IEMSA

October – December 2008

VOICE

A **VOICE** FOR **POSITIVE** CHANGE IN **IOWA** EMS

Iowa Emergency Medical Services Association

"**Our service went from $60,000 a year in revenues to $170,000 a year since switching to LifeQuest!** In the 5 years we've been with LifeQuest, **the returns have been so great that we have been able to pay wages and rising costs of medical equipment and supplies without increasing taxes** to the municipalities that fund our service. It's nice to have the money to be able to pay all expenses and still set aside funds for new ambulances and defibrillators. Our service, commission, and community leaders have all been pleased with our reimbursements. This just wouldn't have been possible without LifeQuest. Thanks !!!" ***Diane Eberdt, Director of Lodi Ambulance***

"I have been with the Boyd-Edson-Delmar Ambulance Service since 1979, and I am currently the Fire Chief/EMS Director . . .We have been with LifeQuest since May of 2007. Previous to that I did all of the billing and used to spend 20-30 hours a week on it, due to the complex system that's used for billing ambulance runs. Since we have gone with LifeQuest as our billing agency, it has freed my time up immensely. **I feel LifeQuest does a very professional job, their high collection rates have increased our revenues, they are very respectful to our clients and are very knowledgeable** about anything to do with Medicare, Medicaid or any other insurance carrier. LifeQuest has always been very patient and accommodating with us no matter what problem has arisen. **Thank you LifeQuest, you do an excellent job!**"

Ronald Patten, Fire Chief & EMS Director for
Boyd-Edson-Delmar Fire Department & Ambulance Service

"Our Ambulance service has been with LifeQuest since 2005 and for 3 years we have continued to have our revenue grow every month. We have been able to upgrade equipment, get an increase in our on call pay, and finish paying for our Ambulance. The free seminars and training are fantastic. The data management is priceless. LifeQuest has most outstanding staff ever. Most of the staff, having been or continue to be in EMS. **They are the nicest, and definitely the most helpful, EMS family.**

As a relatively new Ambulance Director, **I can't imagine running a service without LifeQuest.** Thank you so much; I couldn't do it without you. As I always say 'I LOVE LIFEQUEST'"

Robyn Foster, Service Director for Osceola Area Ambulance

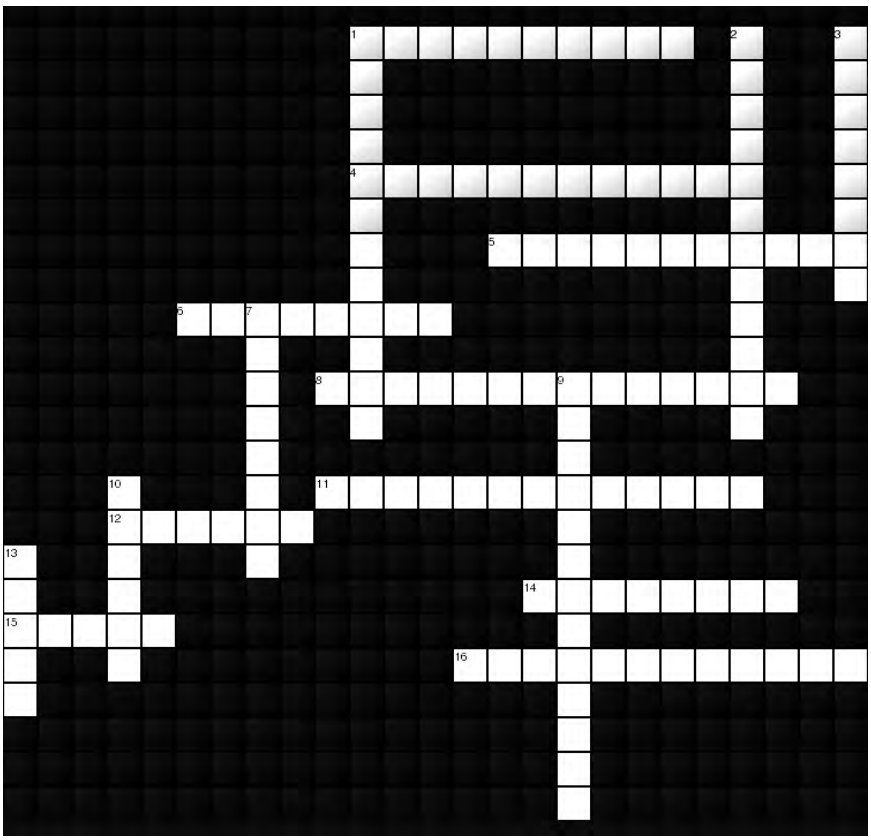
LIFEQUEST
Billing, Collection, & Data Management Services

Call us today! 1-888-777-4911
www.lifequest-services.com

IEMSA Vol. 2008-04, October-December, 2008
VOICE

Iowa Emergency Medical Services Association Newsletter is Published Quarterly by:
IOWA EMERGENCY MEDICAL SERVICES ASSOCIATION
2600 Vine Street, Suite 400 • West Des Moines, IA 50265

IEMSA CROSSWORD PUZZLE *Challenge*



ACROSS

1 The membrane lining the abdominal cavity (parietal) and covering the abdominal organs (visceral).
4 Pain felt in an area of the body other than the area where the cause of pain is located.
5 Inflamation of the peritoneum.
6 Involuntary muscle contractions (spasm) of the abdominal wall, an effort to protect the inflamed abdomen.
8 Bulging out of intestinal rings in small pockets at weak areas in the muscle walls, creating abdominal discomfort.
11 Complete obstruction of blood circulation in a given organ as a result of compression or entrapment; an emergency situation causing death of tissue.
12 Vomiting.
14 Inflammation of the bladder.
15 Acute, intermittent cramping abdominal pain.
16 A condition of sudden onset of pain within the abdomen, usually indicating peritonitis; immediate medical or surgical treatment is necessary.

DOWN

1 Inflammation of the pancreas.
2 Inflammation of the appendix.
3 A swelling or enlargement of a part of an artery, resulting from weakening of the arterial wall.
7 Lack of appetite for food.
9 Inflammation of the gallbladder.
10 The protrusion of a loop of an organ or tissue through an abdominal body opening.
13 Erosion of the stomach or intestinal lining.

Crossword puzzle solutions printed on page 21.
Reprinted with permission from Jones & Bartlett Publishers.

2009 IEMSA MEETINGS

Board Meetings:
The IEMSA Board of Directors will meet either in person or via teleconference on the following dates from 1:00-3:00 p.m. unless otherwise noted. All meetings, with the exception of the Annual meeting, will be held at 1:00 p.m.

2009

- **January 28** TBA at 7:00 p.m.
- **February** *NO MEETING*
- **March 19** Teleconference
- **April 16**
  West Des Moines EMS Station 19
- **May 15**
  West Des Moines EMS Station 19
- **June 18** Teleconference
- **July** *NO MEETING*
- **August 20**
  West Des Moines EMS Station 19
- **September 17**
  West Des Moines EMS Station 19
- **October 15**
  West Des Moines EMS Station 19
- **November 12**
  ANNUAL MEETING
  Polk County Convention Center
- **December 17** Teleconference

Additional Important Dates:

January 29, 2009
EMS Day on the Hill and
Leadership Conference
Des Moines, Iowa

March 15 – 22 , 2009
Iowa EMS Cruise
Departs from Miami, Florida
Visit www.iemsa.net/cruise for details

A *Message* from the President

John Hill, EMT-PS
IEMSA President
Board of Directors

United We Respond

I hope this issue of *The Voice* finds you enjoying the winter months. Freezing weather, icy conditions, chimney fires, motor vehicle crashes, snow shoveling injuries, snow mobile accidents, and the winter list of calamities goes on and on! We need to remember we are in the season that always brings us trouble – winter. Especially this year, with the increased cost of heating fuel and gas, many will be heating with wood or other solids which, if not installed and operated appropriately, can cause damage to the body and to the structure. Please be prepared for the oncoming season and train and respond in a very safe manner.

Two years of presidency of the Iowa EMS Association seems like a long time. But time has passed quite rapidly, and my impression is that it has been a rather short, but a very busy and highly interesting period in my life. I have been fortunate in becoming acquainted with numerous EMS professionals, both career and volunteer, from many different regions of the state – and the country for that matter, all of whom are devoted and actively involved in EMS. I quickly realized these people are of a very special kind. They are proactive and enjoy discussing EMS and new ideas. Working with them has been a very exciting and rewarding experience. I have truly been blessed in the past two years to serve with such people on the IEMSA Board of Directors.

Will 2009 Be Our Year?

I posed this question at the end of this year to stress a couple of points. Often during this time of year, some of us stress the importance of upcoming New Year's resolutions and sometime in around March or July those resolutions are tossed aside for other "more important" things.

As an organization, the Iowa EMS Association needs to make some New Years resolutions that will hold fast. You see, while each of our individual resolutions may be wonderful for us or for those that are directly around you, this organization has the ability to begin a revolution!

We all know change is hard and is often constrained by those who wish to hold on to the "old way" because they know no different. We have a unique ability this year to look at the lessons learned from 2008 and pave the way for 2009 and beyond. IEMSA is working hard for you. The board of directors is in the final stages of completing last year's strategic planning initiatives. In the past year, many things have happened. IEMSA underwent its first official financial audit. We have updated our website and increased membership benefits. Our legislative agenda is moving ahead as public employees were moved into the IPERS protected class. We will continue to lobby to have Iowa provide a system to reward volunteerism in public safety, with proposals that will influence and affect EMS in Iowa. We will have our lobbyist at the capital during this Legislative secession lobbying to protect and enhance rules, regulations, policies and laws that affect the practice of prehospital emergency medicine in Iowa. Stay tuned to www.iemsa.net for more information and please join us for EMS Day on The Hill on January 29 from 7:00 AM until 9:00 AM in the Capitol Rotunda. Immediately following this event IEMSA will host the EMS Leadership Conference at the West Des Moines Marriot from 10:00 AM until 3:00 PM.

I would also like to remind all IEMSA Members, that each region of the state has IEMSA representation on the board. The responsibility of the regional representative is to be an IEMSA ambassador in their area. This allows each region to have a point of contact and to allow the information to flow more freely. Please contact the IEMSA Office or check the website if you are unsure who your area representative is.

Will 2009 be our year? I believe we are on the verge of some amazing changes with the adoption of the National scope of practice and system standards pilot programs, etc.

Many other professions had their year and now it is time for us to have ours. Please know that the only way this happens is with your support.

