Emergency Medical Services

Emergency medical services can be provided to communities in several different delivery models. First we will define levels of care available in Pennsylvania. The first level of care is basic life support or BLS. BLS personnel can provide CPR, automatic external defibrillation, basic patient assessment, splinting/trauma care, oxygen administration, and several other functions. Providers at the BLS level are called Emergency Medical Responders (EMR) and Emergency Medical Technicians (EMT). This is based on standards of care and training requirements. Advanced life support or ALS personnel can perform all of the basic level functions and advanced airway control; administration of medications, IV's and many other advanced medical functions. Providers at this level are called Paramedics.

Types of Emergency Medical Services

A community may choose what type of medical service it desires. Common types of service in Pennsylvania include the following:

1. First Responder / Quick Response Service (QRS) – A QRS can provide the community trained BLS personnel quickly and cost effectively. QRS uses a non-transport vehicle usually a pickup or SUV to respond to the scene. These types of services are typically used in rural areas by volunteer fire departments to ensure a fast response when transport ambulances come from a further distance.
2. Basic Life Support – A BLS service is licensed by the Pennsylvania Department of Health and must meet certain staffing and response reliability requirements. A BLS is staffed with two personnel trained to the EMT level. Kennett Fire Company is currently a BLS service. The BLS vehicle is an ambulance that is used to transport the patient to the hospital.
3. Advanced Life Support – An ALS service is licensed by the Pennsylvania Department of Health and must meet strict regulations. All ALS services must have a Medical Director (Physician) who authorizes the service's Paramedics to practice care. There are two types of ALS vehicles; an ALS squad is an SUV type vehicle that transports a Paramedic to the incident scene who then meets with a BLS service to provide care to patient. The second is an MICU or mobile intensive care unit. That unit is staffed with both an EMT and Paramedic and can provide all levels of care on all types of calls. Longwood Fire Company provides both MICU and ALS Squad services.

It should be noted that a new level of provider has been authorized in Pennsylvania. The Advanced Emergency Medical Technician or AEMT. The AEMT is a mid-level provider who can perform at an intermediate level between and EMT and a Paramedic. At this time there are no services using this level of provider.

Providers of EMS

In Pennsylvania and across the country, there are several different providers of emergency medical services. They include:

1. Non-Profit – A non-profit service is governed by a board of directors that could be community members or members of the service. Non-profit ambulance services evolved in the 1970's and matured over the years. Many of the services provide ALS, BLS emergency, non-emergency, Para-transit and other services. Some only provide ALS and BLS. A variety of funding streams are used for sustainability of non-profit services. Traditionally, third party billing of private and government insurance has been the primary source of revenue but as reimbursements have decreased, local government assistance has increased.
2. Municipal Based – a municipal based ambulance service is owned by a local government and is funded by tax dollars and third party billing. The municipal based ambulance service can be fire department based (Philadelphia and Wilkes Barrie) or a separate department or bureau.
3. Private Corporation – A private ambulance is usually owned by an individual or a number of individuals who form a corporation. Private ambulance services primarily provide non-emergency or inter facility transportation at the ALS and BLS level. Some also provide community 911 services. The primary source of revenue for this type of service is through third party billing and facility contracts.
4. Fire Department / Non-Profit – In Pennsylvania, non-profit fire departments can also provide ambulance service. The service is governed by the fire department board of directors or an EMS committee of the board or members. Fire departments can provide ALS and BLS and in some cases non-emergency services.
5. Health System / Hospital – Many hospitals began to provide ALS Squad services in the late 1970's, 80's, and 90's. Those services provided what is called intercept. The local BLS ambulance was dispatched along with the hospital based ALS squad. They would meet and the scene or while en-route to the hospital and provide care to the patient. The hospitals would absorb the cost of these services. In the 2000's hospitals either began to expand services into ambulance transportation or to get out of the business altogether. In the cases where the hospital got out of the EMS business the ALS was usually turned over to the local ambulance service. Today the services that remain are a department or division of a hospital.

