



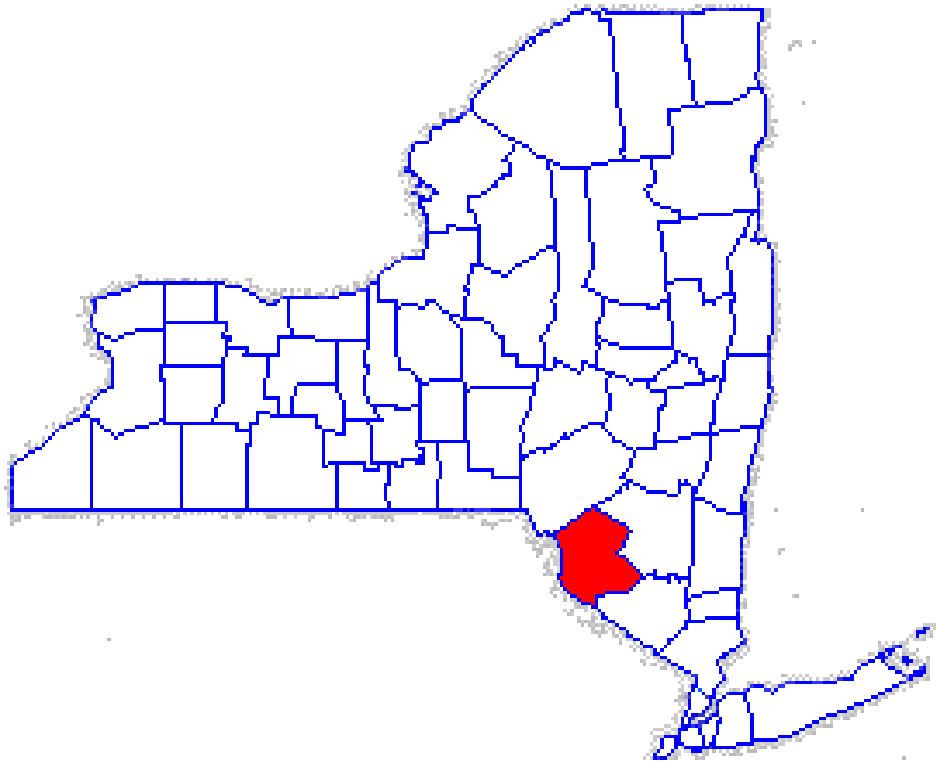
Sullivan County Rural EMS:

EMS: An Assessment



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Sullivan County, New York

Dear Participants of the EMS Assessment and the Sullivan County Rural Health Network:

RURAL HEALTH RESOURCES takes pride in presenting to you the assessment of Sullivan County Emergency Medical Services. We are pleased we could be of service to your community and we anticipate you will find in the following information the ingredients needed for serious planning of future EMS development.

This data, gleaned from hands-on participants, was predetermined to correlate with the standards of EMS in New York State as well as parallel organizations nation-wide. This assessment was conducted with the very able assistance of HealthAnalytics, LLC and Linda Beeman, RN, CPHQ, CNOR, CCCP. RURAL HEALTH RESOURCES is very grateful to them for their expertise, professionalism, good humor and enormous patience. These professionals were chosen to assist in this endeavor because of their cutting-edge knowledge of EMS systems and barriers in rural America and the integration of quality pre-hospital and emergency department disciplines.

RURAL HEALTH RESOURCES has been very impressed with the personable and endearing EMS providers we had the pleasure of encountering in Sullivan County. Their forthrightness and devotion to their mission is to be applauded and admired.

A very special thank you goes to Ethan Singer, N.P., liaison for this project, and to Don Hopkins, EMS Coordinator. Both these fine men give 100% of themselves to the task everyday. Sullivan County is truly fortunate to be home to such dedicated and skilled health care service professionals. Rural Health Resources particularly would like to thank our colleagues, Everett Ferguson and Arthur Jones for their know-how, savvy and nonstop support.

Thank you for your participation in this “snap-shot” of your Emergency Medical Services and best wishes in your future EMS endeavors.

Focusing on the Future,

Elizabeth Embser Wattenberg, MCSA
President RURAL HEALTH RESOURCES

VISION

***Speak with a single voice, a loud one.
Focus on your MISSION: saving lives.***

Sullivan County Rural Health Network has as its mission, to facilitate access to critically needed health care services within a cost-effective (and coordinated) framework. Beyond question, improving access to emergency medical services (EMS) falls into that category.

The participating member organizations have the ability to supply just the right blend of health and human services to develop and promote projects directed at filling the gaps-in-services. This network does not wish to duplicate existing services, yet in collaborative ventures Sullivan County Rural Health Network, Catskill Regional Medical Center, Grover M. Herman Hospital, individual agencies within the network and the providers of EMS together, can focus on the compelling community EMS needs. They can then address and resolve those needs to the benefit of all the residents of Sullivan County.

This critical access hospital (CAH), Sullivan County government, public health, primary care providers, rural health network, educational institutions and EMS Squads or any of the above could come together and work toward filling the gaps-in-services. Integrating EMS personnel into a community based service would allow

them to be in a state of readiness and permit them a broader function to do Health Promotion/Disease Prevention, health education, monitoring, outreach and data collection, even a mobile clinic-screening venture in selected areas of Sullivan County. This would be mutually beneficial to the CAH, the community and the EMS service. It would require solidarity and innovation by all members of the “network”.

This assessment, or “snap-shot” of the EMS delivery system in Sullivan County presents a profile of concerns of those people intimately involved with supplying this important public safety/medical assistance. They told us that their chief concerns are:

- **RECRUITMENT AND RETENTION**
- **TRAINING and QUALITY IMPROVEMENT**
- **ORGANIZATION and COLLABORATION**

Acknowledgments

Sullivan County Rural Health Network

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Sullivan County Rural EMS:

An Assessment

INTRODUCTION

By RURAL HEALTH RESOURCES

INTRODUCTION

This report has been prepared for the Sullivan County Rural Health Network. In Sullivan County, Emergency Medical Services (EMS) is an essential component of the health care system. However, EMS volunteers like the majority of providers across the country, face organizational and recruitment challenges, the need to incorporate advances in technology and training, and the need to integrate with broader community health efforts.

