get the **right** information.

at the **right** time.

to the **right** people—every call.

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**FEATURES**

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Critical care aircraft-fixed and rotary wing are specially equipped as flying intensive care units.

30 | WHEN SECONDS DO COUNT
The ECHO-Level Determinant in the protocol system signals an obviously life-threatening situation that demands instant response.
Sherri is the training and operations manager for Waukesha County Communications, Wis., a combined dispatch center in southeastern Wisconsin, just west of Milwaukee, a land where the beer runs freely and locals proudly stack cheese on just about everything and call it great. You can contact Sherri at 262-446-5085 or by email at sstigler@waukeshacounty.gov.

Anthony Guido is the Performance Improvement Coordinator for North Shore-LIJ’s Center for Emergency Medical Services in New York. He has worked in emergency communications since 2001 having served as EMT, field training officer, dispatcher, and communications tour commander. He is a member of the Journal’s Editorial Board and assistant editor for Q-Tips.

Art is a regional software and EMD-Q® instructor for Priority Dispatch Corp.® He has been a fire and EMS dispatcher for 17 years and currently works at one of New Jersey’s largest regional EMS dispatch centers. Prior to that he was a fire, EMS, and air medical dispatcher at CenCom. He has been involved in dispatch training and 9-1-1 medical quality assurance since 1999.

Anthony is supervisor at the Portland (Maine) Regional Communications Center, where he coordinates the EMD-Qs within the communication center and, among other responsibilities, maintains the CAD response plans and coordinates the responses with the MPDS® Determinant Levels and Descriptors. He is an EMD and EMD-Q and an ETC Instructor.

Tina Taviano is the telecommunications manager for Lee Control 911 Emergency Dispatch Center for fire and EMS in Fort Myers, Fla. She formerly directed 9-1-1 Communications and Information, and held management positions in the sheriff’s office and fire district. She holds a master’s degree in public affairs management.

Kory is a certified protection professional. Board certified in security management by ASIS International, he is an Advanced EMD and EMT. Kory currently works for Life Link III as a radio and communication specialist. Life Link III provides air medical transportation in Minnesota and western Wisconsin.

Eric Braun is an EMT and certified medical and fire dispatcher and former dispatcher for Monmouth Ocean Hospital Service Corporation Emergency Medical Services (2005-2012), New Jersey. He is currently a freelance writer, with experience in both radio and print journalism. He served in the U.S. Marines from 1983-1988.
Dear Reader

I was introduced to the Police Priority Dispatch System™ (PPDS) in late September 2014, although I would have preferred to remain less familiar.

“Okay, tell me exactly what happened.”

“My mom’s house was robbed.”

“You are at the location now?”

“Yes.”

“When did this happen?”

“Sometime during the last week. We were on vacation.”

Using ProQA software, the dispatcher’s Case Entry Questions identified Protocol 110 Burglary (Break-And-Enter)/Home Invasion as the Chief Complaint. We weren’t in danger—we’d spotted a shoe print near the bathroom sink left behind during the suspect’s apparent exit—and we hadn’t noted a suspicious vehicle or person fleeing from the house or neighborhood.

“The police are on their way,” the calltaker told us. “Do not disturb anything on the scene, including weapons, tools, or objects found nearby.”

A police officer arrived in front of the house within 10 minutes. A scene investigator wasn’t far behind.

Apparently, the intruder had recruited a patio chair to reach the window, pried it open and, then, hoisted his or her body through the opening and into the bathroom. The person stepped down to the sink, leaving the dusty shoe print. The investigator took photos and dusted for prints. The police officer talked to my understandably upset mom, while I filled out the incident report. The officer was also honest about the chances of finding either the thief or the missing items we had yet to inventory.

“We might be lucky,” the police officer said. “Maybe the person will be caught in the act at another home.”

He said the crime was most likely drug-related, and not altogether uncommon. In fact, on a scale from one (low) to 100 for property crime, Salt Lake City earns an 83. In burglary-type offenses, money and property are the objects and, in my mom’s case, the items stolen were small (easily carried) and likely pawned or melted down for the gold content in the hours immediately after the suspect left through the patio gate.

The next day, my husband beefed up security measures at our house, and I helped her compile a list for police and insurance purposes. Some of the losses are more upsetting than others, such as my father’s World War II medals.

My introduction to PPDS was certainly not a welcomed occasion, but at least the dispatcher, protocol, and police officers involved provided a formidable first impression in response to an unfortunate event.

The Journal of Emergency Dispatch is the official bimonthly publication of the International Academies of Emergency Dispatch™ (IAED), a non-profit, standard-setting organization promoting safe and effective emergency dispatch services worldwide. Composed of three allied academies for medical, fire, and police dispatching, the IAED supports non-respond-er-related research, unified protocol application, legislation for emergency call center regulation, and strengthening the emergency dispatch community through education, certification, and accreditation.

General IAED membership, which includes a Journal subscription, is available for $19 annually, $35 for two years, or $49 for three years. Non-member subscriptions are available for $25 annually. By meeting certain requirements, certified membership is provided for qualified individual applicants. Accredited Center of Excellence status is also available to dispatch agencies that comply with Academy standards. © 2015 IAED. All rights reserved.
DON’T LET HASTE CLOUD REALITY
Some technologies may require further R&D

Scott Freitag, IAED President

ext Generation 9-1-1 (NG9-1-1) stimulates lots of ideas in the open market, which is a good thing, although some of the concepts may be a bit premature.

Take, for example, the solar-powered phone system—solar panels mounted in reception-poor areas create energy stored in a sealed battery, allowing for 24/7 phone availability. Solar power saves the cost of running cable and is a renewable energy source.

While a possible solution for some, it’s not going to work everywhere.

A solar-powered system wouldn’t work in sun-deprived areas, such as heavily forested regions or near the north-facing side of a mountain. They would also require some type of directory similar to one for AEDs in a cardiac emergency.

Features that some solar-powered phone manufacturers claim are built into their systems are not 9-1-1 friendly, at least at this time. A model talked about in Utah supposedly has the capability to send videos straight to the dispatchers, which might provide a helpful visual of the location.

This brings up the larger problem: the public’s awareness and understanding of our current technology against incorrectly (though unintentionally so) heightened expectations.

In the case of the solar-powered phone system, an alternative-locating device could prove beneficial, but in the absence of a theoretical video capability, it is impractical.

Video sharing is not available at any PSAP, although text-to-9-1-1 continues to gain momentum. Nearly 60 PSAPs in 16 states accept texts (as of May 14, 2014); however, no state has full text-to-9-1-1 capability. The Federal Communications Commission (FCC) text-to-9-1-1 deadline of Dec. 31, 2014, applies to carriers and certain IP-based application providers.

Some states are offering interim solutions or going the route of pilot projects prior to total deployment. Utah is moving ahead with a text-to-9-1-1 pilot project in six PSAPs along the Wasatch Front, according to Utah 9-1-1 Program Manager Eric Parry.

ProQA® has been text-to-9-1-1 capable since 2010, and to receive a text, a center must have a CAD that interacts with the ProQA software.

Locating the caller remains problematic for any center, and that’s where carrier opposition enters the debate in relation to timelines and actual technology. CTIA-The Wireless Association, which represents the major carriers, has called for the FCC to base its rules on verified data, not aspirational goals.

Current FCC outdoor location accuracy regulations include any county or PSAP service area in which the carrier has deployed at least one Phase II cell site.

Carriers can request exclusions where they determine outdoor location accuracy is limited or technologically impossible. A spreadsheet compiled by National Association of State 9-1-1 Administrators (NASNA) Officer Daryl Branson lists 1,533 exclusions and includes all 50 states. The reasons for exclusion include insufficient cell sites and sites too far apart to allow triangulation.

In the near future, the exclusion list could go the way of rotary dial phones.

According to the E911 Location Accuracy Third Report and Order (released February 2014), the FCC will require carriers to test outdoor location accuracy compliance on a periodic basis. Results must be made available to the FCC, PSAPs within their service areas, and 9-1-1 offices in the states or territories in which they operate. The exclusions declared might not pass compliancy testing, especially considering advancing technology.

It’s neither my point to downplay advancements in communication center technology nor to admonish wireless carriers. This is a remarkable period in emergency dispatch history, and we have made tremendous strides in the direction of reaching NG9-1-1 goals. And if the costs of location accuracy improvements are a hang-up for carriers, face it: When a nation goes wireless, people in an emergency need to be assured that help can find them when they call 9-1-1.
Dr. Clawson:

We know that De Luca's Law states: EMDs will follow all protocols per se, avoiding freelance questioning or information unless it enhances, not replaces, the written protocol questions and scripts.

Who is De Luca?
Jayne Robinson
Senior Learning & Development Officer
Organisational Effectiveness & Education
ElmBank Training Centre
West Yorkshire, U.K.

Dear Jayne:

Actually, this question gets asked every now and then, so I thought I would scan and attach the original document that this now well-known law actually came from. It originated when the Los Angeles City (Calif.) Fire Department was implementing the Medical Priority Dispatch System™ (MPDS™) after several very damaging medico-legal problems culminating in the Ziporah Lam case (the 60 Minutes segment used in the EMD course video). It had been our universal experience that during implementation, support for the program, and subsequent compliance to it, must visibly emanate from the highest level of authority within that agency, and that is generally the Chief Officer or Executive. Unofficially, we affectionately call these documents “Death Penalty Memos.”

The moment of online implementation in LA was drawing close at Operations Control Division (dispatch). Our small group at PDC™ was consulting with the city and I personally asked the Chief Engineer and General Manager, Don Manning, to issue a strong memorandum regarding adherence to the protocol. He declined, saying that it should come from the Deputy Chief of Operations. When I strongly disagreed, he explained that while he was the chief of the entire department, his role was more political and that the EMDs would probably never see him during their entire lifetime, while the Deputy of Ops was the main man for all employees in the trenches. While I was thinking that over, Chief Manning mentioned that the nickname for the Deputy Chief of Operations was affectionately known there as “The Enforcer.” That was enough to convince me. That LAFD “enforcer” was Timothy R. De Luca. I had great respect for the man and was saddened to learn that he died of a brain tumor only a few years later.

The official policy memorandum that was issued on Nov. 10, 1988, four days before the “go live,” became a classic and set the tone for the remainder of the implementation. What he said about protocol compliance has since been proven to be the foundation of a successful EMD system. His name lives on with this law.

Hope this helps you better understand “the rest of the story.”

Best regards ... Doc

Jayne Robinson
Senior Learning & Development Officer
Organisational Effectiveness & Education
ElmBank Training Centre
West Yorkshire, U.K.

DE LUCA’S LAW
Was this a real person?

Jeff Clawson, M.D.
The methods fire agencies use to track calls vary according to emergency dispatch protocols and/or technology and the manpower available to manage the system and keep data current. The goal, however, is obviously the same no matter the method: finding the ultimate techniques—such as call data analysis—to efficiently protect life, property, and natural resources.

Manual tracking is obsolete in the computer age, and has been surpassed during the past decade with, for example, Geographic Information System (GIS) technology and the Fire Priority Dispatch System™ (FPDS). GIS is a technology that integrates geographic features with tabular data to assess and better understand real-world problems. During the past 60 years, GIS has evolved into a way to visualize, manipulate, analyze, and display spatial data. GIS-layered maps can benefit fire agencies in many ways, including complex incident analysis to provide decision support for fire prevention, staffing requirements, and apparatus placement/deployment.

The FPDS can provide agencies with similar benefits.

A project to characterize the distribution percentages of call incident types using the structured protocol system (Dornseif, et al., 2014) proved as much. The nine agencies selected for the study all use FPDS and are Accredited Centers of Excellence. The sample (2011–2013) of specific data elements extracted from ProQA® datasets included the following, among others: the Chief Complaints (CCs) selected by the emergency fire dispatchers (EFDs) using ProQA; the priority level the EFDs assigned to each call; and the specific Determinant Descriptors the EFDs selected for each call.

The primary endpoints were the frequency distributions of calls, categorized by the CCs and priority levels, as selected by the certified EFDs in the centers.

Overall, 205,324 fire calls were handled by the nine centers during the study period. The most commonly used protocol was Protocol 52: Alarms, contributing nearly 50 percent of the total call volume. The top five were Protocol 52: Alarms, Protocol 67: Outside Fire, Protocol 69: Structure Fire, Protocol 53: Citizen Assist/Service Call, and Protocol 55: Electrical Hazard.

The overall percentage of BRAVO- and CHARLIE-level calls was nearly identical (35.3 percent and 35.0 percent of total call volume, respectively). Study findings demonstrate the ability of the EFD, using the FPDS, to gather detailed knowledge regarding the frequency distribution of call and event types. As stated, this important data can assist fire services with planning and operational decision-making, including call response need, crew resource allocation, and even the purchase of new equipment and apparatus (e.g., the finding that Outside Fire calls are even more common than Structure Fire calls suggests a potential need for more apparatus specific to outside fires, such as a brush truck).

In the communication center, accurate call-type distribution provides the opportunity to track trends and patterns and to compare call distributions of similar agencies. Categorizing call types—normal to rare—can drive more effective training focusing on calltaker proficiency with common calls and preventing loss of EFD familiarity with call types that are infrequent, but potentially serious, if mishandled.

From the moment an emergency call is received, FPDS helps reduce critical time and increases efficiency.

From the moment the call is received, through the deployment of tactical resources, the FPDS (similar to GIS) helps reduce critical time and increases efficiency. Both provide additional power to the fire personnel whereby hazards are evaluated, service demands are analyzed, and resources deployed.

Source
Some people are big on New Year’s resolutions. Others think they are ridiculous and refuse to entertain the concept. I am what you would call a “closet New Year’s resolutionist,” which means that although I quickly deny the existence of resolutions, I will admit that I secretly DO develop resolutions (typically surrounding my desire to cut down on caffeine, sweets, and naughty words, and increase my exercise). I don’t share them with others out of the overwhelming fear that I am now committed to actually doing something to achieve them!

Whether or not you believe in New Year’s resolutions, I am of the opinion that we can do ourselves a big favor by identifying some core individual (yet department-centric) resolutions in the dispatch environment. Here are a few suggestions:

I will take better care of my health and the health of my teammates.