Emergency Medical Service in the Kennett Area

In the Kennett area with a population of close to 30,000, EMS is provided by two separate organizations. Kennett Fire Company is a fire department non-profit with a 911 call volume of 1,014. The service provides one BLS ambulance 24 hours per day, seven days a week. The cost to provide this service is $404,000. The Kennett Fire Company provides standby services for Kennett Run, the Mushroom Festival and local football games. Longwood Fire Company is a fire department non-profit with 911 call volume of 2,376. Longwood provides one ALS MICU 24 hours per day, seven days a week and one ALS MICU 10 to 12 hours per day seven days per week. Longwood also provides a variety of standby EMS services. The total cost to provide service is $1,134,000.

*It is important to note that the consultants attempted to separate the EMS costs from consolidated fire company financial information. The totals reported above may not be completely accurate.

The Po-Mar-Lin Fire Company provides first responder medical care when dispatched to assist the Longwood Fire Company EMS.

Examples of Pennsylvania Emergency Medical Services

The following are examples of similar Pennsylvania emergency medical services designs and deployment models:

A Non-Profit Ambulance Service in Cumberland County serving a population of 20,000 at night and 30,000 during the day with a 911 call volume of 2,900. The total budget is 1.1 million dollars and staffs one BLS 24 hours per day seven days per week that costs $475,587 and one BLS unit 12 hours per day costs $237,797. This ambulance service has an agreement with a local hospital system to provide ALS service with a Paramedic 24 hours per day seven days a week who rides on the BLS ambulance. The paramedic cost is covered by the hospital system and ALS call revenue is split 50/50 between the ambulance service and the hospital system. The primary municipality provides the ambulance service $26,000 as an annual donation.

A municipal based BLS ambulance service in Cumberland County serving a population of 30,000 at night and 40,000 during the day and has a 911 call volume of 3,500. The total budget is $1,051,226. The service has one BLS ambulance 24 hours per day, 7 days per week and a 12 hour BLS ambulance, five days a week Monday to Friday. ALS is provided by a local healthcare system using the intercept model. An intercept SUV is stationed at one of the township's fire stations. The municipal government bills insurance companies and covers the remainder of the EMS budget with tax dollars. There is a joint billing agreement between the BLS and ALS service.

The healthcare system based emergency medical service provides ALS and BLS coverage to multiple municipalities in Cumberland County. They provide a wide range of services including non-emergency, inter-facility and para-transit. They use multiple MICU's, BLS ambulances, and intercept SUV's throughout the system. The cost for one BLS ambulance is $40 per hour for a total cost of $350,400 per year for 24/7 coverage. For an MICU, the cost is $60 per hour for a total cost of $525,600 per year for 24/7 coverage. Sixty percent of the services calls are BLS, forty percent are ALS. To fund the system, the service uses 3rd party insurance billing, a membership program, and some municipal donations. The system is seeing an increase of Medicare and Medical Assistance insurance utilization.

A fire based EMS system that is located in York County provides BLS coverage to a population of 18,161 at night and 25,000 during the day and has a call volume of 1,900. The service has one BLS ambulance 24 hours per day, 7 days per week. This ambulance is staffed with cross trained EMT / Firefighters who also perform fire rescue duties during incidents. This department uses a total of 7 firefighters to staff and ambulance 24/7. The estimated cost for this unit is $492,168. ALS is provided by a hospital based intercept unit and a joint billing agreement is in place

between the fire based system and the healthcare system. The service has 1,300 to 1,400 revenue generating calls that produce $315,000. The collection rate is 80%.

A non-profit ambulance service in Montgomery County serving a population of 28,305 at night and close to 40,000 during the day and has a 911 call volume 3,335. The organization has a total budget of $1,335,000. The service has one ALS ambulance 24 hours per day 7 days per week and one ALS ambulance 12 hours per day 7 days per week. The remaining 12 hours is occasionally covered by volunteers.