Make it one of your New Year's resolutions to become more active in IEMSA with your membership, your communication to the board, and your support.

I can assure you that one of my top resolutions in 2009 is to see that this organization makes a difference.

Thanks for your time and your continued support. ■

Maintaining Your Crew's Education & Skills

Azeemuddin Ahmed, MD, FACEP
IEMSA Medical Director

It is always challenging to maintain crew education and skills regardless if you have a busy service or not. The obstacles of disorganized skills maintenance schedules, poor training opportunities and time constraints can lead to a deterioration of education and clinical skills that can potentially affect patient care. In this column, I would like to suggest some tips that may be helpful.

Plan in Advance

This is a good time to start preparing the educational curriculum for the upcoming year. Discuss with your clinical leaders the topics that are mandatory to be covered as part of the certification maintenance process and then supplement those topics with topics that are part of your service scope. By planning in advance, this allows for securing the proper speakers for the topic and limits last-minute scrambling and introduction of topics that are not relevant to your operations.

Regular Skills Maintenance

It can be difficult to maintain skills, especially in a low call volume department. This again requires an organized and planned process that starts with identifying a competent training officer dedicated to EMS. This officer must work with the medical director to identify the essential skills that have to be maintained for the service to function optimally, and then proceed to plan the training sessions in advance. Techniques to "spicing up" the training include having competition amongst the group, similar to the patient care competitions that occur at EMS conferences, as well as bringing in providers from other services to lend their expertise. This builds collegiality and allows for a fresh speaker as opposed to the "usual suspects" who always end up leading the skills sessions.

Testing

This is always uncomfortable and EMS providers may be opposed to this. However, there is a benefit to testing an individual's knowledge and skills on a regular basis, and I encourage services to come up with a fair test to be given to the members of your group. Testing allows people to become aware of new protocols and skills while demonstrating continued mastery of previously learned protocols and skills. As someone who has taken many knowledge and skills tests, I know it can be a little painful, but understanding that you have what it takes to provide good emergency care is a source of professional satisfaction and also a protection for the public.

Remediation

There may be people identified within your group that may have fallen behind. This again can be a delicate situation that needs to be addressed quickly and professionally. Additional reading and skills review may be needed with these individuals to bring them back to an acceptable level.

It is understood that the vast majority of EMS in Iowa is volunteer and people may not have the time and inclination for such an education and training schedule. I believe that regardless of volunteer or paid we are all professionals. Being a professional means maintaining a baseline level of education and skills that allows us to do our job efficiently and successfully. Aside for the actual patient care aspect, EMS providers must maintain certain continuing education credits to maintain their credentials. Not meeting these requirements certainly can mean trouble from regulatory bodies. Neither the provider nor the patient can afford that!

As the new calendar year approaches, I would like to ask you to review your education and training schedule for 2009 and make sure that you have a plan of action, as well as a method of testing your crew. Proper maintenance of the varied skills that we possess is the cornerstone of our profession and should not be taken lightly. I am happy to speak with your medical director or service director if they have any questions or concerns. Please e-mail me at azeemuddin-ahmed@uiowa.edu.

Until next time, please be safe and thank you for your service to your community and to the world of EMS. ■

Welcome New IEMSA Members

OCTOBER – DECEMBER, 2008

AFFILIATES: Clarinda Regional Medical Center
Superior Ambulance

INDIVIDUALS:

Adam Misfeldt
Andy Lake
Annie Rabe
Audrey Rex
Ben Lines
Brad Ransford
Catherine Horak
Catherine Wilhelm
Christina Spoerl
Cori Rayevich
Dan Sanders
David Baker
Deidra Waln
Derek Peck
Donald Stangeland
Dr. Chris Buresh
Dustin Groeneweg
Elizabeth Spoerl
Frank Rahman
Jason Adams
Jay Taber
Jess R. Dunn
John Crookshank
Julie Lines
Katie Smith
Kenny Moen
Kevin Lee
Kris Kamm
Kristen Donnelly
Michael T. Wise
Michelle Nelson
Patricia Neilssen
Ryan Kieffer
Scott Gymer
Stephanie Mahaney
Susan Flogel
Tamara Crookshank
Tamora Brown
Travis Van Den Top
Wesley O Conner

STUDENTS:

Alyssa Kusler
Ann R. Borseth
Cassady Rider
Chester Mills
Donnie Kenkel
Douglas J. Junior
Jeffrey C. Cain
Jeffrey Muller
Jennifer Robasse
Jordan Massman
Joseph Lawrence
Justin Gilbertson
Kent Bodensteiner
Kyle Kohls
Lisa Davis
Melissa Pothoven
Mitchell Easton
Nicole Westerguard
Pamela Miller
Patricia A. Rose
Robert Andersen
Sarah Gude
Sarah Halverson
Zachary Flott

The ABCs of ACS

BY JEFF J. MESSEROLE, PS

You're a BLS Ambulance service responding to the home of a 48-year-old male who complains of chest discomfort. Upon arrival the patient's wife leads you back to the bedroom where you find an apprehensive male patient who says "Oh it's nothing – just a little indigestion, but my wife seems to think you guys should check me out." You notice beads of sweat above his lip and on his forehead and he is rubbing the left side of his chest. You've been hearing all the scuttle about getting patients with chest discomfort to a cath lab – something about STEMI, so a tier with ALS is ordered. In the meantime, what are your options?

All complaints of chest pain should be taken seriously until it can be ruled out whether the cause is life-threatening. We are going to focus on the causes of chest pain the American Heart Association term Acute Coronary Syndromes or ACS. As its name implies, an Acute Coronary Syndrome (ACS) would be a sudden onset of heart-related signs and symptoms that point to a particular disease, in this case atherosclerosis. Atherosclerosis comes from the Greek words athero (meaning gruel or paste) and sclerosis (meaning hardness). This gruel or paste is made up of calcium, lipids, fats, and is called plaque. As this gruel or paste clings to the walls of the coronary arteries it narrows the lumen of the artery, reducing the amount of blood and oxygen reaching the heart muscle. The plaque may harden or remain soft. When atherosclerosis occurs within the coronary arteries it is referred to as Coronary Artery Disease (CAD). Patients with CAD may develop Acute Coronary Syndromes (ACS) caused by disruption of this atherosclerotic plaque. The two most common Acute Coronary Syndromes are Angina Pectoris and Acute Myocardial Infarction (AMI). Angina can be divided into stable and unstable types while AMI can be further divided into ST-segment Elevated Myocardial Infarction (STEMI) and Non-ST-segment Elevated Myocardial Infarction (NSTEMI).

Angina Pectoris literally means "chest pain" and is caused by an inadequate blood supply from a narrowed coronary artery filled with plaque. Angina pain usually comes on with exercise or stress and lasts three to five minutes, sometimes up to 15 minutes. Angina pain is relieved by rest and/or nitroglycerin. Less common causes of Angina may include coronary artery spasm, arterial inflammation resulting from an infection, and extrinsic causes not related to the coronary artery like hypoxia, hypotension, tachycardias, and anemia. A rare form of an ACS may result from cocaine or methamphetamine use as they increase myocardial oxygen demand and may cause coronary artery dissection. Most patients who develop Anginal pain from these extrinsic causes have a past medical history of CAD or Angina.

An AMI is caused by a clot or thrombus that forms in a narrowed coronary artery where the plaque has ruptured causing platelets to aggregate and a clot to form. If the coronary artery becomes completely obstructed, the cells in the heart muscle will begin to die if they do not receive enough oxygen-rich blood. This can cause permanent damage to the heart muscle and is often referred to as a heart attack or ST segment elevated myocardial infarction (STEMI). If the coronary artery is partially obstructed from the clot formation, this leads to ischemia from lack of a good blood supply and

is often referred to as a Non-ST segment elevated myocardial infarction or NSTEMI. If left untreated it may progress to a STEMI, causing heart tissue injury and death.

EMS providers will get frequent calls for the most common symptom associated with ACS – chest pain. As effective treatment for ACS is time-sensitive it becomes important for the EMS provider to quickly recognize the presence of ACS, develop a field impression as to its cause, and provide essential treatment within the first hours of onset to reduce the likelihood of a sudden cardiac death.

What are the Signs and Symptoms of an Acute Coronary Syndrome?

The classic signs and symptoms of ACS may include a sudden onset of chest pain or pressure located in the center of the chest behind the sternum. This pain or pressure may feel like it is radiating to the neck or jaw and down the left arm. It is described as constant, usually lasting longer than 15 minutes. The patient may also complain of shortness of breath, like their chest is in a vise or an elephant is sitting on their chest making it difficult for them to breathe. They may also have the associated signs and symptoms of an ACS like diaphoresis; pale, mottled, cool skin; weakness or lightheadedness; may complain of feeling nauseated and may vomit; and may have a feeling of impending doom. The presence of rales and rhonchi with or without jugular vein distention may be present with a large or repeated AMI indicating the presence of Congestive Heart Failure (CHF). These classic signs and symptoms of ACS may all be present or only a few may be present. The elderly, diabetics and post menopausal women may present with no pain or discomfort, but instead present as though they are having a sudden onset of flu-like symptoms. Failure to recognize the flu-like symptoms as ACS in the elderly, diabetic, or post menopausal women may lead to the development of serious and life-threatening consequences.

How Do I Assess for an Acute Coronary Syndrome?

Recognizing early that a patient is having ACS is the primary goal of the assessment. Most patients will wait two to three hours before seeking medical help. This delay can result in lasting heart damage or worse, death. Since about half of all ACS patients may die before reaching the hospital, your assessment – like the assessment of all medical patients – begins with the ABCs.

If your patient is unconscious you must determine the patency of their airway, the presence of breathing, and if they have signs of circulation. If after opening their airway with a head tilt chin lift there is no breathing, then two rescue breaths each lasting one second should be delivered with enough volume to make the chest rise. If no pulse is felt or you are not sure a pulse is present then chest compression should begin immediately using the universal compression to ventilation ratio of 30:2. Compressions should occur at a rate of 100 per minute with limited interruptions. An AED or ECG monitor capable of electrical therapy should also be applied, the rhythm identified, and the protocol for that particular AED or ECG monitor should be followed. Cardiac arrest management should follow the AHA algorithm for Pulseless Arrest.

If your patient is conscious and there are no serious life threats found when checking the ABCs then a focused history and physical exam can begin. A SAMPLE history may be obtained and the patient's complaint of chest pain or pressure evaluated using the OPQRST memory aid. Let's start first with the OPQRST.

