25 Years Of Improving Performance & Harnessing The Power Of Your Data

FirstWatch helps public safety and healthcare professionals serve their communities through the use of technology and the science of quality improvement. Drawing on deep experience in emergency services, the FirstWatch team develops software and personalized solutions to help organizations continuously improve at what they do. Founded in 1998, and based in Carlsbad, Calif., FirstWatch has partnered with more than 500 communities across North America to improve outcomes, efficiency, safety, and operations.
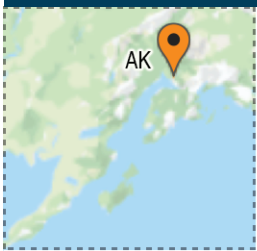
FirstWatch.net

F1RST WATCH®

Helping the Helpers

EMS 10 — INNOVATORS IN EMS

2014 EMSWORLD INNOVATION AWARDS

JEMS HOT PRODUCT EMS TODAY 2015 — Mobile App

AMBY awards 2016 — Honoring Excellence in EMS — Best Use of Technology — TRINITY EMERGENCY MEDICAL SERVICE / FIRST WATCH — OPIOID EPIDEMIC PROJECT

JEMS HOT PRODUCT EMS TODAY 2017 — IDV

JEMS HOT PRODUCTS EMS TODAY 2020 — ResilientFirst

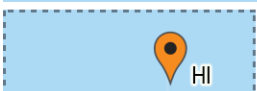Todd Stout

Mike Taigman

Check out our COVID-19 handout to see how we are helping

F1RST WATCH®

Helping the Helpers

through COVID-19
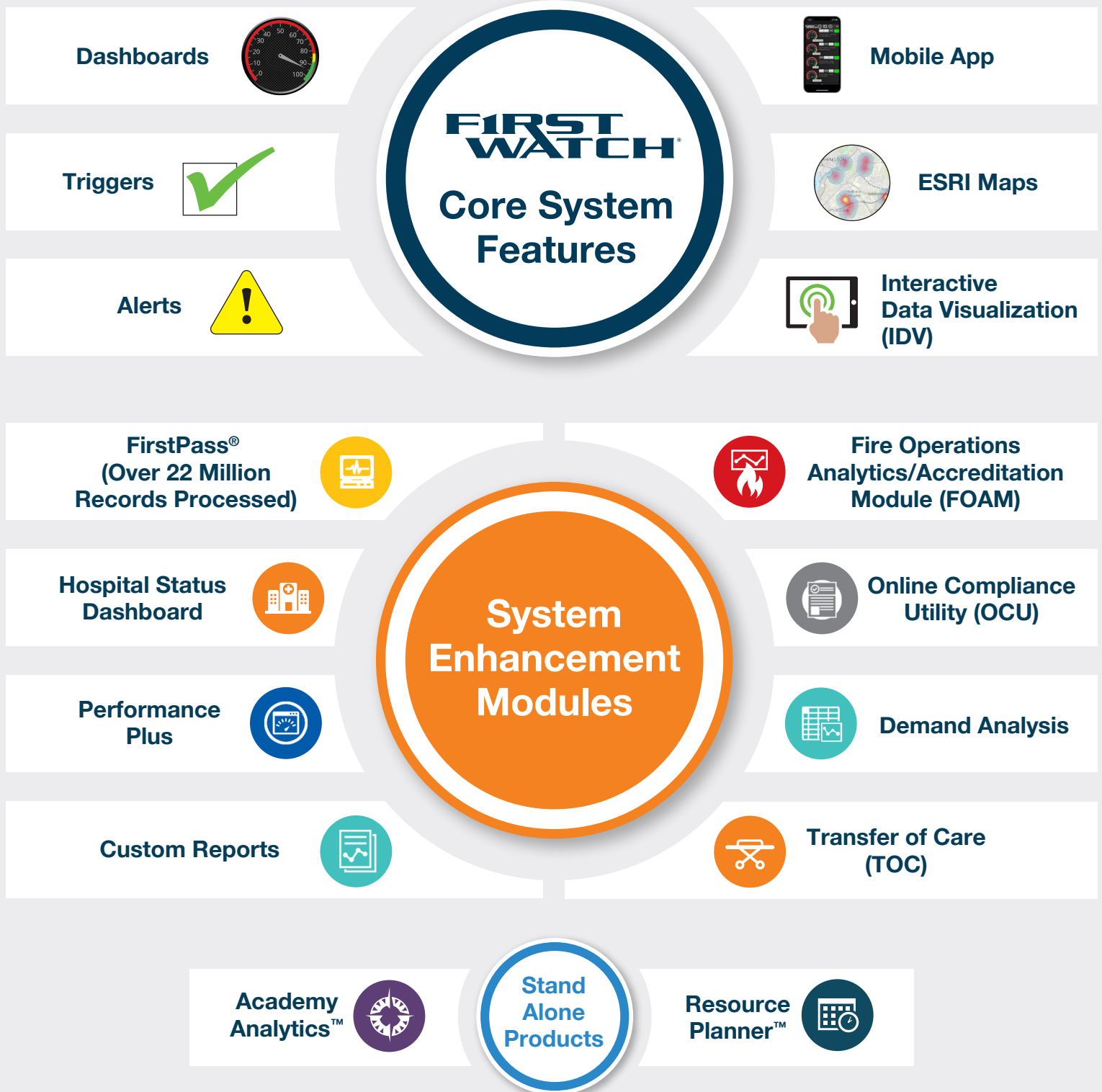
FirstWatch is helping more than 160 communities across the US and Canada with real-time COVID-19 related data analysis and automated alerting.

AK

Canada

United States

Mexico

Gulf of Mexico

HI

9 1   9 2   9 4   9 3   9 5   9 6

Core System Features

- Dashboards
- Triggers
- Alerts
- Mobile App
- ESRI Maps
- Interactive Data Visualization (IDV)

System Enhancement Modules

- FirstPass® (Over 22 Million Records Processed)
- Hospital Status Dashboard
- Performance Plus
- Custom Reports
- Fire Operations Analytics/Accreditation Module (FOAM)
- Online Compliance Utility (OCU)
- Demand Analysis
- Transfer of Care (TOC)

Stand Alone Products

- Academy Analytics™
- Resource Planner™

About FirstWatch

FirstWatch helps public safety and healthcare professionals serve their communities through the use of technology and the science of quality improvement. Drawing on deep experience in emergency services, the FirstWatch team develops software and personalized solutions for over 500 communities across North America. **FirstWatch.net**

FIRST WATCH®
Helping the Helpers

3

Real-Time Tracking of Opiates Overdoses
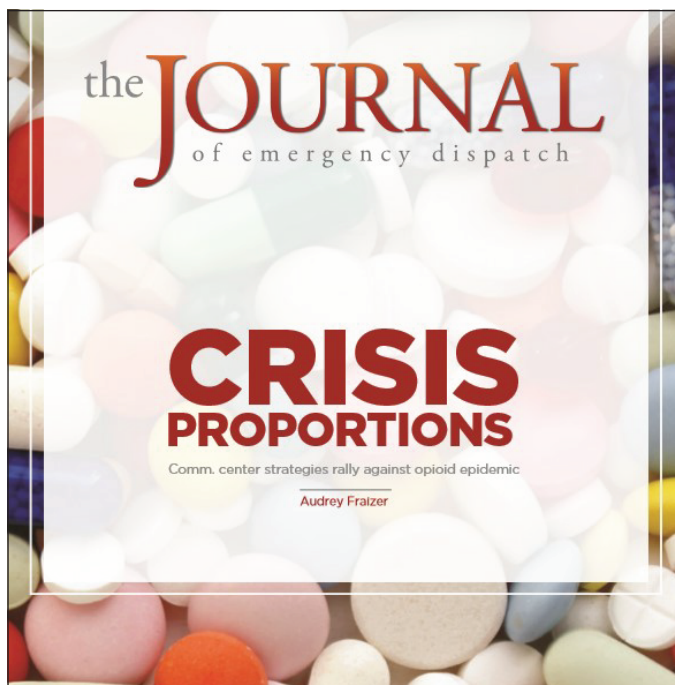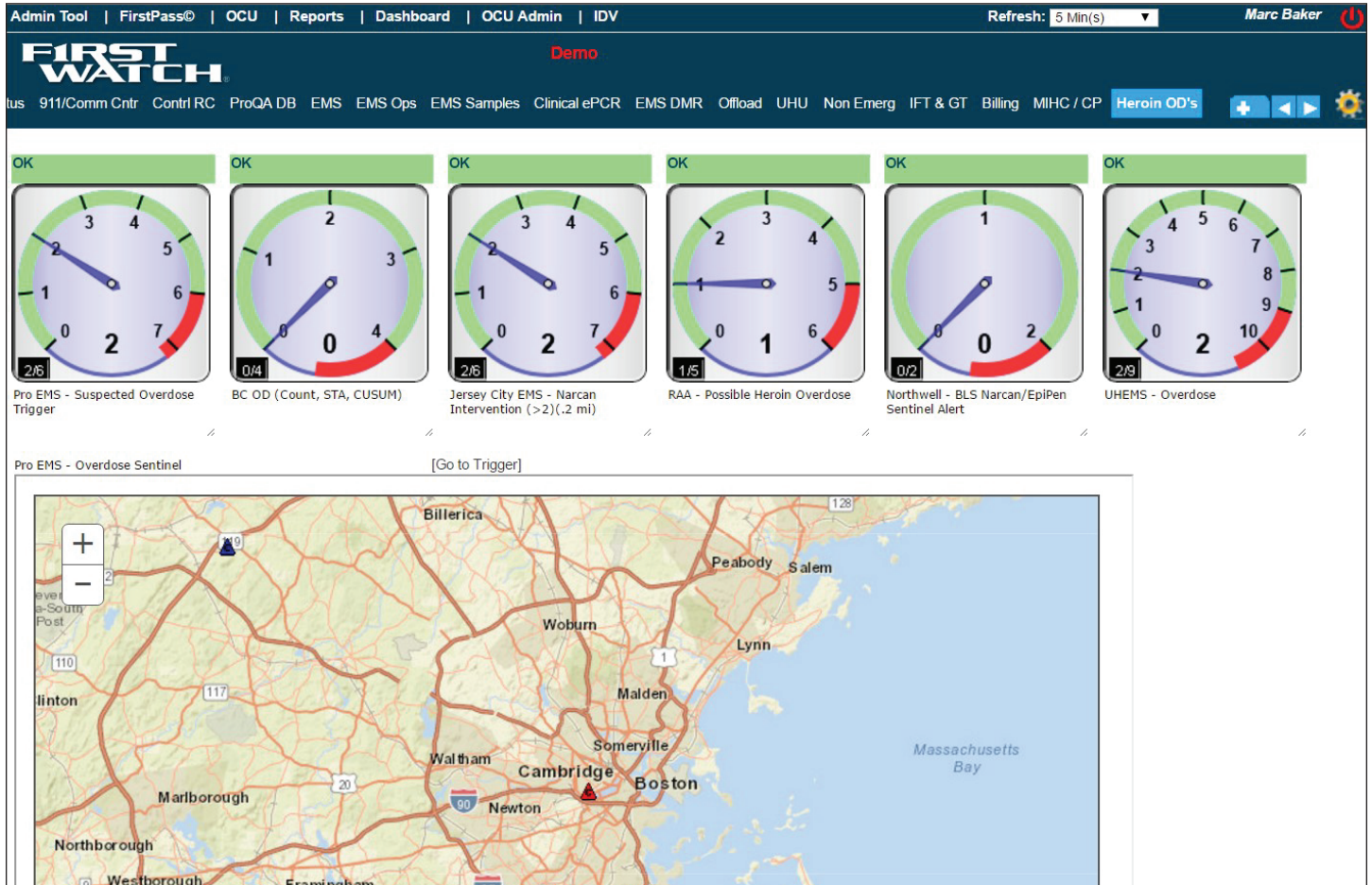
IAED March/April 2017 Issue

Crisis Proportions: Comm center strategies rally against opioid epidemic

Surveillance and multi-agency cooperation using and sharing CAD and electronic patient care reporting (ePCR) data is a strategy with the persistence to escalate the war against opioid abuse.

