ATTACHMENT 14

FirstPass Real-Time Clinical Performance Monitoring

THE FIRSTPASS
EVOLUTION
AN INFORMATION DRIVEN APPROACH TO EMS

ALEX GARZA, MD, MPH
FIRSTWATCH MEDICAL DIRECTOR AND FORMER CHIEF MEDICAL OFFICER FOR THE U.S. DEPARTMENT OF HOMELAND SECURITY

Knowledge

Know what's happening with your system, patients and medics - right now.

Smart Queue

We'll show you what's most important - you decide!

Collaboration

Medical Directors, QA/QI Managers, Medics and other stakeholders can work together in one view

Advanced Algorithms

Apply hundreds of tests to your protocols for STEMI, Stroke, Airway etc.

LET US SHOW YOU HOW FIRSTPASS CAN HELP.

FirstPass® monitors and analyzes patient care data, identifying deviations rapidly, consistently, and automatically. What used to take days or weeks can now be accomplished in minutes, allowing agencies to see in near real-time how their system is performing.

Customers using FirstPass Include:

Allina Health EMS, MN - AMR CSA, CA - AMR EMSA, OK - AMR San Bernardino, CA - AMR San Diego, CA - AMR Ventura, CA - Clark County Fire, NV - Envision Healthcare - Humboldt General Hospital, NV - Huntsville Emergency Medical Services (HEMSI), AL - Johnson County MedAct, KS - Lassen County, CA - Las Vegas Fire Rescue, NV - Life EMS, MI - Louisville Metro EMS, KY - McCormick Ambulance, CA - Metro Atlanta Ambulance Service (MAAS), GA - North Shore Fire Rescue, WI - Northwell Health, NY - Orange County Fire Rescue, FL - Pinellas County, FL - Prince George's County, MD - Richmond Ambulance Authority, VA - Riggs Ambulance/SEMSA, CA - San Marcos Hays County, TX - Sedgwick County EMS, KS - St. Charles County Ambulance District, MO - Sonoma, CA - Suffolk FRES, NY

F1RST WATCH®

What is FirstPass?

The traditional approach to Quality Improvement in EMS is labor intensive, time consuming and often confusing, leaving little time to actually improve care. EMS agencies need the ability to monitor and analyze patient care data, identifying deviations rapidly, consistently and automatically.

FirstPass® is a clinical quality measurement and protocol monitoring tool designed to alert users to deviations in expected treatments to medical protocols. Within minutes, FirstPass can review the entire patient encounter from the time 911 is called to delivery at the hospital. Most importantly, quality improvement managers can now focus on actually improving the delivery of EMS rather than the collection, entry and analysis of data. Beyond these clinical aspects, improving the quality, collection and analysis of data improves billing and financial recovery.

FirstPass does not only tell you when a call fails because it did not meet protocol, but it also tells you WHY the call failed.

HOW DOES IT WORK?

FirstPass provides continuous monitoring of ePCR and other data to quickly identify and provide real-time alerts related to protocol deviations, incomplete "care bundles" (which include scientifically validated patient care protocols), missing data elements or urgent patient safety issues.

A standard bundle of FirstPass protocols was designed by our Medical Director to measure predefined quality metrics; protocols are configured with quality metrics, yet the agency has the ability to add metrics specific to their needs. The goal is not just quality improvement; it is the quality of care to the patient.

The FirstPass Bundle of Care includes the following protocols: ACS/STEMI, Stroke, Trauma, Airway Management, Cardiac, and Universal.