Rural residents, in general, experience a disproportionate number of serious injuries and their distance from traditional health resources increases the morbidity and mortality associated with trauma and medical emergencies. Rural EMS providers work hard to meet the heightened expectations of the public. In rural areas like those found in Sullivan County, this is becoming an increasing challenge.

Sullivan County, located on the border of Pennsylvania, is primary rural. However, it is only 90 miles from New York City. Even though its permanent population is 73,966, seasonal and recreational visitors swell the population to 130,000 in the summer. Population is densest in the Liberty area. The western area of the county is very thinly populated. A cumulative view of the State, County and Township road miles comes to approximately 1,930 miles, in eleven



hundred square miles of hilly, curvy, topography. Of concern to the EMS community is the number of people over 75 years of age, which comes to 4,728.

Traditionally, rural EMS services in this area rely heavily on volunteers. Almost all of these EMS squads are independent with the other six based in the local volunteer fire department. The EMS system has grown, evolved and matured significantly over the last three decades to include many highly trained volunteers, more ambulance companies, some paramedics, and one Advanced Life Support proprietary provider.

EMS services, nationally, differ from region to region depending upon the mix of voluntary and proprietary components. Effective pre-hospital care has been provided in Sullivan County, as with most rural areas, at the First Responder/Basic Life Support level with transport to the nearest hospital Emergency Department. While proprietary EMS systems train their employees in Advanced Life Support (ALS), volunteer Emergency Medical Service organizations usually do not have that luxury.

Expeditious provision of appropriate treatment and transportation are of prime importance. However, the time and resource requirements of recertification and skill maintenance, particularly for ALS level service, strain the volunteer organizations.

This common phenomenon has led to the fly car intercept approach to providing ALS in many areas. In the service area covered by the study, one fly car operated by an independent proprietary service and an ambulance staffed by paramedics are available for dispatch. The possible need to expand the fly car system or otherwise provide for increased ALS service, particularly for the western part of Sullivan County, requires careful assessment. Billing/reimbursement issues, varying degrees of acceptance by the volunteers, appropriate dispatch; population density and protocols also need to be addressed.

Models could be developed that more closely integrate pre-hospital BLS and ALS care and the hospital Emergency Department. For example, some of these models could include basing ALS units at the hospital and using paramedics in the Emergency Department as supplementary help, when they are not involved in the field. A number of benefits may result from such an arrangement. Studies have demonstrated improved outcomes when ALS is available for special populations such as patients with sudden cardiac arrest and victims of trauma.

To achieve a higher degree of continuity of services and greater efficiency, strong linkages between health care providers are extremely important. EMS integration can help guarantee that prehospital care is included into the



management of ill or injured patients. Historically, EMS has been effectively linked with the public safety sector (dispatch, law enforcement and fire service), with nearby EMS providers for mutual aid, with the emergency department of nearby hospitals and, in some areas, with designated trauma centers as part of regionally designed trauma care systems. In the future, successful EMS providers will need to integrate more fully with public health and social service agencies, primary care providers and other health care facilities to ensure that patients are referred or transported to the most appropriate and cost-effective facility. Care should not occur in isolation; rather it should be part of a seamless system that provides patients with well-organized and high-quality care.

EMS is a critical component of the delivery of health care services in Sullivan County. Many of the volunteers and paid staff are unsung heroes. The Sullivan County community and its thousands of visitors benefit enormously from the dedication, courage and hard work of the EMS providers. However, EMS volunteers and paid staff must also understand and positively engage in changes promoting growth, development, and evolving integration with broader community health efforts.



Sullivan County Rural EMS:

An Assessment

ANALYSIS and RECOMMENDATIONS

By RURAL HEALTH RESOURCES

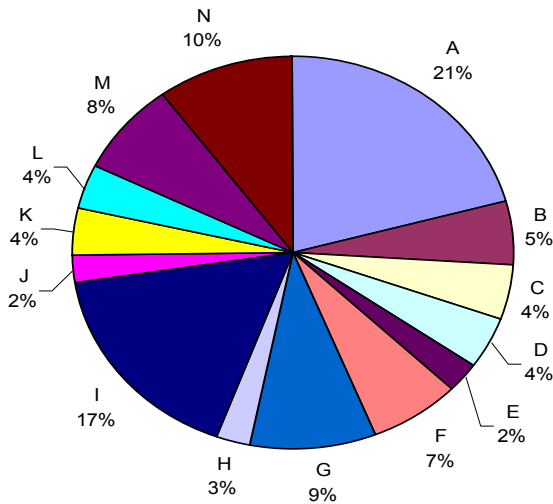
A. RECRUITMENT & RETENTION

Nationally, recruitment and retention is a growing problem for volunteer EMS squads. Among the factors contributing to this are increased commutes to work, reduced availability of volunteer time due to family responsibilities, and concerns about the quality of EMS services and demands of training.

In Sullivan County, recruitment and retention were identified as the areas most important to the success of the squads. When the squad captains were asked, 17% identified recruitment and 24% identified retention as most important.

Health Analytics Captains' Survey, Question #10 ("Captains, # 10") When the EMS volunteers were asked, 17% identified recruitment and 21% identified retention as most important. **Health Analytics Volunteers' Survey, Question #10 ("Volunteers, # 10")**

- a. Volunteer retention
- b. Customer service
- c. Meeting NYS regulations
- d. Financial management
- e. Fund raising
- f. Having the best medical equipment
- g. Meeting volunteer needs
- h. Conflict management within the service
- i. Volunteer recruitment
- j. Strategic planning
- k. Public education
- l. Quality management
- m. Continuing education
- n. Communications between leaders and volunteers



Which three issues from the above list do you believe are the most important to the success of a volunteer ambulance service?

