You never change things by fighting the existing reality. To change something, build a new model that makes the existing model obsolete.”

Buckminster Fuller
Unique Opportunities in Your Community

Stephen J. Lanieri, NCEMSF National Coordinator

In collegiate EMS, we stay very busy with school work and the responsibilities that come with providing emergency medical services on college campuses. However, just outside your college doors, exciting opportunities for you and your squads await. These fun opportunities provide the ability to enjoy unique areas of EMS, enhance your skills, and boost teamwork/squad morale. They also put your collegiate EMS squads on the map and provide a chance to teach others in your community about collegiate EMS.

If your school is located near even a moderately-sized city, chances are you have an airport near you. Airports that handle scheduled commercial flights are required by the FAA to have an Aircraft Rescue and Fire Fighting (ARFF) department located on the airport. These ARFF departments are also required to host annual tabletop exercises that test their unique Airport Emergency Plan. Additionally, every 3 years, these airports are also required to hold a full scale exercise. These tabletop and full scale exercises are always open to mutual aid fire/EMS/law enforcement agencies, local hospitals, and many other local, state, and federal partners. Some larger airports host multiple full scale and tabletop exercises throughout each year to continuously analyze response plans for many different types of emergencies (e.g., aircraft crashes, terrorist attacks, fuel fires).

If your school is near one of these airports, you should make sure you’re on the run card/response plan for any large scale incident. Even if your squad may not be called upon to respond to an airport incident, these airports are always looking for volunteer evaluators, patients, exercise controllers, and other help for their MCI exercises. This is also a great way for you to meet and network with other agencies and leaders in your area. To get involved, reach out to your local airport management and ask to speak to someone in the ARFF department about your interest in future airport exercises.

For those of you in colder climates, every ski area has a ski patrol tasked with ensuring the safety of ski area guests and responding to injuries/medical conditions around the mountain, lodges, and parking lots. Getting involved in ski patrol is an exciting way to learn outdoor emergency care techniques while skiing/snowboarding for free! Ski patrol is another small niche community in EMS and is a very supportive environment even for those who may not be the best skiers or snowboarders. Each mountain has a first aid room which can be staffed by those who are working on their skiing/snowboarding skills. Additionally, most mountains host Outdoor Emergency Care training courses, similar to an EMT class, and are very supportive environment even for those who may not be the best skiers or snowboarders. Each mountain has a first aid room which can be staffed by those who are working on their skiing/snowboarding skills. Additionally, most mountains host Outdoor Emergency Care training courses, similar to an EMT class, and always look for volunteers to help teach courses or play as patients for class students. Those who are already EMTs, nurses, or doctors can challenge the Outdoor Emergency Care exam and become a National Ski Patroller without having to take the OEC class. To get involved with a local mountain, contact their main office and ask for the Ski Patrol department.

Beyond airports and ski areas, most communities also have a Red Cross or CERT team. Many areas host large public events, such as marathons, 5K runs, high adventure challenges like the Spartan Race, etc. As an example, each year many members of Boston-area collegiate EMS squads volunteer with the Boston Athletic Association’s Medical Unit to provide course medical services at the Boston Marathon. Getting involved in any of the above will expand your medical horizons, boost squad pride, allow you to network with other industry professionals in your area, and give you an opportunity to enjoy different aspects of EMS while also being involved in the community outside of your college.

Steve Lanieri is an Airport Operations Manager who coordinates airport emergency responses, and also enjoys ski patrolling during the winter months, and annually volunteering as an EMT at the Boston Marathon. He can be reached at nc@ncemsf.org with any questions or for more information.

In less than six months, seniors will be collecting their diplomas and begin an exciting new phase of their lives. These squad members have devoted hundreds of hours towards community service across the country, and have had a substantial impact on the health and well being of students on your college campuses.

Collegiate EMS is plagued by rapid turnover – each four years an entirely new group of students is responsible for continuing on-campus efforts, tackling administrative, financial, and training-related dilemmas, and expanding to new goals and achievements. Keeping your organization moving in the right direction can be challenging with such continuous loss of personnel.

Given these challenges, it is crucial for your organization to begin/maintain an “Alumni Database,” which can keep track of contact information of graduating students. These alumni can help with recurrent organization-related issues, serve as mentors to existing members, and eventually contribute financially to the long-term sustainability of the organization.

While maintaining the database is important; keeping alumni engaged with your organization is a whole additional endeavor. Fortunately, NCEMSF has compiled numerous ideas for how to keep alumni engaged. These ideas, in addition to supplemental resources for maintaining an alumni database, can be found on the website under the Alumni tab.

**Graduating In a few months and moving to a new job in a new city?**

**Need advice on applications for post-graduate education?**

*Check out our alumni mentorship page!*

Our alumni have gone on to pursue careers in a diverse array of professional fields and are well-prepared to offer insight and advice to students to help guide them through the transitory process of graduation and the application process for post-graduate education.

A complete listing of alumni mentors can be found on the NCEMSF website: www.ncemsf.org/resources/alumni-resources/mentorship-program

Interested in being a Mentor/for more information? Contact Josh Glick at alumni@ncemsf.org
"High Performance EMS" Starts with High Performance People
Jeffrey J. Bilyk, ACP(f), NCEMSF EMS Week Coordinator

Out-of-hospital Cardiac Arrest (OHCA) is a survivable event. A commitment to higher survival rates starts with believing this statement and investing in staff so that they do, too.