O - Onset – What was the patient doing when the chest pain or discomfort occurred. Remember you don't have to be working hard for an AMI to occur. In fact most occur at rest. If the pain occurred suddenly with activity or during a stressful situation, further assessment to determine a past medical history of Angina is warranted. A gradual onset may suggest Pericarditis, or an onset a day after heavy lifting, or forceful coughing may suggest a chest wall muscle involvement.

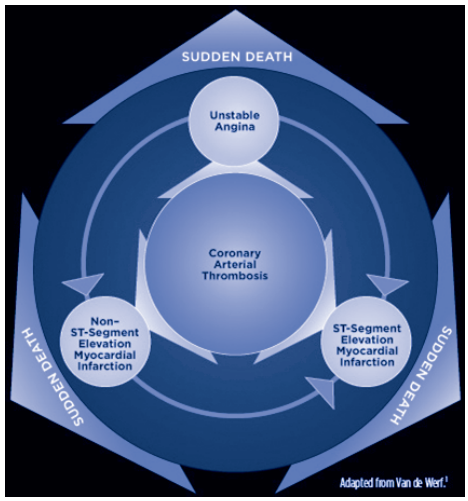
P - Provocation – What makes the pain or discomfort better or worse? The pain from ACS is usually constant and it generally does not get worse with a deep breath, or when you push on the area where the pain is being felt. It is not made better by a particular position, or by splinting the chest with a pillow. If the pain or pressure is relieved by rest or nitroglycerin, then the ACS may be Angina. If not, then the pain or discomfort could be the result of unstable Angina or an AMI. If the pain increases with touch or inspiration then pneumonia, pneumothorax, pericarditis, or pulmonary embolism may be the reason for the pain or discomfort and further assessment for those signs and symptoms should occur.

Q - Quality – Have the patient describe their pain or discomfort in their own words. Asking them if it is sharp or dull limits their response to sharp or dull, which may not accurately describe how they feel. Heart related pain is often accompanied with the complaint of pressure or squeezing. It can be described as indigestion in those patients denying the possibility of an AMI.

R - Radiation – Does this pain or discomfort radiate? Typically it will radiate to the neck or jaw or down the arms, but may radiate to the back or into the abdomen or down the legs. It may radiate anywhere. Pain that is felt in the shoulder may be referred and associated with gall bladder disease. The pain of an aortic dissection typically radiates straight through to the back and may settle in the flank. Further assessment of those types of pain is warranted.

S - Severity – On a 1 to 10 scale with 1 being the least amount and 10 the worst pain or discomfort ever felt, have them rate their pain or discomfort. Giving the pain or discomfort a number informs you of where the pain is now, and if the treatment you provide is effective that number should go down. If the patient's pain or discomfort worsens the number may go up. It lets the EMS provider know how effective they are or if the patient is getting worse. Men typically will rate their pain a higher number than women. Often the treatment for chest pain in men is taken more seriously because of how they describe the intensity of their pain. Women may have little or no complaint of pain, but instead complain of a sudden onset of weakness with the associated signs and symptoms of AMI like nausea, dizziness, and malaise.

T - Time – How long have they had this pain? Depending on how close the patient is to a definitive therapy or a chest pain center capable of cardiac catheritazation, the patient may need a fibrynolitic or "clot



buster" to dissolve the clot in the coronary artery if that is what is causing the ACS. There is a narrow window of opportunity in which the administration of a fibrinolytic will be beneficial. EMS providers should know what the capabilities are of the facilities they transport the patient to. "Heart Hospitals" are designated as the place a patient with an ACS should be eventually transferred to for specialty care. Every community should have a written protocol to guide EMS on the rapid assessment and transportation to an appropriate facility able to care for their patients' ACS. The Quality Assurance Standards and Protocol subcommittee of the Iowa EMS Advisory Committee is working on such a protocol.

After completion of the OPQRST you should have a good idea if your patient is experiencing ACS, and whether that is Angina, Unstable Angina, or AMI. Chances are they are having an AMI if they were shoveling heavy snow and suddenly developed chest pain that is substernal, constant, radiates to the neck, jaw, and down the left arm making it hard for them to breathe, described as like an elephant sitting on their chest, and rated at 10-plus, and it has been going on for about an hour and has not been relieved by rest or their own nitroglycerin. Although we have not completed a 12-Lead EKG or have the ability to look at cardiac markers, we can with some certainty develop the field impression of an AMI. If it looks like a duck and sounds like a duck, it's a duck.

Add to your OPQRST the findings of your SAMPLE history.

S: Signs and symptoms – look for those associated signs and symptoms like a sudden onset of flu-like symptoms; weakness; dizziness; pale, cool, clammy skin; or the feeling of impending doom. Pertinent negatives like the pain not being relieved by rest or after getting their nitroglycerin would be important to note.

A: Allergies – to any medications are important as this patient may be given Aspirin along with other medications for their AMI.

M: Medications – prescription, herbal, and over the counter (OTC) are important to determine and may indicate a past medical history of CAD, or that they have a previous heart history. Medications like nitroglycerin, an aspirin a day, cholesterol lowering medications, high blood pressure medications like ACE inhibitors, beta-blockers, or calcium channel blockers; and oral hypoglycemics indicating diabetes would all be pertinent for the possibility of CAD. Note that if the patient has taken any medications in the last 24 to 36 hours for erectile dysfunction (medications like Viagra, Cialis, or Lavitra), this is important as nitrates should be avoided.

P: Pertinent past medical history – Do they have heart disease; is there a family history of heart disease; have they had an AMI; have they ever had a Coronary Artery Bypass Graft (CABG) or a Percutaneous Transluminal Coronary Angioplasty (PTCA) with a stent to open a coronary vessel; is there evidence of risk factors? These would all be pertinent medical history questions you should attempt to get answered.

L: Last oral intake – may indicate the presence of a full stomach and an increased risk of vomiting should they become nauseated.

E: Events leading up to the call for 911 – Was the patient engaged in physical activity, a high stress situation, or did they wake up from a sleep with the pain or discomfort? Has there been any use of cocaine or methamphetamines?

Our continued physical assessment would include a baseline and serial sets of vital signs, looking, and listening and feeling those areas of the body associated with the chief complaints. The baseline vitals include recording:

Respirations – Assess for rate, regularity, and depth. Respirations may be fast if the patient is anxious and believes they are having a heart attack, or if the patient is hypoxic. Normal respirations are 12 to 20 effortlessly, without pain, and without noise. They should not be working hard to breathe or making noises when they breathe. Noisy breathing is obstructed breathing and requires further assessment as to its cause. Consider left heart failure with acute pulmonary edema in the patient with a positive history for ACS with rales and rhonchi.

Pulse – assess for rate, regularity and strength. The normal pulse rate is 60 to 100 beats per minute. A rapid, slow, or irregular pulse may indicate the presence of a dysrhythmia and a weak pulse may be an indication of inadequate blood pressure or an early sign of shock. A bounding pulse may be an indication for high blood pressure, or possible cocaine or methamphetamine use.

Blood Pressure – should be normal unless the patient has a history of hypertension. It may be elevated as the result of anxiety, or may be low indicating the presence of cardiogenic shock. It will also serve as an indicator of how well the patient is tolerating slow, rapid or irregular heart rates.

Temperature – Normal body temperature is 98.6 degrees Fahrenheit or 37 degrees Celsius and is an important and often overlooked vital sign. An elevated temperature may indicate the presence of an infection, pericarditis, pulmonary embolism, aspirin overdose, or cocaine or methamphetamine use. Elevated temperatures increase myocardial oxygen demand by increasing the heart rate to the point of causing chest pain or discomfort.

Important to your assessment as well would include using the following diagnostics:

Pulse oximetry should be monitored for the presence of hypoxia as defined by the complaint of shortness of breath, increased work of breathing, tachypnea, and oxygen saturations of less than 95%. Administering oxygen in the first six hours of ACS is a high priority and should not be delayed to get a pulse oximeter reading. Since what you see on a pulse oximeter is not real time, applying oxygen will not have an instantaneous effect of the number you see on your oximeter. Delaying oxygen administration in a hypoxic patient in need of oxygen is strongly discouraged.

A heart monitor with 12-Lead ECG capabilities should be placed on all patients with ACS as soon as possible. It is within the scope of practice for EMT-Bs to obtain a 12-Lead ECG. If tiering with a Paramedic Specialist, it is within their scope of practice to interpret acute changes on the 12-Lead ECG. The 12-Lead ECG could be faxed or sent ahead by EMS along with advanced notification alerting the ED of your patient with an ACS. Notifying the receiving facility in advance of arrival reduces door to drug times in patients who are candidates for fibrinolysis.

Having completed the OPQRST, SAMPLE history, obtained baseline vital signs, and applied diagnostic equipment, the EMS provider's assessment should turn to completing the physical exam, focusing on the area of the body associated with the chief complaints. Lung sounds should be auscultated for the presence of rales or rhonchi. Wet lungs may be the result of left heart failure and acute pulmonary edema (APE), indicating cardiogenic shock. The presence of a cough with frothy pink sputum may also be evidence of APE. If the patient has a cough, do they normally have a cough? If so, why? Do they have a past medical history of chronic obstructive pulmonary disease (COPD)? If they normally cough, is it

productive? Is what they are coughing up of normal amounts and color? A patient with COPD or pneumonia may have a productive cough. Noting if this is different may help you determine if what you are hearing is edema froth or normal productive sputum. Jugular vein distention and pedal edema may be present if right heart failure has occurred secondary to left heart failure. Examining the chest for previous scars indicating the presence of a pacemaker or past heart surgery would be beneficial to know as well, and would support your field impression of ACS.

Having completed your assessment, the field impression of ACS can be made and treatment specific to the type of ACS instituted.

What Treatment Options are Available for Acute Coronary Syndromes?

The EMT Basic should be able to provide the following prehospital care for a suspected ACS. Initially until risk stratification occurs with 12-Lead ECG interpretation, ACS is treated similarly. "MONA" is often used as a memory aid for the interventions needed once the field impression of ACS has been determined. "MONA" stands for Morphine, Oxygen, Nitroglycerin, and Aspirin. It does not suggest a particular order of administering the medications, or a particular importance of one medication over the other. Check with your medical director and scope of practice within your state for the appropriateness of EMT Basics administering medications.