This article features FirstWatch customers like RAA, VA and ProEMS, MA who both use FirstWatch to track potential opioid-related calls by searching ePCRs for terms such as "Narcan" or "heroin". Read the full article here:
https://iaedjournal.org/crisis-proportions/

For 25 years FirstWatch has provided real-time, automated situational awareness visualizations & alerts for our 9-1-1, Law, Fire, EMS, Public Health, and Homeland Security customer partners (across the US).

HELPING
MORE
HELPERS

Expand your FirstWatch data view by including other regional partners

We're Helping MORE Helpers than ever before! Our FirstWatch customer partners are ***strategically leveraging their investment in FirstWatch tools and technology*** by inviting other Public Safety agencies (dispatched via the same CAD, or using same ePCR, RMS, or ProQA data systems, or even completely disparate CADs, or different ePCR, RMS, or other data systems). Using FirstWatch, all teams can share data & benefit via automated, real-time situational awareness, data visualizations, and automated alerts across the entire operational area, region, or even State!
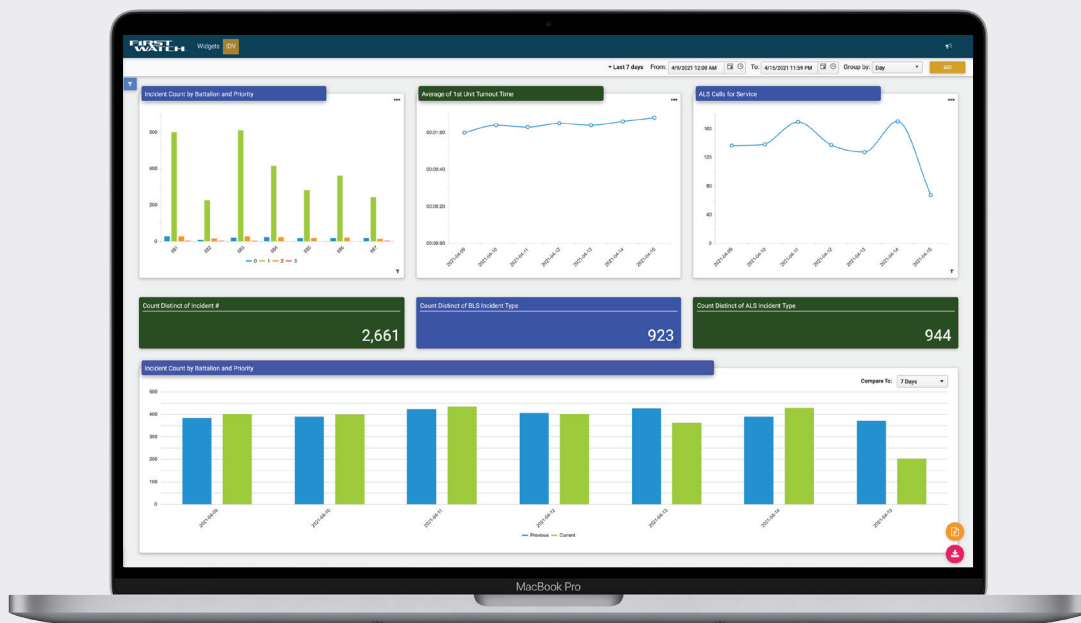
sales@firstwatch.net | firstwatch.net

FIRST WATCH®

Helping the Helpers

5

FIRST WATCH®
Core System Feature

IDV

What does IDV stand for?

IDV stands for Interactive Data Visualization and like the name suggests, its intended to enable users to create dashboard visualizations offering interactive drill-downs into their FirstWatch data.

What is IDV?

IDV is a module with a modernized look and feel designed to allow users to interact with the data that is populated from a FirstWatch trigger. Users can create and save an unlimited number of widgets or tabs to display data in a manner that is meaningful to them and their organization.

Once designed, IDV allows users to answer common questions about what may be going on in their system. IDV supports the ability for users to search or filter data and save custom filters for each user profile to be used at a later time.

IDV provides the ability to group multiple data elements and compare to previous day, month, or year. Interval breakdowns can include day of week, hour of day, by station, unit, shift, battalion or other options important to your organization.

Access to the data at your finger tips on screen or multiple export options are part of the core feature set. All widgets can be exported in various formats to add to your reports. The IDV Grid allows the end user to group by, hide or sort columns, reorder the data columns, apply filters just to the grid and if needed export to Excel.

How would it help my organization?

IDV helps organizations setup and see information at a glance in an easy-to-read visual display. IDV can be shared to other individuals within your organizations or entities that you report to. Because information can be exported out, many agencies use IDV to assist in reporting or providing information in an easy-to-understand manner for authorities, councils, etc.

What type of data does IDV look at?

The majority of clients using IDV are using CAD or ePCR data, but IDV can be setup against any data source you have flowing to a trigger in FirstWatch – CAD, ePCR, ProQA, RMS, or a combination of data sources.

❯ For more IDV FAQs, please visit: firstwatch.net/idv

Manatee County EMS Customer Spotlight

"We use IDV to communicate with our hospital partners daily. We provide them with data that showcases their Transfer of Care times, Nurse Signature Times for Transfer and Volume. This helps us have a continual pulse on their performance as it relates to getting our units turned around at their facilities.

We also use IDV to provide senior leadership within our organization a view of how our system is performing. Some of the most desired data is presented to them through IDV to quickly show trends in our teams performance."

Sean Dwyer
Assistant Chief, Special Operations
Manatee County EMS

Cypress Creek EMS Customer Spotlight

"FirstWatch IDV gives administrators the ability to view response data in a clear and concise report. We share this data with the various fire departments we provide emergency communications services saving my Communications Manager three days of work."

Wren Nealy Jr.
Chief Executive Officer
Cypress Creek EMS

HOT Trigger Examples

Frequent Patients / Hot Spots

PGFD - ePCRs - Frequent Patient Current Call Information
Calls displayed represent active or performed calls between the hours of 2/5/2017 10:46:10 PM and 2/6/2017 10:46:10 AM
Data and Report from the FirstWatch™ Internet Server

Geo Valid	CAD	Time Sent To Queue	Box #	First Name	Last Name	Count of Duplicates	To
✓		2/5/2017 11:44:22 PM		[Deidentified]	[Deidentified]	3	7
✓		2/5/2017 11:53:26 PM		[Deidentified]	[Deidentified]	11	7
✓		2/5/2017 11:53:26 PM		[Deidentified]	[Deidentified]	11	7
✓		2/5/2017 11:56:35 PM		[Deidentified]	[Deidentified]	1	4
✓		2/6/2017 12:01:44 AM		[Deidentified]	[Deidentified]	4	2
✓		2/6/2017 1:28:51 AM		[Deidentified]	[Deidentified]	3	0
✓		2/6/2017 1:59:52 AM		[Deidentified]	[Deidentified]	1	0
✓		2/6/2017 2:19:14 AM		[Deidentified]	[Deidentified]	14	21

PGFD - ePCRs - Frequent Patient - Google Chrome

🔒 Secure | https://sanbsubscriber.firstwatch.net/W

Prehospital Patient Care Report

Previous Patient Past Year Same DOB

INC_DT	Incident ID	Primary Impression	First Name	Las
01/18/2017 03:37:30	6936150	Altered Mental Status	DE-IDENTIFIED	DE
12/26/2016 14:0?:?9	6826400	Diabetic Symptoms (Hypoglycemia)	DE-IDENTIFIED	DE
12/?8/2016 0?:03:56	6794038	Diabetic Symptoms (Hypoglycemia)	DE-IDENTIFIED	DE
12/14/2016 09:55:35	6781013	Diabetic Symptoms (Hypoglycemia)	DE-IDENTIFIED	DE
12/07/2016 09:24:36	6754275	Diabetic Symptoms (Hypoglycemia)	DE-IDENTIFIED	DE
12/02/2016 10:36:07	6733310	Diabetic Symptoms (Hypoglycemia)	DE-IDENTIFIED	DE
11/08/2016 02:39:46	6646629	Diabetic Symptoms (Hypoglycemia)	DE-IDENTIFIED	DE
10/31/2016 14:06:33	6618639	Diabetic Symptoms (Hypoglycemia)	DE-IDENTIFIED	DE
10/09/2016 01:23:27	6538038	Diabetic Symptoms (Hypoglycemia)	DE-IDENTIFIED	DE
09/09/2016 10:37:44	6425159	Diabetic Symptoms (Hypoglycemia)	DE-IDENTIFIED	DE
08/24/2016 13:58:16	6365585	Altered Mental Status	DE-IDENTIFIED	DE
08/19/2016 03:15:14	6345784	Diabetic Symptoms (Hypoglycemia)	DE-IDENTIFIED	DE

Critical / Special Incidents

AHEMS - Critical Incidents Current Call Information
Calls displayed represent active or performed calls between the hours of 1/1/2017 and 2/6/2017 11:59:59 PM.
Data and Report from the FirstWatch™ Internet Server

INFO: MATCHING PROBLEM TYPES: 07 Burns / Explosions 14 Drowning / Diving / SCUBA 22 Industrial / Machine Accid. 27 Stab/ Gunshot / Penetrating AND MATCHING DETERMINANTS: 7% 14C% 14D% 14E% 22% 27B% 27D% OR 4 OR MORE UNITS ARE ON SCENE OR HAS BRAIN MATTER IN THE PCR NARRATIVE OR PCR HAS PT AGE < = 18 WITH PRIMARY/SECONDARY IMPRESSION OF CARDIAC ARREST. EXCLUDES: TEST, MIS-ASSIGNED, DUPLICATE CALLS AND PRIORITY 99 CALLS, SEA ALS Special Event Ded., SEA ALS Special Event Nondedic, SEB BLS Special Event Ded., SEB BLS Special Event Nondedic

Geo Valid	ePCR	Time Sent To Queue ▲	Pri	Problem	ProQA	Incident #	Address/Location
✓	1	1/1/2017 3:31:32 PM	10	27 Stab/ Gunshot / Penetrating	27D04Y	010117-0255	From **AHEMS**
✓	1	1/1/2017 8:52:26 PM	10	27 Stab/ Gunshot / Penetrating	27D02X	010117-0340	From **AHEMS**
✓	1	1/1/2017 8:52:26 PM	10	27 Stab/ Gunshot / Penetrating	27D02X	010117-0340	From **AHEMS**
✓		1/7/2017 11:28:26 AM	15	FS Fire Standby		010717-0163	From **AHEMS**
✓	1	1/13/2017 5:42:40 AM	10	27 Stab/ Gunshot / Penetrating	27D04G	011317-0056	From **AHEMS**
✓	1	1/14/2017 9:10:22 AM	10	27 Stab/ Gunshot / Penetrating	27D05G	011417-0099	From **AHEMS**
✓	1	1/14/2017 9:10:22 AM	10	27 Stab/ Gunshot / Penetrating	27D05G	011417-0099	From **AHEMS**
✓	1	1/14/2017 9:10:22 AM	10	27 Stab/ Gunshot / Penetrating	27D05G	011417-0099	From **AHEMS**

Hospital Status Dashboard

The **Hospital Transport Status Dashboard** lists each primary hospital in the area, showing how many units are currently en route to, or at each facility. Additionally, the dashboard provides: count of units transporting to and arrived at each hospital, average elapsed time and maximum time at hospital, visual warnings by hospital, pre-defined counts and time thresholds, summary and detailed view of each hospital, custom sorting by hospital - allowing each hospital to see transports and times.