When the captains were surveyed, 100% stated

increasing the number of EMT's would have a positive impact on the community.

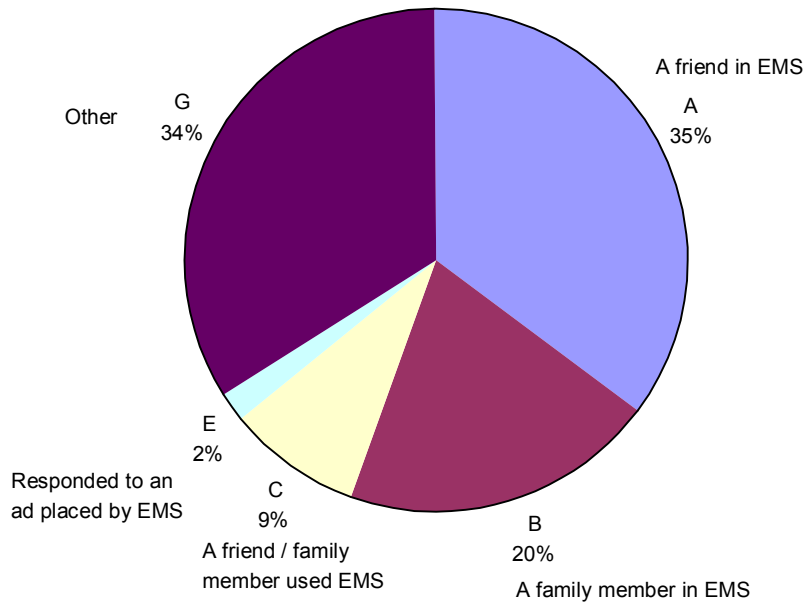
(Captains, # 12) Of the volunteers surveyed, 96% stated increasing the number of EMT's would have a positive impact. **(Volunteers, # 18)** Consistent with national trends, 43% of the volunteers stated that work commitments, and 25% of the volunteers stated that family commitments – were the primary factors keeping them from volunteering more time. **(Volunteers, # 5)**

1. Recommendations for Recruitment

Recruitment efforts need to be pursued at two levels – personal contacts and improved public relations. In rural areas, personal contacts are of prime importance. This statement is supported by the volunteer survey. When asked, 35% of the volunteers stated that a friend in EMS originally attracted them to volunteering and 20% stated that it was a family member in EMS. **(Volunteers, # 4)**

However, recruitment also needs to be pursued through improved public relations, by taking every opportunity to give the community a positive association with EMS volunteers. This positive association takes many forms. Building on quality of service is one form. When asked, 9% of the volunteers stated that it was a friend or family using EMS, which attracted them to volunteering. **(Volunteers, # 4)**

What originally attracted you to EMS volunteering?



In addition to drawing on personal contacts, attention is needed towards more general public relations efforts, such as reports in the media, distributions of a pamphlet describing EMS opportunities in Sullivan County, and establishing an Internet site. In addition, long-range efforts are needed, such as programs with the schools.

The following are specific recommendations:

Supporting recruitment activities which build on friendship, social associations and family ties

1. Appoint a recruitment coordinator for each squad.
2. Design a recruitment brochure describing EMS volunteer opportunities for Sullivan County for distribution at social, community and service club events.
3. Each squad to host an annual recruitment social event, such as a barbecue or picnic
4. Have in attendance guests from other squads or the county coordinator.
5. Provide business cards for squad members for the purpose of "spontaneous" recruiting.

Supporting recruitment efforts through broader public relations

1. Develop a countywide EMS Captains sub-committee designed to develop, implement, and monitor recruitment and retention marketing plans.
2. Select volunteers willing to coordinate on county-wide basis, media, service club, and school presentation efforts

3. Look for both men and women who are in their late twenties or thirties who have some relationship with current members
4. Develop a one-page informational sheet about the department
5. A booklet that describes the department in detail
6. A new member algorithm to track each prospect
7. A checklist for department recruiters to use in interviews
8. A job description for each position to be filled

2. Recommendations for Retention

When asked, volunteers identified training and recognition in the community as the most valuable benefits to the volunteers. More specifically, 21% identified reimbursement for education and training, 17% recognition in the community, and 14% squad level training, and 13% other community support.

(Volunteers, # 14) These responses support a conclusion that a belief on the part of the volunteers that they are providing high quality service and that they are being properly training for such service and community recognition and support for EMS efforts, are key to retention. The quality of the experience appears to be the main component in retaining EMS volunteers. Sullivan County is fortunate in having a base of experienced EMS volunteers. When surveyed, the volunteers had an average of 9.8 years experience.

(Volunteers, # 16) However, in light of the concern expressed by the

volunteers and captains over recruitment and retention, a more systematic approach to retention issues is needed.

Specific Recommendations:

► Improvements in training and quality improvement are discussed in section B

Other specific recommendations are as follows:

New volunteers

1. Include an Orientation Manual & Standard Operating Procedures package to be given to each new member.
 2. Mentor assigned to each new member.
 3. Quarterly follow-up with recruit for the first two years.
 4. Compose job descriptions.
 5. New member orientation checklists.
 6. Establish ride-along programs at busier services for medics
- Reimbursement for education/training programs.

Existing volunteers

1. Build a list of options outlining general programs that non-EMS volunteers could help with; i.e.: accounting, correspondence, babysitting, fund raising. Be open to non-EMS members who do have something to offer.
2. Reimbursement for education/training programs.

3. Skill Maintenance sheets.
4. Performance evaluations
5. Internet enhanced information sharing should be included in strategic planning.
6. College/Technical School scholarships
7. Offer flexible shifts
8. Plaques for years of service

Captains

1. People Management and Conflict Management Training (i.e. - Listening skills, Interest based bargaining, etc).

Retiring volunteers

1. Exit interview forms.
2. Award banquets

It is important to keep in mind that EMS volunteers will generally continue to serve if they feel their efforts are challenging, valuable, and appreciated. The appreciation comes from the service, the community and service customers (the patient and their families).