A non-profit advanced life support squad in Chester County serving a population of 70,000 in 18 municipalities covering 225 square miles. The organization works out of two stations and staffs two units 24/7 with two Paramedics running 2,957 calls. The organization has a 1.2 million dollar operating budget. The organization works with three BLS services and has a joint billing agreement with each. The organization uses four sources of funding, health insurance reimbursement, municipal tax dollars, a fund drive, and donations. The organization receives 1/10 of a mill from 13 of the 18 municipalities and a donation from the remainder or the municipalities. The municipal funds generate $375,000.

Trends in Pennsylvania EMS

The Ambulance Association of Pennsylvania has long been an advocate for all types of ambulance services. To provide members of the Kennett area fire / EMS evaluation committee an outline of the current issues facing EMS, I have included remarks from a recent ***Veteran's Affairs and Emergency Preparedness Committee*** testimony:

Chairman Vulakovich, Chairman Barrar, Chairman Costa, Chairman Sainato and members of the committees, thank you for this opportunity to come before you today to discuss our concerns on pressing issues facing the Emergency Medical Services (EMS) provider community of this Commonwealth and current legislation before the General Assembly.

My name is Dean Bollendorf and I am the President of the Ambulance Association of Pennsylvania (AAP). Accompanying me today is Don DeReamus, Board Member and Legislative Chair. This is my volunteer job. More importantly, I am the Vice President of Healthfleet Ambulance. We come before you today to attest that, if the EMS System in this Commonwealth was a patient, it would be on life support and we would be investigating palliative care options.

To validate this statement we offer two huge alarms that sounded within the past week. First, TransCare Corp., with locations in Pennsylvania, New York and Delaware who once serviced the Philadelphia market until September 2015 and Pittsburgh until this February 26th shut down all service and has filed for Chapter 7 bankruptcy protection. Secondly Falck, who serviced eastern Pennsylvania and the Philadelphia market, announced it will cease all operations in Pennsylvania after June 2016. Why is this alarming and a precursor to the demise of the health of EMS Agencies in this Commonwealth?

Falck, a multi-national corporation serving 18 countries with 2200 ambulances and revenues of 120 million dollars released the following statement to their employees:
"Although we have reshaped our business profile and exceeded customer expectations by providing unparalleled service to our clients, the market dynamics in Pennsylvania and lack of sufficient reimbursement from government and third party payers have made it impossible for us to continue our service delivery model to our valued customers. Without proper compensation from those who ultimately pay for the services we provide, we are unable to sustain providing high caliber ambulance and medical transportation in a timely, reliable and safe manner. Therefore we are unable to continue providing services in the Pennsylvania market after June 2016."

Why should members be concerned with these events? These are two large for-profit corporations serving multiple states with deep pockets and equity firm backing who exploit economies of scale. They could not survive in today's EMS healthcare environment in the Commonwealth. Your community or municipal EMS Agency is in a similar situation except we don't answer to shareholders; we answer to our community, our family and our traditions of compassion and care. An EMS Agency departure from an emergency response area directly impacts a community with increased response times or possibly no response by the local EMS. This, by itself, impacts access to emergency treatment and non-emergency medical transportation. Regionally, the decrease of available ambulance resources directly affects emergency management and their ability to adequately backfill and respond to multiple simultaneous incidents or a mass casualty scenario. Again, this is reducing access to care in critical situations, and quite frankly is happening today.

So why does EMS find itself in this situation? The General Assembly declared in Section §8101 of the EMS Systems Act that "emergency medical services are an essential public service and frequently the health care safety net for many Commonwealth residents." Notwithstanding this declaration, EMS, unlike our police and fire brothers and sisters, receives little to no municipal support or tax revenues, has no parity in state or federal grant funding and is seeing cuts in Emergency Medical Services Operating Fund (EMSOF) annually. Regardless, we responded and recorded over 1.8 million patient contacts.