Outside of the standard Bundle of Care, you are agency has the ability to add additional protocols to look at others that are important to you. Examples include: Billing, Sepsis, Refusals or Pain Management.
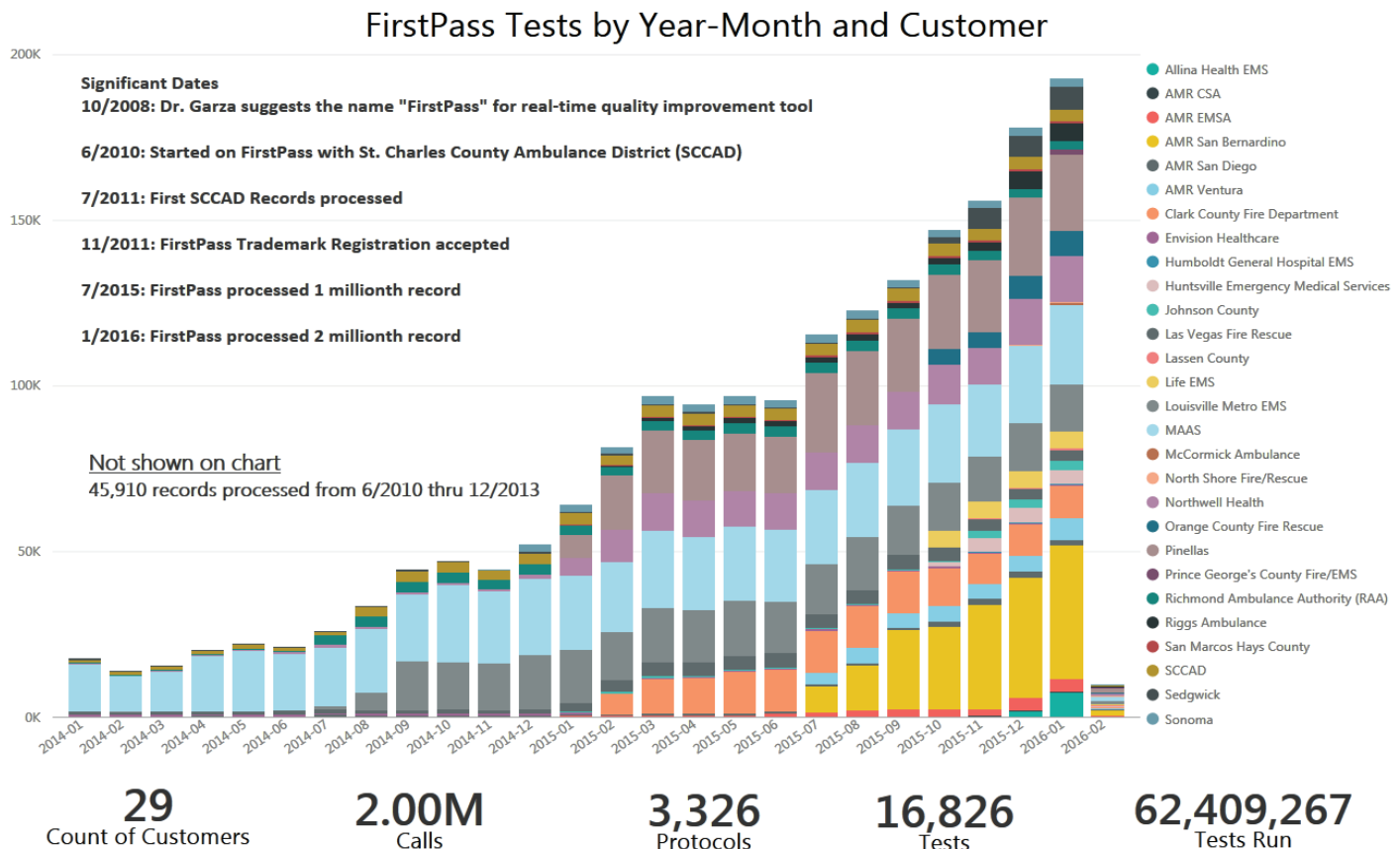
You have the data. Now what you need is a way to understand what it means quickly and confidently.

KEY BENEFITS

- *Real-time Automated QA/QI - use one tool to measure protocol compliance, documentation, and patient outcomes*

- *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*

FirstPass has processed more than 2 *million* ePCR records and performed more than 62 *million* tests for deviations from protocols

FirstPass Tests by Year-Month and Customer

Significant Dates
10/2008: Dr. Garza suggests the name "FirstPass" for real-time quality improvement tool

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

7/2011: First SCCAD Records processed

11/2011: FirstPass Trademark Registration accepted

7/2015: FirstPass processed 1 millionth record

1/2016: FirstPass processed 2 millionth record

Not shown on chart
45,910 records processed from 6/2010 thru 12/2013

Legend:
- Allina Health EMS
- AMR CSA
- AMR EMSA
- AMR San Bernardino
- AMR San Diego
- AMR Ventura
- Clark County Fire Department
- Envision Healthcare
- Humboldt General Hospital EMS
- Huntsville Emergency Medical Services
- Johnson County
- Las Vegas Fire Rescue
- Lassen County
- Life EMS
- Louisville Metro EMS
- MAAS
- McCormick Ambulance
- North Shore Fire/Rescue
- Northwell Health
- Orange County Fire Rescue
- Pinellas
- Prince George's County Fire/EMS
- Richmond Ambulance Authority (RAA)
- Riggs Ambulance
- San Marcos Hays County
- SCCAD
- Sedgwick
- Sonoma

29	2.00M	3,326	16,826	62,409,267
Count of Customers	Calls	Protocols	Tests	Tests Run

FirstPass FAQs

How is FirstPass different from FirstWatch?