It’s 11 o’clock at night, and you’re just getting back to the station after running for hours. Five minutes into microwaving your food (for the second time) the tones drop for an elderly male who collapsed on his wife, and is not breathing.

On the way to the call your partner mutters under his breath, “Let’s get in there and pronounce this guy”. We’ve all said it, or at the very least thought it. Does that actually change the way we perform on the call? Does that pre-conceived mindset actually alter chance of survival? I’d wager a bet and say it does. I’m not suggesting by any means we don’t follow all training and protocols and we don’t give it our all; I’m sure every Paramedic does on every single arrest. But when they aren’t equipped with the knowledge, training, and equipment to perform at their best that’s a problem. I break this piece down ultimately into four vital components: 1) Knowledge and Training, 2) Resources, 3) Quality Assurance, and 4) Management and Leadership. Notice which one I listed first.

We can have an abundance of ambulances available. We can streamline hospital drop off procedures and have off load nurses to take patients quickly so ambulances can get back to the streets. We can have the latest in monitor/defibrillator technology with see-through rhythms so we can pause less during CPR. We can have auto-pulse machines that deliver perfect CPR without ever getting tired. But it boils down to this: Your people. If your people don’t believe that Out-of-Hospital Cardiac Arrest is a survivable event, and train hard and prepare for that survivable event, all the rest of the pieces of the puzzle are for naught. (I’m very aware, of course, of unwitnessed arrests and those that just should just “stay dead” for lack of a better term, but that isn’t what this article discusses). An instructor once gave me this gem of a quote, and it remains so true for our industry: "Amateurs practice until they get it right. Professionals practice until they can’t get it wrong." The first line of investment of any high performance EMS system should be it’s people. Not with the latest in equipment (don’t get me wrong, that comes part in parcel as well), but with knowledge and training.

When is the last time you practiced a full cardiac arrest scenario in a simulation setting, or better yet, how often do you do scenarios or simulation training? This is important to maintain proficiency. Are your advanced life support providers mandated to maintain their ACLS? Obviously current protocols change to meet the standards but actually doing the course gives you the “why” and the background (example, I know many Paramedics that don’t realize Hypoglycemia was removed from PEA/H’s and T’s in 2010 - your protocols may get updated and you still provide the proper care, but you don’t realize this routinely if you don’t actually take the course and that does have an effect on clinical judgement). On that note, is your staff familiar with the most recent changes to BLS/ACLS guidelines just released by the AHA/ILCOR a few months ago? Why not? As Paramedics we are all too familiar with either “buying” that CPR card, or taking the easy way out and doing an online course to refresh, because we do CPR all the time, right? But think about it: What has happened to BLS/ACLS guidelines over the years? They have removed many components and told us the best thing we can do is focus on high quality CPR (that same card that we’re cheating ourselves on). Check out this pitcrew CPR video from the NHS London Ambulance Service and compare it to your practice (https://www.youtube.com/watch?v=Iiw5fN65Rw). The best things our service providers can do is recertify annually in-house and use scenarios that we see in the pre-hospital environment and allow us to practice outstanding cardiac arrest performance. The harsh reality is this: EMS staff routinely do not deliver high performance CPR, and it’s mostly because they haven’t trained for it. CPR isn’t complicated. But perfect CPR isn’t easy either. A popular cardiologist once quipped “VF is a benign rhythm” - tongue in cheek of course considering those folks are already dead, but his point merely was that nobody in VF should ever die because we have the tools to fix them.

Are your staff familiar with the latest science surrounding cardiac arrest? Understanding the why behind the way we do things is important. Many of us are still attached to the “20 minute” rule which is outdated and inaccurate. Latest data shows the optimal resuscitation time to be 14-24 minutes, in conjunction with a high degree of importance of the recognition of those subset of patients (roughly 10 percent) that would benefit from more resuscitation efforts beyond 20 minutes. The ironic thing is these staff are used to conduct the latest in research, from STEMI to CVA to cardiac arrest. If you’re in a big urban center in North America, I’m sure you all remember the various studies over the years including the continuous chest compression study, the PRIMED study (remember that yellow do-hockey we put on the end of the BVM?), and more. But it’s just as important to get the results of that research into the hands of the very providers that collected the data. Sit 50 Paramedics down in a room and ask them their thoughts on ETT vs SGA in a cardiac arrest situation. Some will tell you they always use ETT. Some will tell you if an SGA is working fine, leave it. Others will tell you it’s situational. But only some can tell you why they exercise that option. The “why” is important. The “why” guides our clinical decision making process. The “why” is how we get the best possible chance of survival for our patients we treat.

At the most recent NAEMSP (National Association of EMS Physicians) meeting, Mohamud Daya, MD, MS, professor of emergency medicine at Oregon Health and Science University and a Resuscitation Outcomes Consortium (ROC) investigator, described prehospital research as "the ultimate crème de la crème." Daya went on to describe some key lessons from ROC:

- Engage paramedics, EMTs and hospitals early in the research design process.
- Avoid complicated trial designs as it becomes challenging for providers.
- Community benefits from prehospital research include better patient care.
- Research networks are important and future work should focus on establishing these networks.
- Technology is important.