We know how easy it is to get sucked into poor eating and sleeping habits in the dispatch environment, especially given the 24/7 challenge. Sleep is critical, so get enough of it. Pass on the pizza, soda, and sweets, and instead try snacking on fresh veggies and fruits. Encourage healthy eating among the team; have a “salad bar day” encouraging everyone to bring salad fixings to share. Appoint a “health czar” for each shift and let the czar find healthy initiatives for the team.

I will do more to support the mission, vision, and values of my center.

The start of a new year offers a great time to have folks review their center’s mission, vision, and values statements, and to give thought as to whether you have done your best to embrace the values, contemplate the vision, and promote the mission. If your center does not have these core statements, get to work on developing them. Seriously, do it.

I will encourage my team, and I will practice patience with my customers, both internal and external.

We live in a world of instant gratification, making it an enormous challenge to apply patience in our fast-paced environment. Stop, take a breath, and remember that our customers are typically under pressure. Be the drain in the bathtub that’s getting ready to overflow. Be the relief valve. Don’t add to the problem; be the solution.

I will do more learning. I will seek out opportunities for growth.

Throughout my career I have heard it constantly: “They NEVER send us anywhere. Dispatchers NEVER get to go to training. Only the ‘chosen ones’ attend conferences, workshops, or training.” Oh, and the all-encompassing wail of, “Nobody cares about the dispatchers!” Hogwash. Respectfully approach your dispatch supervisor, whether civilian or sworn. Ask for a meeting, but have your homework done. What valuable training is coming up? Can we send one or two people to a “train the trainer” situation? Help the supervisor understand that training protects the agency from litigation. Training allows for the professional development of staff. Training benefits the officers, firefighters, and EMTs, and it benefits our citizens. Remind the chief or supervisor about having the most highly trained communications staff in the area, and boy, won’t he or she look good when that happens!

We can do ourselves a big favor by identifying core resolutions in the dispatch environment.

I will offer solutions and suggestions instead of complaints and criticisms.

Stop with the “victim-think.” Put on your big girl/boy pants. When you or your team members have a complaint or criticism—whether it’s about policy, equipment, or personnel issues—by all means, be ready to speak to communication center management about it. But before you do, make sure you have a few solutions to bring along. I promise you will get much further and will positively influence your chance of success in the process!
PETS, PILLS, AND PORCH LIGHTS

PDIs are the precaution

Art Braunschweiger

ProQA® medical users will instantly recognize “Pets, Pills, and Porch Lights” as an irreverent reference to three of the Post-Dispatch Instructions (PDIs) from the Case Exit Protocol in the Medical Priority Dispatch System™ (MPDS®). We give the instructions to callers all the time, but how often do we really think about them? For many emergency dispatchers, the Case Exit PDIs are merely something to get through before the call is ended.

PDIs are actually much more important than that.

At NAVIGATOR 2014 in Orlando, Fla., Thomas Margetta presented the session “Your PSAP is a 747,” an in-depth look at aviation disasters, including the causes behind them and how lessons learned apply to a 9-1-1 Public Safety Answering Point (PSAP) environment. We can use a similar analogy if we think about the Case Exit process like preparing for landing.

The majority of commercial airline arrivals are non-events. Flight attendants make one last pass through the cabin to pick up trash. Passengers are told in that polite but don’t-make-me-have-to-remind-you-again voice to power down and stow electronic devices. Every instruction falls under the reason of “preparing the cabin for arrival,” as the litany goes, and to keep you from becoming injured or possibly killed before the aircraft is parked safely at the gate.

An airplane is a blissfully serene place to catch up on work. It annoys me to have to shut down my laptop 20 minutes out from our destination. But in the event of something had happening on the way down, my laptop could become a projectile that might seriously injure a fellow passenger or me. Similarly, my seatback has to be returned to its fully uncomfortable position because if I’m thrown forward against my lap belt in a crash, my upper body has less distance to travel, and I’m not likely to slide forward under the belt.

A similar rationale is behind the Case Exit PDIs we give so routinely. “Family pets” evokes images of Fluffy the cat and Mr. Jingles the gerbil. But the family menagerie might well include a breed of canine known to act aggressively when protecting its human family, and just because you can’t hear a dog doesn’t mean there isn’t one. Lots of dogs don’t bark incessantly (mine don’t).

Every Case Exit PDI matters or it wouldn’t be there. Badly frightened dogs can hurt responders or cause chaos on scene. Patients can become worse after eating or drinking. Each PDI should be given with the appropriate emphasis and sufficient pause before moving on to the next instruction. Relating the instruction to the situation at hand, providing the instruction is given in a materially identical manner, can enhance a PDI.

For example, “I hear a dog barking. Please put the dog away along with any other family pets.” (While we’re at it, the porch light instruction is intended to be given in the middle of the day. It’s a proven attention-getter when responders are looking for the home.)

In delivering PDIs, don’t turn them into questions (“Do you have any pets?” “Okay, then, put them away.”). There are a lot of things our 9-1-1 callers need to remember and do, and for that reason protocol instructions should be given concisely and efficiently.

Let’s remember that word choice matters, and PDIs are part of the protocol script. It’s not acceptable to say, “If anything changes, give me a call back.” That particular PDI reads, “If s/he gets worse in any way, call us back immediately for further instructions.” That tells the caller why they need to call back.

The Case Exit PDIs are a part of customer service. People do appreciate the help we give, and PDIs do make a difference in preparing the scene for responder arrival.
I had a conversation with a fire chief about the Medical Priority Dispatch System™ (MPDS) and how it relates to responder safety, public safety, and response times. It can be hard to get the message across to responders who don’t understand MPDS Protocols or how they are a benefit to the agencies they serve. Typically, they believe that asking “all of those questions” slows response and that the answers don’t really matter.

I spent some time explaining the system to the fire chief in a manner that I believed would help clarify what the protocols do for responders. First and foremost is the safety aspect. Protocols have built-in questions that help with both responder safety and public safety. There are questions as well as Pre-Arrival Instructions (PAIs) so that the caller can assist with safety-related matters on scene.

I asked the fire chief, “How quick do we need to get there?” to get him thinking about that question.

The biggest threat to responder safety and public safety is responding with lights-and-siren; the protocol system helps to make better decisions by allowing the user to define which calls actually need a lights-and-siren response.

For example, if your mother is having a heart attack, it may indicate lights-and-siren as the appropriate response. If a patient has had back pain for a week and now needs to go to the hospital, with no priority symptoms, then it may be safer for both the responder and the patient to respond to the call without the use of lights-and-siren.

Every protocol has safety questions to evaluate the presence or absence of priority symptoms. In the second example, the calltaker will ask the safety question regarding whether the patient with back pain is completely alert. If the answer is “no,” protocol will default to a higher acuity response.

Responders and chiefs must learn to view the protocol process as a mathematical equation; a patient’s problem, solved correctly and most efficiently, results from asking the right questions and coding the right response.

Ask them: Do you want to be the responder who gets into an accident that injures a co-worker, friend, or member of the public because responders were using lights and sirens when not needed? We have the formula for prevention—the protocol system—and it’s our job to educate the decision makers about how to use it!
What could be more important than protecting our children?

Announcing 9-1-1 COMMUNICATION CENTER BEST PRACTICES IN CASES OF MISSING CHILDREN

A missing child is a critically important and high profile event that can rip the fabric of your agency and community if not handled correctly. In terms of urgency, use of resources and potential impact on the community, a missing child requires a level of readiness akin to a disaster. This joint initiative of NAED, APCO, NENA, National AMBER Alert and the National Center For Missing & Exploited Children (NCMEC) was created to:

- Promote awareness of the critical role of the 9-1-1 communication center in handling missing and exploited children calls
- Develop and endorse best practices
- Develop tools for handling incidents of missing and abducted children

Helping to PROTECT OUR CHILDREN is as easy as 1-2-3!

2. Request a copy of the Public Safety Telecommunicator Checklist for Missing Children.
3. Apply to attend NCMEC’s CEO Overview Course in Alexandria, Virginia.

CEO Overview Course

9-1-1 Communication Center Managers and Directors are invited to apply to attend the two-day overview course held at the National Headquarters of NCMEC in Alexandria, VA. Courses are conducted approximately every six weeks at no cost to participants.

For more information, visit www.missingkids.com/911 or email 911@ncmec.org
The International Academies of Emergency Dispatch (IAED™) has released an updated version of its Fire Priority Dispatch System™ (FPDS™).

Version 6.1 includes a critical component that can have a significant impact on future use of the FPDS. The key element of FPDS v6.1 is the addition of the new ECHO-level determinants on Case Entry for REPORTED BUILDING/STRUCTURE FIRE. These additions will allow agencies to send an earlier response for all structure fire incidents with a spontaneous report of smoke or flames while also allowing for differentiated responses and resource allocation for ECHO- and DELTA-level incidents.

The changes were 12 months in the making and based on Proposals for Change (PFCs) submitted by current users of the FPDS and reviewed by fire/rescue experts on the Academy’s Fire Council of Standards. Combining the PFCs with current research and field expertise, the Council of Standards, on behalf of the College of Fellows, determined which proposals would be accepted and the specifics of how they should be implemented.

“Users of the protocol have asked for a way to respond sooner to critical structure fire incidents, and now the Academy has answered,” said Gary Galasso, Chair of the Academy’s Fire Council of Standards and a Priority Dispatch System™ (PDS™) Program Administrator—Fire and Medical.

Other changes were made to the Case Entry Protocol as well as Protocol 69: Structure Fire in order to accommodate the new ECHO determinants on Case Entry. For example, the former Case Entry Questions 4a and 4b have been consolidated into a new Case Entry Question 4a: “(REPORTED BUILDING/STRUCTURE FIRE) What type of building is involved?”

Definitions were also added to the Case Entry Additional Information in order to help EFDs select the correct building type. These new definitions include the following: HIGH LIFE HAZARD, HIGH RISE, COMMERCIAL/INDUSTRIAL Building, and NON-DWELLING Building/Structure.

“The Academy has been working with national and international fire standards with the release of FPDS v6.1 to reduce civilian and firefighter injuries and fatalities due to structure fires,” said Jay Dornseif, a PDS Program Administrator—Fire.

Dornseif added that if some agencies still request additional information prior to dispatch, the DELTA pathway is still available in FPDS v6.1.

It is critical that EFDs learn how to correctly use these new ECHO determinants. FPDS users are encouraged to review the v6.1 update guide and work within their agencies to ensure that this new version of the protocol is used safely and effectively. In doing so, they can assist the fire service in reducing fire fatalities and injuries to the public.

Ultimately, the International Academy of Emergency Fire Dispatch (IAED™) is confident that FPDS v6.1 will have a positive impact for EFDs and fire/rescue responders.

ProQA Paramount software is the exclusive operational system for FPDS v6.1. The updates in this version help decrease calltaking times, increase accuracy and efficiency, and enhance the user experience. For more information about ProQA Paramount or FPDS v6.1, see the link below or email efdstandards@emergencydispatch.org.
Protocol saves time and cuts taxes

It’s not a given that the Fire Priority Dispatch System™ (FPDS™) will change a city’s Insurance Standards Organization (ISO) classification, but Bloomington (Ill.) Communications Manager Darren Wolf is among the first FPDS users to give it a try.

The ISO Public Protection Classification (PPC) program rates community fire suppression delivery systems based on three criteria: fire department, water supply, and emergency communications systems. Extra credit points are given for community risk reduction efforts, such as public fire safety education.

Emergency fire dispatch protocols, certification, continuing dispatch education, and a quality assurance process are factors in the PPC rating scale.

Bloomington’s fire protection area is less than a point shy of the percent required for Class 2 standing. Class 1 is the highest ranking. According to statistics available on the ISO site, only 750 fire protection areas are rated Class 2 out of the 47,500 the ISO recognizes.

Wolf was quick to point out the real benefit of the PPC rating.

“It says a lot about the quality of service you’re providing for your citizens,” he said.

New IAED tools for the tech-savvy comm. center

Have you heard what’s new with the International Academies of Emergency Dispatch™ (IAED™) tools necessary for efficient computerized emergency dispatch?

Earlier initiation of hands-on-chest in the Medical Priority Dispatch System™ (MPDS™) v13.0 for “Obviously NOT Breathing and Unconscious (non-traumatic)” reduces the time to “hands-on-chest” in cardiac arrest situations. When initiated, this Fast Track feature immediately triggers a 9-ECHO-1 response, automatically answers all remaining Case Entry Questions, asks if a defibrillator is available, and then moves directly to the appropriate Pre-Arrival Instructions (PAIs).

MPDS v12.2 bypassed the questions and instructions on Protocol 9: Cardiac or Respiratory Arrest for patients with suspected medical arrest, directing the EMD to proceed with CPR immediately from Case Entry. This direct link was created in an effort to meet American Heart Association recommendations to reduce the time from discovery of cardiac arrest to “hands-on-chest.”

A new Compressions Only pathway in Protocol C in the MPDS gives EMDs access to instructions for continuous compressions with no rescue breaths for adult patients experiencing cardiac arrest of suspected cardiac origin (non-respiratory etiology), when authorized to do so by Local Medical Control.

The Emerging Infectious Disease Surveillance (EIDS) Tool contains a list of possible signs, symptoms, and epidemiological risk factors—as defined by the Centers for Disease Control and the World Health Organization—including any recent patient travel and disease exposure information that might be observed or known about a given “patient of interest.”

The EIDS Tool alert is available to ProQA™ users in English, French, German, Italian, Spanish, Portuguese, Arabic, Dutch, Chinese, Lithuanian, and Malay.

The MPDS, PPDS™, and FPDS™ tools are available only through the software interface of the IAED protocols, including Priority Dispatch Corp’s™ ProQA Paramount versions 5.0/5.1 and Legacy version 3.4.

Stressful nature of dispatch improves job prospects

Employment of police, fire, and ambulance dispatchers is projected to grow 8 percent from 2012 to 2022, about as fast as the average for all occupations. However, the prospects of landing a job in dispatch (regardless of growth) also says something about the job’s stress: The prospects are tied to the stressful nature of the job and the number of workers leaving this occupation.