We receive below cost reimbursement from government and the majority of third-party payers for the healthcare services EMS must provide by statute, the leader of that grouping being Medical Assistance. We endure high co-payments and extremely high deductibles since the enactment of the Affordable Care Act (ACA). The Commonwealth's expansion of Medicaid by Governor Wolf under the ACA has also resulted in over half a million new enrollees. Ambulance services to Medicaid recipients present the lowest reimbursement per call and use EMS more than anyone else. Highmark is reducing contracted payments 4.5% for physicians and 2% for ambulance providers as a result of underestimating their risk and anticipate losses of $500 million. Co-payments for ambulance service approach half of the fee schedule or more. Deductibles and co-payments have become a huge challenge for the EMS community from a collection standpoint.

Recent information reported in a Tribune-Review article cited an Allegheny County EMS Council survey that found of the 34 EMS agencies responding, 75 percent reported a financial loss in the last three years, one third do not receive funding from their municipality and the

average collection was 43 percent. Allegheny County was once served by 132 EMS Agencies, it now has 44. Many EMS Agencies have gone out of business, reduced service or are running huge deficits including one county-wide service who reported a $1.44 million operating deficit last year. Fayette County once had 27 EMS Agencies now 7, Northampton County 27, now 14. These are typical of findings in every County in the Commonwealth.

Our workforce has deteriorated over the decades as volunteerism has declined and services have transitioned to volunteer and/or career staff to meet regulatory staffing standards for 24 hours a day, 7 days-a-week service. Millennials and Generation Zs are not entering EMS as a career but use it as a stepping stone to other healthcare professions or just bypassing the field altogether because of the poor wages, long hours or difficult, and at many times, a hazardous work environment. The National Highway Traffic Safety Administration is now studying Fatigue in EMS as many providers are working multiple shifts or going from service to service without rest just to survive in today's economy. Food service workers in New York City are now making more money than people saving lives in this Commonwealth. Our EMS providers deserve better wages, but when you are reimbursed for your services below the cost of providing that service, you don't get to choose between regulatory required equipment, expendable supplies and vehicles to maintain a license versus what you can afford to pay your staff.

Training that was once available at little or no cost as a part of Community College funding, now averages from about $700.00 for a basic EMT to $10,000.00 for a paramedic and significantly more should they pursue a college degree. The availability of training is extremely sparse in rural areas of this Commonwealth. We lose potential volunteers and future career staff due to the time constraints and the distance they must travel to obtain EMS training. Representative Martin Causer (R-Turtlepoint) has convened a Rural EMS Task Force in his area where many of these issues have been raised and believes rural EMS is on the verge of collapse. In the urban or suburban environment where training is more available, training costs are even higher.

In summary, EMS services are failing financially:

a) Rarely receive financial support from the municipalities legally bound to provide those services to their residents,
b) Receive the least amount of grant funding compared to police and fire, have a much larger utilization than fire,
c) Cannot attract, train or retain a viable workforce for many factors, and
d) Receive below cost reimbursement from the majority of healthcare payers, especially Medicare and Medicaid.

While we have painted a grim picture here, we would like to acknowledge that both the House and Senate Veterans Affairs and Emergency Preparedness Committees are aware of our struggles and have worked diligently with EMS stakeholders on behalf of the EMS provider community. Members, we thank you.

It wouldn't be fair to paint such a grim picture without providing solutions for your consideration. These solutions are a transition from the honorable volunteer incentives of the past. Instead, they are targeted toward financial solutions directed at below cost reimbursement, expansion from traditional roles, parity in grant funding, prioritization and funding to EMS and emergency services training for lower tiered emergency responders.

The greatest impact the General Assembly could take to influence the financial decay of EMS in this Commonwealth would be by increasing the Medical Assistance (MA) reimbursement base rates and mirroring the Medicare payment guidelines for loaded mileage. Presently, MA reimburses $120 for basic life support and $200 for advanced life support and $2 per mile after the first 20 loaded miles. As previously mentioned with the cessation of ambulance services in Philadelphia by Falck, it was cited that ambulance operators have complained widely that rates, such as the $120 reimbursement from managed care Medicaid companies and Medicaid, is too low and will lead to the collapse of the industry.

