an EMTALA-compliant alternative for weapons detection in healthcare facilities. It uses Al-powered sensor technology to screen for concealed firearms and other threats at hospital entrances. In doing so, the Express system allows individuals to pass through unimpeded at normal walking pace. This speeds emergency access while providing continuous threat detection.



Getting Approval from the Hospital Board

After completing his testing and vetting, Hall took his findings before the executive team.

The executive team had a lot of good questions for Hall. He explains, "They wanted details on Evolv, its number of employees, if the company was positioning itself to be sold or had long-term plans, what other hospitals use Evolv and how. At the end of the presentation, our executive team felt comfortable with what they learned and granted us approval to proceed with the Evolv purchase."

Preparing for a Successful Rollout of Evolv

To prepare for the rollout of the Express systems, SOMC communicated extensively through emails and its employee newsletter.

"We started months in advance talking to different directors and leaders of our respective departments," he says. "For communications with the broader staff, we rolled out what is called an S-bar email, telling the staff what to expect. Hall and his team also created signage to display in front of each Express lane. "We also branded both of our Express with SOMC logos," Hall says. "This branding makes them more inviting and helps them blend into our facility."

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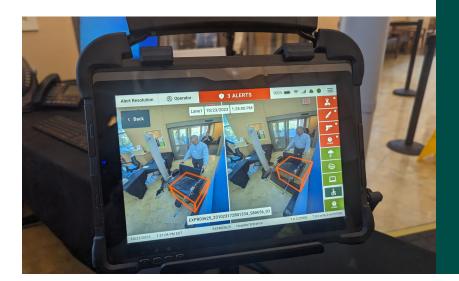
Impressive Results Starting on Day One

The Express systems have delivered impressive results from day one.

"We had two situations on the first day of deployment when we were setting up the system," Hall says. "In one instance, we had a man pushing his wife [in a wheelchair] through the lane and an alarm went off. We know Evolv alerts on wheelchairs but a second alert box was on him in a completely different area than the wheelchair itself. We asked him if he had a gun on his person and he told us, 'I'll be right back.' He came back and the system didn't go off."

A few hours later, while the Evolv and SOMC teams were still setting up the system, an older lady walked through an Express lane and the alarm went off and the red box on the Express tablet showed the threat was in her purse. "She went and sat down and I asked the security officer if he wanted to go speak with her," Hall remembers. "They told me that they wanted me to do so, as they wanted to see how I would approach the situation. I asked her, 'Ma'am, do you have a weapon in your purse?' And she told me, 'No, I don't have anything in it.' She opened one side and then the other side. When she opened the middle of the purse, it revealed a long hunting knife."

These two incidents, both within hours of deployment, confirmed for the SOMC Security Operations team the effectiveness of the Express system. Hall points out that the Express system also acts as a deterrent, in addition to delivering proactive threat detection. "Either the person takes the weapon back to their car or, for those who do not want to do so, we have lockers in the ED as well as by the front door where the weapon can be stored and given back to the person upon their departure," Hall explains.





[Security staff] also like the fact that they can engage with patients and visitors as they enter the ED or the main hospital entrance. You can engage with people and talk to them with Evolv."



Response from SOMC Security Staff

SOMC security operations staff are very enthusiastic about the Evolv deployment.

"We trained all of them on the Express system and every new member of the staff must do so when they go through initial training and onboarding," Hall says. "They also like the fact that they can engage with patients and visitors as they enter the ED or the main hospital entrance through the Express. And when an alarm does go off, you know exactly where the potential threat is located on the person's body or bag. Rather than conducting a full body and bag search, the security officer knows exactly where the potential threat is located and can ask the person to pull up their pant leg to reveal their ankle or open up the purse or bag."

"SOMC sometimes see a lot of homeless people and rehab patients," Hall says. "We've had a couple situations where we've uncovered multiple weapons on one person. For example, we had one homeless person who had six knives in a plastic bag. Knowing exactly where the threat is located enables our staff to deescalate the situations. It makes security screening non-intrusive and seamless. Those who do set off an alarm are always fascinated to see the technology and the red box on the Express tablet really impresses them. The 'wow factor' makes the technology especially cool."

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Response from Other SOMC Staff

"The nursing staff was concerned about potential delays in getting into the hospital," Hall says.

"After they went through the Express lanes a couple times, this concern subsided. Many of them carry a lot of items in their backpacks when they come to work. They really like the fact that it shows exactly where the suspected threat is located. We had a large healthcare provider from the area here on two occasions the last couple weeks. While they were walking down the hall, our emergency department nursing educator walked past and I asked her to give them her feedback on Evolv. Her response was, 'Absolutely, all of us feel safer with the Express systems in place."

The staff at the front door registration watched Hall's staff setting up and testing the Express systems on the first day of deployment. Hall says, "They came up and told me, 'Thank you for putting these into place.' The response from providers has been very positive as well. They feel very positive about the proactive techniques and steps to protect all our staff and patients. Everyone who comes through our doors, at any time of the day or night, must pass through security screening."



Phase 1: Implementation at the Emergency Department

The deployment involved two Evolv Express® single-lane systems.

Hall and his team decided to go live with one at the ED first and follow this deployment at the main hospital entrance once they were comfortable with its operations in the ED. The Evolv Systems Engineer and account manager arrived the day before the deployment in October 2022. "We thought that we had identified the right location for the Express system in the ED, directly inside the lobby entrance," Hall recalls. "However, the Evolv team noted that they would block part of the view of our officers and recommended that we place them directly outside. We ran a couple tests, and their recommendation was spot on."