County of Riverside Hospitals - TOC Dashboard
7/17/2018 8:48:55 AM

Southwest Zone Hospitals	Enroute	Arrived	Elapsed - Avg	Elapsed - Max
INLAND VALLEY REGIONAL MEDICAL CENTER	0	1	22:59	22:59
LOMA LINDA UNIVERSITY MEDICAL CENTER - MURRIETA	0	3	13:11	19:49
MENIFEE VALLEY MEDICAL CENTER	0	0		
RANCHO SPRINGS MEDICAL CENTER	0	0		
TEMECULA VALLEY HOSPITAL	0	1	25:04	25:04

Hemet/Pass Zone Hospitals	Enroute	Arrived	Elapsed - Avg	Elapsed - Max
HEMET VALLEY MEDICAL CENTER	0	1	35:35	35:35
SAN GORGONIO MEMORIAL HOSPITAL	0	0		

Desert Zone Hospitals	Enroute	Arrived	Elapsed - Avg	Elapsed - Max
DESERT REGIONAL MEDICAL CENTER	0	0		
EISENHOWER MEDICAL CENTER	0	0		
JOHN F. KENNEDY MEMORIAL HOSPITAL	0	0		

Northwest Zone Hospitals	Enroute	Arrived	Elapsed - Avg	Elapsed - Max
CORONA REGIONAL MEDICAL CENTER	0	0		
ETS	1	0		
KAISER HOSPITAL - RIVERSIDE	0	0		
PARKVIEW COMMUNITY HOSPITAL	0	0		
RIVERSIDE COMMUNITY HOSPITAL	0	4	22:12	35:45

Central Zone Hospitals	Enroute	Arrived	Elapsed - Avg	Elapsed - Max
MORENO VALLEY COMMUNITY HOSPITAL - KAISER	0	0		
RIVERSIDE COUNTY REGIONAL MEDICAL CENTER	0	0		

Out of Area Hospitals	Enroute	Arrived	Elapsed - Avg	Elapsed - Max
ARROWHEAD REGIONAL MEDICAL CENTER	0	0		

Available as an add-on feature to the Hospital Status Transport Dashboard, the **Transfer of Care module** is a web enabled system that records and tracks the transfer and acceptance of a patient to the Emergency Department. In addition to capturing the date and time stamp for the transfer of care at each facility, the TOC tool can be configured to capture delay reasons over a user defined threshold.

EISENHOWER MEDICAL CENTER - 39000 BOB HOPE DRIVE, RANCHO MIRAGE, CA

Agency	Unit		Enroute	(Elapsed)	Arrived	(Elapsed)	Problem/Nature
AMR_RC	8437		7/17/2018 8:48:17 AM	01:35			1A1 ABD_PN

ETS - 9990 County Farm Rd, Riverside, CA

Agency	Unit		Enroute	(Elapsed)	Arrived	(Elapsed)	Problem/Nature
AMR_RC	4115		7/17/2018 8:19:39 AM	30:13			5150 HOLD

HEMET VALLEY MEDICAL CENTER - 1117 E. DEVONSHIRE AVE, HEMET, CA

Agency	Unit		Enroute	(Elapsed)	Arrived	(Elapsed)	Problem/Nature
AMR_RC	5502	TOC	7/17/2018 8:00:24 AM	11:46	7/17/2018 8:12:10 AM	37:42	12D2 SEIZ_MULTI SEIZ

INLAND VALLEY REGIONAL MEDICAL CENTER - 36485 INLAND VALLEY DRIVE, WILDOMAR, CA

Agency	Unit		Enroute	(Elapsed)	Arrived	(Elapsed)	Problem/Nature
AMR_RC	4460	TOC	7/17/2018 8:06:28 AM	18:18	7/17/2018 8:24:46 AM	25:06	30B1 TRAUMA_DANG BODY AREA

LOMA LINDA UNIVERSITY MEDICAL CENTER - MURRIETA - 28062 Baxter Rd, Murrieta, CA

Agency	Unit		Enroute	(Elapsed)	Arrived	(Elapsed)	Problem/Nature
AMR_RC	4440	TOC	7/17/2018 8:15:54 AM	12:02	7/17/2018 8:27:56 AM	21:56	SICK PERSON_26
AMR_RC	4428	TOC	7/17/2018 8:19:09 AM	16:51	7/17/2018 8:36:00 AM	13:52	UNKNOWN MEDICAL ASSISTANCE_32
AMR_RC	4443	TOC	7/17/2018 8:19:23 AM	20:23	7/17/2018 8:39:46 AM	10:06	26B1 SICK_UNK

RIVERSIDE COMMUNITY HOSPITAL - 4445 MAGNOLIA AVE, RIVERSIDE, CA

Agency	Unit		Enroute	(Elapsed)	Arrived	(Elapsed)	Problem/Nature
AMR_RC	3334	TOC	7/17/2018 8:25:41 AM	04:55	7/17/2018 8:30:36 AM	19:16	SICK PERSON_26
AMR_RC	3338	TOC	7/17/2018 8:17:52 AM	23:02	7/17/2018 8:40:54 AM	08:58	HEADACHE_18
AMR_RC	3359	TOC	7/17/2018 8:00:55 AM	17:47	7/17/2018 8:18:42 AM	31:10	23C2 OVERDOSE_ABN BREATHING
AMR_RC	3316	TOC	7/17/2018 7:58:13 AM	13:47	7/17/2018 8:12:00 AM	37:52	FALLS_17

TEMECULA VALLEY HOSPITAL - 31700 TEMECULA PKWY, Temecula, CA

FirstWatch Performance Plus is an enhancement module to existing FirstWatch standard Performance Triggers. While standard Performance Triggers are great at providing the overall compliance perspective, they do not provide compliance monitoring at the various individual or specific component levels. For example, standard Performance Triggers can monitor overall Priority 1 calls processed within 45 seconds, ninety percent of the time. However, they cannot measure or monitor the individual Call-Taker's performance against the same standard (John Smith's performance).

The Performance Plus module is designed to do just that, by analyzing both the overall and the specific components that make up the overall compliance. By automating these performance measures, it increases situational awareness and early detection of potential problem areas, which in turn allows for early mitigation – resulting in improved performance, compliance, and operational efficiencies. Real-time alerts on individual performance keep your finger on the pulse of performance in your agency.

Trigger Views: Events Graphs Maps Destination Individual Performance Analysis Tool   View Alert Config Refresh rate [3 min(s)]   *Jessica Smith*

- Hospital Drop Performance Plus - Individual Performance
Current = Data between the hours of 12/1/2015 12:20:41 AM and 12/1/2015 12:20:41 PM | Download to Excel:
View: ☑Current ☑MTD ☑Last Month ☑Last 30 Days ☑YTD [Update]

Individual Performance	Current				MTD			Last Month			Last 30 Days			YTD	
	Total	Out of Compliance	Compliance %	Avg Time	Total	Out of Compliance	Compliance %	Total	Out of Compliance	Compliance %	Total	Out of Compliance	Compliance %	Total	Out of Compliance
	1	0	100.00	00:00:28	1	0	100.00	155	107	30.97	155	107	30.97	1512	1038
	8	2	75.00	00:22:24	8	2	75.00	301	147	51.16	301	147	51.16	3990	2075
	7	3	57.14	00:32:09	7	3	57.14	382	226	40.84	382	224	41.36	4632	2792
	4	2	50.00	00:40:20	4	2	50.00	138	89	35.51	142	91	35.92	1501	1106
	18	9	50.00	00:34:08	20	11	45.00	1313	962	26.73	1314	963	26.71	13998	10244
	6	3	50.00	00:36:31	6	3	50.00	414	206	50.24	413	203	50.85	4184	2342
- Hospital Drop	87	52	40.23	00:37:28	90	55	38.89	5910	3886	34.25	5894	3885	34.09	65122	43803
	11	7	36.36	00:43:28	11	7	36.36	769	497	35.37	765	498	34.90	8364	5362
	19	14	26.32	00:44:19	19	14	26.32	1181	879	25.57	1184	884	25.34	12973	9822
	9	8	11.11	00:40:50	9	8	11.11	674	396	41.25	668	396	40.72	7370	4839
	0	0	---	00:00:00	0	0	---	170	121	28.82	161	115	28.57	1804	1261
	1	1	0.00	01:19:34	2	2	0.00	172	138	19.77	168	136	19.05	2086	1592
	2	2	0.00	00:33:03	2	2	0.00	146	68	53.42	147	70	52.38	1702	781
	1	1	0.00	00:32:24	1	1	0.00	95	50	47.37	94	51	45.74	1006	549

Example Performance Plus Triggers:

- Call processing times – performance by individual call taker

- Dispatch assignment – performance by individual dispatcher

- Total call processing performance – performance by individual

- Call-taker/dispatcher performance by priority

- Call-taker call completeness/accuracy

- Geovalidation by call-taker

- Call-taker overides

- 1st unit assignment accuracy

- Unit/crew times – performance by unit, by station, by battalion, and individual

Workload Monitoring

Make informed, real-time decisions when sending your crews on calls based on their current total task time for that shift.