This is according to the latest report by the U.S. Bureau of Labor Statistics, which also cites overtime, long shifts, and the “pressure to respond quickly and calmly in alarming situations” as major contributors to the job’s stress.

The bureau’s summary lists $36,300 a year as the median salary (in 2012), with the number of jobs in the public sector close to 100,000.
Ride, don’t drive, to hospital following heart attack

Time is critical for patients experiencing a heart attack, and calling 9-1-1 first speeds access to lifesaving treatment, according to MedStar Heart & Vascular Institute cardiology researchers.

According to an article published in Cardiovascular Revascularization Medicine, researchers found that patients transported to the hospital by first responders were treated faster than those providing their own transportation.

The study evaluated the “door-to-balloon” (DTB) time, or the time between when a patient arrives in the ER and when a balloon angioplasty procedure restores blood flow.

The study showed that 83 percent of heart attack patients who used EMS reached the Cardiac Catheterization Laboratory in fewer than 90 minutes—the gold standard—compared to 54 percent of self-transported patients. The median DTB was 20 minutes shorter when patients arrived by EMS than when they were self-transported—65 minutes versus 85.

The study suggests the public needs more education on when to call 9-1-1 and how to seek treatment of a possible heart attack, especially a STEMI. Quick treatment can help limit damage and increase the chance of a full recovery.

STEMI means “ST segment elevation myocardial infarction,” which is a type of heart attack.

Source

The feeling isn’t mutual

Women and men have their differences and that includes heart attack symptoms.

“Women don’t always get the same classic heart attack symptoms as men, such as crushing chest pain that radiates down one arm,” according to writer Lisa Fields, in a WebMD feature. “Those heart attack symptoms can certainly happen to women, but many experience vague or even silent symptoms that they may miss.”

What should women watch for? The prominent symptoms are:

• Chest pain that feels like a squeezing or fullness anywhere in the chest, not just on the left side
• Pain in the arm(s), back, neck, or jaw, which is more common in women than men and can be gradual or sudden, and may wax and wane before becoming intense

Shift work can take off years of effective memory

New research suggests that shift work for more than 10 years might have the equivalent of an extra 6 1/2 years of age-related decline in memory and thinking skills.

Although the study found an association between shift work and earlier declines in memory and thinking, it didn’t prove that shift work was the definitive cause of those changes, said Jean-Claude Marquie, research director at the National Center for Scientific Research, at the University of Toulouse, France.

“Our work suggests that shift work is associated with impaired cognition, that the association is stronger and especially significant for exposure durations exceeding 10 years,” he said.

Recovery of thinking skills took at least five years after the individual ceased any form of shift work, his study found.

Researchers tracked the mental abilities of more than 3,000 people from different regions and job sectors in France over five-year increments (1996, 2001, and 2006). The differences weren’t dramatic. For example, on a scale measuring thinking, memory, and speed, those who had never performed shift work scored 56 points out of a possible 100, while those who had worked rotating shifts for more than 10 years scored about 52.

Source
Halloween is scary time for 9-1-1

This year’s statistics are still being compiled, but if things stay fairly status quo, it won’t be Labor Day topping the list of holidays sparking parents’ frantic 9-1-1 calls. Neither will it be Valentine’s Day or Memorial Day. If all holds the same as 2013, Halloween activities will again claim top place.

According to the Consumer Product Safety Commission, events surrounding the day of kids wearing costumes and soliciting candy sent 4,400 people to the hospital between Oct. 1 and Nov. 30, 2013.

More than half of the visits—53 percent—were due to pumpkin-carving accidents, while another quarter were the result of people falling while putting up or taking down decorations or tripping over costumes.

A study published in the 2010 journal Pediatrics found that Halloween is the holiday with the fourth-highest number of ER visits. Other results included:
- Finger/hand injuries accounted for the greatest proportion of injuries on Halloween (17.6 percent)
- Of the finger/hand injuries sustained on Halloween, 33.3 percent were lacerations and 20.1 percent were fractures
- Children, ages 10 to 14, sustained the greatest proportion of injuries (30.3 percent)

The descending darkness combined with the number of children dashing across streets also places Halloween as the deadliest day of the year for child pedestrian accidents. Children are more than twice as likely to be killed by a car while walking on Halloween night than at any other time of the year, according to a study by Safe Kids USA. The National Highway Traffic Safety Administration reported that 48 percent of all motor vehicle crash fatalities on Halloween night in 2012 involved a drunk driver.

Lose weight, feel great

Want some quick and easy ways to feel great and lose weight? If so, you might want to visit The Healthier 911 Dispatcher Diet blog by Kathleen Babcook.

Babcook is not a certified nutritionist but knows the routine of long hours, eating meals at a desk or on the run, and the struggles inherent with eating right in a high-stress environment. So, take her advice with or without a grain of salt.

First: Toss a salad—opt for oil-based dressings and avoid the heavy, creamy dressings.

Second: Look to protein for power—prepare snack-sized “pick-me-ups” to munch on throughout your shift (a spoonful of peanut butter and packaged string cheese are examples).

Third: Forget the instant overhaul—make small incremental changes that add up without getting you down and discouraged (water instead of high-calorie soda pop and packing a lunch rather than opting for take-out).

“Improving your health is not always easy, especially in the field of emergency dispatch,” Babcook writes. “But judging from the dispatchers we have talked to recently, the end result of losing weight and feeling great are totally worth the changes you’ll make.”

Hacking pays

“Hackathons” award thousands of dollars in prize money to the best hacker in events held across the country, which might seem a bit counter-productive to anti-hacking efforts.

The goal of an officially sanctioned Hackathon, however, is not to crack the security of a computer or network. Rather, it is to create the most innovative mobile applications (apps) for end users, including first responders.

According to a story on FirstNet, hacking for mobile apps at these events, including those highlighting public safety, benefits the end user. An event recently held in Washington, D.C., facilitated by the Department of Homeland Security and sponsored by several private organizations, offered more than $25,000 in prize money in categories that included the best public safety and situational awareness apps. APCO International sponsored an award for the best location app.

Hackathon events are planned as part of the “National Day of Civic Hacking” in coordination with the White House Office of Science and Technology Policy and supported by a number of federal, state, and local agencies.
Suicide is international crisis

One person commits suicide every 40 seconds somewhere in the world, according to a World Health Organization report published in Sept. 2014. The study, which is the first of its kind to chart suicide rates across the globe, found that an estimated 804,000 people killed themselves in 2012, which is partially attributed to the low priority that governments and policymakers place on suicide prevention programs.

According to a few statistics in the report:
- Suicide is the second-leading cause of death globally among young people, ages 15–29
- The annual global age-standardized suicide rate is 11.4 per 100,000 population, and men are more likely to end their lives compared to women
- Globally, suicide accounts for 50 percent of all violent deaths in men and 71 percent in women
- The ingestion of pesticide, hanging, and firearms are among the most common methods of suicide globally

Suicide prevention is an integral part of the 66th World Health Assembly’s Mental Health Action Plan, with the goal of a 10 percent reduction in the suicide rate by 2020.

Australasia NAVIGATOR DOY spotlighted in local media

Grant Perry, an EMD and senior communication center officer with Ambulance Tasmania, Australia, was recently named Dispatcher of the Year at the International Academies of Emergency Dispatch’s (IAED™) Australasia NAVIGATOR 2014, held Nov. 4–5 at Surfers Paradise, Australia.

Within days of the conference, a local Australian newspaper, the Hobart Mercury, published a feature article on Perry, his award, and his experience on the job as an emergency dispatcher.

Yorkshire Ambulance Service goes solar

Yorkshire Ambulance Service NHS Trust in England has been awarded a £166,000 (approximately $259,530 U.S. currency) grant to install solar panels on 175 of its vehicles to prevent draining batteries when the vehicles are stationary.

The ambulance project in Yorkshire was one of 21 projects to receive a grant from a £5 million (approximately $7.8 million) government “clean vehicle technology” funding package. It is the first ambulance service in England to implement the technology on its response vehicles.

Paramedics are required to keep the vehicles’ diesel engines running at all times, despite additional exhaust emissions, and the Yorkshire Ambulance Service expects that the introduction of solar panels will reduce carbon dioxide emissions and nitrogen oxide emissions.

If successful, the trial could be replicated by ambulance services across the country to meet European Union clean air targets.

In total, the funding pays for low-emission technology on 1,080 vehicles, including buses, taxis, vans, fire engines, coaches, and ambulances across Britain.

Yorkshire Ambulance Service planned the rollout to solar panels in November.
The list of Durham Emergency Communications Center (ECC), North Carolina, accolades reads like a résumé submitted for a U.S. 9-1-1 Operation (or Agency) of the Year award.

Durham ECC is an International Academies of Emergency Dispatch® (IAED™) Accredited Center of Excellence (ACE); Project 33 certified by the Association of Public-Safety Communications Officials (APCO) International, Inc.; and accredited by the Commission for Accreditation of Law Enforcement Agencies (CALEA)/Public Safety Communications.

It is also the first 9-1-1 center in North Carolina, as well as one of the first 9-1-1 centers in the U.S., to enable text-to-9-1-1 technology, and the first major municipality to enable the direct 9-1-1 texting feature for its residents through four major wireless carriers.

But it’s not just about the parts: accreditation, certification, and texting capability combined with other advancing technology. They work in sync.

“We look at the process,” said Durham ECC QA Manager Charles Brown. “We look at how everything fits together for the benefit of our callers.”

The 68 employees dedicated to the comm. center answer emergency police, fire, and EMS as well as non-emergency calls for an area covering 296 square miles and 250,000 residents. They work on the third floor of Durham City Police headquarters, an 84,566-square-foot building constructed in 1959 for a life insurance company.

Along with the law enforcement operation, the comm. center occupies quarters that are too small and inadequate for the growing service. Staff members are looking forward to moving to a new building in mid-2018.

Director James Soukup said the proposed law enforcement complex puts the ECC on a dedicated floor in a building attached by a corridor to police headquarters. Proximity maintains their close ties, Soukup said, and complements mutual goals.

Soukup tends to be all about goals.
He started in the profession 33 years ago when the Citrus County (Fla.) Emergency Command Center engaged his radio engineering skills to improve communications. He stayed for the next 22 years building a portfolio that includes replacing the 10-digit emergency number with a 9-1-1 system and combining two police departments, a hospital-based EMS, and 13 volunteer fire departments into the Citrus County Sheriff’s Office Emergency Operations Center (EOC). It was Florida’s first 9-1-1 consolidated center.

Soukup resigned as Citrus County’s EOC director in 2004 for a move to Durham, three years after the Citrus County Sheriff’s Office EOC was accredited as an ACE; the EOC has been re-accredited four times.
Soukup’s goals—never his ambition—changed slightly to fit the times and demands of North Carolina’s fourth-largest city (in terms of population). Achieving ACE was a given. The comm. center was already using the Medical Priority Dispatch System™ (MPDS) and had started the Twenty Points of Accreditation.

“I made sure we finished,” Soukup said.

Durham ECC was first accredited in 2005, and has been re-accredited three times consecutively. A fire ACE and a police ACE are close to being accomplished.

Soukup’s drive to achieve three accreditations—medical ACE, Project 33, and CALEA—and a tri-ACE, however, were not to enhance the center’s already impressive résumé or to claim external recognition outside those they serve.

“Everything we do makes our job more efficient and better for the public,” he said. “That’s what it’s all about.”

On average, Durham ECC processes 949 calls each day, a number that can easily double like it did when a winter storm hit the city on Feb. 12, 2014, and a state of emergency was declared. But it’s not only the calls from residents they answer on a continuing basis. Durham is a happening city; it’s a destination for people from all over North Carolina and outside the state.

An estimated 9 million tourists descend upon Durham each year to visit the historic sites, parks and recreation areas, academic institutions, performance and music venues, downtown shopping district, and its 43 museums and art galleries.

The city also holds running top ratings in “smartest city” profiles owing to Duke and North Carolina Central universities, innovative technology (home to the Ctrl-Alt-Delete computer command), the number of residents with bachelor and master’s degrees, and total volume of book sales. The majority of the Research Triangle Park (RTP) makes its home in Durham County.

Adding to the city’s universal appeal is the “cooperative management style” practiced, Brown said.

“There’s not a lot of the ‘us and them’ mentality,” he said. “We have a high level of cooperation that helps things get done.”

The working-things-out-together philosophy extends to law enforcement, fire, EMS (including EMS Medical Director Eric Ossman, M.D.), and communications. Representatives meet bimonthly to discuss system issues and relay progress reports that relate to their joint public safety responsibility. Brown presents performance measurement data.

“We’re not meeting to have meetings,” Brown said. “We’re constantly looking for ways to connect everything we do.”

Durham ECC is also part of the “Safe & Secure Community” strategic plan developed by the city. Their primary objective—answering 9-1-1 calls within standards to reduce the occurrence and severity of crime—is scored in the plan as “at or above target.”

Brown connected with emergency services right out of high school, owing to the severity of a crime he witnessed while a bystander in a parking lot.

“There was a stabbing,” he said. “When fire-rescue responded, and I watched what they did to help the victim, I knew that’s what I wanted to do.”

Brown, a paramedic, EMD instructor, and an IAED National Q, has “been riding the ambulance” ever since. It was during his earliest days working for Tampa, Fla.-based SAS Ambulance in Durham that he learned about the MPDS from his manager Wayne Clark.

“He taught me about the MPDS years before it was widely adopted in North Carolina,” Brown said. “He made me a believer in its practice.”

In 1989, Brown was hired to work in the Durham comm. center.

It was the toughest job he ever pursued.

“Expectations here have always been high, and it takes the efforts of a whole bunch of people who understand the difference they can make,” he said.

Brown is a dedicated Q, along with fellow Qs Jayme Tidwell and Leigh Watson, and for consistency, they operate on a rotational basis. Each Q eventually gets a turn to review each calltaker.

ACE wasn’t a hard sell, Brown said.