B. TRAINING and QUALITY IMPROVEMENT

Training and quality improvement are essential for retaining an experienced, highly motivated corps of EMS volunteers and providing top quality service to the community. As set forth in the previous section, training and quality improvement rank high on the list of issues that the volunteers believe their squads need the most improvement in. Of the captains surveyed, 21% listed continuing education and another 17% listed public education. **(Captains, # 11)** The challenge is to provide training opportunities that will fit into already busy schedules.

There are basically two tracks for training. The first track is for the volunteers at the BLS level. These volunteers typically have received initial training of approximately 50 hours, with a requirement for continuing training of the same every three years. The second track is for people at the Critical Care (ALS) level, who require up to 350 hours of training or Paramedics who are mandated to have 1600 hours of training. All must pursue recertification every three years.

Community Colleges should make a tuition allowance arrangement to those students who are actively involved in a local volunteer EMS squad. Official EMS training in rural Sullivan County must have a flexible and accessible schedule. This was stated over and over again in the survey. The curriculum should also contain courses in leadership, organizational and service management, and coping skills. Key players should be open to the innovative use of training on

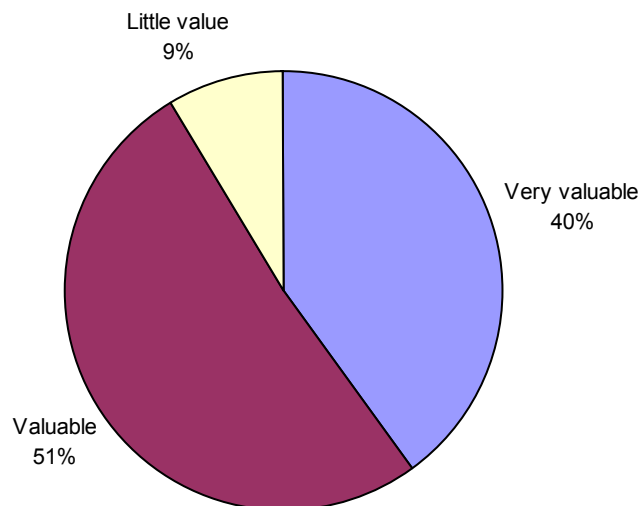
the Internet, teleconferencing and efforts should be made to train-the-trainers, so Sullivan County will always have enough qualified instructors. The hospital in Callicoon could partner with the EMS Association and provide access to their facility, patient presentations and supervised clinical experiences for EMS volunteers.

The New York State Senate is sponsoring a legislative bill (S.6279/A.9829) that would allow members of a volunteer ambulance squad to audit courses tuition free at a state university college on a space available basis. This incentive is designed to encourage participation in volunteer squads. Sullivan County Rural Health Network and the EMS Association should appeal to their New York State Senator and Assembly representatives for passage of this bill. Other tax abatements or incentives should be explored with the local elected officials.

An essential companion to training is quality improvement. EMS volunteers need feedback on their services and whenever possible, specific medical feedback on patient outcomes after emergency discharges. Placement of Advance Life Support, Critical Care or Paramedic level staff in emergency rooms, would enhance response time, contribute to improved communication with EMS providers, offer constant and positive feedback, and is a practical way of cultivating better procedures and potentially upgrading EMS – Emergency Department teams.

When asked, the EMS volunteers overwhelmingly supported quality improvement feedback as an important need. **(Volunteers, # 19)**

How would you rate the value of the quality improvement feedback you receive as an EMT?



Please describe how quality improvement could be more valuable to you.

(The following are verbatim responses by volunteers in response to the survey)

- It could help me learn more & be able to help people in a better manner.
- I feel we have a good system here. I learn from my mistakes and learn new techniques from other EMS members.
- Improve skills to better treat patients

- Quality improvement will help me to be able to perform my duties more efficiently.
 - It could be more valuable to me because I could work harder on the calls that I go on.
 - Quality improvement is not available in my squad as a volunteer; half of the members do not know what QI is.
 - I'm still in learning process of EMS so all QI is valuable to me
 - If it was at my end of the county
 - If there was a larger base of volunteers to learn from
 - More interagency contact and joint training with fire pd other local amb agencies.
 - Would like feedback on all calls delivered to local hospital not just the complaints.
 - Make it more accessible to the volunteers so it has little impact on their already busy schedules.
 - We do QI on a monthly basis and if there is a problem after a call we discuss it right away so our QI area is already great and informative.
- Thanks.
- I believe in some cases it can be very much a deterrent for volunteer EMS being more added resentment & pressures but on other hand it can be a valuable tool to help improve quality of care given to patient. QI helps to fine tune skills of EMT

- Sharing of information is always helpful & we can always learn from feedback & change-it helps us to grow. 18B&D of course those services would improve pt. Care do I want to see this NO, will it come to that someday, maybe. But I personally feel nobody knows the people in this rural area better than those who live right here. Those of us who are presently members!
- We need to constantly improve our ability to care for patients, relate to various publics including paid services who want to put us out of business, politicians, the community and other EMS/Fire agencies. We learn this through collaboration, teamwork, and effective PI and PI programs.
- It can not be more valuable than it already is
- Quality improvement in equipment would mean better patient care without interruption
- Update information update equipment correct dispatch information about call
- The only real quality improvement received was from a paid company. I've seen some really horrible care & documentation from fellow volunteers. I truly believe that the state has made it way too easy to become an EMT therefore having a negative affect on the care our patients are receiving. This is truly a shame.
- Sullivan county EMS advisory board & EMS coordinator offer little to no help to our services . . . hospital acts as though they're doing you a favor by accepting your patients

- People need to work together better and work as a group instead of as I've seen in other departments of one person trying to do all just for the credit and say "I" or "me" when it should be "we" or the "crew" or "us"
- To be more educational for the individual tech rather than being an opportunity to downgrade or ridicule another person.
- It helps us know where we are doing well, and where we could use improvement.
- Quality improvement means we will provide the best possible care to our patients. Our system here reviews each PLR and deficiencies are brought to the attention of the EMT/Paramedics. Discussion is encouraged and reviewed calls are kept on file and often used in training sessions.