We also need feedback and data, and this ultimately brings us to both Management & Leadership as well as Quality Assurance. None of us ever like hearing criticism of our performance. But to improve and be the best provider and give the best to our patients we need to hear where we can make small changes and improvements. It starts with data collection from our managers. We absolutely cannot fix what we don’t keep data on, and that data tells a story. I spoke briefly with Jay Loosley who is the (Continued on page 4 - PERFORMANCE)
I recently read an essay that bluntly stated that “all EMTs do is drive patients to the hospital and drop them off.” After rereading it a few times to ensure I understood the author correctly, I began to come up with countless reasons of why this statement was not only wrong, but blatantly offensive. EMTs and paramedics are the first ones to respond to an emergency, the first ones to assess a patient and take a history, the first ones to begin treatment, and the critical link that bridges patient care in the field to the emergency room. It got me thinking about the countless skills that EMS personnel possess and the amazing work they do for patients in emergency situations. I asked myself how we can perform our job better and which of these functions are the most important to develop in order to better serve our patients. At the end of the day, I kept coming back to the effectiveness of our communication as the defining skill of what makes or breaks us in EMS.

It begins with the dispatch and radio communication. 10-codes are now a thing of the past due to multiple meanings associated with each number and the confusion they caused. Being able to call for additional resources while clarifying the type and quantity is a critical function of first responders. No other situation highlights this better than in an MCI scenario where we need to organize chaos.

Next, we need to be able to communicate effectively with our patients in order to obtain an HPI and medical history in a clear, concise manner. Patients are often scared and nervous during emergencies, and a caring, empathetic EMS provider can go a long way in reassuring them. In other situations (most notably with our intoxicated patients), you may have to spend the time explaining why you are asking certain questions, informing them of your campus’s medical amnesty policy if one exists, and assuring them that their medical information is confidential. Furthermore, when accepting an RMA (refusal of medical attention), it is our legal obligation to ensure that patients know the risks of not being transported to a hospital. We must communicate this clearly, and it is also a useful technique to have the patient repeat it back to confirm understanding.

Most importantly is our communication with hospital personnel at the transition of care. It is critical to prioritize your oral report and immediately notify the hospital staff of any abnormal vitals or physical exam findings. Moreover, EMS is unique in that we treat people in their homes or at the scenes of their emergencies. This is insight into potentially useful information that those providers taking care are not privileged to. It is critical to convey your scene impression to the physicians and nurses at the hospital and any concerns you may have. Lastly, our documentation serves as a permanent piece of communication and it needs to be clear and accurate.

So what is the take away? Although communication is essential to patient care and everything we do, we fall into the trap of not practicing it enough. Continuing education sessions often focus on a medical condition or a skill involving a piece of equipment. While these are essential to review, much of the time it comes at the expense of practicing what composes the core foundation of an EMS provider. MCI drills provide a great way to both test and practice the art of communication. But there are many other more innovative ways to enhance this essential skill. I challenge you and your organization to be creative, spend more time practicing communication, and come up with new methods to improve your patient care.

(Continued from page 3 - PERFORMANCE)

Superintendent of Education for Middlesex-London EMS in London, Ontario. Through his department he is able to provide feedback to every single cardiac arrest patient to the attending Paramedics and let them know their CPR quality, time on the chest, time off the chest, pre/peri shock pauses, and more. This is in no way, shape, or form reflective of any disciplinary process — quite the opposite. It allows quality feedback to the Paramedics so their next arrest call can be that much better and more focused. It’s working. MLEMS boasts a 41% witnessed VF OHCA survival percentage, and a 39% overall VF OHCA survival percentage, and 55% of OHCA victims will receive bystander CPR through a wide variety of CPR/AED programs. Those stats are some of the best in the business, nearing the amazing hallmark of the King County Medic One Program (nearly 80% survival with 72% of victims receiving bystander CPR).

System measure and non-disciplinary quality improvement are vital components to a high performance system. And it’s easy to start with this aspect. The Resuscitation Academy calls this the low-hanging fruit, because anybody can do it tomorrow. Start a cardiac arrest registry, enact dispatcher assisted CPR (with training, implementation, and quality assurance), and staff high performance CPR (with the same).

On that note, another hallmark of a high performance system is indeed the public. From AED location assistance such as Pulsepoint AED, more public CPR training and AED access, ambulance communication operator assisted CPR, and overall public education and recognition are certainly important as we are all aware. The chance of survival drops greatly if no care is done prior to EMS arrival. We also need to engage and educate the public of our own system as well. The public typically regards the quality of an EMS system based on their response times alone. If you’re "fast" you’re "good." The reality is this is far from the truth. If you solely base quality on response times and some magical target you set an agency up for failure. In other words those who arrive in nine minutes but their cardiac arrest victim walks out of the hospital, is a failure. Vice versa, those who arrive in six minutes but pronounces their patient in home, is a success. Don't get me wrong, response times play a role, and when they get too long they are certainly a marker that we may need to shuffle existing resources or allocate new ones, but they have a marginal place on measurement of overall quality. The public and our politicians need to be engaged and know the same.