Provider Protocol Compliance

Date Range: 7/17/2017 to 7/23/2017

Completed By	Avg Adj Percent	Test	Total Incidents	Test %	System Test %	RAW Protocol %	Adjusted Protocol %
Provider	1	Universal	1	100.00%	90.04%	100.00%	100.00%
Provider	1	Cardiac Arrhythmias	2	91.67%	97.22%	0.00%	50.00%
		Pain Management	5	98.00%	94.30%	80.00%	80.00%
		Universal	8	87.50%	90.04%	25.00%	25.00%
Provider	1	Universal	4	95.83%	90.04%	75.00%	75.00%
Provider	1	Universal	2	100.00%	90.04%	100.00%	100.00%
Provider	1	Pain Management	1	100.00%	94.30%	100.00%	100.00%
		Universal	4	91.67%	90.04%	75.00%	75.00%
Provider	1	Pain Management	1	100.00%	94.30%	100.00%	100.00%
		Universal	3	100.00%	90.04%	100.00%	100.00%

186+ Live Sites

45.3 Million + Records Processed

1,738+ Protocols

8,488+ Tests

FirstPass® by the Numbers

3 1/2 years in research and development

6/2010
Started developing FirstPass with St. Charles County Ambulance District (SCCAD)

7/2011
Initial SCCAD records processed

11/2011
FirstPass Trademark Registration accepted

Additional development customers

1/2014
FirstPass Version 1 released at NAEMSP

6/2015
FirstPass Version 2 released

7/2015
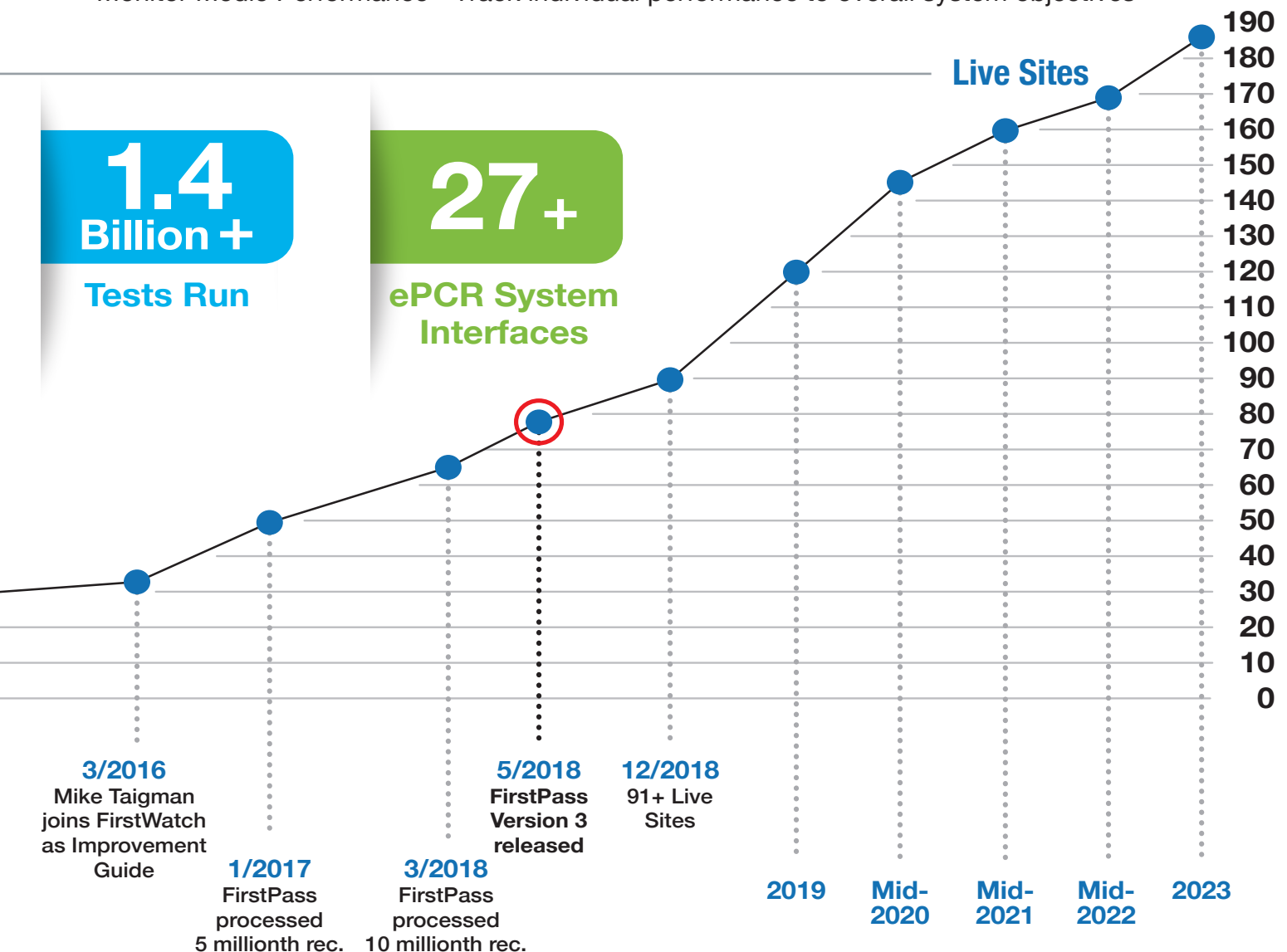FirstPass processed 1 millionth rec.

ENHANCEMENT MODULE

Automates Performance Improvement

Know how your system is performing on the things that matter most in near real-time

The NEW FirstPass Dashboard includes a customizable display of a tiled summary of where your calls are in your FirstPass queues, and Statistical Process Control (SPC) charts for each of your system's Protocols.

- Real-time Automated Performance Improvement - Use one tool to monitor Protocol compliance, documentation, and improvement success

- Measure Protocol Compliance - Prioritize and monitor the protocols that are most important to your system

- Enhance Documentation Quality - Real-time review of completion of required ePCR fields

- Provide Meaningful Feedback - Ask questions and provide medics with feedback before they end their shift

- Save Time & Resources - Let the computer do the work and save the human for what is most important

- Monitor Medic Performance - Track individual performance to overall system objectives

1.4 Billion +
Tests Run

27 +
ePCR System Interfaces

Live Sites

3/2016 — Mike Taigman joins FirstWatch as Improvement Guide

1/2017 — FirstPass processed 5 millionth rec.

3/2018 — FirstPass processed 10 millionth rec.

5/2018 — FirstPass Version 3 released

12/2018 — 91+ Live Sites

2019

Mid-2020

Mid-2021

Mid-2022

2023

Telecommunicator & Provider Wellness

Critical Incident Notification

Allina Health EMS and Las Vegas Fire uses their Critical Incidents triggers to alert their Chaplain in real-time.

AHEMS - Critical Incidents Current Call Information

Calls displayed represent active or performed calls between the hours of 5/12/2017 and 5/18/2017 11:59:59 PM.
Data and Report from the FirstWatch™ Internet Server

INFO: MATCHING PROBLEM TYPES: 07 Burns / Explosions 14 Drowning / Diving / SCUBA 22 Industrial / Machine Accid. 27 Stab/ Gunshot / Penetrating AND MATCHING DETERMINANTS: 7% 14C% 14D% 14E% 22% 27B% 27D% OR 4 OR MORE UNITS ARE ON SCENE OR HAS BRAIN MATTER IN THE PCR NARRATIVE OR PCR HAS PT AGE <= 18 WITH PRIMARY/SECONDARY IMPRESSION OF CARDIAC ARREST. EXCLUDES: TEST, MIS-ASSIGNED, DUPLICATE CALLS AND PRIORITY 99 CALLS, SEA ALS Special Event Ded., SEA ALS Special Event Nondedic, SEB BLS Special Event Ded., SEB BLS Special Event Nondedic

Geo Valid	ePCR	Time Sent To Queue ▲	Pri	Problem	ProQA	Incident #	Address/Location	City	County	Division
✓	1	5/12/2017 1:32:56 AM	15	FS Fire Standby		051217-0028	From AHEMS	ARDEN HILLS	RAMSEY	Allina North
✓	1	5/12/2017 1:32:56 AM	15	FS Fire Standby		051217-0028	From AHEMS	ARDEN HILLS	RAMSEY	Allina North
✓	1	5/12/2017 10:50:32 AM	5	27 Stab/ Gunshot / Penetrating		051217-0180	From AHEMS	MOUNDS VIEW	RAMSEY	Allina North
✓	1	5/14/2017 10:27:50 AM	5	29 Traffic Accident / PI		051417-0138	From AHEMS	ANOKA	ANOKA	Allina North

LVFR - Critical Incident Notification Current Call Information

Calls displayed represent active or performed calls between the hours of 4/17/2016 and 4/18/2016 11:59:59 PM.
Data and Report from the FirstWatch™ Internet Server

Geo Valid	ePCR	Time Sent To Queue ▲	Incident #	Pri	Problem	ProQA
✓	1	4/17/2016 12:07:58 AM	04172016-6108729			
✓	3	4/17/2016 1:04:56 AM	04172016-6108772			
✓		4/18/2016 12:33:27 AM	04182016-6109705			

Records Per Page: 50 ▼
Total Responses: 3

LVFR units only AND matching determinants: GSW (explosive to head) - "27B05G" GSW (multiple victims) - "27D05G" Building Fire with person inside - "07C01" Cardiac Arrest Obvious Death - "09B1%" Drownings - "14D%" and "14B%" Traffic Accident - "29D%" OR Matching Problems Types: "27B-Stab/Gunshot Wound" "27D-Stab/Gunshot Wound" "7C-Burns/Explosion" "9B-Cardiac/Respiratory Arrest" OR With "Hanging" or "Jumper" in the ePCR narrative. Unit must be on scene > 2 minutes Does not include "unable to locate" or "no patient contact" in ePCR narrative

DRAFT - LVFR - Critical Incident Notification Filter Criteria
Includes Priorities: 1, 10, 11, 12, 13, 14, 15, 16, 17, 18, 2, 3, 4, 5, 6, 7, 8, 9 Only.

Trigger Criteria Include the Following Categories (with Matching Free-Text Entries with Call Comments):
  Critical Incidents, No Patient Contact

(Drill down into each call's detail to see which free-text words or phrases were found in the call comments and had a corresponding Category.)

Other Information: LVFR units only AND matching determinants: GSW (explosive to head) - "27B05G" GSW (multiple victims) - "27D05G" Building Fire with person inside - "07C01" Cardiac Arrest Obvious Death - "09B1%" Drownings - "14D%" and "14B%" Traffic Accident - "29D%" OR Matching Problems Types: "27B-Stab/Gunshot Wound" "27D-Stab/Gunshot Wound" "7C-Burns/Explosion" "9B-Cardiac/Respiratory Arrest" OR With "Hanging" or "Jumper" in the ePCR narrative. Unit must be on scene > 2 minutes Does not include "unable to locate" or "no patient contact" in ePCR narrative

Workforce Safety

Monitor unit activity in real-time.