■ Aspirin 162 to 325 (two to four baby aspirin) should be chewed and swallowed at the earliest sign of ACS. Providers should assure the patient is not allergic to ASA, has no history of recent bleeding ulcers, or is having an asthma attack. Patients with asthma may develop a condition known as Aspirin Induced Asthma (AIA). When given aspirin they may develop an asthma attack that occurs gradually, but is more intense and difficult to break. Early administration of aspirin has been associated with decreased mortality rates in several clinical trials. Therefore, aspirin should be given as soon as possible. The AHA is advocating that prearrival instructions to take aspirin are given by dispatchers if at all possible. Aspirin suppositories (300 mg) are safe and can be considered for patients with severe nausea, vomiting, or disorders of the upper gastrointestinal tract.

■ Oxygen, initially at four LPM via nasal cannula, would be appropriate as administering oxygen increases the supply of oxygen to the ischemic tissue. If there are signs of hypoxia oxygen should be administered at 10 to 15 LPM via nonrebreather mask. If shortness of breath is severe or in the presence of acute pulmonary edema secondary to left heart failure, then oxygen should be administered with Continuous Positive Airway Pressure (CPAP), or at least using a bag valve mask to provide positive pressure. It is not yet within the scope of practice for an EMT Basics to administer CPAP.

■ Nitroglycerin may be administered sublingually as a 0.4 mg tablet or metered dose spray. It may be repeated every three to five minutes three times as long as systolic blood pressure remains above 90 mmHg. Administering nitroglycerin more than three times may be appropriate with medical direction as long as the blood pressure remains above 90 mmHg. Nitroglycerin decreases the pain of ischemia by decreasing preload and cardiac oxygen consumption, and it dilates coronary arteries increasing cardiac collateral flow. Nitroglycerin should be given in patients with ACS. Nitroglycerin should not be given to patients with hypotension, extreme bradycardias, or tachycardias. Do not administer nitroglycerin to patients who have taken a phosphodiesterase inhibitor (Viagra, Cialis, Lavitra) for erectile dysfunction within the last 24 to 36 hours. Nitroglycerin may lower the BP in a patient whose vascular system is already dilated. Watch for headache, a drop in BP, syncope, and tachycardia when nitroglycerin is given. The patient should sit or lie down during administration.

Tiering with advanced EMS providers with their knowledge of rhythms, 12-Lead ECG interpretation, and ability to administer medications will allow the basic service to enhance their lifesaving care already administered.

The American Heart Association advocates a chain of survival, four links in a chain, each representing actions that, if followed, increase a patient's chance of survival should cardiac arrest occur. Basic EMS Providers continue to play a pivotal and important role in the reduction of death from ACS by rapidly identifying the ACS and providing treatment to include Oxygen, ASA, and assisting with Nitroglycerin. Obtaining a 12-Lead ECG, completing a fibrynolitic check list, and early notification and transportation of the ACS patient to the closest Hospital or tier with ALS will strengthen that chain. Patients with an ACS may require prompt reperfusion. The shorter the time interval from symptom onset to getting that reperfusion, the greater the benefit. Time is muscle, and the Basic EMS provider can play a major role in salvaging that muscle. Efforts should also focus on early recognition of ACS by patients and family members as well. Many patients die before reaching the hospital because patients, their family members, and the general public may fail to recognize the signs of ACS and further fail to activate the EMS system. Only when we strengthen all the links in the chain of survival will we truly be doing all we can for patients with ACS. ■

References

1. Dalton, A.; Limmer, D.; Mistovich, J; Werman, H: Advanced Medical Life Support, 3rd Edition, Chest Discomfort Or Pain 6:207-217; 2007, Pearson Prentice Hall, Upper Saddle River, New Jersey

2. Aghababian, R.: Essentials of Emergency Medicine. ACS 17:97-116, 2006. Jones and Bartlett, Sudbury, Massachusetts

3. Bledsoe, B; Porter, R.; Cherry, R: Essentials of Paramedic Care 2nd Edition; Cardiology 28:1211-1224, 2007, Pearson Prentice Hall, Upper Saddle River, New Jersey

4. Field, J.: Advanced Cardiac Life Support Provider Manual, ACS 4:65-78, 2006 AHA, Dallas, TX

5. 2005 AHA Guidelines for CPR and ECC Part 8:89-110, Circulation. 2005 AHA, Dallas, TX

6. ACLS For the Experienced Provider Textbook

7. Field, J.; Hazinski, M.; Gilmore, D.: Handbook of ECC for Healthcare Providers, ACS 22-42, 2006 AHA, Dallas, TX

8. STEMI Provider Manual – AHA 2008

Websites: Visited between October and November 2008

http://www.medpagetoday.com/Cardiology/AcuteCoronarySyndrome/tb/3723

http://www.emedicine.com/EMERG/topic31.htm

http://www.americanheart.org/presenter.jhtml?identifier=4440

http://www.clevelandclinicmeded.com/diseasemanagement/cardiology/cad/cad.htm

http://www.nhlbi.nih.gov/health/dci/Diseases/HeartAttack/HeartAttack_Treatments.html

IEMSA
CONTINUING EDUCATION
answer form

CLIP AND RETURN

(Please print legibly.)

Name _____

Address _____

City _____

State _____ ZIP _____ – _____

Daytime
Phone Number _____/_____–_____

E-mail _____

Iowa EMS Association
Member # _____

EMS Level _____

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

*IEMSA Members completing this informal continuing education activity should complete all questions, one through ten, and achieve at least an 80% score in order to receive the one hour **(1 CEH)** of optional continuing education through Indian Hills Community College in Ottumwa, Provider #15.*

For those who have access to email, please email the above information along with your answers to: administration@iemsa.net.

Otherwise, mail this completed test to:
Angie Moore
IEMSA
2600 Vine Street, Ste. 400
West Des Moines, IA 50265

The deadline to submit this post test is
DECEMBER 31, 2008

10 QUESTION POST-ARTICLE Quiz

1) Which of the following are included in an Acute Coronary Syndrome (ACS)?
- **A)** Stable Angina
- **B)** Unstable Angina
- **C)** Ischemic Chest Pain
- **D)** Acute Myocardial Infarction
- **E)** All are included

2) A helpful memory aid for assessing the discomfort of an ACS is:
- **A)** SAMPLE
- **B)** MONA
- **C)** OPQRST
- **D)** MOI/NOI

3) All heart attacks occur with physical exercise.
- **A)** True
- **B)** False

4) Some heart attacks occur with no more warning signs than that of the flu.
- **A)** True
- **B)** False

5) The classic signs and symptoms of an ACS include:
- **A)** Constant chest discomfort radiating to the neck, jaw, and down the left arm
- **B)** Stabbing chest discomfort over the left side of the chest
- **C)** Tearing or burning chest discomfort that settles in the lower back
- **D)** Gradual dull ache that gets worse over days, making it hard to breathe when laying down

6) A useful memory aid in describing the treatment for a suspected ACS is:
- **A)** ICES
- **B)** MONA
- **C)** FAST
- **D)** AEIOTIPS

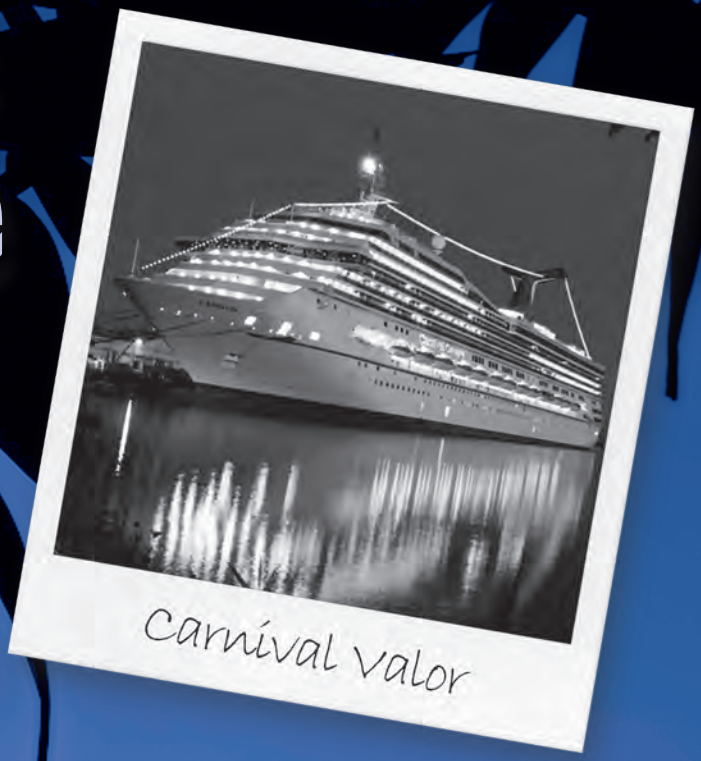
7) What medication should be given immediately upon suspecting an ACS and is being encouraged by EMS dispatchers if no contraindications?
- **A)** Oxygen
- **B)** Nitroglycerine
- **C)** Aspirin
- **D)** Morphine

8) A 12-Lead ECG cannot be obtained by an EMT-B in Iowa.
- **A)** True
- **B)** False

9) Serial sets of vital signs will help the EMT rule out other causes of chest pain.
- **A)** True
- **B)** False

10) If the EMS provider suspects their patient is having an Acute Coronary Syndrome, one of the most important aspects of care would include:
- **A)** Full focused history and physical exam on scene
- **B)** Calling for an ALS tier
- **C)** Obtaining a 12-Lead ECG
- **D)** Early notification and rapid transport to the closest ED

The First Iowa EMS Cruise



March 15 - 22, 2009

Make plans today to attend the first Iowa EMS Cruise presented by the Iowa EMS Association. The amazing Carnival Valor will host hundreds of your fellow EMS providers on an unforgettable tour of four spectacular Caribbean islands. Be there as we set sail from Miami, Florida March 15 - 22, 2009. With rates as low as $380 per person, this is one cruise you can't afford to miss! Visit www.iemsa.net today for more information and to book your cruise.

Rates are per guest, double occupancy and cruise only. Restrictions Apply. Government fees and taxes are additional. Multiple air options available from many cities.

Call today for more information!

1-800-793-6820

2008 Hall of Fame AWARD WINNERS

By LINDA FREDERIKSEN
AWARDS COMMITTEE CHAIR

Al Hunter Hall of Fame

Al Hunter began his EMS career in Aberdeen, South Dakota in 1946 after attending a first aid class that was taught by his father who retired as Assistant Chief after 38 years of service.

