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UNIFYING PINELLAS COUNTY'S EMS & FIRE OPERATIONS TO SAVE LIVES WHEN IT MATTERS MOST

How an integrated system handled thousands of calls during a record-breaking hurricane season

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>
> - Robert Crandall, Application Analyst

THE OPPORTUNITY

Pinellas County, Florida, is home to 18 independent fire agencies, a private transport provider, and a population that relies on a seamless EMS & fire response system. Given the complexity of multiple agencies operating under one medical director, ensuring standardization and efficient patient data transfer was a top priority.

This need became even more urgent during the 2024 hurricane season, when agencies had to manage thousands of emergency calls under extreme conditions—making reliable, real-time data access a matter of life and death.

However, existing challenges threatened response efficiency, including:

- **Disconnected systems** requiring redundant data entry for license management and ePCR.
- **Slow software updates**, which previously took days to deploy across all devices.
- **Legacy systems** lacking real-time analytics and cloud-based reliability, making response times and decision-making less efficient.
- **Cumbersome quality assurance processes** for patient care reports, relying on manual data entry and storage.

"The biggest challenge was getting all of our agencies onto a single, standardized system," says Robert Crandall, Application Analyst, EMS/Fire Data at Pinellas County. "With multiple fire departments and a private transport agency operating under one umbrella, data continuity was critical."

Recognizing the need for a fully integrated, cloud-based platform to streamline emergency response, Pinellas County partnered with ImageTrend to deploy a suite of solutions designed to modernize its EMS and fire operations.

THE APPROACH

Pinellas County adopted the ImageTrend Platform to unify and optimize its EMS and fire response infrastructure. The implementation strategy involved breaking the deployment into structured phases, each led by a designated point person responsible for rollout, training, and ongoing support.

Weekly internal meetings ensured alignment across teams, while regular check-ins with ImageTrend implementation specialists facilitated a smooth transition.

KEY IMPLEMENTATIONS:

Products and Features	Impact
Elite EMS & Fire	Standardized ePCR & NFIRS documentation across 18 fire agencies and a private transport provider, ensuring seamless data sharing between agencies and hospitals. Implementation was phased to troubleshoot early challenges.
License Management	Automated credentialing and renewal for 2,000+ paramedics, EMTs, and fire personnel, significantly reducing administrative workload, allowing the county to redistribute credentialing responsibilities more efficiently.
Elite CQI	Implemented structured CQI workflows for EMS billing and fire incident reviews. Transport contractor categorized call types for quality assurance and billing accuracy; fire agencies used CQI for ongoing compliance.
Data Mart & Power BI	Developed a real-time data lake consolidating metrics from CAD, ePCR, and emergency systems. Power BI dashboards provided live insights on call volume, resource allocation, and performance, crucial during hurricanes.
Continuum Alerts	Replaced legacy CAD-driven alerting systems with automated, real-time notifications for field personnel, ensuring timely awareness of critical incidents during major emergencies.
Hospital Hub & Health Information Hub (HIH)	Transformed patient data transfer from manual paper-based reports to electronic sharing with hospitals, reducing lost documentation, improving continuity of care, and minimizing dispatcher workload.

> **"Hospital Hub has made a huge difference in how we transfer patient data. Before, we relied on printed reports that could get lost or damaged. Now, everything is transmitted directly to the hospitals, ensuring they receive accurate information," says Crandall.**

THE RESULTS

Since deploying ImageTrend solutions, Pinellas County has seen significant operational improvements, particularly in response efficiency and data-driven decision-making.

FASTER RESPONSE TIMES:

Standardized workflows and real-time updates across all agencies have improved coordination, allowing teams to operate with greater precision.

STREAMLINED LICENSING & CREDENTIALING:

Automated processes in License Management drastically reduced administrative workload, allowing the county to adjust the work assignments associated with credentialing. The new system reduced licensing-related work from a full-time role to just a few hours per week for two personnel.

IMPROVED PATIENT CARE & DATA ACCURACY:

Hospital Hub reduced documentation errors by eliminating manual, paper-based processes, ensuring hospitals received **100% electronic patient data in real time**. Previously, hospitals frequently called dispatchers for missing reports—this need was virtually eliminated.

EFFICIENCY GAINS IN EPCR COMPLETION:

After launching Elite EMS, initial time-on-task increased as crews adjusted to the system but returned to pre-implementation levels within 2-3 months, demonstrating the platform's usability and efficiency.

Uninterrupted Emergency Response During a Life-Threatening Hurricane

During the 2024 hurricane season, when Pinellas County faced record-breaking emergency call volumes, ImageTrend's cloud-based system became a critical lifeline. First responders relied on **uninterrupted data transfers to coordinate thousands of life-saving responses** without delays or system failures. "The biggest success of the hurricane response was that everything just worked," says Crandall. "The CAD integration never dropped a single call, even as our 911 center handled an unprecedented surge in emergencies."

WHAT'S NEXT?

Pinellas County is continuing to refine its data-driven approach by expanding the use of HIH to integrate hospital outcome data. This initiative will allow EMS teams to assess the effectiveness of their interventions and improve patient care based on real-world outcomes.

Additionally, the county is working toward incorporating Visual Pre Plans by FlowMSP, part of ImageTrend, into its fire operations.

> **"Once FlowMSP is fully implemented and integrated, we see a great opportunity to streamline pre-incident planning and significantly enhance fireground operations," says Crandall.**

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