In closing, to create the best possible High Performance EMS system, we need to invest in our people. They need to be equipped with the tools, feedback, and knowledge to the deliver the best possible care on every single cardiac arrest patient. They need to start each arrest with the mindset that a witnessed arrest can be saved, and when they can’t, find out and learn from the why not. We need to measure outcomes as a result and use that to improve future performance.
Project Homeless Connect Omaha-Council Bluffs 2016

Jairo Chávez, Rachael Greenheck & William Leggio
1 BS EMS Student 2017, 2 Paramedic Program Coordinator, Creighton University, Omaha, Nebraska

With no food or place to call home, Creighton University opened its doors to the homeless and near-homelessness population in Omaha, Nebraska to provide health and wellness screenings. In the campaign’s ninth year, efforts went beyond the river separating two states and reached out to its neighboring city, Council Bluffs, Iowa to include outreach across the entire Omaha metropolitan area.

The 2016 Project Homeless Connect Omaha-Council Bluffs was held on April 1st at Creighton University’s campus. Each year, the event has about 500 homeless and near-homeless clients. Starting at 0800 and ending mid-afternoon, clients arrived by buses from churches and shelters to be paired with a navigator that assisted the client through the event and services offered. The clients were offered a fresh meal, warm clothes, a hot shower, and the option to participate in medical and wellness screenings, and social service sessions. The event spanned across five full-size basketball courts, and locker room areas in a student recreation facility. An immense amount of preparation was put into this event by volunteers around the greater Omaha area, Creighton faculty and staff, and Creighton health science students from: medicine, physical and occupational therapies, nursing, pharmacy, and EMS.

Nineteen Creighton University EMS paramedic students, including two international interns from Riyadh, Saudi Arabia, participated in a specific medical screening station that included: taking vitals, point of care glucose checks, and recalling medications and allergies with the clients. The paramedic students worked with other health science students who all graciously volunteered their time.

While most of the EMS students’ time is dedicated to studying for class and riding with nearby fire departments, the students had the opportunity to interact with the homeless and near-homeless people in the Omaha metropolitan area. For many of the EMS students, this event served as another reminder that homelessness and near-homelessness knows no age, race, gender, or ethnicity. Maria Nguyen, a current Creighton BS EMS student, stated, “I am so thankful to have been given this opportunity to volunteer at Project Homeless Connect Omaha-Council Bluffs. Not only am I able to help people when I am riding with the local fire departments, I am able to talk with and help the homeless people in my hometown. It is great to see such great response be from my school and Omaha community.”

The annual event and campaign of Project Homeless Connect Omaha-Council Bluffs serves to provide outreach services to those in need of medical and social services. For the paramedic students, this event serves as an opportunity to fulfill their EMS program motto of knowledge and compassion in action. The event is a true display of Creighton University and Jesuit values of women and men for and with others, and cura personalis or “care for the individual person”. Although Creighton University leads the campaign and hosts the annual event, it would not have been possible without the help of all the community volunteers, faculty, staff, and student body.

EMS Response to Healthcare Facilities

Gabe Gan, NCEMSF Southeast Regional Coordinator

Collegiate EMS providers frequently respond to calls at healthcare facilities located on campus and in the surrounding area. University hospitals often have clinics, medical office buildings, and surgery centers on campus as part of their healthcare system. In addition, almost all college and university campuses have a student health center that provides primary and urgent care to students.

Medical facilities will activate EMS for multiple reasons. Patients in need of emergency medical care may incorrectly seek treatment at student health centers or in other care settings. These facilities may not have staff properly trained for emergency situations or lack necessary equipment and medication. A second common scenario involves patients or other individuals developing an acute condition while inside the facility. The complaint may be outside the scope or specialty of the healthcare facility, prompting EMS intervention.

In some cases, campus EMS squads may be called for an ill or injured person on the university hospital grounds (grassy areas, sidewalks, parking lots, etc.). The Emergency Medical Treatment and Active Labor Act (EMTALA) is a federal statute that protects the public’s access to emergency services regardless of ability to pay. In compliance with this legislation, hospitals have an obligation to treat individuals who are on hospital property—including parking areas, sidewalks, and driveways. When dispatched to these locations, it is appropriate for the hospital you are responding to their property. In most systems, this is commonly done by having your dispatch notify the hospital operator to activate the “Rapid Response Team”, “Code MET team”, or other facility-specific emergency code. The responding hospital team will assess the patient and if appropriate, provide transport via wheelchair to the emergency department.