FirstPass is an add-on, enhancement module that sits on top of FirstWatch. FirstWatch is the foundation for which the data is derived, where you define the things you want to look at and calls are pulled based on user-defined filters. FirstPass then takes that data through a very structured process of algorithms and logic to evaluate specific quality oriented protocols, tests and outcomes. A queue based tool, FirstPass allows members of QA/QI, risk management and the medical director's office to all access and work through one singular quality improvement tool.

Can FirstPass be customized to fit my system's protocols?

Providing that the data source (CAD, ePCR, ProQA, Hospital Data etc.) FirstWatch is interfaced with captures relevant data that can be used to evaluate against your systems protocols, FirstPass can have a high degree of customization. Once a customer defines what they want to measure, we can build custom protocols that look for quality metrics driven by customer focused initiatives as well as regional or state level mandates.

While FirstPass is highly customizable, we recommend starting with our "Bundle of Care" approach as envisioned by our Medical Director, Dr. Alex Garza. This initial set of evidence based protocols is designed to encompass recognized standards of care, the affordable care act and overall best practices. The Bundle of Care is made up of the following protocols: **ACS/STEMI, Stroke, Trauma, Airway Management, Cardiac Arrest, Universal OR Billing. Additional metrics to consider might be: Pain Management, Patient Care Aspect, High Risk/Low Frequency Event or Non Transports/Refusals.**

How will my QA/QI department benefit from FirstPass?

The overarching goal of FirstPass is to provide automated data analysis for clinical indicators and quality measures – all in real-time, at your fingertips. With FirstPass, QA/QI teams can now spend more time working to improve patient outcomes rather than filtering through every patient record to locate potential outliers that could indicate opportunities for improvement in patient care. FirstPass automates a process that is traditionally time, resources and labor intensive; you will now know right away when a call is outside the expected parameters occurs

.Real-time feedback and knowledge of what is happening within your system at all times allows for collaboration amongst crew members, managers, QI/QA analysts, the Medical Director and any other stakeholders involved. Ultimately, this will result in rewarding success to crew members for a job well done and improving patient outcomes by focusing on areas of improvement and continuing education in a timely and continuous manner. Additionally, FirstPass comes with real-time reporting tools; examples include Provider Protocol Compliance, System Protocol Compliance and Summary of Test by Protocol.

How is FirstPass connected to Healthcare Reform and the new focus on quality outcomes?

Healthcare is moving to quality measurement, bringing with it improved patient care – and financial implications. Simply stated, the components of the Affordable Care Act are directly related to controlling cost through a focus on quality of care. The same quality measures that are driving change in healthcare will soon be coming to EMS. Progressive EMS agencies are monitoring, measuring and managing quality to improve patient care and ensure success when financial incentives become realities. FirstPass helps agencies to define, automate and streamline their measures and monitor in a timely, consistent and reliable manner. This will allow systems to make corrections and demonstrate timely and effective care through the tracking of patient satisfaction and outcomes in real-time.

FirstPass Reports

The FirstPass module comes with the following "Bundle" of Standard Reports:
1. Provider Protocol Compliance
2. System Protocol Compliance
3. Summary of Test by Protocol
4. Protocol Compliance Graph
5. Protocol Summary Report
6. Call Review Status Report

Provider Protocol Compliance: Display compliance of protocols and compare them against the system for the same time frame selected. Individual tests can be selected to view the incidents used for compliance reporting.

FIRST WATCH. Provider Protocol Compliance (Draft)

Completed By	Avg Adj Percent	Test	Total Incidents	Test %	System Test %	RAW Protocol %	Adjusted Protocol %
JI9ADXLJKPLK	11.01%	**Universal Treatment**	11	74.24%	77.57%	18.18%	18.18%
		Two sets of vital signs > four minutes apart		72.73%	60.49%		
		SpO2 measured and if <95% O2 administered		72.73%	91.36%		
		AVPU or GCS documented		100.00%	100.00%		
		At least one Pain Scale if patient alert		27.27%	27.78%		
		Impression documented		72.73%	98.15%		
		Medical History, Medications, and Allergies documented		100.00%	87.65%		
		Billing	26	86.36%	90.23%	3.85%	3.85%
		Impression documented		80.77%	97.36%		
		Name documented and not last name of "Doe"		100.00%	100.00%		
		DOB documented		100.00%	98.53%		
		Address and Zip documented		84.62%	87.52%		
		Contact Phone documented		3.85%	40.68%		
		Method Patient moved to Ambulance documented		100.00%	100.00%		
		Transport Mileage documented		100.00%	100.00%		
		ALS Assessment documented		80.77%	84.58%		
		Patient signature obtained or valid reason for no signature documented		100.00%	83.85%		

System Protocol Compliance: System compliance of clinical performance over a chosen time frame (one protocol in expanded view will display all tests and further drilldown will display incidents). Displays raw percentage (original results of QA) versus adjusted compliance (after thorough review and assigning of exemptions).