Live Workload Report

Unit #	Scheduled Start Time	Actual Start Time	Total Time on Duty	# of Responses	# of Arrivals	Total Task Time	Task Time UHU		# of Times Out of Service	Out of Service Time	# of Post Movements	Time not at Post	@ Post > 30 Min	Active Time UHU	
ALS Units															
3333	05:00:00	05:17:52	08:46:04	4	4	04:43:17	0.54	■	1	00:34:57	6	06:30:03	0	0.74	■
3334	05:30:00	05:29:54	08:34:02	5	2	05:13:53	0.61	■	1	00:51:17	4	06:15:15	0	0.73	■
3331	05:30:00	05:30:43	08:33:13	4	3	05:56:19	0.69	■	1	00:47:26	6	07:43:04	0	0.90	■
3385	06:00:00	06:23:05	07:40:51	3	3	05:47:11	0.75	■		--	6	06:48:45	0	0.89	■
3340	06:00:00	06:43:44	07:20:12	6	5	04:11:53	0.57	■		--	9	05:26:22	0	0.74	■
3336	06:30:00	06:44:34	07:19:22	3	3	03:32:27	0.48	○	1	00:40:47	4	04:21:10	0	0.59	○
3101	06:30:00	06:46:18	07:17:38	3	3	05:40:41	0.78	■		--	0	00:00:00	0	1.00	■
3338	07:00:00	07:03:25	07:00:31	4	4	03:49:44	0.55	■		--	7	05:26:09	1	0.78	■
3317	07:30:00	07:30:43	06:33:13	7	2	02:29:57	0.38	○		--	8	05:09:15	1	0.79	■
3339	07:30:00	07:53:44	06:10:12	3	3	04:09:10	0.67	■		--	6	05:37:21	0	0.91	■
3343	08:00:00	08:01:01	06:02:55	0	0	00:00:00	0.00	■	2	05:51:38	0	00:00:00	0	0.03	■
3107	08:00:00	08:02:46	06:01:10	3	3	05:40:46	0.94	■		--	0	00:00:00	0	1.00	■
3364	08:00:00	08:03:39	06:00:17	2	1	02:22:00	0.39	○		--	4	02:54:27	0	0.48	■
3327	08:00:00	08:17:24	05:46:32	1	1	04:37:47	0.80	■		--	3	05:03:41	0	0.88	■
3332	08:00:00	08:17:50	05:46:06	3	2	04:23:44	0.76	■	1	00:50:50	2	04:41:52	0	0.81	■
3344	09:00:00	09:16:14	04:47:42	0	0	00:00:00	0.00	■	1	04:47:44	0	00:00:00	0	0.00	
3342	09:00:00	09:42:03	04:21:53	3	3	04:12:16	0.96	■		--	2	00:00:00	0	1.00	■
3103	09:30:00	10:07:35	03:56:21	1	1	02:45:59	0.70	■		--	0	00:00:00	0	1.00	■
3365	10:00:00	10:08:16	03:55:40	2	2	02:18:20	0.59	■		--	3	03:07:19	0	0.79	■
3104	10:00:00	10:09:40	03:54:16	1	1	03:23:33	0.87	■		--	1	03:37:19	0	0.93	■
3366	11:00:00	11:38:43	02:25:13	2	2	01:15:56	0.52	■		--	5	02:13:12	0	0.92	■
3102	06:00:00	12:44:12	01:19:44	1	1	01:18:20	0.98	■		--	0	00:00:00	0	1.00	■
3113	11:00:00	13:29:44	00:34:12	0	0	00:00:00	0.00	■		--	1	00:32:52	0	0.96	■
3108	13:00:00	13:32:26	00:31:30	0	0	00:00:00	0.00	■		--	1	00:30:11	0	0.96	■
BLS Units															
4490	07:30:00	08:46:26	1.05:17:30	18	10	10:43:07	0.37	○	1	00:53:28	5	12:30:40	6	0.43	■
3341	06:00:00	06:04:29	07:59:27	3	2	04:54:59	0.62	■		--	1	05:36:07	0	0.70	■
3302	07:00:00	07:11:12	06:52:44	2	2	01:39:03	0.24	■		--	2	06:20:02	1	0.92	■
3348	07:30:00	07:38:55	06:25:01	2	2	01:53:12	0.29	■		--	3	06:23:29	0	1.00	■
4441	08:30:00	08:40:27	05:23:29	2	2	03:50:31	0.71	■		--	0	00:00:00	0	1.00	■

Online Compliance Utility (OCU)

OCU Key Benefits:

- Real-time access to calls outside defined standards
- Web-enabled, late run call analysis completed anywhere
- Simple, universal tool designed for both Authority and Provider
- Automated rules designed to simplify and streamline the process
- 3rd party transparency
- Save time, money and resources
- A suite of OCU reports

" ...OCU has truly revolutionized our ambulance response compliance program."

"Before we implemented our FirstWatch OCU, I would spend 20-30 hours every month processing the late responses and exemption requests which included manually verifying the call information and personally calculating the penalty amounts by ambulance zone and then individually generating 10 invoices that were delivered via U.S. mail. Due to the time commitment, we were often 30-45 days behind in completing the process and getting the invoices sent out. Now, with OCU, I spend an hour or two a few times a month to go through the current late responses and exemption requests. FirstWatch generates the invoices and they are emailed to providers directly, which has reduced our invoicing process as much as 45 days. FirstWatch OCU has truly revolutionized our ambulance response compliance program."
– Steve Carroll, EMS Administrator, Ventura County, CA

15

One of the many challenges faced by agencies is making the most effective use of the resources they have available. A common way to forecast needs for staffing, scheduling and resource deployment is to analyze historical patterns of demand for service, both by day of week and hour of day and geographically. This time proven approach is referred to as "Demand Analysis."

Variations of this approach have been used for more than 20 years all around the world. In the past, the process of compiling and creating a complete temporal and geographic Demand Analysis was tedious, time-consuming, and too often, very manual.
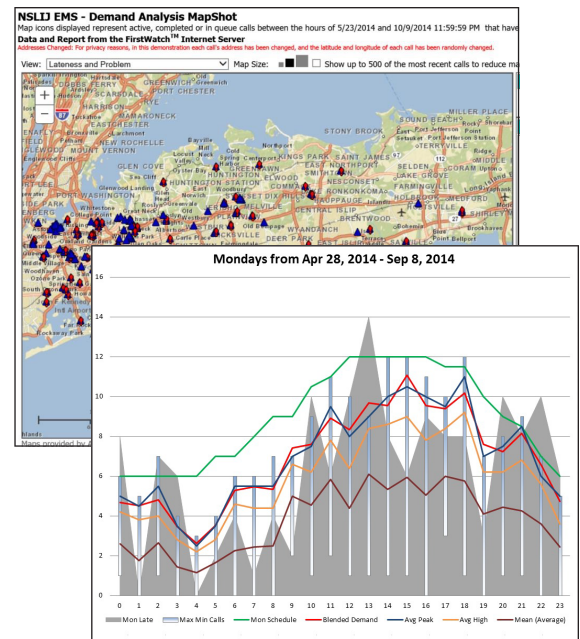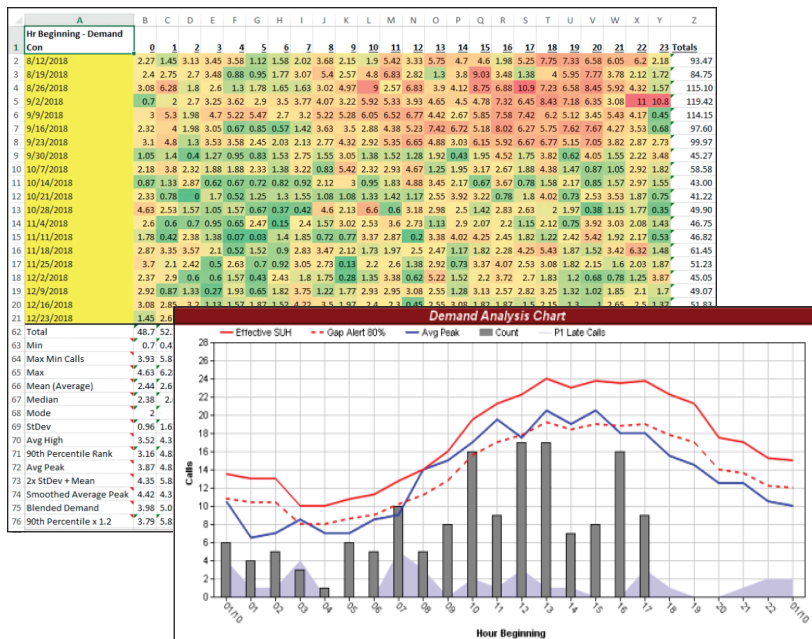
FirstWatch has created a real time, dynamically updated and calculated Demand Analysis Module which offers views of select customer data. The Demand Analysis calculations in the data can be downloaded into an Excel spreadsheet, with all formulas intact. We're working to enhance the Demand Analysis module by adding a Demand Consumption-based approach, as well as addressing geographical demands by creating up-to-the minute problem/solution maps for each hour of the day and each day of the week and/or other user-defined intervals.

