

Saving Lives with Data: EMS Harnesses VITLAccess for Exceptional Emergency Care in Vermont

Seamless access to patient records and medication data improves outcomes

Emergency Medical Services (EMS) agencies stand as a cornerstone of Vermont communities, encompassing 167 ambulance and first responder agencies supported by approximately 3,000 licensed EMS practitioners. From treating minor medical concerns to handling critical situations like cardiac arrests and severe trauma from accidents, the breadth of EMS services is extensive and important. For many, their essential role in their communities is being supported through the accessibility and availability of health data from VITL.

Health data elevates emergency response care

Dedicated to delivering unparalleled standards of emergency and proactive preventive care, Vermont's EMS agencies have embraced using new technology to support their response work. This includes using VITLAccess, a secure web-based clinical portal that gives health care providers access to patient data shared by participating health care organizations across Vermont. Through VITLAccess, EMS practitioners obtain crucial patient insights both during events and after, enhancing their ability to provide effective and informed medical assistance. Currently 46 EMS agencies in Vermont use VITLAccess.

Timely access to this data is particularly critical in an emergency. For example, if a patient is unable to provide their health information, EMS practitioners can swiftly retrieve important details in the ambulance within seconds through VITLAccess, such as current medications or relevant medical conditions that could impact care.

Real-time data access informs effective emergency treatment

Real-time access to patient data during interactions holds immense value for EMS agencies, not only in determining the required care, but also in assessing the necessity of transport to the hospital and if specialized services are required. This capability has the potential to avert costly hospital stays and unnecessary medical tests.

An EMS leader in Vermont shared an incident in which their team was called in response to an elderly person who was acting confused. The individual was not able to articulate what day of the week it was or why they were at that specific location. The EMS leader who responded to the scene shared, "When somebody has confusion like this, there's a huge list of possibilities — maybe their blood sugar is low, maybe they are having a stroke, could be post seizure or could be dementia."

The EMS team took the person into the ambulance where they began checking their vitals while also logging in to VITL, where they were able to quickly determine from their shared records that the patient had dementia. The family was contacted, and the patient was returned home safely, with the insights from VITL preventing a costly transport to the hospital where the patient may have had a full stroke workup from the stroke team with a CAT scan and the radiation involved. "Thousands of dollars of testing was avoided because we were able to quickly figure out the problem was not acute, but very much a chronic one," says the EMS leader. The experience was better for the individual too, who spent the rest of the day at home with family instead of in an ambulance and in an emergency department.

CASE STUDY

Timely data access also helps EMS find the right solution at the right time. In another case in Vermont, an EMS crew was called for an agitated person yelling in a gas station parking lot. The responding team plugged the person's name and date of birth into VITLAccess where they were able to see that they had schizophrenia and had been discharged from the emergency department just hours before. With a clear diagnosis, the EMS team was able to deescalate the situation and contribute to a plan to safely transport the patient back to the hospital they preferred for continuing treatment.

Clarity into patient outcomes is vital feedback for EMS excellence

Patient outcomes are also an important part of the feedback loop for EMS staff and are easily accessible through VITL. Previously, it was challenging and time-consuming to get this feedback directly from hospitals. "You can imagine how hard it is from a learning perspective, or a quality assurance perspective, not knowing what the patient outcome was, and was the treatment I provided the correct treatment; that was something that frustrated us for years," explains Michael Chiarella, Director of Operations at Richmond Rescue. VITL provides EMS direct access to the information they need to support learning and improvement. "VITL is a much better way to get us direct access to the information," says Chiarella.

VITLAccess supports EMS operations

In addition to using VITLAccess to support care and quality improvement, many EMS agencies have found that the available data improves the efficiency of administrative and billing operations. Agencies are often funded by tight town budgets and staffed largely by volunteers, so any operational efficiency helps. "I find VITLAccess helpful on a daily basis," says Kathleen Ives, the Senior Billing Specialist for the Bennington Rescue Squad. "There are many times that the hospital doesn't have patient

insurance or demographic information available to give our crews when they bring a patient to the hospital. Rather than wait on the patient to return a form or a phone call, or instead of billing the patient directly, we're able to get that information from VITLAccess. There are also times when a hospital transport doesn't seem to meet medical necessity guidelines for reimbursement. VITLAccess has been very useful for me to review those ER notes to determine if there was medical necessity or not," explains Ives.

Data is a powerful tool, especially for first responders who must make quick decisions under stressful conditions. It also provides a critical feedback loop for EMS, helping identify which treatments and actions are the most effective.

VITL isn't just about accessing data; it's about making critical decisions easier and ensuring the best possible outcomes for health care providers and patients.

**EMS agencies
accessed health
records in VITLAccess
over 30,000 times in
2023.**

CASE STUDY

Richmond Rescue: A VITL partner

Founded in 1971, Richmond Rescue's first ambulance was a converted Cadillac hearse. Today, the organization has evolved into a cornerstone of emergency care across seven towns in Vermont. The team, which include four dedicated full-time staff members and approximately 35 active volunteers, responds to over 1,200 calls annually, transporting more than 700 patients to hospitals each year. They are one of the Vermont EMS agencies that rely on VITLAccess for data to support care on the scene of emergencies and for quality improvement work.

CHALLENGES FOR RICHMOND RESCUE

- Little access to data about a patient in the field. Often rely on patient's ability to provide their medical history, which can be difficult in complex cases or where a patient cannot communicate effectively
- Lack of access to follow-up information available on patients after they were taken to the hospital to determine if treatment was effective, leading to time spent tracking down patient outcomes following care (i.e., phone calls and emails back and forth with the hospital) with 25% success rate

SOLUTION

- Engaging VITLAccess, VITL's secure, web-based clinical portal, to enable Richmond Rescue's authorized users to view and access relevant patient data

RESULTS

- Immediate insight into the medical history of patients, including accurate patient data (i.e., medications, allergies, etc.) for patients unable to communicate effectively at the time of emergency care
- Improved ability to perform quality assurance activities, to know that patients received the appropriate treatment at point of care and inform future practices

VITLACCESS BY THE NUMBERS

- Richmond Rescue staff reviews critical medical records for Vermonters through VITL's network more than **200** times a month, which is six to seven times a day on average

“When we started using VITL, I’m not sure we knew what problem we were trying to solve. We just knew that this health data utility existed in Vermont. It sounded like something that was interesting, and that would help us out. But I don’t think we knew the depth of data that was available to us, which was a great surprise.” **Michael Chiarella, Director of Operations, Richmond Rescue**

ABOUT VITL : VITL is a nonprofit organization that supports the advancement of health care delivery and reform in Vermont through the aggregation and exchange of health information. Founded in 2005, VITL is the legislatively designated operator of the Vermont Health Information Exchange. VITL's vision is to be a leader in collaboratively delivering actionable data that leads to better health. Learn more about VITL's work at www.vitl.net.