The security operations team went through online training via the Evolv Academy before the arrival of the Express systems. Then, on the day of rollout, the Evolv staff also trained them on setup and operational aspects of the Express systems. "They are very easy to use," Hall notes. "Unlike walkthrough metal detectors where staff experience fatigue and they require technical training, the Express systems are intuitive and fatigue does not set in."

Phase 2: Implementation at the Main Hospital Entrance

For deployment at the hospital's main entrance, one Express tablet is used at the Express lane, while the second one is located at the registration desk that is across the hallway from security screening.

"This enables the registration desk personnel to see what is happening in the screening area," Hall explains. For implementation assistance, SOMC's security provider, Access Control, set up a second desk stand for the Express tablet. "They've supplemented the Evolv team and are here three or four times a week," Hall says.



The Express System Leaves Employees "Tickled"

During normal operating hours, SOMC manages each Express system with one security officer.

The only exception is during shift changes in the morning and in the evening when an additional security member is added to the main hospital entrance. Every security operations staff member is trained on flow control and threat resolution and the security staff serve in both functions as well. In the future, SOMC plans to begin training security officers directly from their Express tablets—a new feature that was added by Evolv with Express 7.0.

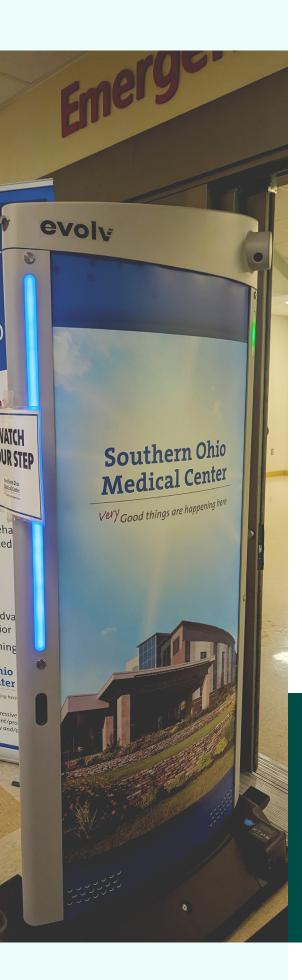
One of the aspects of the Express that Hall appreciates is the cloud-based software. "Our IT team was 'tickled to death' to discover they do not need to worry about testing the systems constantly or applying software patches," Hall reports. "The systems are constantly learning, not just from our data but from data of all Evolv customers," Hall continues. "An object that was made into a weapon and detected by an Express system out in California becomes part of the threat database used by our Express systems. We all learn from and benefit from each other"

Handling Laptops Made Easy

With many staff bringing laptops to work, SOMC needed a way to prevent them from setting off alarms.

Here, SOMC was able to learn from Evolv customers in the education space, who they were put in touch with by their Evolv account manager. "Most students in schools have Chromebooks," Hall says. "We were able to take lessons from those customers to address the laptop issue with our staff. In addition to communicating the recommendation in our employee newsletter, we also created signage displayed in front of the Express system at the main entrance instructing those with laptops to remove them from their bags and to hold them in front of themselves when they walk through the Express lane."





Analytics Leveraged from Day One

SOMC began to leverage Evolv Insights® analytics from the first day of deployment.

"With Insights, we are able to see how many people are screened down to five-minute intervals, what weapons were found and their location on the person," Hall notes. "We can also generate a list of the items the team tagged that set off nuisance alarms." Hall also reviews the Insights analytics as part of his regular presentations to the SOMC board of directors.

Joint Commission Conference Highlights Success with Evolv

SOMC is very active in the Joint Commission Agency, which regulates hospitals across the U.S.

When the agency heard about the extensive security training program and the proactive security measures being taken at SOMC, Hall was asked to present at their 2022 Joint Commission resources conference in Columbus, Ohio. "I was able share with them during our workplace violence session as what we are doing to address our Evolv deployment—our configuration, operational procedures and policies, and results," he says. "There was a lot of feedback from the member hospitals. Violence in healthcare is a top concern, and hospitals are looking at ways to mitigate those risks. Our success with Evolv to reduce these risks made an impression on other hospitals present."

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Evolv: A Partner That Listens

SOMC appreciates the strategic relationship it has formed with the Evolv team and how Evolv listens to their security needs and ideas.

"When the first Express was deployed, an outdoor mat was used," Hall recalls. "While it was easy to pass over, it caused a few problems for some of our patients with walkers and crutches. When the second Express system arrived, it came with a flatter mat and to my delight, a new mat for our first system."

SOMC executive staff and the board of directors have been very impressed with what they've observed over the past year. "I share the analytics from Insights when I meet with them," Hall notes. "They're quite pleased with the results."

The ability to integrate the Express systems into SOMC's broader set of security investments is also something Hall appreciates. "Security is a multilayered approach," he says. "You don't simply select a system, drop it, and walk away. While we haven't integrated the Express systems with our security cameras yet, we wanted this option in the future."



Grandmother Knows Best

After decades of experience, Hall knows that patient care starts at the door.

Staff, patients and their families feeling safe when they enter the hospital can be a determining factor in their ability to comfortably give and receive care. First-day jitters with a new security system are normal, but those were quickly replaced by validation in the decision when weapons were found within hours of deployment, and when visitors shared feedback right on arrival.

On that very first day of deployment, Hall remembers a grandmother, who had her granddaughter in the ED, called him out by name and told him she wanted to speak with him. "She told me, 'David, it is very sad you need to put these systems in, but thank you for doing so because I feel so much safer—for both me and my grandchild.' This accentuated that we were doing the right thing, and the feedback has continued over the past year—both from staff and patients."