Finally, public education in responding to emergencies complements the training. In rural Sullivan County time is extremely critical. The first person on the scene of an accident or acute illness may not be a trained EMS provider. That makes First Responder Training enormously important. New York State Police, local police, constables, firemen, family members, school officials, students, and coaches are all likely to arrive on the scene first. Training them to deal with the emergency until the EMS providers get there should be a priority.

A role the Sullivan County Rural Health Network is addressing is the need for an Immediate Response, which is always present. Because it is virtually impossible

to predict when and where someone will be when sudden cardiac arrest occurs, the Red Cross, the American Heart Association and others have recommended the widespread deployment of AED's in highly-trafficked public places such as airports, sports stadiums and large office buildings. New York State Legislature has just passed a bill calling for AEDs to be retained on school premises. New York State Senator Bonacia has arranged for a "Member Item" in Sullivan County that would promote CPR-D training and operation at the grass-roots level.

According to the vice president of the American Red Cross' Health, Safety and Community Services, defibrillation has the most life-saving potential when administered within four minutes of cardiac arrest. If a victim has to wait for a defibrillator-equipped ambulance to arrive on the scene, his or her chances of survival drop by 10 percent each minute of the delay. If an AED and a trained responder are available on the scene, the victim's chances for survival increase dramatically.

After 10 minutes of cardiac arrest, very few resuscitation attempts are successful, which shows that the most important element in the treatment of Sudden Cardiac Arrest (SCA) is providing rapid defibrillation therapy. In sudden cardiac arrest the heart goes from a normal heartbeat to a quivering rhythm called ventricular fibrillation (VF). This happens in approximately 2/3rds of all cardiac arrests. VF is fatal unless an electric shock, (defibrillation), can be given. CPR does not stop VF but CPR extends the window of time in which defibrillation can be effective.

Even if CPR is started within 4 minutes of collapse and defibrillation provided within 10 minutes a person still has only a 40% chance of survival.

Recommendations For Training:

BLS level

1. Explore creation of an EMS recertification demonstration project for on-going accumulation of continued education hours required for recertification – coordinate 24 hours of core training in four-hour blocks at in 2 or 3 locations, on evenings or Saturday mornings.
2. Create a quarterly countywide emergency medical workshop event – local physicians and other health care professionals to lead sessions on emergency medical topics, such as poisonings, drug overdoses, falls from heights, choking, exposure to severe cold, and cardiac arrest. Each presentation to be followed by a more general question and answer period about responding to medical emergencies.
3. Automatic External Defibrillator (AED) training
4. Create a Sullivan County EMS Coordinator position with stipend – responsibilities to include enhancing ALS level training and promoting paramedic service upgrade. Many counties have established this position. (See organizational section).

5. Research EMS “Best Practices” of training models in New York State and Nationwide.
6. Suggest specific accessible approaches for training to New York State representatives.
7. Provide BLS and ALS training on a rotating basis in different locations across Sullivan County.

ALS level

1. Placement of ALS personnel in the hospital emergency room with a shared staff arrangement
2. Tuition arrangement with local community colleges

Captain and leadership level

1. Have Sullivan County Rural Health Network members share training events on financial, management, fund raising, quality management, conflict resolution and leadership with the volunteers.
2. Research EMS “Best Practices” of training models in New York State and Nationwide.

Public education and expansion of emergency training to other health professionals

1. Work with Red Cross or American Heart Association to promote the use of Automatic External Defibrillators ~ Train hundreds of “bystanders” in CPR-D and place AED’s in strategic locations in the county.
2. Work with BOCES and the high schools to promote basic training to youth.
3. Initiate Certified Emergency Nurse (CEN) certification programs to 75% of nursing staff at the Grover M. Herman Division
4. Offer Pediatric Advanced Life Support, (PALS). It is a program that teaches a systematic, organized approach for the evaluation and management of acutely ill or injured children. Early identification and treatment of respiratory failure and shock in children improve survival, from a dismal 10 percent to an encouraging 85 percent.
5. Recommend nursing staff have exposure to in-field prehospital experience

Recommendations for Quality Improvement

1. Utilize Patient Care Reports (PCR) to provide feedback from medical staff regarding emergency transports by EMS volunteers – emphasize positive following of protocols and also document areas of concern
2. Periodic meetings between hospital medical staff and squad captains and other EMS volunteers.

C. ORGANIZATION AND COLLABORATION

Once an issue is identified it is easier to address and resolve through collaboration. The 1980's saw an increasing problem in the staffing of volunteer ambulance services. Particularly problematic was, and continues to be, the inconsistent daytime coverage.

Nationwide, the majority of requests for service are received between the hours of 6 a.m. and 6 p.m. In some areas, two-thirds of the calls are received between these hours. The services that are covering their calls are often relying on a handful of people to accomplish this. This quickly overburdens these people. Pressure comes quickly on these people from family members and/or their employer that is releasing them from work to cover "just an occasional call". Many services have had to abandon providing non-emergency transfers for their residents at some cost in community support.

In some areas, it may be necessary to contact several squads before an ambulance becomes available to respond to life threatening emergencies. This has been affectionately referred to as "volleyball". Ironically, long response time was why many volunteer services were formed in the 1950's and 1960's. Some services are now calling commercial services or relying on inadequately staffed

fellow volunteer services to cover calls, but response times are often too lengthy for life threatening calls.

Additionally, these situations are quite stressful to the police and first response fire services that are put in the position of having to attempt to explain to distraught families and bystanders why there is no ambulance. Equally disconcerting is that these services are delayed at ambulance calls, and are less available to fulfill their primary mission.

The two main organizational challenges for EMS in Sullivan County are:

1) Expanding ALS coverage, particularly in the western part of the county; 2) establishing a stronger countywide coordinator position for both BLS and ALS service.