System Protocol Compliance (Draft)

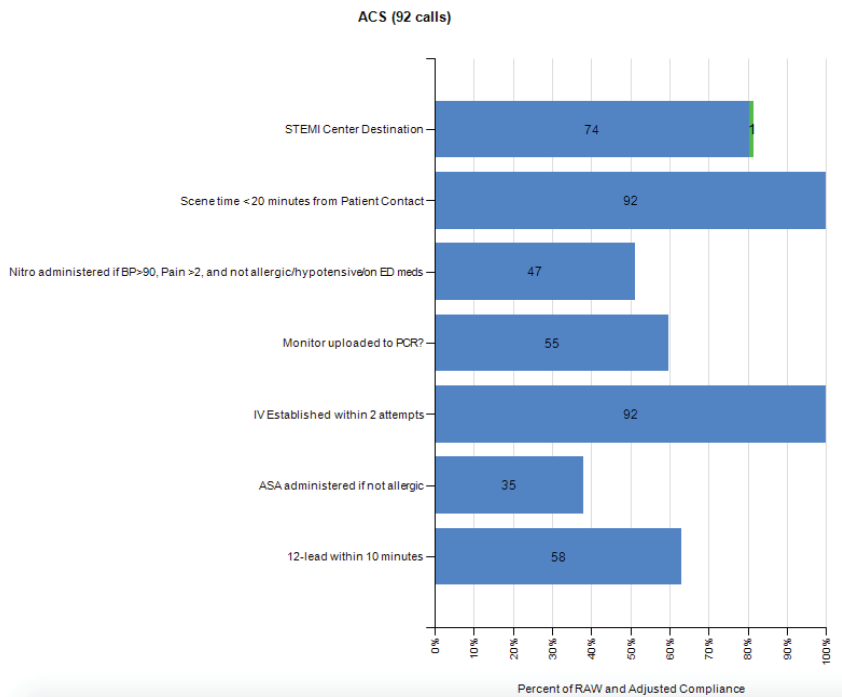| Protocol	Test	Total Incidents	Yes	System Test %	RAWPass	Adj Pass	RAW Protocol Compliance	Adj Protocol Compliance
⊟ ACS		92	64.71	70.34%	23	23	25.00%	25.00%
	Monitor uploaded to PCR?		55	59.78%				
	12-lead within 10 minutes		58	63.04%				
	ASA administered if not allergic		35	38.04%				
	Nitro administered if BP>90, Pain >2, and not allergic/hypotensive/on ED meds		47	51.09%				
	Scene time < 20 minutes from Patient Contact		92	100.00%				
	STEMI Center Destination		74	80.43%				
	IV Established within 2 attempts		92	100.00%				
⊞ Altered/Seizure		101	94.63	93.80%	56	56	55.45%	55.45%
⊞ Billing		857	773.09	90.21%	228	228	26.60%	26.60%
⊞ Cardiac Arrest		7	5.60	80.00%	1	1	14.29%	14.29%
⊞ Cardiac Arrhythmias		209	153.85	73.61%	0	0	0.00%	0.00%
⊞ CVA/Stroke		12	9.67	80.56%	3	3	25.00%	25.00%
⊞ Pain Management		159	100.22	63.03%	4	4	2.52%	2.52%

Summary of Test by Protocol: This displays the system protocol compliance. When the protocol is expanded, the individual protocol test information and compliance is displayed. *When expanded, this displays the protocol and the associated tests with their system-wide compliance.