In 1952 he was drafted into the United States Army, serving as a Lieutenant in the Corps of Engineers assigned to Pusan Military post in Korea. During this time, Al became the Chief of the Pusan Military Post, which contained the City of Pusan with a population of two million people.

After finishing his military service in 1959, Al Hunter joined the Sioux City Fire Reserve and was appointed Training Officer in 1960. During this time, he was active in emergency medical training.

In 1968 he was appointed to the position of Operations Officer for Civil Defense in Woodbury County. Duties included emergency response and daily operation of the Woodbury County Emergency Operations Center.

In 1971 Al Hunter was appointed to the position of Chief of EMS for the State of Iowa. He was tasked with the creation and development of the State of Iowa EMS Programs. During his tenure as the State Bureau Chief, the first Iowa EMT patch was designed and the first EMT-Ambulance class was conducted in Humboldt.

In 1976 Al Hunter became Chief of Emergency Medical Services for the city of George, Iowa. During this time Chief Hunter trained the members of the rescue squad to the Emergency Rescue Technician level.

In 1978 Al Hunter became the Chief of the Windsor Heights Fire Department, a position that he held until his retirement in 2005. During this time Chief Hunter remained an advocate for EMS in the State of Iowa.

Al Hunter's career spanned 58 years. Through his leadership, dedication and personal sacrifice, EMS has flourished in the State of Iowa and the lives of countless patients, co-workers and friends have been shaped.

Brett Henderson Hall of Fame

Brett Henderson joined the Cedar Rapids Fire Department in 1988 at the age of 20. A goal-oriented individual, Brett became an EMT-Basic within two months of his hire on the department, a certification which he maintained throughout his career. As a vital member of the Cedar Rapids Fire Special Operations team, Brett was instrumental in teaching many members of the department rope rescue techniques.

An avid hunter, Brett became skillful in the training of dogs, which spurred his interest in the training of a search and rescue dog. Brett joined the Missouri Task Force and the Iowa Task Force Urban Search and Rescue teams as a dog handler and quickly trained a Lab named "Star" to be a federally certified live search dog. Although a difficult undertaking, Brett and Star passed their certification test on their first attempt, bearing tribute to their level of expertise.

Brett was the youngest firefighter in the history of the Cedar Rapids Fire Department to be promoted to Captain, and was on the list for promotion to Battalion Chief. After nearly a 20-year career with the department, Brett developed an inoperable brain stem tumor and passed away in January of this year, leaving behind a wife and two daughters.

As proud as he was of his career and "Star," Brett's wife and daughters held a special place in his heart, with his family always coming first. They meant the world to him, and he supported them in everything they did.

With the passing of Captain Brett Henderson, the world lost a great husband, father, friend, and brother.

Ken Vanlandingham
Hall of Fame

Ken Vanlandingham has been a Paramedic Specialist for Stuart Rescue for 22 years. He was the Director of Operations as well as the first member to be paid fulltime on the service.

As a strong EMS advocate, Ken has been involved in numerous organizations, and has been a part of virtually every aspect of the State's EMS system. Just a few of Ken's accomplishments include:

- Director of Operations for Stuart Rescue
- ACLS, PHTLS, BLS and EMS-I Instructor
- President of the Guthrie County EMS Association
- Member of the DMAT team that responded to Hurricane Katrina
- Leader in establishing Guthrie County Emergency Management
- Represented Guthrie County on the Regional 911 Board
- Taught several EMS classes over the years
- Very active in Public Information and Education
- Member of the Iowa EMS Association

Earlier this year, Ken was diagnosed with ALS. In March he found that he was unable to provide patient care and removed himself from the service. Ken is very well-respected as a member of both his community and surrounding communities. He loves to ride his motorcycle and has gone on several trips this past summer with his family and friends. He knows his time is limited and wants to enjoy every moment that he can.

Rick Jennings Hall of Fame

Rick Jennings has been a true asset to his profession for over 30 years. He was a volunteer for the Carlisle Fire Department, and spent nearly 30 years with the Des Moines Fire Department. After his retirement, he continued to work in EMS with Fraser Ambulance.

Rick developed an aneurysm while riding his motorcycle in September 1, 2008, and subsequently crashed. As evident from the number of visitors at the funeral home and at the funeral, it was obvious that he had really connected with almost every EMS provider in the Des Moines Area.

Rick worked as a very concerned paramedic, and was a true asset who will be missed in the EMS field.

Charles Owen
Hall of Fame

This Hall of Fame award recipient began his career in 1975, three years after the Hamburg Volunteer Rescue Squad was officially chartered as a service of the Hamburg Volunteer Fire Department.

Charles Owen's tentative beginning into EMS was short-lived, as he quickly became a vital part of his service. In March of 1977 he took his first formal training as an ERT, following which he took an EMT-A class. Charles has been an EMT ever since that day, also becoming an Instructor through Iowa Western Community College. To date, Charles has taught more than 150 individuals in Fremont County, and continues to teach today!

Charles was instrumental in Hamburg Rescue, which became a fully functional provisional paramedic service, serving as a Captain for many years and continuing to function as a leader within the service. Charles continues to assist in Hamburg's training, and on December 11 this year will celebrate 33 years with the service.

Rick Moore
Hall of Fame

Active as an EMT-B with New Hartford Ambulance, Rick Moore's career has spanned twenty-five dedicated years. Rick was also a volunteer firefighter in New Hartford in the 1980s.

Rick has had many interesting experiences during his lengthy career, and he was on duty when the EF5 tornado struck Parkersburg and New Parkersburg earlier this year. On board one of the first responding ambulances to arrive in Parkersburg, Rick was faced with transporting two critical patients. Because of the magnitude of the disaster, he did so without paramedic intercept and helicopters were not available.

As an inspiration to many during his dedicated years of service, Rick plans to retire from EMS at the end of his certification period.

Chuck Gipson
Fulltime Instructor of the Year

This year's Iowa EMS Association Fulltime Instructor of the Year has been in the field of EMS for the past 15 years, and a practicing paramedic since 1994. Well-known as a presenter at the local, regional, and state levels, Chuck Gipson demonstrates a passion for delivering high-quality EMS education.

As an individual known for tackling most everything he does with a natural curiosity, Chuck Gipson has proven himself as a great EMS educator at all levels. With a succinct and easy delivery, Chuck has been successful at "de-mystifying" a multitude of topics, making learning fun and even enjoyable.

Chuck is currently the Quality/Education Manager at MEDIC EMS, serving as the clinical resource for the company. Coordinating all educational initiatives for the company as well as delivering a majority of that education, Chuck's expertise ranges from the First Responder to the Critical Care Paramedic level. Anchoring an annual on-site EMT-Basic program in the rural operations of the company, Chuck has proven to be an inspiration to many new students who have now chosen the EMS profession as their primary career.

In addition to initial program education, Chuck's commitment to quality patient care continually drives him in his quest for best practices in EMS, researching protocols, equipment, and the education necessary to "make it happen" at the county level.

Chuck's personal oversight of the Critical Care Transport program at MEDIC EMS ensures that critically ill patients get on the road even faster to definitive care. With CCP transports frequently executed under Chuck's watchful eye in conjunction with other Critical Care Paramedics who are developing confidence and proficiency in their new found skills, Chuck has shown his dedication to the success of this program with his 24/7 commitment.

Consistent with his educator skills, Chuck is a Child Passenger Safety Seat Technician, assisting many parents and caregivers to make their children safer through the proper installation of car seats.

Clifford Greedy
Part-time Instructor of the Year

Many say that Clifford Greedy has dedicated his life to EMS, not only as a provider, but as an educator, a leader, and even a disaster responder at the national level. A volunteer firefighter and medic since age 17, Clifford has dedicated his life to helping others in the delivery of first class Emergency Medical Services at the local, state, and national levels.

This year's recipient of the Part-time Instructor award remains a member of the

Sidney Fire Department, and has relocated his primary career to Grape Community Hospital. His current role involves the oversight of several departments and programs, including the Administrative Director for Emergency, Trauma, and Disaster Preparedness. Clifford provides the nurses at Grape Community Hospital with many things, including necessary training and stress management. He is also famous for rolling up his sleeves to help out during Trauma Alerts and blizzards, as well as in everyday situations.

Clifford received a Governor's Volunteer Award from Senator Charles Grassley on June 30, 2008 for his valuable role in New Orleans, Louisiana in October 2005. Clifford's role during Hurricane Katrina was to organize and supervise mental health service for public service employees, a challenge he admits was almost overwhelming.

Clifford Greedy has served or been a member of the following organizations:

- Sidney Fire & Rescue since age 16, serving as Fire Chief, Assistant Chief, and Training Officer since 1983
- Fremont County Emergency Management Agency as the EMS Coordinator from 1990 to 2006
- Fremont County Sheriff's Department as a Critical Counselor since 1991
- Past Iowa EMS Association Board Member
- Southwest Iowa EMS Association Charter Member, Board member and Executive Officer
- Founder and Charter Member of the Fremont County EMS Association
- National Association of Emergency Planners

Dan Collins

Volunteer Individual Provider of the Year

In Scott County, a certain name comes readily to mind when thinking of public service to the community at the volunteer level. That name is Dan Collins, who for the past eight years has resided with his family in Eldridge, Iowa, and served a vital role as an EMT-Basic for MEDIC EMS, as well as a firefighter for the Eldridge Volunteer Fire Department.

With an ever-present smile on his face, Dan is well known in Scott County as "Happy Dan," essentially brightening the days of virtually all he comes into contact with. Known for his wit and positive attitude, Dan joined both MEDIC EMS and the Eldridge Volunteer Fire Department in 2000, motivated by the primary goal to serve the community in which he lives. Dan also served as a volunteer firefighter and EMT-Basic for Long Grove Volunteer Fire for four years prior to starting with MEDIC EMS in 2000.

As a frequent visitor to the onsite annual EMT-Basic classes held by MEDIC EMS in rural Scott County, Dan consistently goes the "extra mile" by mentoring and encouraging new students as they acquire the skills and abilities to become active in their profession. Dan has also won the "most volunteered hours" award for the MEDIC EMS county operation since 2003, logging more than 2,000 hours each year!

As an EMS professional and firefighter who is a familiar face in his local community grade school classrooms to teach the kids about prevention, Dan also is a favorite among senior citizens in his community. Serving as the entertainment organizer for a local senior assisted-living center, Dan also delivers and educates this population about the importance of having a File of Life, which can make a lifesaving difference in an emergency situation.