First, the Catskill Regional Medical Center Grover M. Herman Division in Callicoon, working jointly with mutual and reciprocal respect, could enhance the access to Advanced Life Support (ALS) that is especially needed in Western Sullivan County. This could be done by collaborating with the key players to hire a shared Paramedic staff for the emergency department at the hospital in Callicoon, 24/7 and by supporting a fly car.

A collaborative effort of stationing an ambulance/Fly Car at the hospital in Callicoon would have beneficial results. Response time for ALS in the Western part of the county would be reduced and transfers to and from Emergency Department could be handled in an appropriate and opportune manner. When the volunteers were asked, 62% stated that adding paid paramedic fly cars would have a positive impact. **(Volunteers, # 18)** When the captains were asked, 62% also stated this would have a positive impact. **(Captains, # 12)**

The need for enhance Advanced Life Support (ALS) service through the stationing of a fly car, is also documented by the current variation in response times for ALS service in the more rural areas of Sullivan County. **(Captains, #6 and #8)** Among the areas most isolated from immediate Advanced Life Support (ALS) are Beechwood, Callicoon, Falls Mills, Hortonville, Lower Beechwoods, Kenoza Lake, & Upper Beechwoods.

Second, there is a growing need from a recruiting, training and coordination perspective, for a countywide EMS coordinator who receives a stipend. As set forth in the first recommendation of Linda Beeman, RN, CPHQ, “A Sullivan County approved EMS office with paid personnel would legitimize the work of the now unpaid EMC Coordinator and could provide leadership, technical assistance, assessments of patient trends, continuing education, community relations and management capability.”

Developing a working relationship with the media is key. Many health and human serviced organizations have achieved this skill and could help. A single public information officer appointed by the EMS Coordinator could work with the media. Many services could benefit from sending a representative to other community organizations. Church, civic, business, and retired citizen groups are common to most communities and provide an excellent opportunity for volunteer ambulance services to "preach their gospel." These organizations can be an excellent source of volunteers. EMS services should broadcast a message to the schools. The use of puppets and robots for young children and straight-talk to high-school students can be very powerful. Some EMS services have even convinced school boards to require all capable high school graduates to be CPR certified.

The support of local elected officials, municipal managers/leaders is also important. Maintaining support levels often requires lobbying on the service's part. Another community group that needs attention is business. Their resources may be release time for volunteers to answer calls, modest wage increases for volunteers, manufactured products, used tools/equipment, employee newsletter access, computer access, equipment/vehicle service, gift certificates, retired employee mailing lists for recruiting possibilities, financial, managerial,



accounting, legal, or administrative expertise, facility space for fund-raising events, etc. The list is limited only by one's imagination.

Please describe how helpful the following agencies are to you – the leader of a volunteer EMS service (If you have no interaction with an agency, check ‘not applicable’)

Rating	Number
5	Extremely helpful
4	Very helpful
3	Neutral
2	Little help
1	No help

Bon Secours ~ “5”

Ellenville ~ 4.5

Sullivan County Sheriff’s Department ~ 4.2

Sullivan County 911 ~ 4.0

One additional item is the need to assess the quality of the dispatch radio. As recommended by Linda Beeman, “All emergency personnel who answer EMS 911 calls should have instruction in emergency medical dispatch (EMD) to make certain that essential first aid and medical advice is known to callers before the emergency responders get to the scene.”

Organizational recommendations

1. Place ALS personnel and vehicle at Catskill Regional Medical Center Grover M. Herman Division in Callicoon for western part of Sullivan County in a shared staff arrangement
2. Expand the county EMS coordinator position and provide a stipend
3. Develop a ground swell of community by-standers trained in CPR-D.

Collaboration recommendations

1. EMD training for personnel answering EMS 911 calls



Sullivan County Rural EMS:

An Assessment of Pre-Hospital and Emergency Department Interface

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Summary

The health care mission of EMS is accomplished using the principles of public health and public safety systems. Prehospital care does not exist in isolation but should be integrated with the providers of continuous health care. EMS of the future will be community-based health management that is fully integrated with the overall health care system.

The purpose of the assessment is to determine the most important directions for future improvement and development of the prehospital and Emergency Department interface at Community General of Sullivan County Grover Hermann Division in Callicoon. This assessment and the following recommendations suggest further development of the following attributes.

- EMS Integration
- Legislation
- System Finance
- Human Resources
- Medical Direction
- Education Systems
- Public Education
- Public Access
- Communication Systems
- Clinical Care

Information Systems

Evaluation

Community General is a Critical Access Hospital in Callicoon, Sullivan County. The Emergency Department at Callicoon handles an average of 300 visits per month during the tourist season and about 2400 visits per year. Thirty percent (30%) of Emergency Department visits lead to admissions to the hospital. The Emergency Department staffing appears appropriate for the volumes. The professional staff is ACLS certified and MD's are available on call. The Grover M. Herman Division is in compliance, however there is no medical control originating from Callicoon, which leads to a perception problem with the EMS volunteers.

Analysis

Integration of health care services helps to ensure that out of facility care meets the immediate needs of the acutely ill and injured to provide stabilization and transportation to an appropriate level of care. Sullivan County EMS must expand its role and develop ongoing relationships with other health care provider organizations. This will benefit patients by enhancing and maintaining the continuum of care.

Legislation and its resulting regulations are central to the provision of EMS. Regulations affect funding, system designs, research, and credentialing/ scope of practice of EMS personnel. There is a federal lead agency mandated by law, which directs EMS development. All states have a single lead agency responsible for ensuring that EMS is of acceptable quality and is available to the population. In New York State, the lead agency is the Department of Health Bureau of Emergency Medical Services, with Edward Wronski, Director.

EMS systems must be financially viable. Providing the population with EMS is a huge effort with many variables. EMS systems must continually determine and improve their cost-effectiveness and evaluate trends within the health care system as a whole.

Many people with greatly diverse backgrounds contribute to the efficient operations of EMS systems. The number of EMS volunteers is decreasing for many reasons including difficulties of recruitment and retention, the time and training commitment, recertification process, occupational risks, aging volunteers, burnout, limited mobility, sub optimal recognition and inadequate compensation (explicit and implicit). Both volunteer and paid personnel are affected.