This below cost MA payment for ambulance service pays only 50% of what Medicare reimburses for each level of service. The GAO has shown in 2007 and again in 2012 that Medicare payments were 6% below cost on a national level and 17% below cost in "super rural" areas, so in essence, MA remits 56% to 67% below our cost of providing the service. Who can provide a service, possibly recoup half of its costs and survive? No one.

The expansion of MA under Governor Wolf is increasing this pool of well below cost reimbursements to ambulance services. MA recipients are more likely to contact 911 or access the healthcare environment based on a population more likely to become ill, and the associated new found covered access. Coupled with an imprudent decision by MA resulting in the loss of reimbursement for loaded mileage, the ambulance provider community in this Commonwealth is essentially providing services to Medicaid beneficiaries free of charge.

Medical Assistance EMS billing regulations are outdated and archaic. They actually contradict the current EMS Systems Act and regulations in both practice and interpretation. What this means is that the Commonwealth's EMS providers are following the most current and progressive EMS clinical protocols but the MA program doesn't recognize any changes made in the past three decades. During recent MA retrospective audits, our providers have been penalized for following the current EMS Systems Act and regulations by having their reimbursement…what little it is…denied because of those conflicts. We have attempted several times to engage the Department of Human Services to explore avenues of remedy regarding payment, policy and regulatory language but get lost in the basement of bureaucracy routinely receiving conflicting responses from different Bureaus. We need relief from Medical Assistance and their below cost reimbursement today. The most recent GAO agrees with our assertion. (GAO-16-238, February 2016, Nonemergency Medical Transportation – Updated Medicaid Guidance Could Help States.)

Another positive step the General Assembly could take to influence the day to day finances of EMS would be the passing of Chairman Barrar's House Bill 339. House Bill 339, now residing in the Senate Banking and Insurance Committee, would reimburse EMS Agencies for services provided, even if the patient is not transported to definitive care. All government and most third party insurers pay for transportation only. We are healthcare providers not a taxi service. The denial of payment for services rendered without transportation essentially denies beneficiaries the advantage of health insurance coverage. The treatment of a patient's condition, with medical oversight when required, also saves the healthcare industry the cost of transportation to a hospital. As an example: Statewide protocols developed from evidenced based medicine permit the release of the resolved episode of low blood sugar or the cessation of an extended

resuscitation, as under most circumstances, transportation to and additional cost of evaluation at an emergency room would be redundant.

This is a Commonwealth. Local Municipalities need to take on a greater role in the provision of EMS in their communities outside of merely designating a primary provider to satisfy Borough, Township or City Code. When the EMS thrived in the late 1980s and 1990s, municipalities were the beneficiaries of fierce competition amongst EMS Agencies who would offer their services for no municipal financial obligation to gain territory or business. For emergency services that rely on 911 call volume, territory and call volume are the drivers of financial health. This mindset still exists today with municipalities and the EMS provider community. Today, EMS Agencies fear asking municipalities for financial assistance. They fear the municipality will bid out that very same territory they covered for decades, just to save a buck. Municipalities have the ability to disburse some of their Local Services Tax (LST) to EMS. We commend Representative Tallman for proposing House Bill 161 that would add an additional $5 tax to the Local Tax Enabling Act to fund fire and EMS. If municipalities sit on the sidelines merely selecting providers and fail to actively participate in the provision of EMS in their community, the time may come where no one will respond to their calls or that response will be lengthy. EMS, clearly and arguably, is the most utilized public safety service second only to police services, yet they receive no parity in grant funding on a state or federal level. Act 78 of 2012, our current Volunteer Fire and Ambulance Services Grant Program, sunsets on June 30, 2016 and authorized 80% of the total grant amount appropriated be used for making grants to fire companies. While fire companies outnumber EMS organizations in the Commonwealth, EMS has far greater utilization and should enjoy parity in grant funding. We would also propose that the definition for Volunteer Ambulance Services be changed to mirror the definition of EMS Agency in Act 37 of 2009 with the caveat that the EMS Agency is designated as a primary provider under Act 7, 8, 9 and 31 of 2008. Grant money should not be withheld from EMS Agencies saving lives because of their municipal subsidies or corporate structure.