Jamie Temple

Individual Career Provider of the Year

This year's Individual Career Award Winner began his career in 1991 as a Paramedic Specialist at Samaritan Hospital in Clinton, and has spent the last 15 years at MEDIC EMS in Davenport. Known as a man of a great many hats, this individual has functioned in the role of street paramedic, manager, and is well known to many as a great educator and published author, contributing to both journals and textbooks. In fact, hundreds of EMS professionals take pride in telling others that their EMS program was taught by none other than this year's Individual-Career award winner.

Armed with every additional instructor and faculty-level EMS specific certification known to man, this gentleman approaches life with a twist of well-known humor, allowing him to touch others and impart knowledge in an engaging and fun way. Recognized as both a valuable resource and mentor, he was also instrumental in the birth of the Critical Care Transport program at MEDIC EMS.

In addition to his many other accomplishments, our Career-Individual award winner has a lengthy history as Coordinator of the Critical Incident Stress Management team. Responding to help others deal with the occasional ravages of our profession at a moment's notice, Jamie readily comforts providers with a truly sincere, simple, respectful and almost reverent approach.

As the Education Coordinator for Eastern Iowa Community College District for the past two years, Jamie Temple is known and loved by many, and remains an active street medic for MEDIC EMS. Speaking at this year's IEMSA conference, Jamie is a local, regional, and national favorite, speaking at hundreds of events, including the well-known JEMS "EMS Today" event.

Holding the unique ability to translate his impressive wisdom into actions, Jamie is universally known, loved, and respected by countless individuals in our state.

Parkersburg EMS

Volunteer Service of the Year

As many are aware in the Midwest region, the town of Parkersburg was hit by an EF5 tornado in May 25, 2008. Witnessing the wide path of devastation left by the tornado, residents of this community were amazed at the destruction left behind, and even more astounded by what they as a community could accomplish in the days to follow this tragedy.

The tornado struck at 4:59 and ended just seconds later. Shortly after, the members of Parkersburg EMS answered the call. Many of the members literally walked out of their basements with their home destroyed and belongings lying everywhere. Others who did not reside in affected areas tried to get to the disaster scene in order to provide assistance. Without a doubt, all were overwhelmed by the task that lay ahead.

Although stunned initially, the members of the EMS team in Parkersburg rose above and pulled from deep within to "answer the call." They immediately cared for seriously injured family members and friends, including those who had lost their lives, ignoring the damage they had personally received in order to provide lifesaving care.

Although providing care to others that you share a personal attachment with

is an EMS provider's worst nightmare, Parkersburg delivered that care without missing a beat, caring for friends they had known for most of their lives, and putting that care above their own personal losses.

In the aftermath of the tornado, Parkersburg Ambulance Service continued to work as a team and with other EMS agencies to deal with the effects of the destruction. With their town virtually half-destroyed by the tornado, Parkersburg Ambulance service lost several valuable members of their service because they had no home to live in while on call. In the face of adversity, Parkersburg continued to work to provide uninterrupted coverage to their community, personifying true professionalism in emergency medical services.

Sartori Paramedics
Career Service of the Year

Well known and respected by many in our state and region for many years, Sartori Paramedics has been chosen as the Iowa EMS Association's Career Service of the year.

In the words of Tammy Fleshner of Parkersburg Ambulance, the Sartori Paramedics have been their mutual aid choice for many years. Efficient, professional, and easy to work with, this service recently increased their coverage area while also managing to decrease their response times. Serving the communities of Waterloo and Cedar Falls, Sartori Paramedics also extend their services into many rural areas, including Butler County. In addition to providing excellent coverage, the Sartori Paramedics are known as great instructors, bringing much needed continuing education to many other services on a monthly basis.

In addition to functioning every day as an outstanding ALS service and resource for other services, Sartori really stepped up to the plate on May 25 of this year after the legendary EF5 tornado hit Parkersburg. Within minutes after the tornado laid its devastation, the Parkersburg community began to see the familiar, reassuring faces of the Sartori Paramedics, some of whom were off-duty and drove their personal vehicles to the scene to help.

The Sartori Paramedics continued to help Parkersburg as the automatic back up service 24 hours per day seven days per week, leaving the Parkersburg community in good hands. This service continued to go above and beyond every step of the way, lining up substitute coverage for Parkersburg, and even suggesting a dual-paging system that worked in Parkersburg during daytime hours when coverage was almost nonexistent.

As we in Iowa are all aware, this year's horrible floods followed those devastating tornadoes. Even though the Sartori Paramedics were dealing with their own local issues, some off-duty members of this service volunteered their time to come to Parkersburg to assist with any calls, truly nothing short of amazing.

Betty Wallace
Friend of EMS

This year's Friend of EMS award is presented to Betty Wallace, Registered Nurse.

Betty has been at SWCC since the early 1970s, starting as an instructor and eventually serving as nursing and EMS coordinator until she retired in 1999. She avoided "true retirement" by going to part-time hours as the CTC Coordinator at SWCC. Betty not only promotes CPR training, EMS education, and other valuable education; she truly believes in its purpose, as well as in the people who work and teach in the healthcare profession.

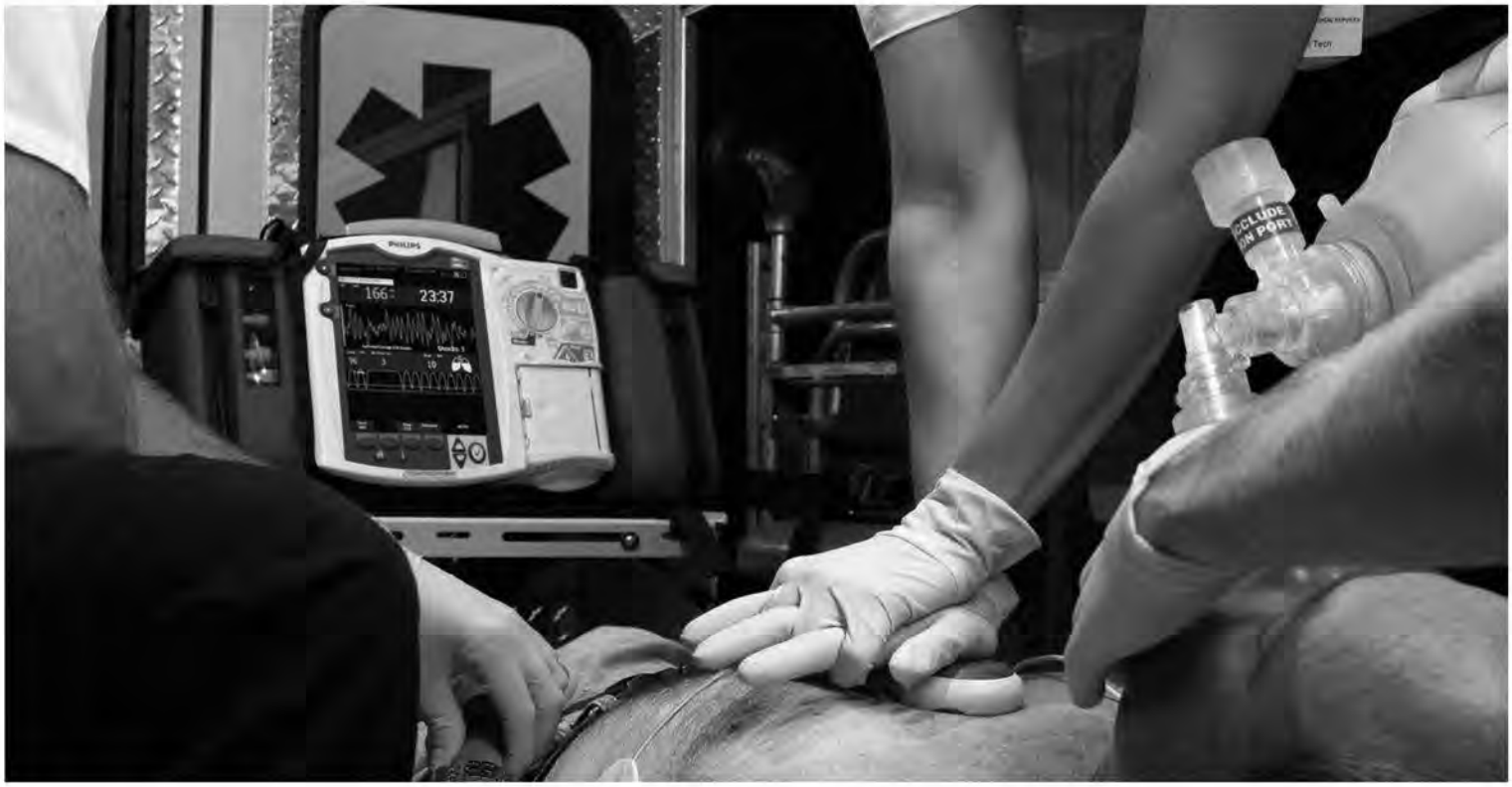
In 1974, Betty was asked to teach the first EMT class in the area. Along with another nurse and several doctors, EMS training was started in the spring of 1974. One of Betty's original students is still active in the field, now a paramedic at the local hospital.

From that first class, Betty has continued to promote EMS in every way possible. Betty has a true understanding and appreciation of EMS, and has played an important role in the education of hundreds of EMS providers.

In addition to her work at SWCC, Betty is active with the Hospital Foundation, the American Cancer Society Daffodils campaign, Meals on Wheels, the local bloodmobiles, and much more.

Helping others is what Betty does, and there are many EMS providers helping others because of her work, encouragement, support and commitment to EMS.

Over the past 34 years, Betty has accomplished a great deal with her diligence and dedication to the healthcare field, doing much to help EMS providers. ■



An advance in Monitoring and CPR delivery is an advance in saving lives.

That's why Philips is the trusted choice.

13.5 lbs.

HeartStart MRx
with Q-CPR™ by Laerdal

- Motion-tolerant NBP and SpO2
- Microstream® EtCO2
- 12-lead ECG – all 12 leads viewable on-screen
- CPR Compression and Ventilation Data
- Proven SMART Biphasic defibrillation*
- Noninvasive pacing and cardioversion
- <5-second charge time
- Long-life batteries: 5 hours of monitoring

4.7 lbs.

HeartStart FR2+
with SMART CPR and Quick Shock

- Adult and pediatric defibrillation
- Optional manual override
- ECG monitoring through defibrillation pads
- Optional 3-lead ECG cable
- Extensive daily self-tests
- 4-year battery (standby life)
- 5-year warranty

3.5 lbs.