Soukup pushed the community recognition that ACE would provide and called in IAED National Q Director Chris Bradford.

“Chris gave us a super how-to and pointed out where we needed to focus,” he said. “His motivational talk was amazing. He put everything into perspective. This was not just a job. This was about saving lives.”

—Charles Brown

Chris gave us a super how-to and pointed out where we needed to focus. His motivational talk was amazing. He put everything into perspective. This was not just a job. This was about saving lives.
FALL AFFECTS BREATHING
Immediate PAIs regardless if EMD chooses fall or fainting

Brett Patterson

The following question was submitted anonymously:

A calltaker received a call for a male that fell less than 10 feet (from a tractor). He was unconscious, on his side, and was breathing but ineffectively. The calltaker selected Protocol 31 for Unconscious, but opted not to use Protocol C instructions because the calltaker was concerned about patient movement with a questionable neck injury. So, the calltaker instead stayed on the line and monitored without moving the patient.

My thought was Protocol 17 first for the best mechanism, which was a fall. More importantly, while I understand the calltaker’s thinking, I’m more inclined to think airway management is more key with regard to instructions. Now the sticky point is the patient was breathing, albeit ineffectively. It’s interesting because staff members in our communication center are either EMTs or paramedics, so sometimes we tend to overthink these things as street providers. This particular calltaker works regularly on the street, which was why the calltaker was thinking don’t further damage a possible spinal injury. I asked the calltaker the response if arriving on this scene as the first EMT. The calltaker said that if the patient wasn’t breathing, the EMT would immediately move him, but in the given situation the EMT would have stabilized the patient before moving.

Brett’s reply:

There are several issues here, some of which you have mentioned, i.e., protocol selection and suspicion of spinal injury. However, if the patient had INEFFECTIVE BREATHING (a defined term in the MPDS’), these other points are actually moot because ProQA’ will recommend immediate PAIs regardless of whether the EMD chooses Fall or Unconscious/Fainting.

Let’s talk about protocol selection first. We know that the Not Alert and Unconscious Determinant Descriptors in the Falls Protocol contain a relatively high number of cardiac arrest outcomes. In the case of ground level or falls under 10 feet, we know that this is because these cases (unconscious or not alert) nearly always have a medical etiology; the caller simply noted the fall and not the preceding medical event (classic “chicken or the egg first” question). A related Rule on the Falls Protocol states: “Always consider that the patient’s fall may be the result of a medical problem (fainting, heart arrhythmia, stroke, etc.).”

The likelihood of serious traumatic injury from a short fall is low, while the probability of a more serious, underlying medical cause is high when medical signs and symptoms are present. However, as you point out, the mechanism of injury is important.
here, so LONG or EXTREME falls are obviously the exception. This case smells very much like a medical case, and I would have gone with “Suspected MEDICAL Arrest” at Case Entry, or 31-E-1, as either would lead to PAIs. Do you know the patient’s outcome? You said that the EMD selected Protocol 31 and the patient had INEFFECTIVE BREATHING, which should have linked from P31 KQ1 directly to PDIs and then ABC-1. However, the EMD elected to link to Panel X-3 and monitor the patient due to concerns about spinal injury, which is not an option for INEFFECTIVE BREATHING on P31, or anywhere else in the protocol.

Rule 3 on the Falls Protocol (which is repeated on other TRAUMA protocols), states: “The head-tilt is the only recognized method of airway control in the PAI dispatch environment. When presented with a TRAUMA patient described as not alert with INEFFECTIVE BREATHING, the EMD should protect life over limb and open the airway.” Exacerbation of a spinal injury after the insult is rare and, when it does happen, it is usually the result of rotation or flexion of the neck rather than extension. With this and the far more concerning INEFFECTIVE BREATHING in mind, the protocol directs us to PAIs to protect life over limb.

The responder that took the call stated that, in the field, she would have addressed the airway immediately, but only after stabilizing him. The latter is not advised as a coordinated instruction in the MPDS for two reasons. First, a “log roll” is very difficult to instruct effectively in the non-visual realm of DLS, even if multiple rescuers are present. I actually reviewed a recording of a paramedic/EMD attempting to do this for a little girl that was hit by a car and was gurgling, face down, in the street. The caller was even a police officer and the attempt was, at best, a cluster of misguided misunderstanding. This leads to the second and perhaps most important reason for not doing this at dispatch; it takes too long when the patient is not breathing effectively. We know, especially in cases of cardiac arrest, that the patient’s chances of survival decrease exponentially with every second lost without intervention, which makes this instruction very risky, as opposed to the relatively low risk of exacerbating a spinal cord injury.

So, in summary, I think the EMD was wise and prudent in selecting the MEDICAL protocol, and I’ll bet this man didn’t simply fall off his tractor but rather had a preceding medical event. However, the decision not to follow protocol at that point and provide PAIs, as the DLS Link directs, was inappropriate, for the reasons mentioned above. As you know, the protocol does provide for monitoring only when the victim of trauma is unconscious with effective breathing, but it links to PAIs when unconsciousness is associated with INEFFECTIVE BREATHING.

Brett

Always consider that the patient’s fall may be the result of a medical problem—fainting, heart arrhythmia, stroke, etc.
Attitude is everything!

FIRST IN LINE
Which takes priority—attitude or multitasking skills?

Audrey Fraizer

It's the chicken/egg debate of communication training: which is more important in fostering the other—attitude or multitasking skills?

Hands down it's attitude, according to Ron Shiner and Eric Fayad, Sunstar Paramedics/Paramedics Plus (Pinellas County, Fla.), during their session, “Dispatch Training When They Just Don’t Get it,” presented at NAVIGATOR 2014 in Orlando, Fla.

“If the new person has a great attitude, we will bust our back to keep him (or her),” said Shiner, Communication Training Coordinator. “We can train for multitasking, but it's not so easy to fix a bad attitude.”

The ability to multitask is a progressive skill, the same as learning radio channel operations or following protocol, with attitude the better indicator of the successful communication center member, added Fayad, Communication Training Officer.

“We know the person and the interview goes well and all of a sudden, the guy’s on the job and oops,” Shiner said. “Where did that come from? That’s not the person we thought we hired.”

The change can stem from personal reasons—problems at home, for example—or slowness getting accustomed to an inside job, personality clashes between trainee and trainer or instructor, or the constant strain of working in close quarters in a multigenerational setting.

“Maybe the person has lost interest,” Fayad said. “That happens. It’s not the job they expected.”

Resolution can take several directions, Shiner said.

Fayad and Shiner talk to the person, one-on-one, extend training (the normal course is 14 12-hour shifts in dispatch and 21 12-hour shifts in calltaking), switch instructors, match generations, or direct attention on the area needing improvement. A more recent approach they’ve tried is interim interviews after channel operations and before Emergency Medical Dispatch (EMD) training and certification.

Fayad said the interview provides a back door for administrators and trainees.

“It gives the candidate a chance to opt out and go back to the field,” he said. “It also gives management the opportunity to say, ‘This isn’t working’ before investing any more time and money.”

Since attitude adjustment isn’t specific to new hires, Fayad and Shiner also apply some of the same principles to longer-standing calltakers and dispatchers who may be going through a bad patch in performance—as long as a good attitude is present and showing.

Fayad and Shiner encourage participation in debriefing sessions after particularly bad events and reinforce the importance of personal and team desired performance.

“If we notice a trend toward snarkiness, we really come down,” Shiner said.

Of course, things don’t always work, even with the best of attitudes.

“There are times you just have to let the person go,” Fayad said. “We usually go a long way before we get there. But sometimes, no matter what you do, it comes down to the only option remaining.”

“Attitude is the most important thing we look for from the start,” Fayad said. “We hire for attitude.”

Sunstar Communication Center generally hires people from the field—paramedics and EMTs who want or need to break from field response. That means most applicants are known through the grapevine or a direct working relationship, but no one is accepted for the transfer inside the center unless the, “Are you nice?” and, “Do we like you?” criteria are satisfied.

“We want customer service Disney-style,” Shiner said. “Talk to your callers the same way you want to be talked to—nicely.”

Sometimes, however, the nice guy can take a turn in attitude. He’s impatient with callers or fellow staff. He or she doesn’t want to follow protocol and doesn’t care about reaching or maintaining compliant performance, ACE style.

“We need to customer service Disney-style,” Shiner said. “Talk to your callers the same way you want to be talked to—nicely.”

Sometimes, however, the nice guy can take a turn in attitude. He's impatient with callers or fellow staff. He or she doesn’t want to follow protocol and doesn’t care about reaching or maintaining compliant performance, ACE style.
NAVIGATOR 2015 packets should come with a spinner.

You know the kind? They’re included in board games requiring players to move pieces along a route. Spin a five, and you move the game piece five spaces.

It might be something to consider for NAVIGATOR 2015 because with so many choices, it’s going to be difficult to decide which sessions to attend without some assistance. The numbers are mind-boggling: 110 sessions, 15 tracks, 95 speakers, 80 exhibitors, and the chance to network with at least 1,600 of your closest friends and allies.

“This is our biggest conference yet,” said International Academies of Emergency Dispatch (IAED™) Conference Coordinator Claire Ulibarri. “And it’s all about taking you confidently into the future.”

Taking the next step

Wherever you land at NAVIGATOR 2015, you won’t be disappointed.

The 14 one-hour course time slots spaced over the three-day conference kick off at 12:30 p.m. on Wednesday, April 29, shortly after a jampacked opening session of Accredited Center of Excellence (ACE) presentations, a look at the online ACE tracking and submission Web application, and the all new recertification Web application.

The always-anticipated Dispatcher of the Year will be announced followed by Keynote Speaker Sgt. Kevin Briggs, a former California Highway Patrol officer who convinced hundreds of people contemplating suicide by jumping off the Golden Gate Bridge to step back over the rail.

From there, attendees will be invited to check out the Exhibit Hall at the spacious Paris Las Vegas Hotel & Casino. Each hour devoted to pure classroom mania—four on Wednesday, six on Thursday, and four on Friday—includes eight sessions to choose from. There are 15 tracks at NAVIGATOR 2015, including Stress Management, CDE & Training, Leadership, Quality Assurance, Take the Next Step, Special Interest, Fire, and Research.

That’s a lot to choose from.

So, say it’s Wednesday, and there’s one period remaining—the 4:15 p.m. to 5:15 p.m. slot—do you step in the direction of QA, leadership, social media, incident dispatch team, contingency planning, EMS science, locator issues, or police calls? Can’t decide? Take out the spinner, give the arrow a whirl, and if it lands on two, you can spend an hour with Kevin Willett and Leslie Whitham at “Jackpot! You Hit the Leadership Challenge.” A four will get you to Thomas Somers and Ron Richard’s “Planned Events: When Things go Wrong,” while an eight puts you in the audience of Eric Parry and Jaci Fox during their seventh annual review of wild and crazy police calls, “When Will This Madness End?”

“You honestly can’t go wrong with any of them,” Ulibarri said. “NAVIGATOR continues to attract the highest caliber speakers in the business. They’re all great.”

Heightened interest into the study of dispatch in relation to the efficacy and advance of police, medical, and fire protocols takes NAVIGATOR 2015 in yet another direction—research.

“It was the hot topic after the Power Session held last year,” said IAED Research & Studies Officer Tracey Barron. “All sorts of people came up to us afterward, and many have contacted us during the past year, asking about our plans for the future.”

The result of all the interest will have attendees running to two sessions held in succession on Friday—“IAED Research” (in general) and “Original Research: Distribution of EMD Calls.”

One last step

On Wednesday evening, NAVIGATOR 2015 will turn back the clock for some high-energy dance moves during the attendee party. If you’re with an ACE-accredited agency, take a cool slide back on Thursday at the ACE Casino Night—a Casablanca-themed gambling party.

Keep your eyes peeled for a Bogart sighting.
Taking to the Skies

Air medical ambulances are high-flying intensive care units

Audrey Fraizer
A call comes in from a remote stretch of road favored by bicyclists. The EMD gathers information. The situation is critical. A vehicle hit a guardrail, spun, and in the process, collided with the local elite racing team. There is at least one fatality. Multiple people are injured, and some injuries are considered to be life threatening. Arrival by ground ambulance would take valuable time.

Based on patient conditions, and the remote location, the decision is made. An air ambulance equipped to provide Advanced Life Support will be dispatched, along with the appropriate medical team to treat the acute respiratory or specialty trauma issues.

Critical care by air

Critical care aircraft—fixed and rotary wing—are specially equipped as flying intensive care units. They provide a Federal Aviation Administration (FAA) approved flight stretcher, specialized medical equipment, and a full assortment of patient-specific drugs and medications. The aircraft is staffed with a medical team and flight crew. There are currently 75 air ambulance companies in the U.S. that operate about 1,515 helicopters.

North Memorial Health Care in Minneapolis-St. Paul, Minn., owns and operates Air Care and its fleet of eight air ambulances dispatched from five bases (soon to be six) covering the entire state of Minnesota and portions of Wisconsin, Iowa, and the Dakotas. Founded in 1985, Air Care responds to an estimated 4,500 requests for services each year.

A majority of calls involve intra-facility transport.

The twin-engine Agusta “S” helicopter can reach cruising speeds of 190 mph and is the fastest civilian helicopter on the market. It is a passenger aircraft reconfigured for medical care and includes instrumentation for flying at night and in adverse weather conditions. The crew consists of a pilot, a flight nurse, and a flight paramedic.

Helicopters take off from the hangar within six to eight minutes after a request for response. The EMD provides the pilot with a radio frequency to connect to a first responder ground unit at the scene. Both a high and low reconnaissance is flown prior to landing. The pilot manages the landing zone, while the nurse and paramedic provide patient care.

Since ground crews generally arrive prior to the helicopter, the patient involved in a traumatic accident is generally ready for flight—airway secured and IVs in. The patient is strapped onto the gurney and slid feet first into the helicopter.

Patient transfer requests involve orders from the sending facility as well as the receiving facility’s documented acceptance, and fulfilling checklists Air Care requires for activation and arrival. The list includes facility name, pickup location and destination, the medical problem, special circumstances (e.g., intubation), and patient age and weight.