Protocol	Test	Total	Yes		No	
⊞ ACS		92	64.71	70.34%	27.29	29.66%
⊞ Altered/Seizure		101	94.63	93.69%	6.25	6.19%
⊟ Billing		857	773.09	90.21%	83.91	9.79%
	Impression documented		831	96.97%	26	3.03%
	Name documented and not last name of "Doe"		857	100.00%	0	0.00%
	DOB documented		846	98.72%	11	1.28%
	Address and Zip documented		747	87.16%	110	12.84%
	Contact Phone documented		353	41.19%	504	58.81%
	Method Patient moved to Ambulance documented		857	100.00%	0	0.00%
	Transport Mileage documented		857	100.00%	0	0.00%
	ALS Assessment documented		719	83.90%	138	16.10%
	Patient signature obtained or valid reason for no signature documented		723	84.36%	134	15.64%
	Facility Signature documented		857	100.00%	0	0.00%
	Crew signature documented		857	100.00%	0	0.00%
⊞ Cardiac Arrest		7	5.60	80.00%	1.40	20.00%
⊞ Cardiac Arrhythmias		209	153.85	73.61%	55.15	26.39%
⊞ CVA/Stroke		12	9.67	80.56%	2.33	19.44%
⊞ Pain Management		159	100.22	63.03%	58.78	36.97%
⊞ Respiratory Emergencies		107	97.08	90.73%	9.92	9.27%
⊞ STEMI		2	1.55	77.27%	0.45	22.73%
⊞ Trauma		114	82.79	72.62%	31.14	27.32%
⊞ Universal Treatment		409	315.83	77.22%	93.17	22.78%

FirstWatch Solutions, Inc   322 Encinitas Blvd., Suite 100, Encinitas, CA 92024   p 760.943.9123   f 760.942.8329
www.firstwatch.net

Protocol Compliance Graph: This is a graphical representation of the tests for each protocol. The bar graphs can be clicked to provide a detailed summary of all incidents that failed a particular test within a protocol. *Drill Thru the graph to display incident information for each incident that failed within a protocol.

ACS (92 calls)

Test	Value
STEMI Center Destination	74 / 1
Scene time <20 minutes from Patient Contact	92
Nitro administered if BP>90, Pain >2, and not allergic/hypotensive/on ED meds	47
Monitor uploaded to PCR?	55
IV Established within 2 attempts	92
ASA administered if not allergic	35
12-lead within 10 minutes	58

Percent of RAW and Adjusted Compliance

➢ **Summary Drill Through**

Criteria:

Date Range: 02/01/2016 to 02/10/2016

Number of Incidents: 92

Protocol: ACS

Test: Nitro administered if BP>90, Pain >2, and not allergic/hypotensive/on ED meds

Total Yes: 47 / **Total No:** 45

Exception(s): All

Resolution(s): All

<< Return to Summary

Incident Number	Test Result	Inc Date	Status	Problem	Unit	Chief Complaint	Crew 1	Crew 2
4973	No	2/1/2016 2:34:29 AM	Pending Review	1ST TRI/SERIOUS HEMORRHAGE	M17	Syncope/Fainting	OR3Z3K1MMLZ	OR3Z3K1MMLZHQU
4985	No	2/1/2016 8:10:14 AM	Pending Review	FAINT/ALERT/ABNOR BREATH	M3	Near syncope	OR3Z3K1MMLZHQU	OR3Z3K1MMLZ
5037	No	2/1/2016 11:40:47 AM	Pending Review		M7	MVA Non-Traffic	OR3Z3K1MMLZHQ	OR3Z3K1MMLZHQU
5134	No	2/1/2016 5:04:29 PM	Pending Review	FAINT/ALERT/ABNOR BREATH	M9	Syncope/Fainting	OR3Z3K1MMLZH	OR3Z3K1MMLZHQUU3U

Protocol Summary Report: Provides a count of incidents and displays the raw pass count and percentage as well as the adjusted pass count and percentage of incidents in FirstPass. Adjusted refers to incidents that were reviewed and found to have passed due to predetermined exception criteria.

Protocol	Total Incidents	RAW Pass Count	Adj Pass Count	RAW Protocol Compliance	Adj Protocol Compliance
ACS	92	23	23	25.00%	25.00%
Altered/Seizure	101	56	56	55.45%	55.45%
Billing	857	228	228	26.60%	26.60%
Cardiac Arrest	7	1	1	14.29%	14.29%
Cardiac Arrhythmias	209	0	0	0.00%	0.00%
CVA/Stroke	12	3	3	25.00%	25.00%
Pain Management	159	4	4	2.52%	2.52%
Respiratory Emergencies	107	34	34	31.78%	31.78%
STEMI	2	0	0	0.00%	0.00%
Trauma	114	0	0	0.00%	0.00%
Universal Treatment	409	65	65	15.89%	15.89%
Totals	2,069	414	414		

Call Review Status Report: This report displays which incidents in FirstPass have been assigned to individual reviewers and displays how long they have been in the queues for review. It is designed to track the time an incident is assigned in FirstPass and includes each of the users which can review incidents.