Medical Direction involves granting authority and accepting responsibility for the care provided by EMS. Quality medical direction is an essential process to

provide optimal care for EMS patients. This is especially important in rural areas where personnel spend longer times transporting patients and are often volunteers trained at basic levels.

EMS education employs sound educational principles and sets up a program of lifelong learning for EMS professionals. Public education is a responsibility and essential activity of every health care provider and institution.

Public access is the contact of EMS with a perceived requirement for care. In Sullivan County, the 911 system has been implemented. Calls received are triaged so the resulting output gives the appropriate response team. Protocols have been developed to provide resource allocation that is tailored to patient's needs. The vast rural terrain plays a part in a timely response of the EMS providers and a safe delivery to a higher level of care.

Clinical care delivered by EMS has evolved over the years to include Basic life support, Intermediate Care and Advanced Life support (ALS). There is one paid ALS provider, Mobilemedic, in the county that also provides transport service from the hospital in Callicoon to the larger affiliate hospital, Catskill Regional Medical Center, in Harris, among others. These transfers are not always timely. This time delay is related to the placement of the ALS vehicles in the county and other emergency calls that are answered en route to the transfer.

Information Systems share information between EMS systems, health care providers, provider networks and other public safety agencies. These systems enable EMS to access patient related data necessary to optimize clinical care, transport disposition and destinations. They provide mechanisms to transmit information to other health care providers and community resources that are part of patient's continuum of care. Rural terrain makes cell phone usage unreliable. Radio communication with EMS personnel and the Emergency Department at Callicoon is accomplished adequately.

Evaluation is the essential process of assessing the quality and effects of EMS so that strategies for continuous improvement can be designed and implemented. This process should include customer satisfaction to ensure that EMS providers are adequately meeting the expectations of the population they serve.

Recommendations

1. There are improvements to be made in the visibility, compensation, and the assistance of the EMS lead agency in Sullivan County. A Sullivan County approved EMS office with paid personnel would legitimize the work of the now unpaid EMS coordinator and could provide leadership, technical assistance, assessments of patient trends, continuing education, community relations, and management capability. Quality reviews from

- the PCR's should be reviewed with Emergency Departments and EMS personnel so that continuous improvements could be made related to following protocols for care and treatment or documentation concerns.
2. These evaluations could lead to an increase in financial resources to provide improved care in the prehospital setting. The National Highway Traffic Safety Administration, Health Resources and Services Administration, Medicare reimbursement, Federal and State Office of Rural Health should be investigated concerning grant funding specific to emergency conditions or situations, shared billing and purchasing.
 3. There is a need in Sullivan County for adequate preparation of EMS personnel to provide health care services. BLS and ALS protocols should be reviewed and revised and adopted throughout the area. There seems to be an adequate system for critical incident stress management and a collaborate relationship with the local community college. Education and training should incorporate injury prevention; involve area health centers and community colleges. Training resources for EMS Captains particular to leadership, personnel and organizational management, volunteer recruitment, retention, and planning should be developed in conjunction with the State Emergency Management Office.

4. Medical Control is the physician oversight and leadership of emergency medical services systems. In Sullivan County there is no tangible medical control originating from the hospital in Callicoon. This creates a need to appropriate sufficient resources for EMS medical direction. The possibility of improving communications and relationships between EMS squad Medical Directors and hospital medical directors should be considered. Dr. Paul Salzberg serves as the Medical Director of the Emergency Department at the Grover M. Herman Division. The NYS Department of Health Medical Control Memo and the regional Medical Directors responsibilities should be reviewed and the relationship between prehospital and emergency departments strengthened.

5. Educational programs and recertification should provide core contents with additional augmentation for local circumstances. Higher-level EMS education should include quality improvement, research and management techniques that would facilitate better working relationships between the providers of prehospital/emergency care. Access to education should include investigation into long distance learning technology. This would assist with travel and time constraints of the volunteers.

6. EMS should collaborate with other community resources and agencies to determine public education needs. Such an assessment would enable

development of education programs and community awareness programs with specific objectives appropriate for the county. Broad-based community coalitions are necessary to support public relations and prevention education activities. For example, school based awareness programs from K through 12th grade with information on: calling 911, ~ who are EMTs, ~ what is in that truck, ~ career and community service opportunities. Sullivan County Rural Health Network dose collaborate with American Red Cross / American Heart Association to teach “by-standers”, (employees, teachers, janitors, ministers, cashiers, mechanics, etc.) CPR-D and First Responder classes. This is a fundamental community project for the rural health network. Rural health networks know that after each minute that passes after an individual collapses from a heart problem, there is a ten percent (10%) increase in mortality. The recommendation is to provide the Automatic External Defibrillators, equipment to lay responders (i.e., the public) in order to affect an increase in survivability. With proper training you would be enabling a layperson to better affect survivability rates in out-of-hospital cardiac arrests. Studies on AED utilization have revealed a great increase in survivability, which rose from one percent (1%) to approximately seventy-five percent (75%), when utilized by trained laypersons. Law Enforcement personnel at the state, county and local level could be taught CPR-D or actually be trained to be a first responder, considering they usually are the first ones on the scene.

7. Using the Sullivan County BOCES education model, EMS leadership could establish an EMS Youth Corps as a long-term recruitment and retention investment.

8. An Advanced Life Support provider should be encouraged to respond timely to Callicoon for a more acceptable transfer time to a higher level of care. Liabilities related to patient outcomes are a major concern. The Grover M. Herman Division in Callicoon could work with the western regions EMS providers to develop an innovative community-specific role for ALS personnel, which might better meet the needs of the western county community. Placement of ALS personnel and vehicle in the western part of the county or integrated at the hospital Emergency Department with a shared staff arrangement should be recognized as an important innovation in the larger system. Planning for this type of paramedic integration must include how to obtain the resources to pay for them.