Patient weight can determine whether helicopter travel is manageable, said Jan Althoff, EMD and Quality Assurance (QA) Coordinator, North Memorial Health Care. “It’s a matter of ensuring the patient can fit within the safety straps and be safely secured onto the stretcher,” she said. “At 400 pounds, we coordinate fixed wing or ground services. At over 300 pounds, we ask for more details.”

Maximum girth is 63 inches, and it’s a tight fit for even an average-sized patient. Crewmembers cannot weigh more than 200 pounds, fully dressed. The Air Care Patient Transfer checklist nearly mirrors recommendations from a 2006 report by the American College of Emergency Physicians and the National Association of EMS Physicians, and they apply to response (not necessarily transport) with the understanding that air transport requires a certain level of over-triage.

The similarity is no accident, Althoff said. “We’re super focused on safety,” she said.

Communications

Althoff has spent 15 years at North Memorial’s centralized secondary Public Safety Answering Point (PSAP) handling all types of emergency calls for the multifacility health care organization. Her schedule dedicates eight hours per week to QA duties and the remaining 32 to calltaking and dispatching medical calls requiring ground and, at times, air ambulance response. The communication center employs 30 EMDs.

The communication job takes multitasking to a whole new level.

As a secondary PSAP, the calls they receive for response are transferred from 9-1-1 centers not equipped to provide EMS or from facilities requiring air ambulance for intra-facility transport. In an emergency, they ‘always, always’ send ground ambulance, Althoff said, supplemented by air ambulance, depending on the situation.

Air Care is deployed primarily for three reasons:

• Intra-facility transport: patient transport to a facility better equipped for optimal care, such as to a level-one trauma center from a local hospital for an individual critically injured, for example, during deer hunting season (11 percent of land in Minnesota is publicly owned, giving a lot of access for deer hunters).

People make one call, and we coordinate everything else.

—Jan Althoff
• Request for air ambulance: Ground ambulance, first responders, or law enforcement arriving at the scene calls for air ambulance due to the severity of the incident and time factor
  ◦ Within six to eight minutes of a 9-1-1 call to any of the five bases, an aircraft is in the air and, depending on the location of the call, can deliver a patient to the hospital more than two times faster than a ground ambulance can. For example, air ambulance response to a deer hunter wounded in Ely, Minn., takes 60 minutes or less for pickup and delivery from the Air Care base in Bemidji to the closest trauma center. The same distance could take several hours for a ground crew.

• Emergency Medical Dispatch Dual Response: From the 9-1-1 call, the North Memorial Health Care dispatcher uses criteria to determine whether the patient requires air ambulance, in addition to ground ambulance. The request to deploy, however, doesn’t mean an automatic “go.”

“There are several variables the pilot must consider to complete the flight safely,” Althoff said. “Weather is just one of them.”

Emergency dispatch

The EMD answering the call stays on the line, gathering information and providing Pre-Arrival Instructions (PAIs), when necessary, particularly if the call comes in from a non-EMS responder. The decision to send ground and air response depends on travel exceeding a specified radius and the urgency of medical care or procedures, including burn care, traumatic injury (e.g., head and spinal cord injury), heart problems, and strokes.

If it’s a DELTA- or ECHO-level, the radio dispatcher generally sends both, Althoff said.

“The calltaker uses the ProQA® tool to clearly establish the patient’s condition,” she said. “The decision to send air [in addition to ground] takes solid judgment based on the information provided.”

The dispatcher coordinates ground and air response. The pilot works with the dispatcher and a designated ground crew contact on-scene regarding the description of the landing zone (LZ), obstacles, wind direction, and other variables. If the pilot determines conditions are unsafe for landing, the helicopter changes course to an alternate LZ, such as the nearest hospital, airport, or other designated safe landing spot where ground resources may intercept.

The ground crew treats the patient and transfers care to the air ambulance crew for flight to the designated care center.

North Memorial Air Care also works with other air ambulance services like the Mayo Clinic’s Mayo One, Life Link III, Sanford AirMed, and Avera McKennan Care Flight to coordinate flights closer to the patient.

“People make one call, and we coordinate everything else,” Althoff said.

Risky business

Air ambulance is ranked as one of the most dangerous jobs in EMS for a number of reasons. Alone or in combination, there are several factors adding some degree of risk every time an air ambulance is dispatched for patient transport.

According to FAA statistics:

• From 2011 through 2013, seven air ambulance accidents resulted in 19 fatalities and seven commercial helicopter accidents claimed 20 lives.

• 2008 proved to be the deadliest year on record with five accidents that claimed 21 lives.

The Air Medical Physician Association (AMPA) reported that even though only 38 percent of all helicopter EMS flights occur at night, 49 percent of accidents during a 20-year period occurred during nighttime hours.

The report also cited controlled flight into terrain (CFIT), in particular during the takeoff or landing sequence, as a common problem, as well as collision with objects (wires were the most common obstacles for EMS helicopters); inaccurate weather forecasts (26 percent of helicopter EMS accidents were weather-related, with most occurring due to reduced visibility); and communications problems with air traffic control (ATC) or a lack of communications due to remote locations and high terrain.
From the 9-1-1 call, the North Memorial Health Care dispatcher uses criteria to determine whether the patient requires air ambulance, in addition to ground ambulance. The request to deploy, however, doesn’t mean an automatic “go.”

According to a query of the National Aeronautics and Space Administration’s (NASA) Aviation Safety Reporting System, patient condition was cited in 44 percent of the EMS accidents or incident reports as contributing to time frame pressure leading to inaccurate or hurried preflight planning.6

The North Memorial Air Ambulance program is committed to safety. This is why they operate twin-engine aircraft and HTAWS (Helicopter Terrain Avoidance Warning System), with pilots and helicopters certified for IFR (Instrument Flight Rules).

FAA involvement
Since August 2004, the FAA has promoted initiatives to reduce risk for helicopter air ambulance operations. While accidents declined in the years following that effort, 2008 proved to be the deadliest year on record with five accidents that claimed 21 lives. The FAA oversees air ambulance operators and its oversight goes beyond inspection and surveillance. It issued a final rule on Feb. 20, 2014, requiring stricter flight rules and procedures, improved communications and training, and additional on-board safety equipment.

Communication staff does not work directly with FAA regulations, although they are regularly briefed on government mandates, especially as they pertain to training. Communication between North Memorial Health Care dispatchers and Air Care crew is ongoing.

Twice daily—at 7 a.m. and again at 7 p.m.—communications staff conferences with Air Care crew to discuss transport issues such as weather, obstacles that might interfere with flight and landing, and requests for intra-facility transfer (although many of these trips are scheduled in advance).

New communication hires spend a shift on a helicopter as part of their eight weeks of training and orientation. An every other month in-house dispatch education course devotes two of the session’s four hours to aviation dispatch safety.

Other FAA requirements
Also specific to air ambulance operators are requirements to:

- Equip with Helicopter Terrain Avoidance Warning System
- Equip with a flight data monitoring system within four years
- Establish operations control centers if they are certificate holders with 10 or more helicopter air ambulances
- Institute pre-flight risk-analysis programs
- Ensure pilots in command hold an instrument rating
- Ensure pilots identify and document the tallest obstacle, such as a skyscraper, along the planned route before departure
- Comply with Visual Flight Rules (VFR) weather minimums, Instrument Flight Rules operations at airports/heliports without weather reporting, procedures for VFR approaches, and VFR flight planning
- Conduct the flight using Part 135 weather requirements and flight crew time limitation and rest requirements when medical personnel are onboard
- Conduct safety briefings or training for medical personnel

The FAA examined helicopter air ambulance accidents from 1991 through 2010 and determined 62 accidents that claimed 125 lives could have, perhaps, been mitigated by the sweeping final FAA ruling issued in February 2014. The estimated cost to the air ambulance industry is $224 million to implement improved communications and training procedures and additional on-board safety equipment.

Sources
3 See note 1.
5 See note 3.
6 See note 4.
7 See note 1.
“625 to base. We have arrived. We have a rollover with ejection and multiple patients. Please start us a helicopter.”

Should an air ambulance be dispatched? That depends. Although not mutually exclusive, the decision to fly is not the same as the decision for medical care required.

Many regional and logistical flight factors come into play. A patient with major burns from a campfire may require helicopter or fixed-wing evacuation from a remote wilderness area, while ground transport may be the better option for a patient experiencing cardiac arrest near a level-one trauma center.

In this case—the traffic accident—on-scene trauma demands immediate care. The air medical dispatcher must determine the availability of the closest and most appropriate air medical unit necessary.

The unit selected is dispatched and the crew alerted. The aircraft is pulled out of the hangar and inspected, and a flight plan is filed for Visual Flight Rules (VFR) or Instrument Flight Rules (IFR).

Several factors influence the pilot’s decision. The pilot must consider the safety of the trip along the entire route. Low visibility, thunderstorms, heavy rain, icing, heavy snow, fog, and extreme wind or temperatures can affect the safety of a flight.

Duty time must be noted. The Federal Aviation Administration (FAA) rules restrict the amount of time that a pilot can be on duty. Indications of mechanical problems can’t be ignored. A flashing warning light (the aircraft equivalent of a check engine light) grounds the unit until the issue is resolved. Also, temporary flight restrictions, issued by the FAA, require special permission to enter the area.

Systems are go

Once committing to the flight, the crew takes the helicopter to the scene to check surroundings and ground conditions. As the unit gets closer to its destination, a first responder onboard describes the landing zone, including information about its shape, size, slope, and surface. Ideally, the area is firm and level, and at least 100 feet long and 100 feet wide. The approach and departure paths must be clear of wires, trees, antennas, poles, cranes, towers, and other obstructions. A night landing requires fixed lighting at the perimeter. The landing area should be at least 100 feet from the patient.

Mile markers, billboards, and other roadway signage are not helpful since visibility from the air is negligible. If ground markers are the only reference points available, the dispatcher will convert the location to GPS coordinates, preferably in degrees, minutes, and seconds rather than decimal degree coordinates. A hazardous situation developing in proximity of the landing area might force the pilot to abort the flight or go around the area until the situation is resolved.

Scene landing

The helicopter presents its own hazards. Access is restricted. First responders already on-scene stay back at least 100 feet until the aircraft lands, and bystanders are directed to keep a distance of at least 200 feet. Approach is from the sides or front of the aircraft in full view of the pilot; no one approaches the aircraft without crew escort. A crewmember is assigned to prevent injury from the tail rotor, and medics carry equipment in a crouching position with nothing held overhead. Only the air medical crew can direct the loading and unloading of patients.

Patient delivery

Air ambulance medical crewmembers determine the facility best suited for treating the patient. The closest hospital would be bypassed if not staffed and equipped for a patient with severe trauma. The patient would be taken directly to the trauma center.

The helipad must be cleared of debris prior to landing, must be free of ice and snow, and lights should be aimed away from the helicopter.

The patient is delivered, the crew disembarks, and reports are filed. They wait for the next call to come in.
LOOKING AHEAD

The March/April Journal of Emergency Dispatch is packed with information that should provide even greater confidence when using the medical, police, and fire protocols. NAVIGATOR Rewind gives insight into those rare occurrences that stimulate change in Pre-Arrival and Post-Dispatch Instructions, while the two Continuing Dispatch Education articles highlight suspicious packaging and the threat to public and responder safety, and precautions to take when thunder cracks and lightning bolts sizzle through the sky. Our columnist Art Braunschweiger looks at the positive impact a dispatcher can make with only a few reassuring words at the time of a major crisis, which EMD Debbie Cook so skillfully did in a call involving a woman fleeing from a domestic violence scene.
When Seconds Do Count

ECHO code powers response to the scene

Audrey Fraizer
HOME HEALTH AIDE answering the 9-1-1 callback realized her patient was in danger, but not to the degree that soon became apparent. “She wasn’t certain about the patient’s breathing; it was questionable,” said Anthony Guido, EMT, EMD-Q*, quality improvement coordinator at North Shore-LIJ Health System in Syosset, NY. “The EMD immediately went to the ECHO response.”

The ECHO-Level Determinant in the protocol systems signals an obviously life-threatening situation that demands instant response. Another unofficial way of describing it is that these are people that are ‘dying right now.’

In a medical emergency, the ECHO code is used when the caller volunteers indicators of ineffective breathing at any point during Case Entry. For example, the caller might tell the EMD that the patient is “barely breathing, fighting for air, or making funny [respiratory] noises (a sign of AGONAL breathing).”

The code accelerates the response of North Shore-LIJ Health System EMS. “It becomes a very quick, calculated assignment,” Guido said. “The caller has confirmed the patient is not breathing or barely breathing. Everything and everyone goes into motion.”

Guido’s agency always sends a minimum of two units to an ECHO call—the two available medical resources that are closest to the scene and often coming from two directions to deflect time barriers resulting from traffic and other obstacles. In the meantime, the EMD begins immediate bystander instructions for chest compressions.

An EMS supervisor who was in the area when the ECHO was dispatched was on-scene in two minutes, 14 seconds, with paramedics arriving moments later. The bystander, who had started chest compressions, turned over care. The patient was transported within 14 minutes of the call.

Guido said the North Shore-LIJ Health System communication center sends response to about 850 medical calls each month, of which at least six are coded ECHO. Most of the ECHO-level responses involving cardiac arrest originate from skilled nursing facilities; some are callbacks to numbers provided through home medical alert systems, as was the case in the call profiled at the beginning of the article.

Guido said ECHO requires situational awareness; it is a low-frequency, high-risk operation that EMDs must be able to pick up on fairly quickly into the call. “We train on the ineffective breathing status and drive home the reasons for using the ECHO code,” he said. “It’s like a NASCAR race. Using ECHO to shave 10 seconds is huge. The patient is going downhill fast and requires immediate medical attention.”

Best thing to happen

The ECHO-Level Determinant was “one of the most exciting” changes to the Medical Priority Dispatch System™ (MPDS™) when introduced in v11.0, according to Brett Patterson, IAED™ Academics & Standards Associate and Medical Council of Standards Chair. “ECHO-level dispatch is sent directly from Case Entry, and that provides the EMD with the means to dispatch earlier in the interrogation sequence,” Patterson said. “It is used when certain life-threatening conditions are clearly evident.”