Campus EMS squads should work with their university medical facilities to develop a protocol for response to emergencies inside these spaces. If your school already has one, it is always a good idea to periodically review and make necessary changes in response to the following questions. When is your staff instructed to activate EMS? Do you contract with a private ambulance service for transport between university health system facilities? Are staff allowed to transport patients by wheelchair to the emergency department if the clinic or office is connected to the hospital by bridge or tunnel? How can the campus EMS squad be most useful in these situations? By having plans and procedures in place, both the EMS service and medical facilities will be equipped to work together to seamlessly provide the appropriate care and transportation for these patients.
Role of Collegiate EMS in Campus Public Health
Ian Feldman, NCEMSF Webmaster and Central Regional Coordinator

Collegiate EMS is in a unique position on both college campuses and in the emergency services world. When one’s peers are also the individuals who provide life-saving interventions in emergencies, the potential exists for a stronger relationship between the campus public and emergency responders. Collegiate EMS agencies already leverage this bond to encourage early reporting of drug and alcohol emergencies, assaults, and mental health crises that students might otherwise be uncomfortable revealing to non-collegiate EMS providers. But what about public health? From food-borne illnesses to Zika and Ebola to the use of drugs and alcohol, college campuses face a variety of public health threats. Collegiate EMS is well-placed to assist their institutions in planning for, responding to, and preventing a variety of public health issues.

While your college campus probably didn’t see Ebola cases, and hasn’t seen Zika cases, your University administration has most likely considered what to do should a disease outbreak occur on your campus. But have they included your group in their planning? Apart from the obvious need to have a collegiate EMS agency involved in planning for situations that would require their response, collegiate EMTs can also help administrators better understand behaviors and actions that might be taken by college students in various public health emergency situations. By working from correct assumptions, the institution’s plan will be better, and hopefully that will lead to a better response in the unlikely event that a disease outbreak or other emergency occurs.

Collegiate EMTs are also often the first people aware of disease outbreaks or injury patterns among the large campus population. Consider food-borne illnesses. Does your squad have procedures to inform your campus dining department if you start to see a large number of potential food-borne illness cases? Early reporting of potential cases by EMS can help start the investigative process earlier to narrow down the source and prevent further spread of the disease. Alternatively, seeing an uptick in calls for influenza-like illness in a particular dormitory may prompt a call to the housing department to ask them to do additional cleaning of common areas in that building. These are issues which are already of concern to campus administrators and health services staff, but with the input of Collegiate EMS, their responses can be improved.

Other public health issues are more specific, and not as easy for administrators to predict. In the fall of 2015, Rice EMS responded to several calls for patients with stings from asp caterpillars (also called puss caterpillars). These fuzzy-looking critters actually cause a very painful sting if their venomous spines come into contact with skin. Some patients have local reactions, while others have pain that radiates up the limb, along with swelling, nausea and vomiting, and blisters. By working with the Rice Public Affairs Office, REMS was able to educate the community about what these insects were, and encouraged students and staff to avoid them.

(https://news.rice.edu/2015/11/02/campus-health-alert-beware-of-asp-caterpillars/) A health services director or university vice president may never have considered insect stings as a communal problem, and yet they can present a public health issue just like anything else. Being proactive and reaching out when your squad identifies an issue can help ensure you don’t see additional patients with the same issue.

Collegiate EMS’ role in public health can be proactive too. Many collegiate EMS groups are already involved in public education, be it CPR classes or alcohol poisoning awareness. But consider some of the other issues that your community might face. Many campuses face extremes of temperature at some point in the year. Be it awareness of heat exhaustion and heat stroke for the marching band in the summer, or ways to recognize and prevent hypothermia among cheerleaders in the winter, collegiate EMTs possess the knowledge and skills necessary to do outreach to groups on campus to prevent calls for heat or cold emergencies.

In all of these situations, collaboration between Collegiate EMS and school administrators is key. EMTs may only play a response role in an actual emergency, but they can nonetheless be instrumental in helping schools plan for emergencies, recognize potential public health threats early, and perform outreach to lessen the impact or prevent disease and injury altogether.

For information on suggested outreach activities, consider viewing our EMS Week Brochure. Also, consider participating in the EMS Ready Campus program, which recognizes squads who have taken steps to improve their involvement in emergency management and preparedness.

HEARTSafe CAMPUS Designation

NCEMSF with support from HEARTSAFE Communities, the American Heart Association, The Sudden Cardiac Arrest Foundation and industry partners, developed an initiative to designate college communities as “HEARTSafe Campuses.” Now in its 5th year of recognition, NCEMSF is proud to announce that it will be awarding its 20th designation. Additional information and applications can be found online at www.heartsafecampus.org.

Cardiac Arrest Registry

For several years now, NCEMSF has been collecting data regarding Cardiac Arrests on Campuses with EMS organizations. While our data set is small, it continues to grow on an annual basis with 5-10 submissions per year.

We remind all organizations, if willing, to submit this data to the NCEMSF Cardiac Arrest Registry

https://www.ncemsf.org/resources/research
A Bright Future for Urban Campus EMS
Scott C. Savett, PhD, NCEMSF Vice President and Chief Technology Officer

Twice within the past few months, NCEMSF has been approached by mainstream media representatives asking whether campus EMS is growing or shrinking. After crunching the numbers, I’m pleased to report that campus-based EMS is growing.

Digging further into the numbers, the overwhelming majority (72%) of the 65 groups created within the last 10 years have been in urban settings. Suburban schools accounted for 16%. Rural schools were 12% of the total. According to The College Board, there are 1,903 public and private not-for-profit colleges and universities in the US. Since urban campuses account for 35% of that number, this is clearly not just a "numbers game" that can be accounted for by a higher number of campuses in urban settings.