We need the support of the General Assembly in essential healthcare reform and innovative initiatives to ensure the inclusion of emergency medical services, including but not limited to:

a) Workforce development,
b) Health information technology,
c) Transitional care coordination,
d) Telemedicine, and
e) Mobile integrated healthcare and community paramedicine.

EMS Agencies should be encouraged to expand their care delivery options beyond traditional 911 responses and transport. Partnerships and collaborations with other provider groups including hospital, healthcare systems, Accountable Care Organizations (ACOs), home health agencies, hospice groups, public health and social worker with similar geographic service areas could provide new revenue streams and sustainability for a system that is already in place, serving its community. We commend Representative Bizzarro for his introduction of House Bill 1113 to codify community paramedicine and develop a reimbursement stream. While neither EMS Stakeholders nor the Bureau of EMS has developed consensus on this issue, when obtained, we will gladly assist you going forward.

The General Assembly and Administration needs to address EMS workforce development and retention. A decade or two ago the Department of Education changed the funding formulas for Community Colleges permitting them to utilize funding for designated seats for local emergency services training. Volunteers previously gave a signed document to the Bursar's office from the Chief Officer of an EMS Agency and they were granted enrollment into a program at no cost except possibly for books. Volunteers were once the backbone of the EMS System in this Commonwealth and still provide a precious resource and are the driving force in sustaining rural EMS. Requiring volunteers to fund training for basic entry level EMS certifications or travel long distances to obtain that training is hastening the demise of rural EMS in this Commonwealth.

Finally, the Pennsylvania Insurance Department is floating proposed draft legislation for the prohibition of surprise balance billing. Should this legislation ever see the light of day it must exempt emergency medical services. EMS cannot be and should not be lumped in with other "traditional" healthcare provider groups. The EMS provider community has spent more than a decade negotiating with several Administrations, the General Assembly and the Insurance Industry for direct reimbursement. A partial product of these negotiations was codified in Act 84 of 2015, which provided the EMS community an option to join a registry and voluntarily enter into a third party insurer's network specifically to receive direct reimbursement as an out of network provider; however, if one chooses to join, they are prohibited from balance billing the patient. Under this law, an EMS Agency may choose not to join the registry, based on their business needs, and continue to balance-bill. While this does not totally ban "surprise balance billing", as the Department is proposing, it may limit the amount of exposure consumers will see from EMS agencies going forward.

There is no magic wand that will fix our issues. The viability of the EMS System in this Commonwealth rests on gaining adequate reimbursement from the majority of healthcare payers, including Medicare and Medicaid, more involvement and support from the municipalities, parity in grant funding, expanded roles with disease management and public health through healthcare reform and innovation and the training and retention or an adequate workforce. We're depending on you to help solve these problems.
Again, we thank you for the opportunity to address the Committees regarding EMS pressing issues and current legislation. We are pleased to answer any questions the members may have.

EMS Model for the Kennett Area

Based on a review of historical data, the municipalities in the Kennett Area generate an estimated 2,300 to 2,500 calls for EMS. This includes ALS, BLS, and vehicle accidents. Not all of those calls generate revenue. We believe that municipal funding will be necessary to sustain an EMS organization.

Based upon the Unit Hour analysis, current call volume and review of similar systems it is reasonable to estimate that the area can be served with the following:

- 1 ALS MICU 24 hours per day, 7 days per week
- 1 ALS MICU 12 hours per day, 7 days per week

- 1 BLS Ambulance 12 hours per day, 7 days per week
- 1BLS Quick Response Vehicle 24 hours per day, 7 days per week (Po-Mar-Lin)

*The QRS can be used throughout the service area when the MICU and BLS units are committed on calls. The national average for missed calls is 15 to 20 percent.
As noted in the report a standard of cover (SOC) or response time (time of dispatch to when the ambulance arrives at the incident scene) should developed and monitored. Currently there is no county-wide or area standard. We do know the public expects a reasonably rapid response to emergencies.