NEW: Mapping Features

Toggle on/off to layer different mapping components such as Planning Zones, Station Districts, Fire Districts, Population Density, Cities and Counties. Display calls by Top 10 Problems in order to see what/where your most common calls are happening.
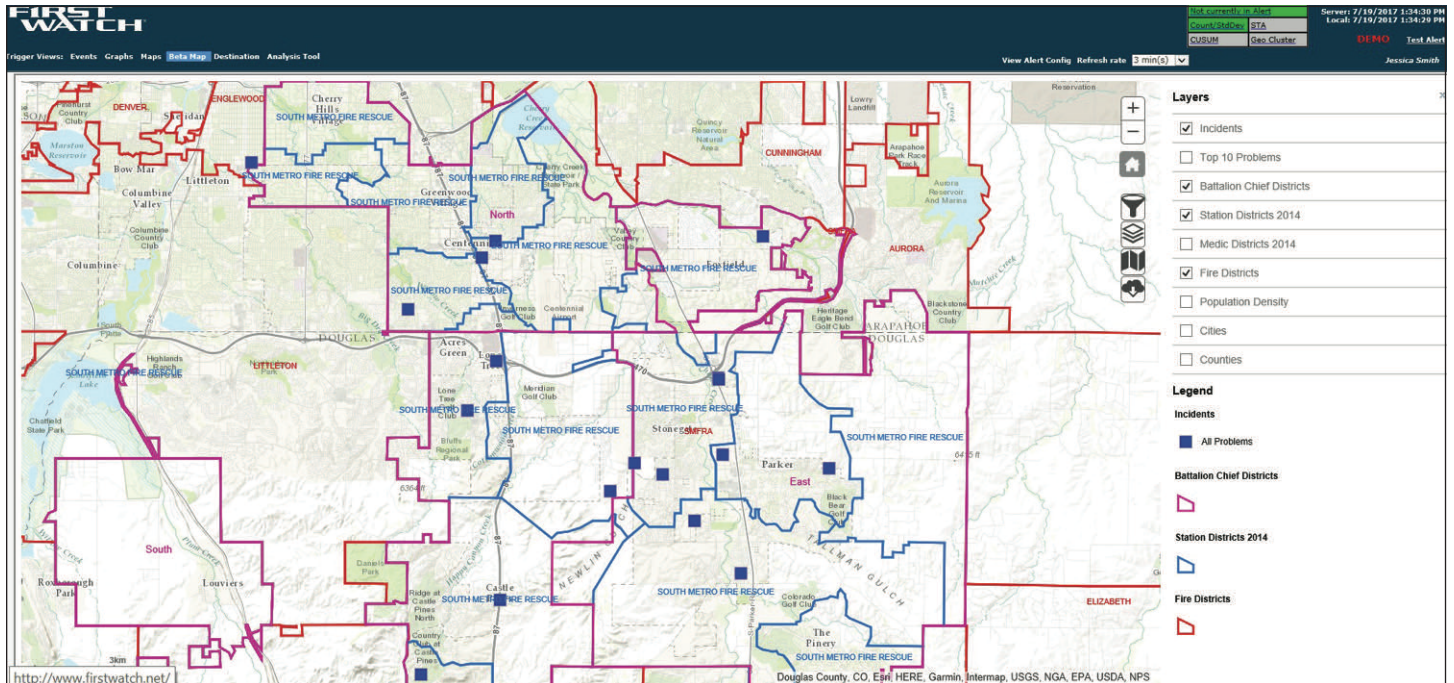
Heat maps with a sliding transparency scale
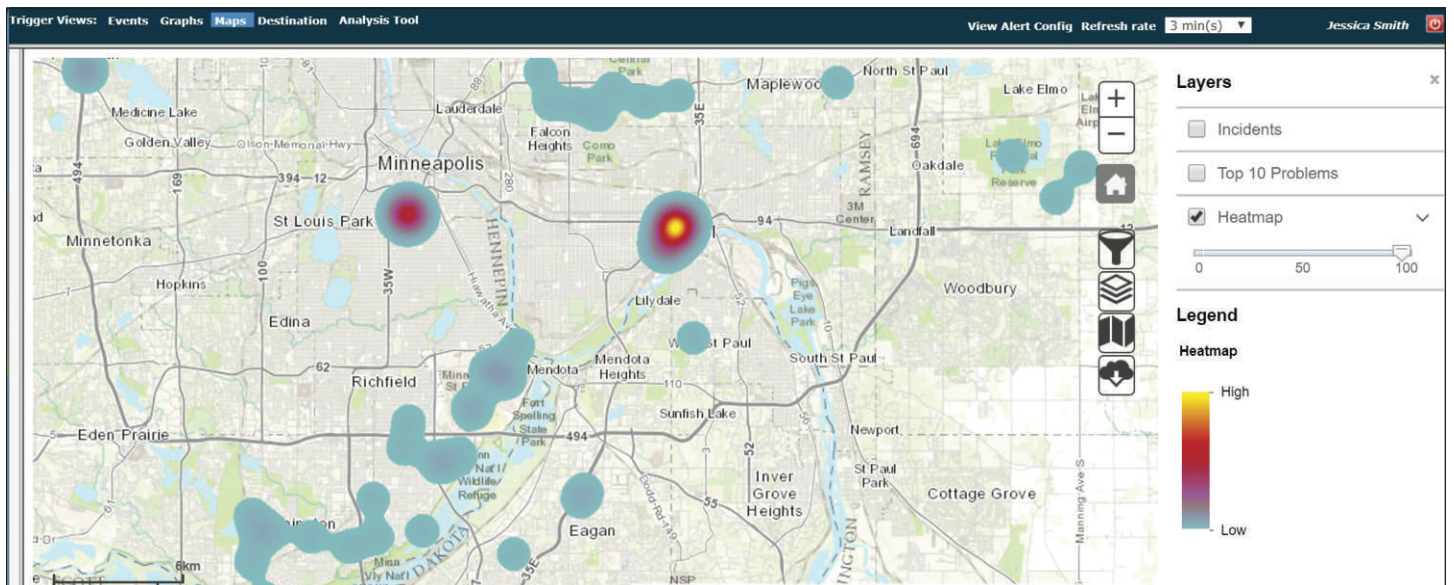
Fire Operations Analytics Module (FOAM)

- The Fire Operations and Analytics Module provides fully automated and dynamic reporting of your Fire Department's Operational Metrics and Key Performance Indicators.
- Full integration with your Department's Standards of Cover and Strategic Planning Documents.
- Provides GIS/Mapping display capabilities to illustrate community risks, demands and coverage.
- Data is integrated into a true Quality Improvement framework that tracks performance over time and identifies trends that require attention.
- Suite of dynamically updated and auto-distributed reports on operational performance factors including turnout and travel times and demand for services.

FIRST WATCH — FirstWatch Response Performance

Criteria: 01/01/2015 07:30:00 to 01/01/2020 07:29:59

Risk Category: Low, Moderate, High, Severe

Fire Supression - 90th Percentile Times			2015 - 2019	2019	2018	2017	2016	2015	Benchmark
Alarm Handling	Pick-up to Dispatch	Urban	02:15	01:53	02:17	02:26	02:17	02:16	01:00
Turnout Time	Turnout Time 1st Unit	Urban	01:31	01:29	01:28	01:34	01:32	01:29	01:20
Travel Time	Travel Time 1st Unit Distribution	Urban	07:49	07:40	07:24	07:56	08:07	07:44	04:00
	Travel Time ERF Concentration	Urban	08:35	08:19	08:05	08:52	08:48	08:42	08:00
Total Response Time	Total Response Time 1st Unit Distribution	Urban	08:51	08:45	08:33	09:08	08:58	08:44	05:20
			n = 14,459	n = 2,625	n = 2,771	n = 3,176	n = 2,983	n = 2,904	
	Total Response Time ERF Concentration	Urban	09:33	09:17	09:08	09:52	09:37	09:40	09:20
			n = 13,384	n = 2,440	n = 2,571	n = 2,949	n = 2,758	n = 2,666	

FIRST WATCH — FirstWatch Demand by Hour of Day and Day of week

Date Range: 01/01/2020 07:30:00 to 02/01/2020 07:29:59
Battalion(s): 1, 10, 4 Call Type(s): Fire, EMS, HazMat, Bomb, Public Assist, Other
Service Area(s): 1, 10, 102, 103, 106, 107, 108, 2, 3, 4, 41, 42, 43, 44, 45, 47, 48, 5, 6, 7, 8, 9

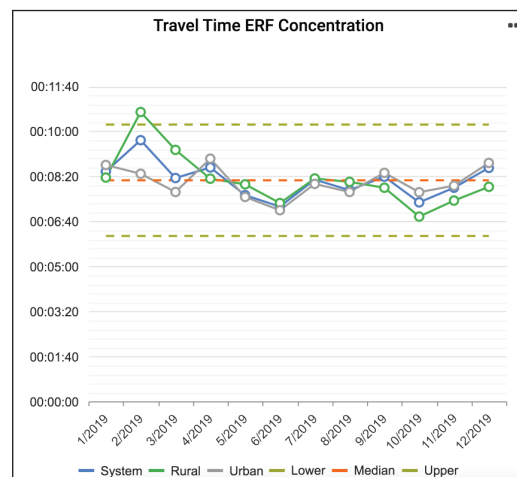| DOW	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Total
Sunday	38	57	27	30	35	39	35	33	34	50	65	42	48	51	64	59	70	78	62	60	63	52	50	49	1,191
Monday	49	40	32	26	16	26	39	42	61	57	75	81	69	57	69	89	77	77	68	53	48	51	45	47	1,294
Tuesday	29	50	19	37	27	47	45	46	41	64	81	76	47	96	86	83	61	68	79	79	60	46	45	40	1,352
Wednesday	26	28	29	19	42	43	36	54	73	73	57	66	85	64	96	86	91	115	99	84	80	72	64	38	1,520
Thursday	39	60	27	29	41	41	32	41	80	92	91	112	85	109	94	85	87	108	104	85	79	71	58	48	1,698
Friday	44	34	34	31	34	42	35	53	80	67	66	70	91	89	83	101	98	113	93	81	83	84	86	44	1,636
Saturday	81	49	32	46	39	27	32	45	59	56	54	67	59	66	69	57	70	64	59	45	61	60	69	44	1,310
Total	306	318	200	218	234	265	254	314	428	459	489	514	484	532	561	560	554	623	564	487	474	436	417	310	10,001

FIRST WATCH — FirstWatch Station Reliability

Date Range: 01/01/2020 07:30:00 to 02/01/2020 07:29:59
Shift(s): A, B, C Risk: Low, Moderate, High, Severe, Non-Emergent

Station	Unit	1 Resp	1 %	2 Resp	2 %	3 Resp	3 %	4 Resp	4 %	5 Resp	5 %
1	B1	11	14.67%			4	5.33%	7	9.33%	3	4.00%
	E1	163	65.99%			7	2.83%	16	6.48%	1	0.40%
	E201	155	60.08%			12	4.65%	13	5.04%	2	0.78%
	R1	223	83.21%			5	1.87%	3	1.12%	1	0.37%
	R201	237	89.43%			5	1.89%	7	2.64%		
	R301	215	85.32%			3	1.19%	7	2.78%		
	T1	136	59.13%			8	3.48%	14	6.09%	2	0.87%
2	B10			4	16.67%					1	4.17%
	E2			163	83.16%						
	R2			166	78.30%						
3	CBRN3	4	28.57%			5	35.71%				
	E3	30	15.08%			109	54.77%			20	10.05%
	R3	14	8.59%			93	57.06%			18	11.04%

Travel Time ERF Concentration

Legend: System — Rural — Urban — Lower — Median — Upper

With Academy Analytics you can:

- Monitor your center's ProQA performance, **in near real-time, from anywhere!**

- Instantly identify outlier cases for review.

- Provide teammates with a dashboard that shows how they are doing on the things that matter.

- Know when there is an increase in aborted or overridden calls.

- Balance the workload to help manage employee stress.

- Coach your team to optimal performance.

- Potentially increase the number of cardiac arrest patients that survive.