Instead, I would propose that the surge in new campus EMS groups on urban campuses over the last ten years represents attempts to supplement reduced municipal emergency services that have been caused by long-term budget cut-backs in large cities. As the fifth largest city in the US, Philadelphia is a good barometer for what’s happening in urban areas throughout the country. Since 2005, Philadelphia has seen the successful creation of three campus EMS groups: Temple University (2005), University of Pennsylvania (2006), and Drexel University (2010). Facing increasing budget shortfalls, in 2010 the Philadelphia Fire Department (PFD) instituted a practice of placing fire stations out of service on a rotating basis, known as a "brown out." The result was increased response times to medical and fire calls, which were already marginal.1 Thankfully, brownouts ended in 2016 under Mayor Jim Kenney, so it’s anticipated that PFD response times across the city will improve. Whether they do or not, these local campus EMS groups will continue to ensure prompt medical attention to emergencies in their campus communities. This is especially important in light of chronic PFD ambulance shortages.3,4

Philadelphia is not alone. Washington, DC is another city where campus EMS organizations fill the gap where municipal services potentially fall short. Georgetown University has had its own student-run ambulance service since the early 1980s. George Washington University started as a quick response group on bikes in 1994 but now has its own student-run ambulance as well. Case Western Reserve University in Cleveland followed a similar path, now providing student-run ambulance service to its campus.

This urban trend is clearly no flash in the pan. The NCEMSF startup team is actively assisting schools establish squads in New York City, Cincinnati, Milwaukee, and Nashville. Whether it’s hashing out details about medical direction or having discussions with campus administrators about liability, NCEMSF is here to assist – wherever your squad may be located.

1 http://citypaper.net/articles/2005-05-12/cover.shtml/
2 http://articles.philly.com/2016-02-12/news/70543070_1_brownouts-fire-department-firehouses
3 http://articles.philly.com/2014-07-03/news/51060288_1_fire-department-food-truck-medical-units

Seeking Out Continuing Education
Lex Martin, RN, NCEMSF Midwest Regional Coordinator

Whether you are a first responder, EMT, or paramedic, continuing education (CE) is essential in maintaining competency and skills. Although hour requirements vary from state to state, EMS providers around the country rely on CE credit to recertify every 2-3 years. It can be difficult to complete these requirements as a collegiate responder without knowing local resources for CE lectures, labs, and events. However, with a little research, most communities have plenty of great (and often free) CE opportunities available to providers. If you’re in need of continuing education, try the following resources:

- Start with regional hospital systems. If your local hospital provides EMS medical direction, it is likely that they have a department that provides CE lectures for municipal services. Check their website and see if they have an events calendar. If not, call!
- Look up critical care transport and flight teams in your area. Many air medical services reach out to EMS providers with run reviews and seminars.
- Contact the coroner’s office. Medical examiners may do case studies for first responders.
- Similarly, cadaver labs at hospitals and medical schools sometimes provide hands-on procedure labs for airway management, IO devices, and trauma skills. If this is available to EMS providers in your area, it is one of the best ways to practice and improve on critical skills.
- If you need a refresher on a certain topic, get in touch with local EMS academies and ask if you can sit in on a class or two on that subject.
- Attending pre-hospital care conferences (like NCEMSF!) is one of the best ways to get many CE hours completed in a short period of time. Plus, conferences are excellent opportunities for networking and meeting other providers from around your region, the country, and even around the world.
- As with anything in the 21st century, plenty of CE also exists online. Although this is not a replacement for in-person education, online resources can fill in those last few credits in a pinch.
Regional Roundup
News from Around the NCEMSF Regions

From the National Coordinator
The Regional Coordinator (RC) network facilitates communication between NCEMSF and its constituents. It is through the Regional Coordinators that NCEMSF best accomplishes its mission of advocating and supporting campus based EMS. The Regional Coordinators are equipped to assist each squad with the day-to-day issues it faces and to help publicize squad achievements. There are few issues that the NCEMSF leadership has not seen before and for which it is not equipped to offer advice and guidance.

NCEMSF has a grant program to provide financial support for regional events and special projects that directly further the NCEMSF mission. Sponsored activities must be educational in nature and provide direct benefit to campus EMS. For further information, eligibility requirements, program rules, or a grant application, contact your RC.

Regional training events and single day conferences are great ways to harness the energy of campus EMS at the local level. Contact your RC to coordinate goals and dates with the NCEMSF national agenda.

Please join your RC at the regional roundtable discussions on Saturday morning and chat informally with your RC and other squads and leaders from your region throughout the conference.

Central
University of Arizona EMS was awarded the 2015-2016 ASUA Service of the Year award. The award from Associated Student Government recognizes the work of UEMS to make their campus community safer. The group finalized agreements to become part of a county-wide regional radio system, allowing University EMS to communicate with Tucson Fire Department and receive dispatch notifications from the City of Tucson. UEMS also began operating 365 days per year, 24 hours per day, with the support of collegiate EMS at the University of Arizona and across the country. UEMSAA is also excited to work with the operational UEMS group to develop new classes and a new degree program in Emergency Medicine at U of A to educate the next generation of health care and public safety and service professionals.