HeartStart FRx
with CPR Coaching and Quick Shock

- Adult and pediatric defibrillation
- Preconnected pads and Infant/Child Key
- Wireless data transfer
- Exceptional ruggedness
- Extensive daily self-tests
- 4-year battery (standby life)
- 5-year warranty

2.7 lbs.

IntelliVue MP2
Easy-to-use
Extremely compact patient monitor

- ECG, Respirations, SpO2, NBP EtCO2, IBP, and Temp capability
- Touch Screen
- 3 waveforms
- Full Arrhythmia, ST Map, QT/QTc
- 12 Lead capability and EASI 12 Lead

To learn more, contact Brian Koste at 800.218.2045 ext. 5460 or brian.koste@philips.com.

www.medical.philips.com/heartstart

PHILIPS
sense and simplicity

* Supported by more peer-reviewed clinical data than any other external defibrillation waveform.

Q-CPR is a trademark of Laerdal Medical Corporation.

What's *New* with the *Bureau*

ANITA J. BAILEY, PS

"Just the facts, ma'am"

At the direction of Iowa's EMS Advisory Council, the Bureau of EMS has posted the Fact Sheet on the Scope of Practice for Emergency Medical Service Providers at www.idph.state.ia.us/ems This two-page document concisely describes the history of the National Scope of Practice Model, how the Iowa EMS Advisory Council has addressed the scope issue, timelines, next steps and provider transition options. Download it, post it, and share it with your staff, community and government officials. Contact bureau staff if you would like an electronic copy.

Service Director Workshops

EMS service leadership can be challenging, rewarding, and at times a thankless job. Too often, new EMS service directors receive little or no training in the minimum requirements to maintain service authorization. This can lead to repeated non-compliance with Iowa EMS laws and rules, a lack of medical oversight, poor documentation and inadequate training. Every EMS provider deserves routine training and feedback on performance. Anything less can compromise patient care.

To assist current and prospective directors, the Bureau of EMS regional coordinators revived and revised the EMS Service Director Workshop. Staff conducted ten workshops for nearly 150 participants in 2008. The program goal is to provide technical assistance, promote smooth leadership transitions, to share best practices and offer networking opportunities for EMS leaders. Sherry Sommerfeldt, EMT-B and Director for Readlyn First Responders said, "I found the workshop informative. It reinforced what I learned on the job and in my EMS training. I now know why we have to keep current. It is more than just paperwork. Both the System Registry and the Bureau website make my job much easier."

We urge current Service Directors to plan to attend a session in 2009 and bring along a mentor. Planned succession makes life easier.

Iowa's Trauma System

John Fiedler, Bureau of EMS Trauma System Coordinator, has been busy reviewing trauma care facility re-verification applications and conducting onsite reviews. Technical assistance remains a priority for John as he works to implement recommendations on behalf of the Trauma System Advisory Council (TSAC) and the System Evaluation Quality Improvement Committee (SEQIC).

John Fiedler conducting Trauma Care Facility on-site re-verification at Stewart Memorial Hospital in Lake City, Iowa on September 15, 2008.

When conducting service annual protocol update trainings, be sure to include the TSAC approved modifications to Appendix A: Adult and Pediatric Out-of-Hospital Trauma Triage Destination Decision Protocols. The summary of the revisions and the protocols and are posted at www.idph.state.ia.us/ems to Services to Protocols. The new formatting provides a linear format, removes the boxes and the name of specific Trauma Care Facilities. The summary of the revisions reminds us that EMS does not call a "Trauma Alert" and urges EMS to relay a complete patient care report to the receiving facility as soon as possible. Good, early communication helps ER staff determine if and when to activate their internal trauma plan. Often times, additional staff must be called in to care for trauma patients, so early notification is critical in assuring patients receive an appropriate continuum of care. Call early, call often. "Paint the picture," and remember, you have information that they don't have available to them. In the field, you are the eyes, ears and nose for the hospital staff.

Emergency Driving Training Policies

Emergency driving administrative rule changes become effective in January 2009. Every service will need to implement a driving policy and document each driver's training that includes:

1. A review of Iowa's laws regarding emergency vehicle operations.

2. A review of the service driving policy for first response vehicles, ambulances, rescue vehicles or personal vehicles of an emergency medical care provider responding as a member of the service.

3. The policy shall include, as a minimum:

- Frequency and content of driver's training requirements
- Criteria for lights and/or siren response
- Speed limits when responding with lights and/or sirens
- Procedure of approaching intersections with lights and/or sirens
- Notification process in the event of a motor vehicle collision involving a first response vehicle, ambulance, rescue vehicle or personal vehicle of an emergency medical care provider responding as a member of the service

4. Behind the wheel driving of the service's first response vehicles, ambulances and rescue vehicles.

This change does not amend the requirement that all drivers must have CPR and training in the use of the service's communication equipment. Word on the street is that many services are working collaboratively to implement county-wide policies. ■

2009 Service Director Workshops

All sessions provide four formal CEHs. Contact your regional coordinator for details.

March 12	Cedar Rapids
April 6	LeMars
May 14	Atlantic
June 17	Fort Dodge
October 8	Coralville
November 12	Des Moines

2009 Legislative Priorities

BILL FISH PUBLIC POLICY COMMITTEE CHAIRMAN

The 2008 Iowa Emergency Medical Services Association Conference has come and gone. The time is here to begin preparing for the 2009 Iowa Legislature. At our annual meeting of the membership during the conference, we unanimously adopted our new legislative agenda.

I will continue as the Public Policy Chairperson through the end of 2009. IEMSA continues to retain our lobbyists for the session. Cal Hultman and his partner Mike Triplett will work with IEMSA as we tackle our legislative agenda. Cal and Mike worked hard last session, ensuring that the top issues of the 2008 agenda were properly addressed.

I would like to take this time to remind you that this process only works with the help of each and every IEMSA member. It's your personal phone call, discussions over coffee, and emails that get the most attention. We will once again rely on you heavily as we work through 2009.

After a very successful 2008, having ensured that EMS providers are now a protected IPERS class, we have decided to focus our attention on the volunteer providers. Following is the 2009 agenda, as adopted:

The Iowa Emergency Medical Services Association will work for the following public policy measures:

1. Provide a system to reward volunteerism in public safety. This should take the form of an Iowa income tax credit.
2. Allow EMS service directors to sign off on eligibility for EMS license plates.
3. Require that counties shall make provision for, by whatever means necessary, emergency medical services treatment and transport for all within the county.
4. Provide liability protection for volunteer physician medical directors.
5. Change rules within the Iowa Cares Program to allow payment for ambulance service.

We believe that job number one for every elected official is to keep Iowans safe and healthy in their homes, at work, at leisure and in transit. This includes fully funded, well-trained, and dedicated Emergency Medical Services throughout the state.

Good government assures the safety and well-being of the citizens first and foremost, and then moves on to the other important tasks of government like education and transportation.

January 29, 2009, is our EMS on the Hill Day and our EMS Leadership Conference. We'll be in the Capitol Rotunda from 7:00 AM until about 9:00 AM. The Leadership conference will follow. Please plan to join us, in uniform, that morning! ■

Spotlight on Training

The Eastern Iowa Community College District consists of Clinton, Jackson, Muscatine and Scott Counties, and parts of Cedar and Louisa Counties. The district stretches along the Iowa side of the Mississippi River with Clinton Community College to the north, Muscatine Community College to the south, and Scott Community College in Bettendorf in the middle.

The district boasted a fall enrollment of more than 7,000 students with approximately 4,000 enrolled in Associate in Arts / College Transfer programs and 3,000 enrolled in one of more than 40 career technology programs.

EICCD is accredited by the Higher Learning Commission. HLC accreditation means our programs meet or exceed the standards for academic excellence set for every public and private college in a 19-state region. The colleges are approved by the Iowa Department of Education and the Board of Regents. Individual programs are accredited by associations within their respective fields.

Just as exciting, the district also registers more than 30,000 students each year in its business and industry, continuing education and adult education classes. These short-term classes are specifically designed to help individuals improve a job skill, upgrade general educational skills or pursue a topic of interest.

The EICCD School of EMS offers on average 10 EMT-Basic classes and one Paramedic Specialist course each year. First Responder classes are offered on an as needed basis. In addition to providing Continuing Education to the numerous region EMS and Fire Services and presenting National Registry Refresher Courses, both Basic and Advanced on an annual basis, EICCD is embarking on an exciting new venture: Human Patient Simulation. We have taken delivery of the new iStan wireless Human Patient Simulator, and are working diligently toward HPS Program completion.

Our dedicated teaching and administrative staff truly are the cornerstones of our high-quality, competency-centered educational experience. ■

Corporate Profile

IOWA DONOR NETWORK (IDN)

Iowa Donor Network (IDN) is a non-profit organization that operates as the primary contact for organ, tissue and eye donation services for the state of Iowa. The Centers for Medicare and Medicaid Services has certified IDN to function as the single organ procurement agency serving the state of Iowa. IDN also serves as the tissue recovery agency for the state.

As the name indicates, IDN serves the entire state of Iowa. It works with more than 100 hospitals across the state. It also works closely with the Iowa Lions Eye Bank to promote eye donation. In keeping with its goals, IDN engages in many interrelated activities: organ and tissue recovery, organ distribution, public education, hospital development, and family support services.

The evolution of IDN began long before its original 1994 incorporation date. Our roots can be traced to the first successful human organ transplant that officially took place in 1954 in Boston, Massachusetts. Three years after that, the Iowa City Veteran's Administration Medical Center (VAMC) became the first facility in a Midwest metropolitan area to offer dialysis to patients suffering from kidney disease.

Over the last 14 years, IDN has worked tirelessly on the local and national level to encourage donation-friendly legislation to increase organ and tissue donation in Iowa and the United States. In 1995, the Anatomical Gift Public Awareness and Transplantation Fund was instituted in Iowa. This fund allows residents of our state to make monetary donations as part of the vehicle registration process. Monies collected by the state are used for public education programs and to help newly transplanted recipients with initial expenses post transplant.

In 2000, IDN was successful in having donor registry legislation passed. This legislation paved the way for additional legislation known statewide as the First Person Consent law. This law, coupled with the donor registry, allows Iowans to legally record their consent for organ, tissue and eye donation prior to death. This consent cannot be revoked by anyone after a person's death and can only be changed by the person who is making the consent prior to death.