Academy Analytics™
by **FirstWatch®**
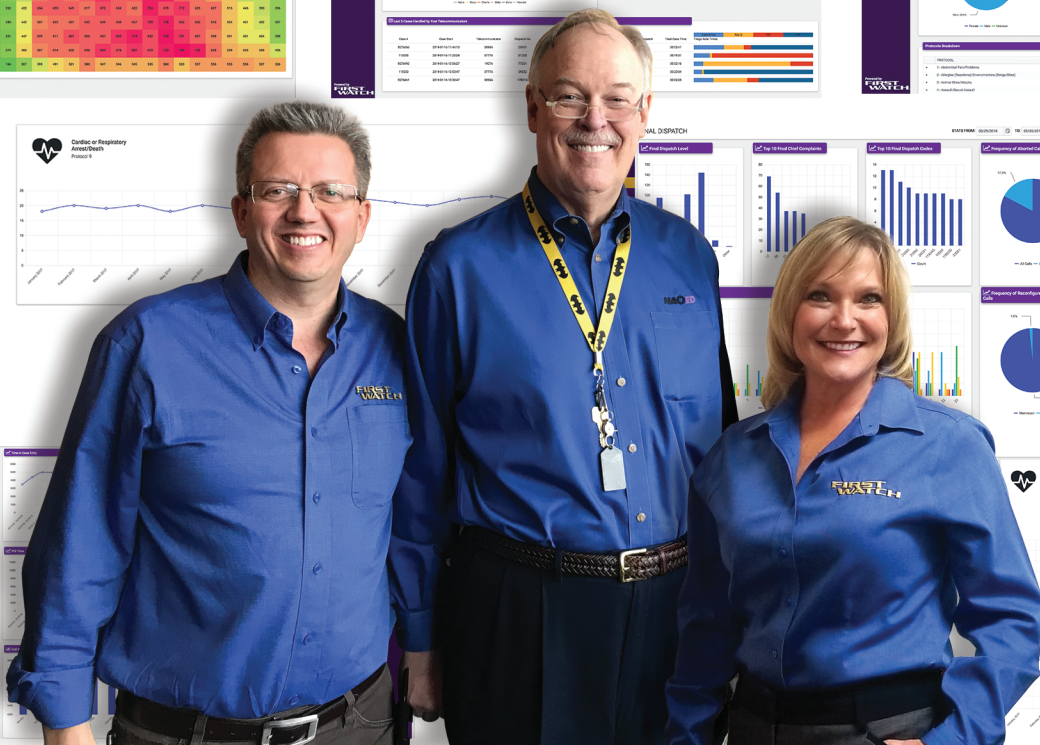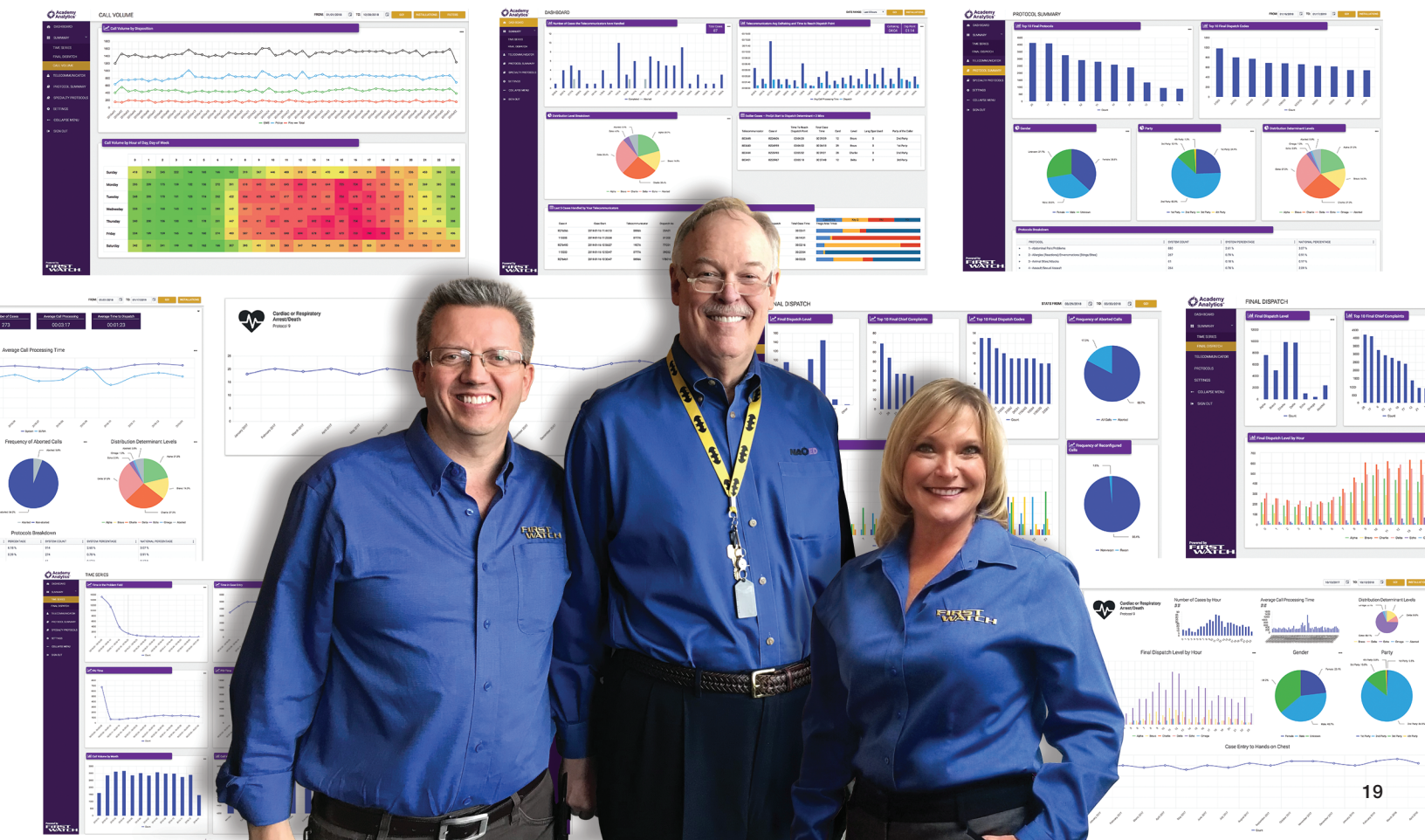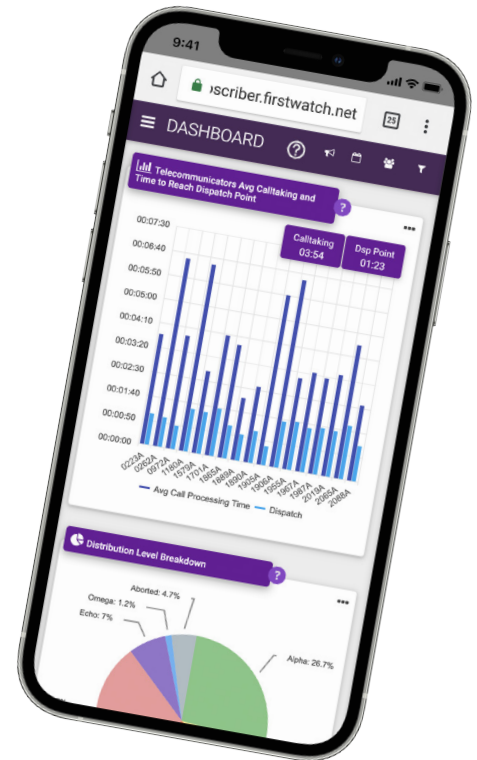
FirstWatch Health Intelligence

Get up-to-date alerts via email!

What's really happening with the flu this season, Ebola, and the opioid crisis? What do our EMS providers need to know about emerging or re-emerging diseases like COVID-19, Measles, Ebola, Valley Rift fevers, Lassa, or Marburg? Between news outlets competing for the most exciting headline and social media posts hoping for hundreds of likes, it's hard to know what really matters and what you really need to pay attention to in the world of disease outbreaks, public health crises, and public safety health and protection. FirstWatch's Health Intelligence page is the place you can go for up to date, reliable information about global emerging health issues. Sign up for free, and we will alert you via email when something new is posted.

Sign up today
www.firstwatch.net/hi/sign-up

or visit here: www.firstwatch.net/hi

Home / Health Intelligence

Health Intelligence

Public Safety-Specific Information on **Emerging Health Issues**
This page was last updated on November 9, 2022.

Sign Up for HI Updates

"FirstWatch alerted our supervisors of a potential COVID-19 exposure BEFORE the paramedics arrived on scene." Click for full quote...

SEASONAL INFLUENZA (FLU)
Provides info on upcoming & current seasonal flu(s) & reported influenza-like illness (ILI), using reports from various public health, government & other resources.

View All Posts & Resources

Intro to Seasonal Influenza (Flu) for 2022-2023

Seasonal Influenza Resources for 2022 & 2023

Weekly U.S. Interactive ILI Activity Map

Updates for Seasonal Influenza (Flu) for 2022–2023
November 9, 2022

Intro to Seasonal Influenza (Flu) 101 for 2021-2022
December 7, 2021

Seasonal Flu – So NOT in the News in 2020-2021
April 26, 2021

Seasonal Flu in the Midst of COVID-19
September 24, 2020

Interactive HHS State & Regional Map

EBOLA
Provides info on past, current, and upcoming Ebola outbreaks, using reports from various public health, government & other resources.

View All Posts & Resources

EMS1-Ebola virus disease Sudan Strain emerges in Uganda
October 25, 2022

Ebola (Sudan strain) Outbreak in Uganda
October 21, 2022

Ebola in Guinea & the DRC Update
March 15, 2021

New Ebola Outbreak in the Democratic Republic of the Congo
February 16, 2021

Ebola Cases in the Democratic Republic of the Congo (DRC)
August 6, 2020

OVERDOSES / OPIOIDS
Contains resources related to awareness and mitigation of opioids and overdoses in response to this nationwide but often local crisis.

View All Posts & Resources

FirstWatch Recommendations for Surveillance of EMS Data for Opioid Overdoses
Updated April 10, 2019

Be Careful with Fentanyl but Don't Be Afraid to Treat
November 1, 2022

PoliceOne article: "How biosurveillance turns opioids-related data into actionable intelligence"
November 18, 2018

Synthetic Opioids/Fentanyl and Fentanyl Analogs
April 9, 2018

CDC Enhanced State Opioid Overdose Surveillance
2017-2018

CDC/Government Resources for Opioid Programs and Other Drug-Related Publications

COVID-19
Public Safety-oriented information and resources on COVID-19. All COVID-19 items previously posted in other sections have been consolidated here for convenience. We are proudly assisting more than 160 customer partners with real-time COVID-19 data analysis & automated alerting.

View All Posts & Resources

OUTBREAKS/EMERGING DISEASES/PANDEMICS
A listing & description of outbreaks of disease, novel viruses, epidemics, or other infections that are making humans sick, even in small numbers. There may be overlap with In the News & Pandemics.

View All Posts & Resources

KEEPING YOUR EMPLOYEES SAFE
Contains info & resources to assist in providing for employee safety whether during standard operations or in planning for or responding to disasters.