WashU Emergency Support Team, working with their University’s Health and Wellness Committee, their medical director, members of the student body, and members of the WashU administration, have recently developed and implemented a Medical Amnesty and Active Bystander Protocol. This new protocol encourages students to call for help in medical emergencies involving alcohol by providing protection against judicial sanctions for the presence, possession, or use of alcohol by the caller and the patient. WashU EST is now working to help increase awareness of the protocol, and they hope it will discourage people from not calling for help when help is needed. WashU Emergency Support Team assisted with medical coverage during the Presidential Debate, held on the WashU campus in early October 2016.

Vance Riley, a former chief at Texas A&M Emergency Care Team and Texas A&M EMS in the 1980s and current Fire Chief in Pearland, TX (outside Houston), was awarded the 2016 Journey of Excellence Award from the Texas Governor’s EMS and Trauma Advisory Council (GETAC). The award recognizes individuals who have made significant contributions to EMS and trauma care in Texas over their careers. The current GETAC chair specifically noted Chief Riley’s contributions as immediate past chair of GETAC and his leadership of the Council over the past twelve years, calling him a “clear choice” for the award.

Rice EMS members Emily Huang and Jessica Sheu presented on their research at the Society for Academic Emergency Medicine Conference in May 2016. The students’ presentation, titled “HEART vs EDACS-APD: Which Score is Better for Ruling AMI and Death?”, examined two common risk scores used to screen ED patients presenting with chest pain to see which is better at predicting low risk of AMI and mortality.

Massachusetts
The Massachusetts region hosted its second annual Regional Round-Up during Campus EMS Week. The day was exciting with several well-known EMS leaders preparing lectures, labs, and simulations.

Last spring, Boston College EMS (BCEMS), Tufts University EMS (TEMS), Brandeis Emergency Medical Corps (BEMCo), and Massachusetts Institute of Technology EMS (MIT EMS) all participated in staffing medical tents along the Boston Marathon route to support injured or ill runners as well as (Continued on page 9 - Regional)
also been diversifying their continuing education with courses such as Tactical Emergency Casualty Care (TECC) that covered the latest in trauma science and resuscitation.

**Midwest**

Case Western Reserve University (CWRU EMS) replaced its 1991 ambulance with a newer model. This upgrade means that both their ambulances are now up-to-date in terms of safety features and appearance. Moreover, both vehicles are identical on the inside, reducing transitional issues when switching between units. CWRU EMS also participated in the Republican National Convention. During this busy time, they were in service to provide coverage throughout the University Circle neighborhood, freeing up municipal units. Additionally, the public access AED program on campus is going strong. Thirty six AEDs are publicly accessible across campus (45 total, including police and EMS units). CWRU EMS performs monthly inspections of all units and handles all equipment replacement. Moreover, all publicly accessible AEDs on campus can be found on the Pulsepoint and Pulsepoint AED apps. The chief and training director have had great success in their jointly run classes regarding AED usage for various departments across campus.

University of Dayton EMS acquired a new power cot as well as a portable suction device thanks to the Student Government Association (SGA) grant and generous donations. This new equipment will help improve excellent patient care. Finally, UD EMS was awarded the Ohio Department of Public Safety Agency of the Year award.

**Southeast**

On November 12th, over 40 campus EMS providers from Southeast Region schools gathered in the beautiful Appalachian Mountains for the first annual Southeast Regional Summit. Hosted by Western Carolina University EMS. Representatives from Duke University EMS, University of Florida Gator Emergency Medical Response Unit, and Western Carolina University EMS participated in a full day of lectures, discussion, and networking. The Summit faculty included paramedics, emergency managers, and psychologists who gave talks on cutting-edge issues pertaining to campus-based EMS, including cardiac arrest management, EMD dispatch implementation, and response to mental health emergencies in the collegiate population. In addition, representatives from each of the attending schools created and delivered their own TED Talk style presentation on topics ranging from the campus cardiac chain of survival to the implementation of innovative alcohol emergency protocols. The Southeast Region looks forward to putting together another great Summit in Fall 2017!

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Do you have news about your squad you'd like to share? Contact your RC and look for it in the next issue of NCEMSF News.
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Beyond the Comfort Zone

Scott C. Savett, PhD, NCEMSF Vice President and Chief Technology Officer

All EMS providers should strive to learn at a higher level. If you’re a college student, this should be almost second nature since learning is part of your daily routine. In fact, I would argue that it’s not enough to learn just the minimum necessary to perform a task – EMS providers should have an ongoing quest for knowledge. The value of such a quest certainly isn’t unique to EMS. My employer (note: NCEMSF officers are volunteer; we all have careers elsewhere) requires every employee to perform an annual self-evaluation on the topics of self-development and continuous learning. They also encourage us to have an annual “stretch” goal that moves us outside of our comfort zone. If a Fortune 500 company with more than 50,000 employees is doing this, you have to think that it matters.

Recently, I was speaking with the coordinator of an annual regional EMS conference sponsored by a large hospital network. The hospital network has a pool of well-respected healthcare providers who are eager to speak on a variety of topics. To keep things interesting, some of the topics selected at each year’s conference are inevitably on the forefront of academic medical research. Unfortunately, for some of the EMTs and paramedics attending the conference, some topics are perceived to be too advanced and not meaningful.