Assigned To	Assigned At	Days Assigned	Status	Incident #	Incident Date/Time	Primary Protocol	Crew 1	Crew 2
9A9PIOKD40ETGSAC	2015-08-18 14:44:23	177	Clinical Review In Progress	33683	2015-08-13 20:17:04	CVA/Stroke	9A9PIOKD40ETG	9A9PIOKD40ET
	2015-08-11 08:56:02	184	Clinical Review In Progress	31763	2015-08-02 00:05:05	Cardiac Arrest	9A9PIOKD40ET	9A9PIOKD40E
	2015-07-23 10:32:28	203	Clinical Review In Progress	30118	2015-07-23 04:05:39	Trauma	9A9PIOKD40ET	9A9PIOKD40ETGSACT
	2015-07-23 10:26:47	203	Clinical Review In Progress	29729	2015-07-20 21:25:45	CVA/Stroke	9A9PIOKD40ETG	9A9PIOKD40ET
	2015-07-08 11:44:58	218	Clinical Review In Progress	26756	2015-07-02 08:45:48	Cardiac Arrest	9A9PIOKD40ET	9A9PIOKD40ETGSA

TOTAL QUALITY MANAGEMENT

Richmond Ambulance Authority uses technology to enhance its QA/QI process

By **Michael Gerber**, MPH, NRP and **Rob Lawrence**, MCMI

Richmond, Va., Ambulance Authority (RAA) is well known for being a high-performance EMS system and for its community education efforts and implementation of a culture of safety.

But the agency has also recently taken a huge leap forward in the areas of quality assurance (QA) and quality improvement (QI). RAA, which serves as the sole provider of emergency ambulance service for the Virginia capital, has implemented the "Total Quality Management" (TQM) system. The system links quality management efforts in the clinical, operations and billing arenas in order to comprehensively improve RAA's service and efficiency.

Each month, RAA's TQM committee meets to discuss any potential areas for improvement. The director of reimbursement might mention a specific documentation issue that's causing delays in billing or collections. The chief clinical officer may discuss intubation rates and educational programs being implemented to improve them.

The idea behind TQM is that everything is interconnected. Dispatch and operations impact clinical care, clinical documentation impacts reimbursement, reimbursement impacts operations, and so on. Like many agencies, RAA has a clinical services committee that focuses solely on clinical issues, where the medical director is joined by the clinical officer, the QA/QI coordinator, the training staff and other paramedics. But the TQM meeting adds another layer.

Attendees at the TQM meetings include the chief operating officer, the director of operations, the chief clinical officer, the quality manager, the director of reimbursement, the compliance officer and the operations and communications supervisors.

Believing that each aspect of agency performance is connected and part of the cycle of providing high-quality services, RAA uses its TQM approach to measure and analyze outcomes and processes and make adjustments to training and policies to achieve its desired outcomes.

USING TECHNOLOGY TO FILL THE GAPS

Previously, RAA's clinical and documentation QI process focused on reviewing specific types of patient care reports (PCRs), such as all cardiac arrests; specific high-risk, low-frequency procedures (e.g., cricothyrotomy); and a certain percentage of other calls. The agency also would choose to review specific topics or themes during certain months—perhaps looking at reports written by new hires one month and field training officers the next.

The billing team would then review the report to identify documentation issues related to reimbursement.

Like most departments, RAA performed these focused PCR reviews because trying to review every PCR provides a limited return on a significant investment of manpower and resources. Either several reviewers read the reports with little consistency or guidance on what to look for, or one person attempts to review every PCR but eventually gets so far behind they scramble to catch up and can't provide effective feedback to providers or correct documentation errors in time to impact billing. Practitioners often didn't receive the feedback until several weeks after the call, when they might not even remember the patient.

In Richmond, agency leaders felt the process wasn't as effective as it could be. They began searching for other solutions, and found one right in their own headquarters.

In the dispatch center, supervisors had already seen how technology could provide real-time feedback and lead to improvements. At any time during the day, dispatchers can look at a monitor that shows whether they're meeting certain performance standards. RAA uses FirstWatch, a California-based data and technology firm, to monitor computer-aided dispatch (CAD) data and provide almost instant analysis.

In the dispatch center, that has helped drive improvements in areas like call processing times, where no dispatcher wants to be the one not meeting the goal that day.