View All Posts & Resources

Book: Super-Charge Your Stress Management in the Age of COVID-19

FirstWatch Collaborate

Share, learn, and improve on our community site

With FirstWatch Collaborate it's easy to discuss ideas, share solutions, explore challenges, and more with FirstWatch customers from across the country. You'll be able to share files, ask questions, share your expertise and more.
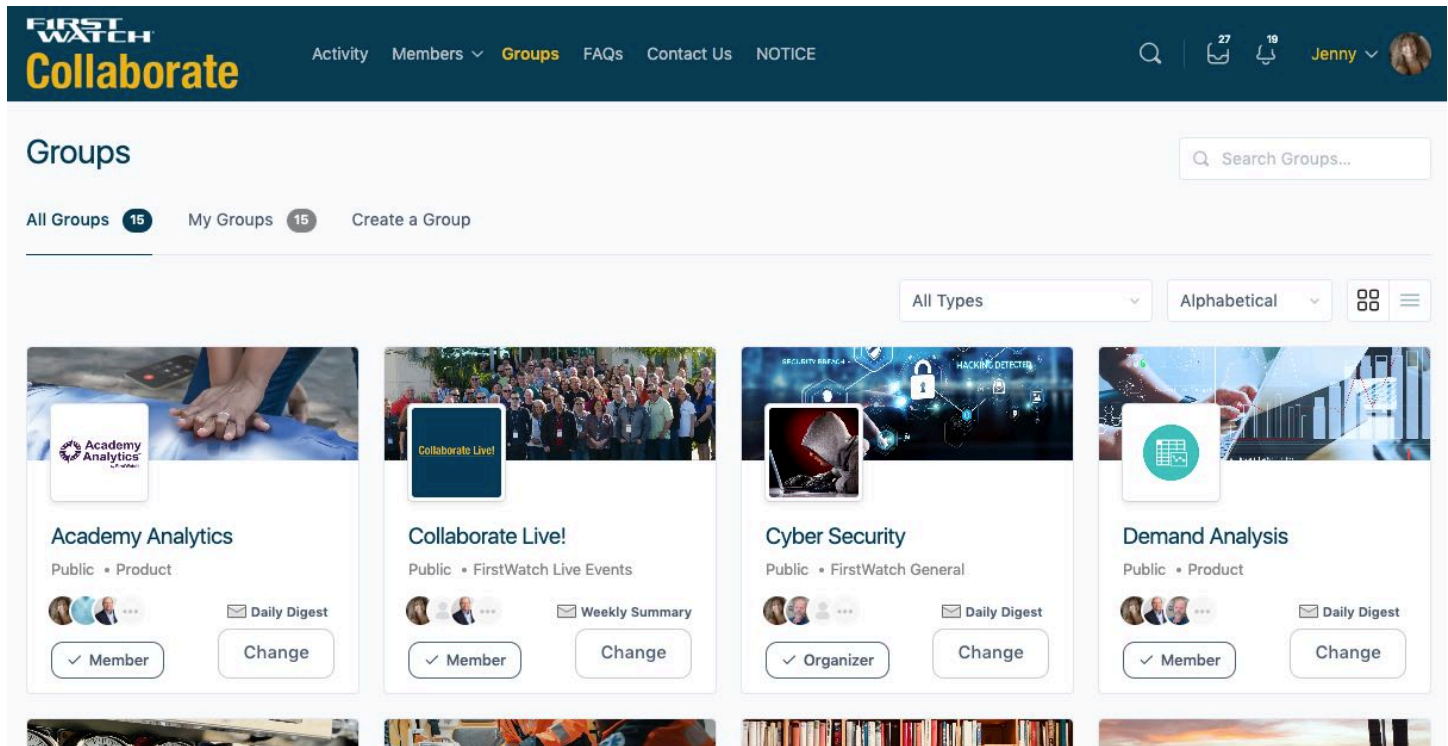
Ever since our inception 25 years ago, FirstWatch customers have talked with each other, tackled shared problems together, and helped each other improve. Several times a week one of us will be talking with someone about an issue and say, "you should really check out what _____ is doing." Here are a few recent examples:

- "You should talk with the folks at ProEMS about how they reduced deaths from opioid overdoses."
- "Heath in Tulsa managed to add over 44 unit hours a day to his system for free by decreasing overall task times and building a culture of trust with their crews, we can connect you."
- "If you're hoping to improve your cardiac arrest resuscitation rate, Chief Grayson and the team from Rialto Fire have made dramatic improvement. I'll introduce you by email."

Would you like to learn how to add a user, make Excel Pivot tables sing, or build an effective quality improvement system? Check out the learning part of FirstWatch Collaborate! We've got a library of videos to help you use FirstWatch more effectively and learn leadership principles. We are continually adding new things!

**Please direct questions, comments, or ideas on FirstWatch Collaborate
to Mike Taigman, FirstWatch Improvement Guide; mtaigman@firstwatch.net or 510-593-5730**
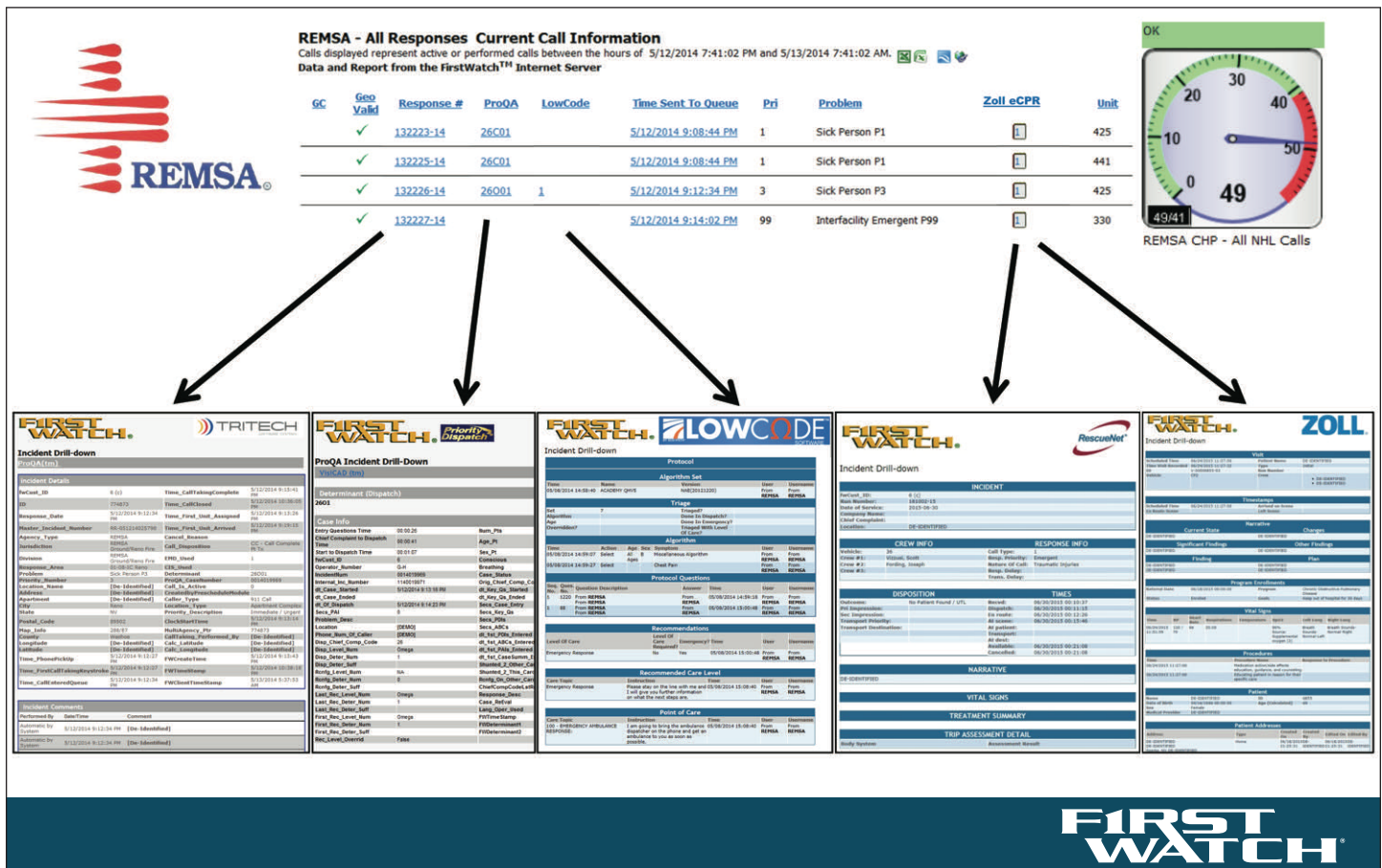
REMSA Community Health Early Intervention Team...
and the Role FirstWatch Plays

The Regional Emergency Medical Services Authority of Reno, Nevada, a non-profit provider of ground and air ambulance services (and long-time FirstWatch customer), in partnership with Renown Medical Group, the University of Nevada-Reno School of Community Health Sciences, the Washoe County Health District, and the State of Nevada Office of Emergency Medical Services, received an award to create a Community Health Early Intervention Team (CHIT) to respond to lower acuity and chronic Disease situations in urban, suburban, and rural areas of Washoe County, Nevada.

FirstWatch is monitoring REMSA's CAD, ProQA, two ePCR sources and Low Code data source to provide near real-time data and actionable information that can be used to reach the project's goals of reducing: number of non-emergency visits, unreimbursed emergency department costs, hospital admissions, hospital readmissions, hospital stay times, and ambulance transports.

FirstWatch Mobile App for iOS and Android

Real-Time Dashboards for:

- Situational Awareness
- Response Times and KPIs
- Clinical and Operational Performance

- Automated Alerting
- Regional Data Aggregation and Sharing
- Bioterrorism
- Pandemic/Public Health Surveillance
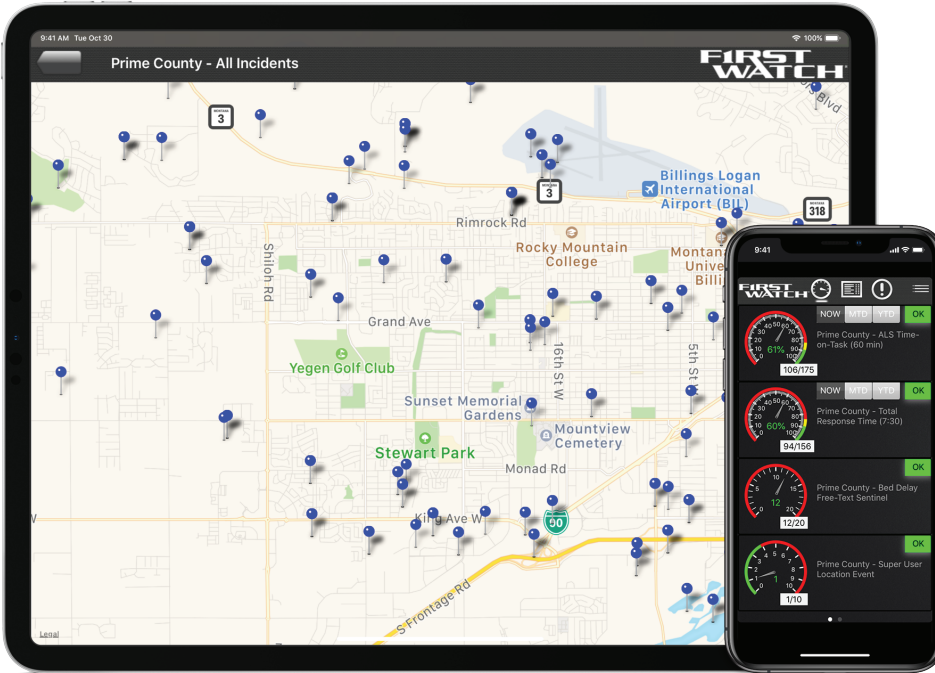
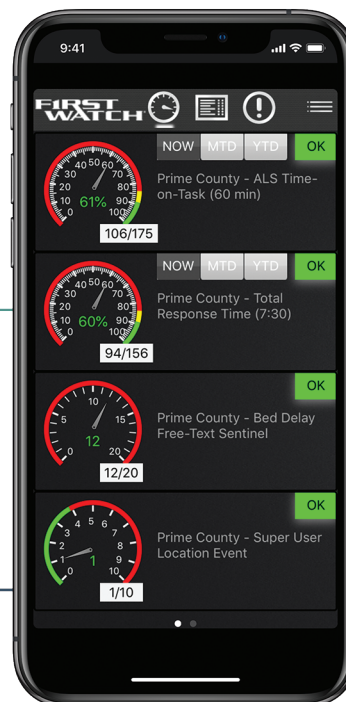**DOWNLOAD the FirstWatch App for iPhone, iPad, Android Phone, and Tablet**

Download on the App Store — Apple Devices

GET IT ON Google play — Android Devices

Trending and Performance Based Gauges

Ability to Drill-Down into the Details of each Trigger

Real-Time Alerts Right on your Phone

Trigger Status

Easily Swipe to View Additional Triggers