

CASE STUDY

Using Data for COMMUNITY RISK REDUCTION



Their goal

Community risk reduction is a priority at Tempe Fire Medical Rescue. Data is key to ensure their crews are responding appropriately to support a successful Community Paramedicine (CP) program and better serve the 190,000 residents of Tempe, Arizona. They use their data to set new goals to quantify their daily activities, utilize information to help reduce non-emergent 911 calls and keep stakeholders up to date.

It's often thought that all Code 3's – or lights and siren responses – are always life-threatening situations, but this is not the case. For Tempe Fire, it's a matter of understanding who is activating 911 and why, and using that data to better serve the community.

Data Documentation & Extraction

Tempe Fire documents all incidents, including patient encounters, using ImageTrend Elite™ for EMS and Community Health to capture and cultivate the information important to them. Accurate and reliable documentation is the first part to establishing and maintaining a successful operation.



“The key is a seamless integration between our Community Paramedicine program and EMS,”

said Dana Cardenas, EMS Coordinator with Tempe Fire.

“We’re able to form a visual representation of a patient’s contact history by pulling our EMS and CP forms together to make sure we’re coordinating the right type of care.”

The second and most important part for Tempe Fire is the ability to extract all of the data that has been documented. Utilizing Elite’s built-in reporting and analysis tool, Report Writer, Tempe Fire is able to make data-driven decisions, monitor trends and identify patient populations that are more likely to have an increased demand for emergency services. Report Writer allows them to create custom reports and utilize a wide variety of pre-built reports, with the ability to easily share these among other Elite users. Having reporting tools, such as Report Writer, empowers Tempe Fire to support their efforts of turning data into useful information and gain insights on their patient populations.



Extract
Data



Custom & Pre-Built
Reports



Data
Analysis



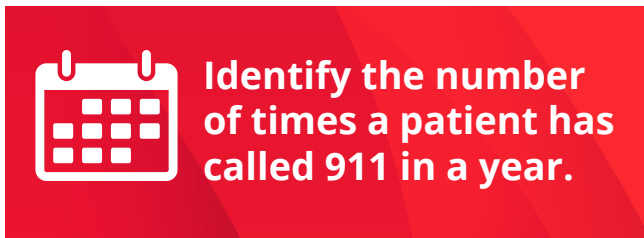
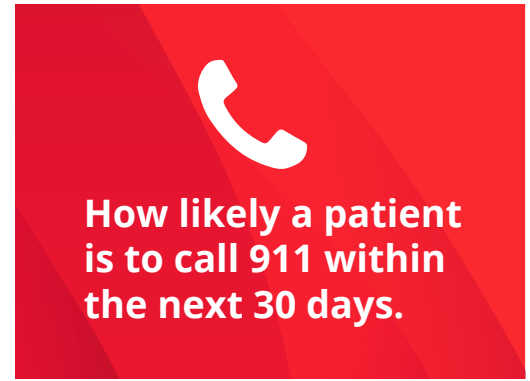
Gain
Insights

“ We have access to the data we need to lead effective initiatives for the betterment of our department and the community,” *Cardenas said.*

“While evaluating 911 utilization, we were able to identify that just a handful of patients accounted for the top 1% of non-emergent calls. By having this knowledge, we’re able to refer and enroll the right individuals in our program.”

Putting it together

Tempe Fire now has the data they need at their fingertips to support optimal workflows and focus on forward thinking. Using the information from Report Writer, they are able to feed data into their own predictive analysis model tools to realize key associations and make predictions, such as how likely a patient is to call 911 within the next 30 days.



The reports generated through Report Writer aid Tempe Fire in identifying key components including the number of times a patient has called 911 in a year, to help discover trends early and determine the likelihood of a patient calling again in the future.

“It might take firefighters 15 calls to notice a pattern. Our analysis establishes a trend in as few as three calls,” said Tempe Fire Data Analyst Daniel Petty.

“We discovered through our predictive analysis model that only two individual patients accounted for an entire percentage of our annual call volume in a response area with a population of 190,000 people.”

By the numbers, Tempe Fire has celebrated major successes in quantifying their call reductions for stakeholders. Their rolling six (6) month performance metric shows about a 49% reduction in non-emergent calls based off run forms that were completed. By focusing on the frequent utilizers of their emergency resources, Tempe Fire not only impacted their reduction in non-emergent call volume, but they also affected other performance measures including response time, insurance costs, crew availability and more.



“The ability of our EMS platform to work in sync with our Community Paramedicine program to create accurate patient profiles that are all backed by data have greatly benefited our program and community,” said Cardenas.

“It’s our continued goal to shape our program and work toward developing a standard curriculum for Community Paramedicine to lead more effective programs across the country.”

Developing this community awareness allows agencies and departments to do more with their data. The bottom line is that most agencies or departments are already documenting this type of data and that the ability to extract reports of your data makes this next level of analysis possible for your community.

ABOUT IMAGETREND ELITE™

ImageTrend Elite is a centralized, web-based system for EMS and Fire organizations, that offers data collection, analysis and reporting in one enterprise solution. It supports the identification of evolving problems or successes while simultaneously providing secure access of that information to authorized personnel from anywhere, at any time. The information can be used to set priorities, make plans and ultimately improve public safety.

ABOUT ELITE COMMUNITY HEALTH™

ImageTrend's mobile integrated healthcare / community paramedicine clients span all types of programs. ImageTrend Elite Community Health works as a standalone solution or connected with Elite to deliver patient history, timelines and KPI dashboards that allow you to focus on providing patient-centric care. Its flexibility allows for a wide variety of programs such as high utilizers, post-discharge follow-up, substance abuse, veterans, CHF, diabetes and more. Combined with optional ImageTrend Telehealth's video consultation capabilities, Elite Community Health is a complete solution for non-emergent, out-of-hospital care delivery

ABOUT IMAGETREND

ImageTrend, Inc. is dedicated to connecting life's most important data in the healthcare and emergency response community. ImageTrend delivers software solutions, data analytics and services for EMS, Fire, hospitals, community paramedicine (CP), critical care, and preparedness to enable fully integrated patient-centric healthcare and public safety. ImageTrend's commitment to innovation, its clients, and providing world-class implementation and support is unsurpassed. Based in Lakeville, Minnesota, ImageTrend combines business analysis, creative design and data driven architecture to offer scalable solutions and strategies for today and the future.

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