On the clinical side, RAA recently began using FirstPass, a tool developed by FirstWatch to automatically evaluate PCRs for adherence to protocols. FirstPass works by running each PCR through a series of tests based on certain criteria as soon as the data is available. The tests are based on treatment bundles and tailored to the agency's protocols.

The software also compares each PCR to a universal protocol that checks reports for certain demographic and basic clinical data, such as baseline vital signs, signatures and other information RAA wants to collect for every patient.

Certain types of reports are screened further. For example, if the patient complaint is for chest pain or another cardiac-related problem, FirstPass will look for documentation of a 12-lead ECG. If none is documented, the incident is flagged. For chest pain patients, FirstPass will also look for appropriate documentation of specific treatments, such as aspirin or nitroglycerine administration. FirstPass's clinical care bundles are evidence-based but also tailored to RAA's protocols and training. RAA is also working with the FirstPass team to develop even more sophisticated analysis and reporting tools.

THE TQM PROCESS

When paramedic and RAA's QA/QI Director of Operations Tom Ludin arrives each morning, he checks to see which reports were flagged by the FirstPass system. He can immediately review the PCR to determine if it was a documentation error, an omission in patient care or if there was a reasonable deviation from protocol. If the answer isn't clear, he can talk to the crew who treated the patient first to help make his decision while the crew still recalls the details of the call.

"It gives a lot of opportunity to look through and see where improvements are needed," says Ludin. "We can't fix it if we don't know it's a problem."

FirstPass not only allows for every PCR to be reviewed for at least minimal criteria, it also creates a system for measuring overall performance of the agency and individual providers. In many systems, simple

database searches and spreadsheet computations can determine how often 12-lead ECGs are documented as having been performed on chest pain patients. But FirstPass creates an easy way to then track why that happened. On a continuous basis, supervisors can determine whether providers require re-education in clinical areas, documentation, or both.

"Ninety-nine percent of the calls pass the criteria. I never look at most of those," says Ludin.

After Ludin reviews a PCR that failed a FirstPass test, he decides whether there was a deviation from protocol or a documentation error and emails the provider who wrote the report within one business day. That provider then has a chance to review the call and explain what happened, or correct the PCR, and Ludin and his colleagues determine whether any further action—such as remedial training—is required.

But while FirstPass allows RAA to check each PCR for certain criteria, it doesn't replace having a real person dedicated to QA/QI.

"FirstPass is a tool," Ludin says, explaining that he still uses his own database queries and other methods for other aspects of the quality management process.

For example, Ludin reads a random selection of PCRs each month so he can look for any issues the computer might not catch. As an accredited dispatch center, RAA already reviews the 9-1-1 calls for critical cases and a random selection of other calls each month—Ludin uses the same list to determine which PCRs he will review.

Having a TQM system means that when issues are discovered by one department, the entire agency helps find a solution. This will become even more critical for EMS agencies when the next revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10) is adopted by payers later this year.

With ICD-10, the number of billing codes will greatly expand, and the importance of good documentation will increase. Having a TQM program is helping RAA prepare for these changes by bringing billing and clinical services to the table together. When the billers find an issue with documentation, they can ask the clinical supervisors about it and determine if it's a documentation error or a misunderstanding by the billers over what service was actually provided. If systemic problems are discovered, the clinical supervisors can conduct training or change the minimum required information to complete a PCR.

CLOSING THE QI LOOP

RAA keeps its quality management as nonpunitive as possible, focusing instead on finding ways to motivate its staff to make corrections and solve problems. Just publicly displaying some performance measures, either at the individual level or system-wide level, has led to improvements. Clinical lapses aren't necessarily tied to performance evaluations, unless supervisors feel there are no efforts made to improve.

"You're not evaluated on your QA/QI results," Ludin says. "Instead it's your responsiveness to training."

When it was recently discovered that intubation rates were slipping after an influx of newly qualified paramedics, RAA's training coordinators instituted a system-wide effort to improve—even though they knew not every single paramedic had unsuccessful intubations. In the Login Room, they set up intubation manikins and equipment, as well as some literature and videos on airway management. At the beginning of each shift, every ALS provider took 10 minutes to practice intubation before heading out on the ambulance to run calls.

After the recent intubation refresher stations, RAA's training staff received positive feedback from the providers, including one paramedic who credited the training with helping make his first live intubation successful.

RAA was also an early EMS adopter of self-reporting. Several years ago, operational medical director Joseph Ornato, MD, signed off on a self-reporting protocol that encourages providers to come forward when they make an error or omission.