The determinant gave dispatchers a code to use in situations when a non-standard responder could reasonably make a difference in the outcome of a dying patient. It provides agencies with the means to assign response-capable units that would not normally respond to typical EMS calls (i.e., AED-equipped police and fire vehicles, HAZMAT, snorkel, and ladder crews). ECHO-initiated crews must be, at a minimum, BLS trained and understand scene safety entry procedures.

For example, a non-standard responder trained in CPR and arriving at the scene within minutes of a call could make a difference for a patient in imminent arrest. In certain cardiac arrest situations, the prompt application of a defibrillator, or AED, can save a dying patient’s life. While in most cases CPR itself doesn’t reverse the patient’s cardiac arrest, it does prolong the window of viability needed for a successful defibrillation. To use an old farmer’s term, it’s like “priming the pump.”

The ECHO-Level Determinant exists only in Chief Complaints that also have DELTA codes, although not every protocol with a DELTA code has the corresponding ECHO-Level Determinant, and not all arrests are ECHOs. MPDS Chief Complaints with ECHO codes are 2, 6, 7, 9, 11, 14, 15, and 31.

Although the Academy designates the Chief Complaints that include the ECHO-Level Determinant, it’s up to the individual agency to determine exactly what response configuration is appropriate for each ECHO type.

The response process provides flexibility, Patterson explained. “Agencies can make sure that the most appropriate and closest resources are being sent in the most effective way possible to give patients in their jurisdictions the best chance at survival,” he said. “Essentially, a response guideline in Miami-Dade County [Fla.] may not be the best for an agency in Merced [Calif.]. This is where agencies should pay close attention to the efficacy of their emergency response, especially with ECHO cases.”
Dispelling misconceptions

Despite ECHO’s popularity, it’s not the easiest tier to understand.

For example, the opportunity to dispatch response early in the interrogation sequence (Case Entry) is not what defines an ECHO-Level Determinant.

ECHO codes in the MPDS have been designed to allow for “early recognition and closer response initiation based on extreme conditions of breathing” caused by potentially reversible factors. They are also to be used for “other dire circumstances as defined, such as person on fire.”

A patient given an ECHO-level designation does not necessarily require a different response from DELTA, according to Dr. Jeff Clawson, IAED co-founder.

“ECHO was differentiated from DELTA to encourage the local assignment of the absolute closest responder of any trained crew,” Clawson said. “It encourages the ‘ethical’ response of other specialty crews or responders who otherwise might be sitting or traveling close by while someone dies.”

How a call is prioritized is based on a pre-determined question protocol sequence, the answers and logic of which determine response levels. The Determinant Descriptor code is like the bar code on a cereal box. The same code exists on every box of that type/size of cereal. However, what we pay for that box is different at each different store. The code defines what it is, and the response assigned to that code in each jurisdiction is essentially the “price” (in manpower, equipment, and speed) that that department is willing to “pay” for that situation.

The process saves dispatchers from making decisions by the “seat of their pants”—trying to figure out what is taking place on the other end of the line and, from there, sending out the cavalry (lights-and-siren) for every call.

The MPDS, first created 35 years ago, was designed to give a medically correct orderliness to EMS response—not just sending everyone to everything, always.
its application is available through the Determinant that includes lessons in specific training in, the ECHO-Level patient, until the troops arrive,” he said.

The following descriptions, when volunteered by the caller at any point in the early interrogation period (Case Entry Protocol), qualify for an ECHO-Level Determinant:

- “Barely breathing”
- “Can’t breathe” or “Can’t breathe at all”
- “Fighting for air”
- “Gasping for air” (AGONAL BREATHING)
- “Just a little” (AGONAL BREATHING)
- “Making funny noises” (AGONAL BREATHING)
- “Not breathing”
- “Turning blue” or “Turning purple”

And/or when the following conditions exist:

- Not breathing at all
- Breathing uncertain (AGONAL)
- Hanging
- Strangulation
- Suffocation
- Underwater
- Complete airway obstruction in choking

A more detailed explanation of, and specific training in, the ECHO-Level Determinant that includes lessons in its application is available through the Academy’s EMD Advancement Series”.

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- Suffocation
- Underwater
- Complete airway obstruction in choking

Anthony Guido contributed to this article. 

CPR Lifesavers
Cardiac arrest patients live to tell their stories
Tina Taviano

In Lee County, Fla., we measure success one 9-ECHO-1 at a time. We track our rates of survival and survival from a cardiac arrest starting at the beginning of the call, through post-arrest, ending when the patient walks out of the hospital.

The statistics
In 2013, Lee County EMS responded to 807 calls coded as 9-ECHO-1. Of these calls, we were able to identify 277 incidents in which the patient was transported. Records indicate that 32 cases involved successful resuscitation.

Through the quality assurance process of call review, we found that the call-taker determined the cardiac arrest in 12 of these calls and encouraged the caller to perform effective CPR until the arrival of advanced life support.

These are the statistics and numbers found in computer-aided dispatch and patient care reports and hospital charts, and used primarily for recording information to document in records and billing.

What is success?
Let me put names to the voices of the callers and the faces of the survivors.

Jerry was coached by EMD Michelle Nevans to drag his wife, Lucy, onto the floor and provide CPR until EMS arrived. They defibrillated her and transported her as an “Ice Alert” (aka therapeutic hypothermia—once a patient’s heartbeat is restored, EMS staff quickly applies coolants to moderately lower a patient’s body temperature) to the hospital. Lucy has made a full recovery.

Jerry had no prior experience in giving CPR.

“She [EMD Nevans] stayed with me the whole time encouraging and instructing me,” Jerry said. “What seemed like a very long time was actually a very short time because she had me counting to 600 at two per second. Lucy’s family thanks you for returning a wife, mother, grandmother, and great-grandmother back to us.”

EMD Eric Schrader gave Cody CPR PAIs when his wife, Amanda, collapsed on their wedding night from a rare heart condition. Since Amanda couldn’t recall her wedding, the couple “re-lived” the day to create the memory they had expected.

The ability of Casey to give CPR to his father, Gene, from instructions provided by EMD Dan Liebal resulted in his desire to become a paramedic.

This list goes on. Each save and each life is celebrated.

Meanings of success
Many attempts to save a life after cardiac arrest aren’t successful “saves” by definition.

I was giving a tour of the communication center when, as the visitors were leaving, a woman in her mid-60s turned in my direction.

“I want to thank you—your staff,” she said, taking my hand in hers. “Last fall, you helped me when my husband had a heart attack.”

Her eyes started to tear up as she continued.

“You (the calltaker) convinced me to do CPR, and my husband lived for another seven days before he died,” she said. “Those seven days were priceless to our family. We wouldn’t have had that time together without what your staff did. I am forever grateful.”

I thanked her for her kind words.

“It’s what we do,” I said.

How often does your agency hear how the family feels about calling 9-1-1?

Chances are the EMD seldom makes a lasting impression on the caller.

At Lee Control, we want our call-takers to recognize that they play a big part in the process. Lives are saved through their attentiveness, determination, and compassion in using protocol effectively.

Performing quality assurance reviews, maintaining certification requirements, and following protocols in a calm, competent, and confident manner do make a difference. From experience, we know that MPDS® and CPR PAIs can make a difference.

Lee County serves a population of 650,000, and during snowbird season, the population swells to 1.2 million. Lee County EMS.

Anthony Guido contributed to this article.
Calling all Police Dispatchers

New version of PPDS continues to streamline process

Audrey Fraizer

Version 5.0 of the Police Priority Dispatch System™ (PPDS™) gets to the core of the situation faster in its streamlined interrogation process.

The latest version is also a remarkable achievement in many other ways, according to Jaci Fox, Chair of the Academy’s Police/EPD Curriculum Council.

“The magnitude of this undertaking will not go unnoticed by our users,” Fox said. “Rest assured there’s been a lot of content distillation and development that’s gone into it.”

Fox said the process—which took nearly two years of meetings within the Standards and Curriculum Councils before it was ready for beta testing—involved scrutinizing every protocol and making the necessary revisions to streamline calltaker interrogation without compromising scene safety for responders or civilians.

The Key Questions, Post-Dispatch Instructions, Determinant Descriptors, and other elements of the PPDS are now even more concisely directed to the specific incident.

For example, while the rationale for removing any Key Question is contingent on several factors, the overriding consideration is relevance to police response and the likelihood of the caller knowing the answer.

“Several Key Questions have been refined and more terms defined, all in an effort to get to the relevant details with more precise questions,” Fox said. “Similar to the process used for the Fire and Medical Protocols, we examine ways to reduce response time. We have to do so carefully, ever mindful of the ripple effect that could interfere with a subsequent step in the process.”

Severe steps

The process doesn’t stop at the Curriculum Council. It takes many steps to ensure that the Academy’s protocols are standardized and consistent across programs; compliant with current statues, rules, and regulations; and updated based on the latest technology, current practices, standards, and cost-effective measures.

The Academy’s Police Council of Standards carefully considers all recommendations and revisions prior to release, according to Jeff Clawson, M.D., co-founder of the International Academies of Emergency Dispatch™ (IAED™).

“We make sure that every question asked in the protocol has a clearly defined critical dispatch objective that must be determined immediately for safety, to ensure a correct response, and to provide instructions to those in need of professional, potentially lifesaving direction,” he said. “Dispatchers are the ‘first, first responders,’ and, without these early interventions, we wouldn’t hear on the nightly news how a dispatcher helped a child hiding under a bed during a home invasion.”

Going for expediency

In the interest of refining the interro-
The magnitude of this undertaking will not go unnoticed by our users. Rest assured there’s been a lot of content distillation and development that’s gone into Version 5.0 of the Police Priority Dispatch System.

—Jaci Fox

Nature of the incident

Several protocols feature new Key Question sequences restructured to reflect the distinct nature of the incidents and to streamline the process for the safety of responders and citizens.

Protocols 108 and 109 are some of the most largely revised protocols, which have been expanded to address the discovery or threat of product contamination. New DELTA- and CHARLIE-level codes have been added to provide the EPD with a clear response to these situations. Newly added PRODUCT CONTAMINATION and PRODUCT CONTAMINATION Threat definitions—slightly individualized on each protocol—also take the guesswork out of determining when to use these codes.

Protocol 123: Missing/Runaway/Found Person also includes a new SPECIAL LOCATION definition, new and modified Pre-Question Qualifiers, and new DELTA- and BRAVO-level Determinant Codes that use the special definition: “An area where, because of terrain or natural elements, an agency will utilize a specialized response to address the hazards that may have caused a person to go missing.” Of course, local authority must define and authorize what constitutes a SPECIAL LOCATION for their area before using this Determinant Code.

New Determinant Codes

In addition to those already mentioned, several protocols include new Determinant Codes:

• On Protocol 105: Animal, a new 105-C-4 Determinant Code “Injured animal” allows agencies to assign different resources and scene safety considerations.

• On Protocol 114: Domestic Disturbance/Violence, two DELTA- and BRAVO-level Determinant Codes have been divided for further differentiation of responses for physical and verbal altercation incidents.

• On Protocol 124: Officer Needs Assistance, a new 124-E-1 Determinant Code “OFFICER DOWN” ensures the soonest possible dispatch for this life-threatening situation.

...
On Protocol 129: Suspicious/Wanted (Person, Circumstances, Vehicle), a new 129-C-6 Determinant Code “Violation of order” provides a pathway for handling reports of a person violating a court order.

Other PPDS v5.0 changes

Also of note is the new “M=Multiple weapon types” suffix added to the existing Determinant Suffixes “C = Club,” “E = Explosive,” “G = Gun,” “K = Knife,” and “O = Other.” This addition reinforces the focus on scene safety, Fox said.

“It’s critical that responders are aware of a suspect with more than one type of weapon,” she said. “It is crucial to providing information to officers about the possible level of suspect resistance. More than one type of weapon carries with it the possibility of greater resistance.”

In the U.K. version of PPDS 5.0, Protocol 137: Kidnap (With Ransom)/Product Contamination has been removed. All kidnappings will now be handled on Protocol 101, and product contamination situations are handled on Protocols 108 and 109.

Major release

Fox said PPDS v5.0 represents the largest number of revisions to the Police Protocol since its original release in 2001. The v5.0 release builds on these earlier versions to make interrogations more succinct for both calltakers and dispatchers.

“As always, it’s a constant work in progress, and we’re continually hands-on,” Fox said. “We never wait for a crisis to consider changes, and if something profound does happen, the Council of Standards is always working to ensure that the protocol is as sound as it can be.”

Changes are based on Proposals for Change (PFCs) submitted by current users of the PPDS and reviewed by the law enforcement experts on the IAED’s Police Council of Standards. Combining the PFCs with current research and field expertise, the Council of Standards, on behalf of the College of Fellows, determines the proposals accepted and how they should be implemented.

Similar to all releases, PPDS v5.0 has gone through beta testing by current and long-standing users of the Police Protocol.
1. Which Key Question has been removed from PPDS Protocols 101, 114, and 125?
   a. Where are the weapons now?
   b. Where’s the person who asked you to call?
   c. Is there a court order/restraining order in place?
   d. Are you feeling violent?

2. Why has the Key Question “Do you know where s/he is going?” been removed from 18 protocols?
   a. The unlikelihood of the caller knowing the suspect’s destination or plans.
   b. The information could send response to the wrong location.
   c. The caller could be setting up a trap.
   d. The question violates privacy concerns.

   a. true
   b. false

4. The Post-Dispatch Instruction “Do not disturb anything at the scene, including weapons, tools, or objects found nearby” has been reworded to:
   a. “Do not remove weapons, tools, or other objects without dispatch permission.”
   b. “Place any weapons at the scene at a location inaccessible to small children.”
   c. “Collect all weapons on scene as evidence for police.”
   d. “Do not disturb anything at the scene.”