In 2007, a revised form of the Uniform Anatomical Gift Act was passed to strengthen previous legislation. This legislation also provides for good faith language that allows EMS providers (among others) to refer out-of-hospital deaths to IDN so the donation wishes of the decedent can be honored.

Iowa Donor Network has enjoyed a long-standing and fruitful relationship with IEMSA. Currently, IDN has two full-time employees who work with funeral directors, law enforcement and EMS providers. These dedicated professionals are available across the state to provide education on not only the donation process, but also how EMS providers can effectively refer scene deaths for donation.

Under federal regulation, all hospitals in Iowa must refer deaths that occur in-house at each hospital. Iowa Donor Network receives over 10,000 calls each year to determine suitability of each potential donor and honor the wishes of the decedent. Through research it has been determined that hundreds of patients who do not die within the walls of a hospital were not being allowed the opportunity to donate. This is why IDN has focused efforts to build relationships with EMS providers who can help increase donation across Iowa by making a call when death occurs at the scene of an accident or at home.

IDN's mission is "Saving and Transforming Lives Through Organ and Tissue Donation, Transplantation and Education." Over 100,000 people in the United States are waiting for an organ transplant, over one million people will need a tissue transplant this year, and over 50,000 people will need a cornea transplant this year alone. All of these potential recipients rely on IDN to fulfill its mission. Many people who need a tissue transplant have to delay surgeries for three or more months because of the lack of transplantable tissue. People needing an organ transplant can wait anywhere between two and six years for the organ they need. Seventeen people die each day in our country waiting for an organ transplant.

In addition to identifying potential donors and performing recoveries, IDN believes it is crucial to be a good partner to communities throughout our state. We are dedicated to providing professional education on the identification of potential donors to all medical centers, EMS providers, funeral directors and law enforcement throughout Iowa. Additionally, through our network of volunteers, we are able to provide organ, tissue and eye donation education in every drivers education course given in the state. This important education to our young residents is required by law.

IDN also takes an active role in providing aftercare to all of our donor families. Each family is given the option of enrolling in our donor family support program. This important program follows each donor family for at least 18 months after the death of a loved one. Through this service, donor families receive individualized grief counseling and referrals

to support groups, reading and support materials to help them in their grief journey, and support through the holidays and other special days like birthdays and anniversaries. Families can also request to learn about how their loved one's organs and tissues were utilized, including information about who received the gifts. Our donor family advocates also help facilitate the communication between donor families and recipients, including face-to-face meetings.

Through our relationship with EMS providers across the state, IDN is realizing an increase in donation each year. Because of our increased referrals from out-of-hospital deaths, we are impacting more and more lives each year through tissue donation. For that, we thank you. ■

Another One for the *Books*

JEFF DUMERMUTH
CONFERENCE PLANNING COMMITTEE CHAIRMAN

For the 19th consecutive year, the Iowa EMS Association sponsored its annual EMS Conference and Trade Show in Des Moines on November 13, 14 and 15, 2008. This year was another great success with more than 1260 participants.

The exhibit hall was the biggest in IEMSA history, with vendors located throughout the conference, even spilling over into the registration area. There were many old faces as well as first time vendors, and we thank them for their continued support of our Association.

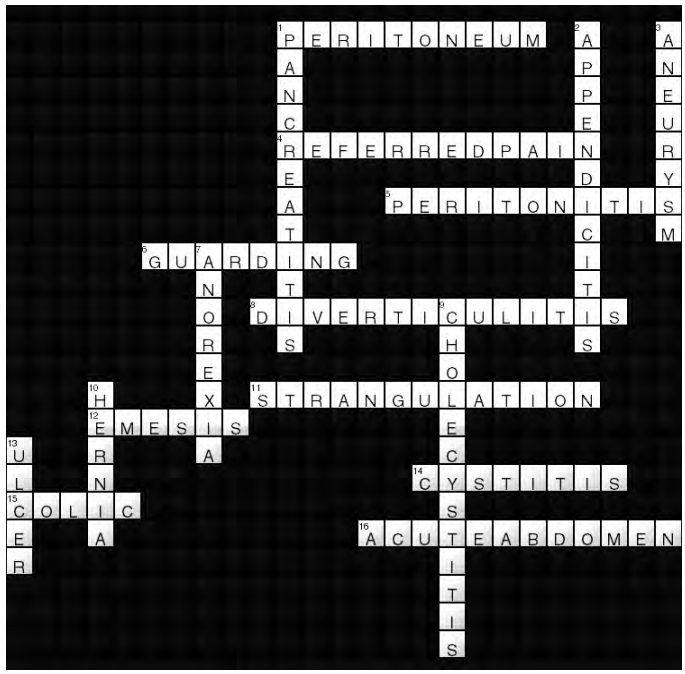
From the pre-conference sessions to the general sessions, everyone we have spoken with had positive things to say about the quality of the presentation and education they received. We are proud to be able to bring in multiple nationally known speakers.

2009 will be the 20th IEMSA Annual Conference and Trade Show. As we prepare for this event (November 12-14), we will work hard to maintain the quality of education you expect, while providing for a time to kick back and have some fun as a small reward for all the things you do to take care of your community throughout the year.

If you attended, and have not already done so, please make sure that you have completed our 2008 Annual Conference Survey, which can be found on the Annual Conference Page at www.iemsa.net.

See you in 2009! ■

CROSSWORD SOLUTIONS



Affiliate Profile

FARMINGTON EMS

Farmington EMS is a volunteer EMT-B Level Transport service. The service was initially established on April 1, 1980 as a division of the Farmington Fire Department. Prior to this time the fire department had been using the local funeral home's hearse and transported the patients without any equipment and very minimal training. When they initially started a transporting service in 1980, they purchased a cargo van that was converted by the members of the service to function as an ambulance. Today they operate with two Type III ambulances.

Farmington EMS started out with EMT-A, which many of you will remember stands for EMT-Ambulance. As the State of Iowa incorporated defibrillators into their scope of practice they became EMT-D. The members then transitioned to the current EMT-Basic level. We have also gone from having basic life support equipment to carrying two LifePak 12s, which have a lot of available options for us or the Paramedic Service that we tier with to utilize. We have been very fortunate to have the support of the community, from when it came time to build a new building due to our increasing amount and size of equipment, to needing to replace an ambulance. The community has always stood behind us.

Farmington EMS responds to approximately one hundred calls per year. The service area covers the cities of Bonaparte and Farmington and the surrounding rural areas. Farmington EMS also covers most of the 9,000 acres of our local State Forest. Farmington EMS is currently comprised of 18 Emergency Medical Providers, with three more students who are presently testing for their EMT-B certification. Several of our members have been with us for at least 15 years, with three of our current members volunteering for 26 years and counting.

The vision of Farmington EMS is to provide high-quality healthcare to the members of our community while trying to promote the health and safety of our citizens. Farmington is located at least 18 miles from the nearest hospital and it is vital that we provide efficient, prompt care by treating the patient appropriately, getting them to a hospital in a timely manner and utilizing the available resources that we have nearby to supplement our care to the ALS level as needed.

Farmington EMS sponsors the local blood drive when the Mississippi Valley Blood Center comes to town several times a year. We also teach CPR in conjunction with Harmony Schools to the senior class and are currently working on expanding that into the Middle School, as well. We have a few instructors on the service who volunteer their time teaching first aid and safety training to interested community members and school students.

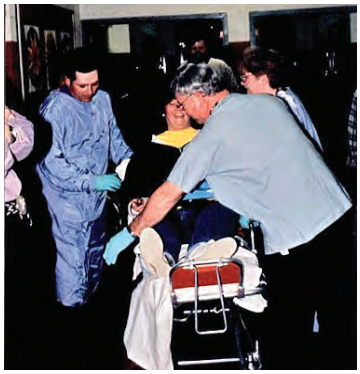
Farmington EMS has been a member of IEMSA since 1999. We chose to become a member of IEMSA because there were several issues locally that we felt were very important to EMS, and we realized that it would take more than just us to change them. We take advantage of the numerous training activities IEMSA provides, from sending members to the annual conference, leadership classes and many other good classes that they offer. We also enjoy the opportunity they give us with EMS Day on the Hill to meet with our local legislators and approach them with a unified message of what is important to us at Farmington EMS, and what is important for EMS across the State of Iowa.

We are so very proud of the present and previous members who have served on Farmington EMS and made it what it is today, but there are three people who we would like to recognize. The first of which is Edmond "Sonny" Rider. Sonny was the driving force behind Farmington EMS becoming an ambulance service. Sonny was the founder who started Farmington EMS, and he taught our EMT classes up until his health forced him to retire in 1994. There are not many people you meet from Southeast Iowa that couldn't tell you that they had been in one of Sonny's classes. Sonny was very proud of EMS and very proud of Farmington EMS, and we try to follow his wonderful leadership examples still today.

Dr. Timothy Blair of Van Buren County Hospital is our medical director and has been for the past decade. He has been very instrumental in ensuring that we maintain a high level of professionalism and are as proficient as possible at performing skills at the EMT-B level. Dr. Blair regularly attends at least eight to 10 meetings a year and is available 24 hours a day for the service. He also teaches several continuing education classes a year for us and helps with skills training and check offs.

The last person we would like to acknowledge is actually the whole rooster of Farmington EMS. All of the members give unselfishly of their time and own resources in order to provide this service. Some of them would probably cringe if they would go back over the years and count the missed holiday meetings and sleepless nights they have had as a result of volunteering for the service, but there is not one of them who would regret it. We are not only an ambulance service, but we are one big family who enjoys serving the members of our community. ■

FARMINGTON EMS *In Action*



Clockwise from top: Edmond "Sonny" Rider, transporting audience members of our local country music jamboree to their seats via stretcher, a few Farmington EMS members taken before a recent training class, Dr. Blair.

EMS *Team* COMPETITION

Counterclockwise from top: Siouxland Paramedics, 2008 EMS Team Competition winners; Medic EMS, second place; Muscatine Fire Department, third place.

HAVE A SAFE AND HAPPY HOLIDAY SEASON

We are proud to provide you with Iowa's premier air ambulance service and a newly renovated Emergency Department that includes:

- Elevated helipad for Mercy One
- EMS report office and lounge
- LCD directional monitors to provide more efficient patient transport directions
- New ambulance garage to accommodate larger, modern ambulances

Thank you for your patience during our renovation!

MERCY ONE
DES MOINES

IOWA EMERGENCY MEDICAL SERVICES ASSOCIATION
2600 VINE STREET, SUITE 400
WEST DES MOINES, IA 50265