The same conference coordinator told me how some paramedics thought that learning about ventilators was beyond what they needed in the field. While pre-hospital ventilators tend to be rudimentary (i.e., respiratory rate and volume), it is useful to understand the physiology behind artificial ventilation and the impact of settings such as PEEP and FiO2.

In many ways, NCEMSF conferences are similar to that annual regional conference. Over the years, our conferences have featured speakers on cutting-edge topics such as CPAP, ultrasound, and telemedicine that have subsequently become mainstream. We select our speakers for their passion about the topics they are presenting. We endeavor to expose you to medical information that may not be directly applicable to your everyday EMS calls. These speakers offer you the opportunity to stretch your knowledge. Not only can these topics make you a better EMS provider, they may spark an interest that will lead you down a career path or research opportunity.

Of course, expanding your knowledge should not stop after this conference. Once you return to your campus, I challenge you to take the opportunity to learn how a 12-lead EKG is taken. Familiarize yourself with the ACLS protocols. Ask a paramedic about the contents of their first-in-bag. Look up the purposes of different blood collection tubes (e.g., red top vs. lavender top). While none of these things are within an EMT’s scope of practice, you will be a better provider if you understand them.

As you’re selecting the lectures to attend at this year’s conference, I encourage you to consider picking at least a couple of interesting topics that are beyond your comfort zone. You will be surprised at how much you learn.

You Are a Sponge

Kate Marquis, RN, CEN, NCEMSF Northern New England Regional Coordinator

Healthcare can be a difficult field in which to work. As EMTs, nurses, doctors, and any other profession within the field, we are expected to give a bit of ourselves to every patient. There are always days that run smoothly, and others that are just train wrecks (hopefully not literally). Luckily, most days we find ourselves somewhere in between, though we must be mindful that our work can take a toll on us, both mentally and physically. When I was in nursing school, my professor gave a spectacular analogy to us. She said to us, “Imagine that you are a sponge. With every patient you touch, you give a little bit of yourself, a drop here, a drop there. After awhile, you become wrung dry. Don’t let that happen. Do things that fill you up, that refill your sponge. That way, you can continue to care for others at the level you would hope you or your loved one would receive.”
National Collegiate EMS Foundation
PO Box 93
West Sand Lake, NY 12196-0093

Please visit the Membership section of the NCEMSF Web site to keep your contact information up-to-date. By virtue of your attendance at the 24th Annual Conference, you are now a NCEMSF Personal Member through the completion of the 2016-2017 academic year (May 31st). Thank you for your ongoing support of campus based EMS and NCEMSF!

The NCEMSF Database of Collegiate EMS Providers is an excellent resource in the event of natural disaster or other public health emergency. Please keep your information up-to-date so that should the situation arise, we can contact you and collectively as campus based EMS answer the call to act!

In addition to making a continued commitment to the advancement of existing collegiate emergency medical services and the development of new response groups, your membership provides financial support to promote Collegiate EMS Week and our annual conference, produce publications, honor outstanding collegiate EMS organizations, and advocate for collegiate EMS.

Your membership in NCEMSF also entitles you to a number of member discounts including medical software and reference, EMS equipment and supplies, apparel and EMS World Magazine. These offers and discounts are detailed in their entirety on our website and are available only to NCEMSF members.

Your NCEMSF membership adds to the collective strength of hundreds of members throughout the nation - those participating in and advocating for collegiate EMS. Renewing your NCEMSF membership in June for the 2017-2018 academic year shows your continuing commitment to collegiate EMS. Don’t let your enthusiasm for collegiate EMS diminish just because your college graduation is imminent. NCEMSF also offers life memberships that keep you in touch with the world of collegiate EMS. More information about our membership categories and rates can be found online at www.ncemsf.org/membership.

Campus EMS Startup Resources

Every year, NCEMSF receives multiple inquiries from enthusiastic EMTs on campuses across the country desiring to establish squads of their own. Among the many resources we provide to help new groups succeed, we advise strongly that organizers make it to the annual NCEMSF conference. One of the most challenging aspects of starting a collegiate EMS organization is developing a network of experienced providers at peer institutions who can give advice, answer questions, and serve as a sounding board for ideas.

This year is no exception, several new groups and those still trying to form are in attendance to learn from the whole of campus based EMS. Please reach out, welcome them and share your collective knowledge!

Specifically, Efforts are underway in many institutions across the country to start up on campus EMS organizations. In the Southeast, J.B. Bridge has been working hard to start an organization at Belmont University. Efforts are also underway at CCNY and NYU to start organizations. In the West, Margaret Brynjolfsson has been working hard to start an organization at Chapman University.

New Group Initiative grants are available through NCEMSF to help defray the costs of attendance for groups still going through the significant difficulties of starting a collegiate EMS organization. This Year’s recipients are:

- Bryn Mawr College
- Colorado College
- SUNY Canton
- Towson University

The NCEMSF Startup Packet is available for download online.

Contact Joseph Grover, NCEMSF Startup Coordinator, with specific questions: startup@ncemsf.org.