But this isn't to say that RAA doesn't let providers know they value high performance. Each year when employees submit preferences for which shifts they want to work, RAA ranks them using a combination of seniority and compliance to certain standards. With FirstPass now in effect, that might include compliance to clinical protocols and PCR documentation in the future.

THE FUTURE OF QA/QI

Technology adds one more tool to the TQM process, allowing personnel to spend more time doing what they do best—analyzing the problems and finding solutions—instead of spending hours determining whether the right boxes were checked. Software can't replace having dedicated providers and educators, but it can make the system more efficient and more robust, allowing agencies to focus on areas where improvement is necessary and ultimately provide better care for their patients. **JEMS**

Michael Gerber, MPH, NRP, is a paramedic, instructor, author and consultant in Washington, D.C. He has more than a decade of experience in EMS and the fire service. He can be reached at mgerber@redflashgroup.com.

Rob Lawrence, MCMI, is chief operating officer at RAA and was named an EMS 10 Innovator for his work on the Rider Alert program in 2011. Rob is a graduate of the U.K.'s Royal Military Academy, Sandurst, and spent his first career as an active-duty Army officer in the British Royal Army Medical Corps, after which he held various senior leadership roles in U.K. ambulance services before moving to Richmond, Va., to join RAA.
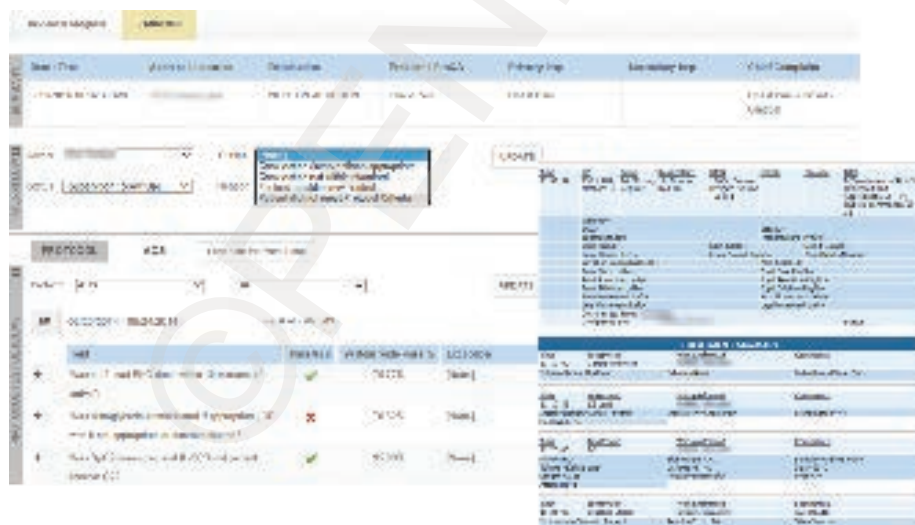
The TQM system links quality management efforts in the clinical, operations and billing arenas in order to comprehensively improve RAA's service and efficiency. Photo courtesy The RedFlash Group/RAA

How is Your System Really Performing, Right Now?
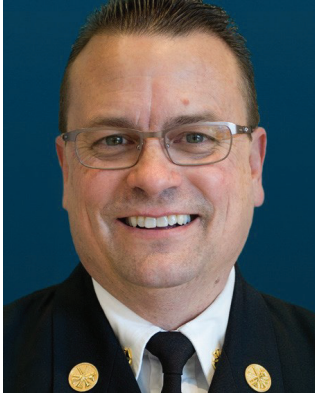
"*FirstPass shines a light on the clinical cases that matter the most, including STEMI, stroke, cardiac arrest, and airway management. It enables us to enhance patient care by recognizing, in a timely fashion, excellence in patient care and opportunities for improvement for our crews caring for these critical patients.*"

DAVID SLATTERY, MD, MEDICAL DIRECTOR, LAS VEGAS FIRE & RESCUE

"*With FirstPass, we're able to focus our attention on the most important calls as they happen. This in turn points us to where we need to further train and educate our staff. Traditional quality improvement looks at a percentage of your call volume. FirstPass looks at everything – all the time. Everyone talks about how quickly we respond; now we can talk about how well we're performing clinically, with immediacy--and we're very   excited about that.*"

ROB LAWRENCE, CHIEF OPERATING OFFICER, RICHMOND AMBULANCE AUTHORITY

To learn more about FirstPass, please contact our sales team:

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Let us show you how FirstPass can help.

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Every Record. In Real Time. Automatically.