5. The (Suspect on scene) Key Question sequence and related subquestions have been modified by asking:
   a. first if the suspect arrived in a vehicle and, if the answer is “yes,” then asking for the vehicle’s description and its current location.
   b. who is in charge of the property.
   c. whether weapons were involved.
   d. whether anyone involved was using alcohol or drugs.

6. The description questions for victim, person, suspect, vehicle, weapon, and device have been reformatted. The prompts have now been scripted to introduce the question to the caller by saying “I need to get the _________ description.”
   a. true
   b. false

7. What is the new definition on Protocol 123?
   a. MALICIOUS COMMUNICATION
   b. SPECIAL LOCATION
   c. PRODUCT CONTAMINATION
   d. OFFICER DOWN

8. The ECHO Determinant added to Protocol 124 refers to:
   a. Suspect in area.
   b. Vehicular chase.
   c. Officer Down.
   d. Multiple civilian casualties.

9. The new M suffix stands for:
   a. machete.
   b. machine gun.
   c. motor vehicle pursuit.
   d. multiple weapon types.

10. PPDS v5.0 represents the largest number of revisions to the Police Protocol since its original release in:
    a. 1999.
    b. 2002.
    c. 2001.
    d. 2000.

To be considered for CDE credit, this answer sheet must be received no later than 02/29/16. A passing score is worth 1.0 CDE unit toward fulfillment of the Academy’s CDE requirements. Please mark your responses in the appropriate box below.
A WORLDWIDE EPIDEMIC
Protocol 13: Diabetic Problems

Michael Rigert

The International Diabetes Federation (IDF) and the World Health Organization (WHO) have designated Nov. 14 as World Diabetes Day, hosting diabetes education and prevention events in more than 160 countries, and with good reason. In 2013, the IDF reported that 382 million people worldwide have diabetes, and if current trends hold, that number will top 592 million by 2035—a whopping 55 percent increase. More alarmingly, the report shows that diabetes caused 5.1 million deaths in 2013, which equates to one death every six seconds worldwide.1

Four years ago, IDF President Jean Claude Mbanya underscored the importance of all nations uniting to create greater awareness about this increasingly prevalent non-communicable disease. “Ninety years after the discovery of insulin and four years after U.N. Resolution 61/225, the number of people with diabetes continues to grow at a staggering rate,” Mbanya said. “In every country and in every community worldwide, we are losing the battle against this cruel and deadly disease.”

In addition to the staggering human loss, the economic costs of diagnosing and treating diabetes is debilitating. In 2013, worldwide expenditures on diabetes totaled $548 billion, the equivalent of 11 percent of the world’s total healthcare spending. North America and the Caribbean contribute the most to this total, spending $263 billion on the growing disease. Often the poor and disadvantaged suffer most, especially in indigenous communities.3

No region is spared from diabetes’ reach. In Africa, diabetes accounts for 76 percent of deaths in people under the age of 60. Europe has the highest prevalence of Type 1 diabetes in children. In the Middle East and North Africa, one in 10 adults has diabetes, the highest prevalence rate of any region. Finally, in the Western Pacific, 138 million adults have diabetes—the largest number of any region.4

The disease
Diabetes is a metabolic disease in which blood glucose (sugar) levels are above normal. Understanding diabetes requires examining the body’s metabolic functions at the cellular level. Glucose is an important energy source for the body (and brain) to function, but this energy cannot be utilized without the aid of a hormone called insulin, which is produced by the pancreas.

This metabolic process is analogous to a furnace that burns the glucose for energy while insulin acts as the mechanism that opens the furnace door. If the pancreas doesn’t provide enough insulin, excess sugar builds (outside the “furnace door”) in the blood where it cannot be used, eventually causing uncontrolled diabetic illness.5

There are three main types of diabetes:

- Type 1 diabetes, previously called insulin-dependent diabetes mellitus (IDDM), or juvenile-onset diabetes, is a chronic disease in which the pancreas produces little or no insulin. Type 1
cases account for only about 5 percent of all diagnosed cases of diabetes and is sometimes tied to genetics or exposure to certain viruses.\(^6\)

- Type 2 diabetes, previously called non-insulin-dependent diabetes mellitus (NIDDM), or adult-onset diabetes, accounts for the majority of diabetes cases. This type occurs when the body becomes resistant to insulin or doesn’t make enough insulin to maintain a normal glucose level.\(^2\) People with Type 2 diabetes can remain undiagnosed for many years, unaware of the long-term damage caused by the disease.\(^6\)

- The third type is gestational diabetes, which may occur during some pregnancies. Though this condition usually resolves after the baby is delivered, gestational diabetes may create complications such as a higher birth weight and also increases the mother’s and child’s risk of developing Type 2 diabetes later in life.\(^9\)

### Complications and the EMD

Under the care of a doctor, patients can control their diabetes through proper medication/insulin injections, diet, and consistent exercise. However, this balancing act can sometimes go awry.\(^3\)

**Too much insulin**

Too much insulin has the effect of too many open “furnace doors” using available sugar too rapidly. This may be caused by a patient taking too much insulin, skipping a meal, or exercising harder than usual. This condition, which may present suddenly, is referred to as hypoglycemia (defined as blood sugar below 70 mg/dL) and is characterized by early symptoms of shakiness, dizziness, sweating, hunger, irritability, anxiety, or headache.\(^11\) Usually, the patient will improve by consuming a small amount of glucose-rich food (fruit juice, regular soft drink, milk, hard candy, honey) or taking a glucose tablet.

However, as stated in Rule 3 on Protocol 13: Diabetic Problems, the EMD should not advise administration of oral sugar to symptomatic diabetics due to risk of airway obstruction if s/he is not alert. This is better left to respondents to treat on scene, if necessary. However, the Case Exit instructions should be modified to omit the warning to “not have anything to eat or drink” for an alert diabetic.

If hypoglycemia is left untreated, a patient may present with clumsy or jerky movements, muscle weakness, difficulty speaking or slurred speech, blurry or double vision, drowsiness, confusion, or loss of consciousness.\(^12\) A cautionary note to the EMD: Axiom 2 on Protocol 13 warns that a significant potential for error is to confuse low blood sugar with alcohol or drug intoxication. This misdiagnosis can have disastrous consequences as severe hypoglycemia can lead to seizures, coma, and even death.

**Too little insulin**

If diabetics have insufficient insulin to prepare sugar to be consumed as fuel, the body begins to burn its own tissue (fat, muscle) for energy, which produces toxic byproducts called ketoacids (acetones). As these byproducts build in the blood, the patient may enter a pre-coma state called diabetic ketoacidosis, an illness characterized by high blood sugar level, excessive thirst, frequent urination, nausea and vomiting, abdominal pain, weakness or fatigue, shortness of breath, fruity-scented breath, and confusion.\(^13\) Untreated diabetic ketoacidosis may lead to a diabetic coma and can be fatal. Over a period of time, the patient’s inhalations may develop an abnormal deep breathing pattern (Kussmaul breathing) that some callers may report as “not breathing.”

Both high and low levels of insulin can lead to decreased levels of consciousness, which can pose difficulty in distinguishing whether an unconscious diabetic patient has experienced hypoglycemia or diabetic ketoacidosis (without a full history of the patient’s original symptoms). EMDs do not need to investigate this distinction, however, but should be primarily concerned with the patient’s consciousness, the main factor on which dispatch determinants are sorted.

### Alertness, behavior, and breathing

Protocol 13: Diabetic Problems has a very succinct and straightforward Key Question interrogation. In fact, all three Key Questions may be bypassed in the case of an unconscious diabetic patient—the EMD will initiate an immediate response (a 13-D-1 Determinant Code), provide applicable PDI’s (including sending someone to get a defibrillator), and follow the “Unconscious” DLS Link to provide Pre-Arrival Instructions on the appropriate airway protocol. This clearly demonstrates the first priority for an unconscious diabetic patient, which is airway control. Rule 3 (Rule 4 in MPDS’ v13.0) states: “The airway of an unconscious patient must be constantly maintained.”

If the patient is not reported to be unconscious during Case Entry, the EMD will continue with Key Question interrogation—each question directly related to the CHARLIE-level Determinant Codes (Not alert, abnormal behavior, and abnormal breathing) or, in the absence of these conditions, the ALPHA-level code (alert and behaving normally).

These Key Questions gather more information on the diabetic patient’s symptoms for responders to assess the patient upon arrival. Because a diabetic patient’s condition may be unstable or worsen rapidly, the EMD may choose to stay on the line after providing all appropriate PDIs, especially in the case of a first-party caller.

If a diabetic patient becomes particularly combative, the EMD should add the C suffix for “Combative or aggressive” to the appropriate Determinant Code and link to instructions for the caller’s safety (avoiding contact) on Panel X-8.

---

**Sources**

3. See note 1.
4. See note 1.
8. See note 1.
10. See note 5.
12. See note 11.
### YOU MUST BE MEDICAL CERTIFIED TO TAKE THIS QUIZ

Answers to this quiz are found in the article “A Worldwide Epidemic,” which starts on page 38.

Take this quiz for 1.0 CDE unit.

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<td><strong>1.</strong> In 2013, the IDF reported that ______ people worldwide have diabetes.</td>
<td>A. 82 million</td>
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<td>C. 382 million</td>
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<td>D. 500 million</td>
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| **2.** Diabetes causes one death every fifteen seconds worldwide. | A. true |   |   |   |   |   |   |
|   | B. false |   |   |   |   |   |   |

| **3.** In 2013, worldwide expenditures on diabetes totaled ______. | A. $500 million |   |   |   |   |   |   |
|   | B. $383 billion |   |   |   |   |   |   |
|   | C. $548 billion |   |   |   |   |   |   |
|   | D. $600 billion |   |   |   |   |   |   |

| **4.** In the Western Pacific, 138 million adults have diabetes—the smallest number of any region. | A. true |   |   |   |   |   |   |
|   | B. false |   |   |   |   |   |   |

| **5.** Diabetes is a metabolic disease in which blood glucose (sugar) levels: | A. are above normal. |   |   |   |   |   |   |
|   | B. are below normal. |   |   |   |   |   |   |
|   | C. drop after eating. |   |   |   |   |   |   |
|   | D. are unaffected by diet. |   |   |   |   |   |   |

| **6.** Too much insulin may result in hypoglycemia, which is characterized by early symptoms of: | A. shakiness. |   |   |   |   |   |   |
|   | B. sweating. |   |   |   |   |   |   |
|   | C. headache. |   |   |   |   |   |   |
|   | D. all of the above |   |   |   |   |   |   |

| **7.** The EMD should not advise administration of oral sugar to symptomatic diabetics due to risk of airway obstruction if s/he is not alert. | A. true |   |   |   |   |   |   |
|   | B. false |   |   |   |   |   |   |

| **8.** Axiom 2 on Protocol 13 warns that a significant potential for error is to confuse low blood sugar with alcohol or drug intoxication. | A. true |   |   |   |   |   |   |
|   | B. false |   |   |   |   |   |   |

| **9.** In the case of an unconscious diabetic patient, the EMD should: | A. ask Key Questions 1 and 3 before sending a 13-D-1 response. |   |   |   |   |   |   |
|   | B. complete the Key Question interrogation and go directly to PAIs. |   |   |   |   |   |   |
|   | C. bypass Key Questions and initiate an immediate 13-D-1 response. |   |   |   |   |   |   |
|   | D. bypass dispatch and provide Pre-Arrival Instructions. |   |   |   |   |   |   |

| **10.** The first priority for an unconscious diabetic patient is: | A. checking his or her blood sugar levels. |   |   |   |   |   |   |
|   | B. administering oral sugar or glucose tablets. |   |   |   |   |   |   |
|   | C. airway control. |   |   |   |   |   |   |
|   | D. elevating his or her legs. |   |   |   |   |   |   |

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To be considered for CDE credit, this answer sheet must be received no later than **02/29/16**. A passing score is worth 1.0 CDE unit toward fulfillment of the Academy’s CDE requirements. Please mark your responses on the answer sheet located at right and mail it in with your processing fee to receive credit. Please retain your CDE letter for future reference.

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**CDE Quiz Mail-In Answer Sheet**

Answer the test questions on this form. (A photocopied answer sheet is acceptable, but your answers must be original.) **WE WILL NOT PROCESS ALTERED SIZES.**

A CDE acknowledgement will be sent to you. (You must answer 8 of the 10 questions correctly to receive credit.)

Clip and mail your completed answer sheet along with the $5 USD (U.S. currency) **NON-REFUNDABLE** processing fee to:

The International Academies of Emergency Dispatch
110 South Regent Street, 8th Floor
Salt Lake City, UT 84111 USA
Attn: CDE Processing
(800) 960-6236 U.S.; (801) 359-6916 Intl.

Please retain your CDE acknowledgement for future reference.

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☐ Fire

☐ Police

☐ Paramedic/EMT/Firefighter

☐ Comm. Center Supervisor/Manager

☐ Training/QI Coordinator

☐ Instructor

☐ Comm. Center Director/Chief

☐ Medical Director

☐ Commercial Vendor/Consultant

☐ Other

**ANSWER SHEET**

Jan/Feb 2015 Journal “A Worldwide Epidemic”

Please mark your answers in the appropriate box below:

1. ☐ A ☐ B ☐ C ☐ D
2. ☐ A ☐ B
3. ☐ A ☐ B ☐ C ☐ D
4. ☐ A ☐ B
5. ☐ A ☐ B ☐ C ☐ D
6. ☐ A ☐ B ☐ C ☐ D
7. ☐ A ☐ B
8. ☐ A ☐ B
9. ☐ A ☐ B ☐ C ☐ D
10. ☐ A ☐ B ☐ C ☐ D

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International Academies of Emergency Dispatch™
EMD Steven Kierstead was down the hall in dispatch working on the radio on Aug. 25 before figuring out the reason that he had been summoned to the briefing room.

“Truthfully, I didn’t think a whole lot about it until I walked around the corner,” said Kierstead, a city of Saco (Maine) Public Safety Communications Center dispatcher. “I looked in and realized what this might be about.”

Inside were several employees of the Saco Police Department as well as an award committee ready to do what they do best: present commendations based on nominations they receive from within the department.

The attention caught Kierstead off guard, especially since the incident, he soon discovered, had happened almost half a year ago. It took a few seconds for him to remember the call.