EXAMPLE of EMS Options for the Kennett Area

The options are not listed in priority.

1. Continue current operations
    a. Pros
        i. None
    b. Cons
        i. Duel administrative costs
        ii. Uncoordinated operational functions
        iii. Different levels of care
        iv. Cost will continue to increase
2. Assign Longwood Fire Company as primary provider of ALS and BLS
    a. Pros
        i. Single provider for entire area
        ii. Coordinated operational functions
        iii. Integrated with local fire company
        iv. Standard level of care (BLS and ALS)
    b. Cons
        i. Cost
        ii. EMS integrated with the fire service
3. Upgrade Kennett Fire Company to an ALS service
    a. Pros
        i. Keep service local
    b. Cons
        i. Cost
        ii. Duplication of service already provided
4. Contract all EMS operations to a private company or non-profit
    a. Pros
        i. Initially cost may be less
    b. Cons
        i. Less local control
        ii. Decisions based on business model/financial aspects
        iii. Can leave area based on business model
        iv. Not integrated with fire service

5. Establish a new stand-alone non-profit EMS organization
    a. Pros
        i. May be more cost effective in the long term
        ii. Service can expand into other healthcare opportunities
    b. Cons
        i. Initial start-up costs
        ii. Concerns about continuing sustainability

When the time arrives to begin decision-making an RFP (Request for Proposal) should be released to evaluate options at that time.

EMS agencies enter into a "verbal agreement" with the municipalities. The county outlines how the agency will respond to a dispatch (ALS or BLS). All agencies indicate that the first unit responding meets the agreement and will have at a minimum, BLS response level or an ALS.

During meetings with various groups and individuals, a significant discussion point was that portions of the area may receive different service level capability, ALS or BLS, than others for emergency medical calls. The overriding theme from all interested parties was for a consistent level of EMS service to be provided at the ALS service level.

The two response agencies reportedly utilize a mix of paid and volunteer staff and are structured, staff and response based upon historical practice.

Significant concern was expressed about long-term viability and consistent service delivery as well as pricing costs.

Upon review of the individual facility EMS staffing, the project team feels the nature of the staffing models in use results in more staffing than is actually required and there are more units in service than are necessary.

In general, verbal input received from almost all sources indicated a general satisfaction in the overall dispatching, EMS protocols in place and the quality of care being provided.

There were multiple sources of staff data. These included the information provided by the agencies themselves and data from County Emergency Management records.

When evaluating staffing, the most appropriate tool to use is the Unit Hour Utilization rate (UHU). The UHU is determined by determining the amount of the time the unit is "busy" and dividing by the total available hours. For example, if a unit runs 500 calls and each call is 1 hour 10 minutes and the unit is available 24 hours a day, the formula is:

500 x 1.16 (70 minutes /60 minutes) divided by 24 x 365

580 / 8760 = 0.066 UHU

These analyses of historical data and collective performance lead to the ability to more efficiently review staffing and performance. The information provided was recalculated to define a unit hour utilization rate (UHU rate). The UHU calculation can then be compared to national benchmarks of performance requirements and the need for staffing adjustments While there are

at least two UHU calculation models in the industry, they both indicate that additional staffing should be contemplated when the UHU reaches .30 to .40, with burnout of staff beginning at .50 UHU.

The current UHU for the Kennett area is calculated to be .11, which is well within operational norms for the delivery of Emergency Medical Services.

The UHU for each EMS agency, based on the data provided to VFIS-ETC is calculated below. The data can then be utilized to better determine what resources are needed to meet the out of hospital care to be provided by the emergency medical services delivery system.

Unit Hour Utilization Calculations – Current Deployment 2015 Statistics

Station	Total Call Time	Total Available Hours	2015 UHU Calculation
Longwood	1,339.2	13,140	=.106
Kennett	486.31	8,760	=.06

This calculation supports recommendation made elsewhere in this report regarding restructuring of EMS apparatus.

RECOMMENDATIONS

16-10	Designate a single provider of emergency medical services.