“I take so many medical calls I had almost forgotten about the call when I was actually able to go through a full birth with the parents,” said Kierstead, who has been a 9-1-1 dispatcher for 15 years. “It’s definitely a career highlight, but the award took me totally by surprise. I was shocked.”

The call came in early on Feb. 26. A woman from nearby Pine Ledge Terrace was in active labor and the father, her boyfriend, was not the least bit eager to offer assistance beyond watching for the ambulance to arrive.

“He was not anxious to help,” Kierstead said. “I let him know that he had no choice, and he ended up doing a fantastic job.”

The father-to-be’s subsequent actions and the baby’s successful delivery had a lot to do with, “Steve’s ability to stay calm himself and to project that calmness to the father,” according to the citation.

Kierstead credits his ability to set aside the father’s fairly colorful language in concern for the immediate task at hand and his co-anchor, Scott Nolette, who handled the radio dispatch while Kierstead relayed the instructions over the phone.

“Scott and I worked as a team,” Kierstead said. “He got the response going.”

The four-minute call yielded a healthy baby boy as Brian Langerman, the on-scene medic, later told Kierstead.

“He called when they arrived at the hospital,” Kierstead said. “We have a great bunch of people in Saco Public Safety. Everyone does their job really well.”

Kierstead is among the few dispatchers who wear a stork pin, his with a stork carrying a baby swaddled in a blue blanket. He said the delay in receiving the commendation had to do with the timing of the committee’s meeting dates.

Kierstead left a job in retail after he was recommended and hired for the emergency communications dispatch position. He genuinely enjoys coming to work, and after all these years, he can’t imagine doing anything else.

It’s the first award he has received with Saco Public Safety, and he’s truly not looking to add to it anytime soon.

“The award was humbling and overwhelming, but, honestly, the call ended perfectly, and that was good enough for me,” Kierstead said. “Every one of us here would have done the same thing. I was just lucky enough to be the one answering.”

The Saco Public Safety Communications Center handles over 28,000 calls for service every year. E9-1-1 calls are transferred to Saco from a nearby Public Safety Answering Point (PSAP), and public safety services are dispatched as needed to emergencies.

This center also handles numerous seven-digit lines covering the city’s police, fire, and rescue departments.

The center was established in 1999 at the Saco Police Department from a consolidation of police and fire department dispatchers. There are 11 dispatchers. The city of Saco has an area of 38.5 square miles and a population of nearly 19,000.
EMD Travis Bell's only concern was keeping the patient alive.

Bell wasn’t thinking that it was almost the end of his shift at the Polk County (Iowa) Sheriff’s Office. He wasn’t planning what to eat for breakfast or where to get the oil changed on the way home.

And after the call ended, it stayed with him. He sent texts to his co-workers on the day shift. He waited. Finally, he got a response: The person receiving CPR had lived.

But the aftermath was a shock he hadn’t anticipated.

“The publicity is good because it’s usually the bad news about 9-1-1 that makes the press,” he said. “But the attention is certainly nothing I wanted. It’s a little overwhelming.”

The call came in at 6:30 a.m. on Aug. 4, shortly before the end of Bell’s scheduled shift. The woman on the other end of the line was desperate for help. She had gone into her daughter’s room for the morning wake-up call and found the 16 year old unresponsive. The mother couldn’t tell if her daughter was breathing.

Bell instructed the mother to place her daughter on the floor.

He signaled fire and medical dispatch—“incoming, unconscious not breathing”—and they initiated response through the city of Mitchellville and city of Altoona Paramedics.

Bell accessed the ProQA AGONAL BREATHING Diagnostic Tool to determine whether the girl had gone into cardiac arrest and told the caller to say “now” every time her daughter took a breath.* The subsequent 12-second lapse between breaths indicated an agonal (dying) breathing pattern. The girl was fading.

Bell started Pre-Arrival Instructions (PAIs) for CPR, telling the mother how to position her hands to effectively pump her daughter’s chest. They counted together, reaching 600 times, and then started the second set of 600.

“We made it to 800-plus when paramedics arrived,” Bell said.

He congratulated the mother for doing such a great job during the nine minutes of compressions-only CPR.

“This was the first time CPR worked for me on a call,” said Bell, who has been a dispatcher at Polk County for 10 years. “That made it a very cool experience.”

In September, Bell was asked to stop by the office for a few minutes after his shift ended. Two people wanted to meet him in person. It would be another first for him. He got to hug the mother and her daughter.

The mother also read aloud a letter she had written in gratitude of Bell’s actions, that in part states: “That morning when I discovered our daughter, her body so still and her voice silenced, I was so afraid she had left us forever. When you asked me to begin CPR, I began to panic as I did not remember what to do. You encouraged me and kept me on track. I know that you probably consider that you were just ‘doing your job,’ but to us you were the anchor that held us steady in the process of saving our daughter’s life.”

Bell was then handed a commendation from the sheriff’s office.

From there it was interviews with the newspaper reporters and, in mid-October, Bell was asked to tell his story on a local television station.

He said it’s hard to take the attention in stride.

“This could have been anybody that I work with,” Bell said. “I’m honored but never expected any of this would happen.”

* Editor’s Note: According to the soon-to-be released Version 13.0 of the Medical Priority Dispatch System™ (MPDS®): UNCERTAIN or INEFFECTIVE BREATHING need NOT be verified by using the AGONAL BREATHING Diagnostic Tool, but rather PAIs should be initiated as soon as possible. ●
“Who We Are …”
Eric Braun

On the radio, we are the voice of reason, even when you think we’re not.
Like you, we don’t always agree with our orders, but we follow them.
Above all, we care; your safety is our primary concern.
We know more about your work ethic, habits, and quirks than you know about yourself.
We know your voice and tone by heart and what each means, and adapt accordingly.
We know when you’re stressed, and we do our best to give you the space you need after a bad call.
We care, too; we take the call, we hear what you’re up against, and we resist the urge to ask you how it turned out.
Sometimes, we just don’t want to know and pretend it must have been a good ending.
We know what you’re saying out of frustration inside the rig when there’s that momentary pause before answering us.
It’s OK, we do the same thing. At the end of the day, we are all still friends—it goes with the territory.
We really do feel bad giving you a job at 6:40 a.m.; we know you have loved ones and lives, too.
When we take 9-1-1 calls, we know within 30 seconds which strategic approach to take to extract what we need.
We know what tone to use, how to talk to you, and how to take control of the call.
Even when you are abusive, we will not break; we remain professional and treat you with respect.
We know more about you in a five-minute conversation than your family does, but not to worry, we don’t judge, and we don’t tell.
We read between the lines; it’s not only what you say but how you say it, and we adapt without hesitation.
We do this because we really do care and want to help you; it’s not a job, it’s our code and vocation.
You will remember us and how we treated and helped you—three hours later when you do; we have taken 20 more calls since then.
For us, it’s not just another call; it’s our chance to make a difference in your life, and in doing so it makes a difference in ours.
We take control, remain professional, stay calm, and get you through it until help arrives.
And yes, we take our headsets off and walk around the parking lot a few times to clear our minds, walk off pressure and tension, and return to take the next cry for help.
Some of you may dislike us, some will respect us, and some don’t care one way or another. It’s OK, we will still be here tomorrow and give 100 percent, because it’s who we are …
diabetes

**Total deaths from diabetes are projected to rise by more than 50% in the next 10 years.**

**Deaths from diabetes are projected to increase by over 80% in upper-middle income countries.**

**Type 2 diabetes is much more common than Type 1 diabetes, and accounts for around 90% of all diabetes worldwide.**

**Thirty minutes of moderate-intensity physical activity on most days and a healthy diet can drastically reduce the risk of developing Type 2 diabetes.**

**Diabetes affects 29.1 million people or 9.3% of the U.S. population.**

**$245 billion is the estimated total medical cost and lost work and wages for people with diabetes.**

**One out of four people in the U.S. do not know they have diabetes.**

**The percentage of Americans age 65 and older remains high, at 25.9% or 11.8 million seniors (diagnosed and undiagnosed).**

**Diabetes remains the 7th leading cause of death in the United States.**

**In 2010, about 73,000 non-traumatic lower-limb amputations were performed in adults 20 years and older with diagnosed diabetes.**

**Diabetes was listed as the primary cause of kidney failure in 44% of all new cases in 2011.**

**Sources:**
The dual role of funeral home drivers in the ‘50s and ‘60s

Audrey Fraizer

Todd Van Beck began his mortuary career in a funeral home that combined transporting both the living and the deceased.

Driving an ambulance came with the mortician’s job, Van Beck explained. Funeral homes took on the dual role and for very good reason—they were equipped with a vehicle of the right size.

“There were no minivans or SUVs,” Van Beck said. “The funeral home had a vehicle that could fit a body laying down. We also knew anatomy, and the phone was answered 24/7.”

So what if the funeral home-operated ambulance service had little to do with training, certification, or essential medical supply? State of the art in those days meant Van Beck was behind the wheel of a 1959 Miller-Meteor, converted station wagons, or a dual-function 1960 Oldsmobile (coach and ambulance) and “some nifty” Cadillacs.

“That time provided some of the most exciting moments in my life,” Van Beck said, who was in his 20s then.

Most of the vehicles that Van Beck commandeered in Nebraska, Iowa, and, finally, Massachusetts, featured all the bells and whistles—emergency lights-and-siren, flashy exterior, and “really, really loud noise.”

There were no pagers, no beepers, no answering services, and no voicemail. The funeral home received calls directly from the ailing patient or a member of law enforcement making a call from the station after word of a medical emergency came in on their radio. The single connection was the landline at the funeral home that personnel attended 24/7.

Medical supplies and training were minimal. The ambulance arrived carrying a couple of towels, some elastic bandages and 4-inch-by-4-inch gauze pads, a stretcher, some Timmons splints, and a not-always-full oxygen tank. A plastic vomiting basin was available for nauseated patients.

Training was on the job, and few had Van Beck’s basic first-aid knowledge. He said it wasn’t about medical care they could or could not provide.

The “load and go” funeral home operation was fast and efficient, and more so than many of the other methods of transport available, such as tow trucks that could haul the car and, unfortunately sometimes, the patient following an impact on the road.

“They tended to be slow,” Van Beck said.

Despite the exhilaration that came with the job, providing mortuary ambulance services and emergency transport also had its share of stress. Long hours were mandatory. Many ambulance calls came in after midnight, despite ailments the patient later said started earlier in the day.

Because funeral homes were the number called in a medical emergency, funeral home drivers were often buried in the thick of some of the most stressful events in their communities.

No money was made at the low rates charged and, even at that, patrons could be reluctant to pay. The money they did collect had to cover supplies, maintenance, staff, and laundry. Sheets were washed after each trip. Most funeral home directors looked to the benefits of advertising and the increased visibility and improved public image their business’ name on a funeral home car speeding to assist the living provided.

Van Beck is quick to point out the good side of what today may seem like an odd practice. He doesn’t dwell on the job’s complications or life tragedies, preferring the memories of human connection established in the unusual circumstances and, at times, comical manner in which things sometimes turned out.

For example, a funeral home in Nebraska where Van Beck worked also offered free delivery home from the hospital for mom and newborn.

“We’d turn on lights-and-siren two blocks from the home to announce the baby’s arrival,” Van Beck said. “That’s an interesting courtesy you don’t see anymore.”

Then there was the unexpected, like the time Van Beck said he “startled the bejesus” out of an unintended audience sheltering from a sudden downpour in the alcove of the hospital emergency drop-off.

“We were transporting this tiny, sweet woman named May from Don Orione Nursing Home in East Boston to Massachusetts General Hospital,” he said. “We liked May a lot.”

Van Beck had made the same trip several times and each time assured May that she was receiving his closest attention. Upon arrival at the hospital this particular time, heavy rains gave him an occasion to prove his word. He gently pulled the hospital blanket over her head before attempting a mad dash through a “cats and dogs” downpour into the hospital. May, lying prone
on the gurney, was fine with that. She dozed off. The rain really started coming down even harder, prompting a decision to hold up in the vehicle, all while keeping May’s head covered.

That was not such a good idea, Van Beck admitted.

The rain kept pouring, giving every opportunity for those leaving the hospital to notice the body while waiting out the storm under the alcove.

“It soon became evident that everybody thought we had a corpse under the blanket, because no one was saying a word,” Van Beck said. “Everyone was somber and reverent like people tend to be in the presence of someone who has died.”

The hard rain stretched into minutes. People glanced and looked away. May stayed under the cover, at least until the blanket over her face threatened to meet the audience’s foregone conclusion.

“I think I am going to suffocate,” May said in a voice loud enough to be heard through the rain.

One of the bystanders—a woman—dropped the vase she was holding, scattering flowers and glass on the wet ground. The looks on the faces of others were enough to convince Van Beck it was time to go.

“We got the hell out of there,” Van Beck said. “It must have been a bumpy ride for May.”

Ambulance transit changed according to the times, with funeral homes relinquishing the service to fire departments, rescue squads, and private ambulance companies.

While rules governing the safe operation of business vehicles on federal and state highways/roads/routes and the Fair Labor Standards Act bore the brunt of the service’s demise, the threat of litigation was the final nail in the coffin.

“We could lose a funeral home over a $15 ambulance call,” Van Beck said. “Someone could say we broke their back in transport and sue us. Truly, the ambulance service became too great of a burden for us.”

Van Beck held out until 1982 and is one of a handful of morticians who recall and is willing to share what the experience was like. People from later generations tend to poke fun at the service that once was, suggesting ulterior or ghoulish motives.

“It doesn’t make sense to a lot of people,” Van Beck said. “Yet, when we stopped providing the service, communities felt the loss. A former $15 to $20 ride was now costing far more.”

Van Beck stayed in the mortuary business and currently operates Forest Hill Funeral Home and Memorial Park in Memphis, Tenn. He looks back fondly upon the ambulance transport days of his profession, although also admitting the relief the end of the dual role produced.

“It was also an opportunity for a young man to see the raw side of life and realities of the human condition, with a few good stories to tell,” he said.
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