9. Integration of all licensed and certified health care providers should be promoted to support the rural health care delivery system, especially in emergency situations.

10. The quality of the radio communication is questionable. It is understood that new cell towers are on the horizon, still no one knows when. Possibly the purchase of a new communication system should be considered. Health officials at all levels should promote technology infrastructure systems that would guarantee that emergency telecommunications are available in rural areas.

11. All emergency personnel who answer EMS 911 calls should have instruction in emergency medical dispatch (EMD) to make certain that essential first aid and medical advice is known to callers before the emergency responders get to the scene. This is especially important in this rural area.

12. Sullivan County EMS system and the services provided at Grover M. Herman Division in Callicoon should have as its underpinnings the needs and medical resources of the community, as well as substantial flexibility.

13. Development of a customer satisfaction survey with implementation could show areas in need of improvement and reveal the communities needs related to the EMS system.

14. The Sullivan County EMS systems should consider developing an outcome-based quality analysis for their decision-making and problem solving process.



Sullivan County Rural EMS:

An Assessment

CONCLUSION

By RURAL HEALTH RESOURCES

CONCLUSION

In order to build on the dedication and experience of the EMS volunteers, everyone in the corps needs to access outside resources better. Services need to loosen up their membership categories, be open to individuals that do not want to staff ambulances, but have special skills of value to EMS service.

Effective management practices are absolutely necessary. Networking among service leaders should occur on an ongoing basis.

Essential to continuous growth and development of EMS squads are training and quality improvement. EMS volunteers need direct feedback on their services in order to learn and grow in the task. Specific medical feedback on patient outcomes after EMS involvement should be the objective. Placement of Advance Life Support, Critical Care or Paramedic level staff in emergency rooms, has potential to resolve several service delivery issues and should be seen as a win-win situation. It would enhance response time, contribute to improved communication with EMS providers, offer constant and positive feedback, and is a practical way of cultivating better procedures and potentially upgrading EMS – Emergency Department teams. The Grover M. Herman Division in Callicoon, working in cooperation with the EMS systems in the western part of Sullivan County could enhance access to Advanced Life Support (ALS). Collaboration is key. The idea of a shared Paramedic staff for the emergency department at the

hospital in Callicoon, 24/7 and supporting a fly car should be seriously considered.

A great opportunity for the volunteers and their leaders to network or benchmark is use of the Internet system. Distance Learning is yet another form of communication that will grow tremendously and has great promise for volunteer services. The addition of administrative training programs will assist the leadership of the services to stay informed and be prepared for the changes that continue to confront EMS units.

The value of securing and maintaining strong community bonding is critical. The volunteer ambulance "gospel" must be presented to the public to capture and maintain this community support. Service leaders also need to learn how to work more cooperatively with outside health and human service organizations and invest more time in planning for the future. It is hoped that this Assessment will be a useful tool in this planning.



Sullivan County Rural EMS:

An Assessment

APPENDIX

By RURAL HEALTH RESOURCES

FOR THE SULLIVAN
COUNTY RURAL HEALTH
NETWORK

SURVEY OF VOLUNTEER EMS PROVIDER AGENCIES

SEPTEMBER – DECEMBER, 2001

A report prepared by HealthAnalytics, LLC



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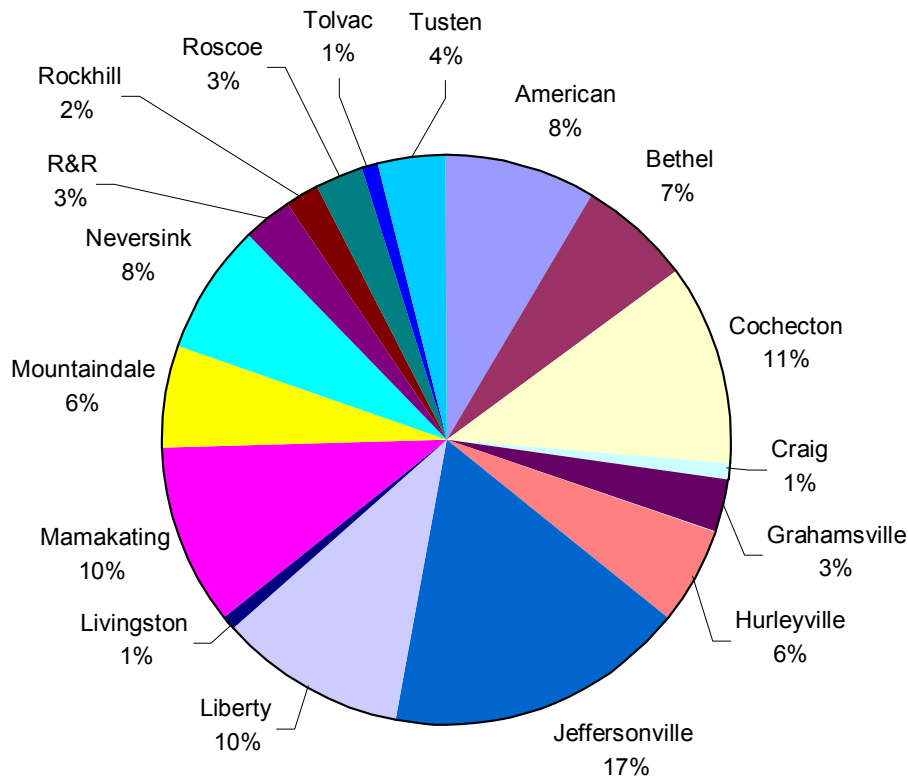
Introduction

This survey of the Sullivan County EMS System was conducted by HealthAnalytics under contract with Rural Health Resources.

Two survey instruments were used. The first was a survey form completed by individuals working for volunteer EMS providers organization serving Sullivan County. One hundred fifteen (115) volunteer surveys were received for analysis. The second survey form was completed by captains or chiefs of volunteer EMS providers organization serving Sullivan County. Eight (8) Captain/Chief surveys were received for analysis.

Results – Volunteer Survey

1. *What is the name of your volunteer ambulance company?*



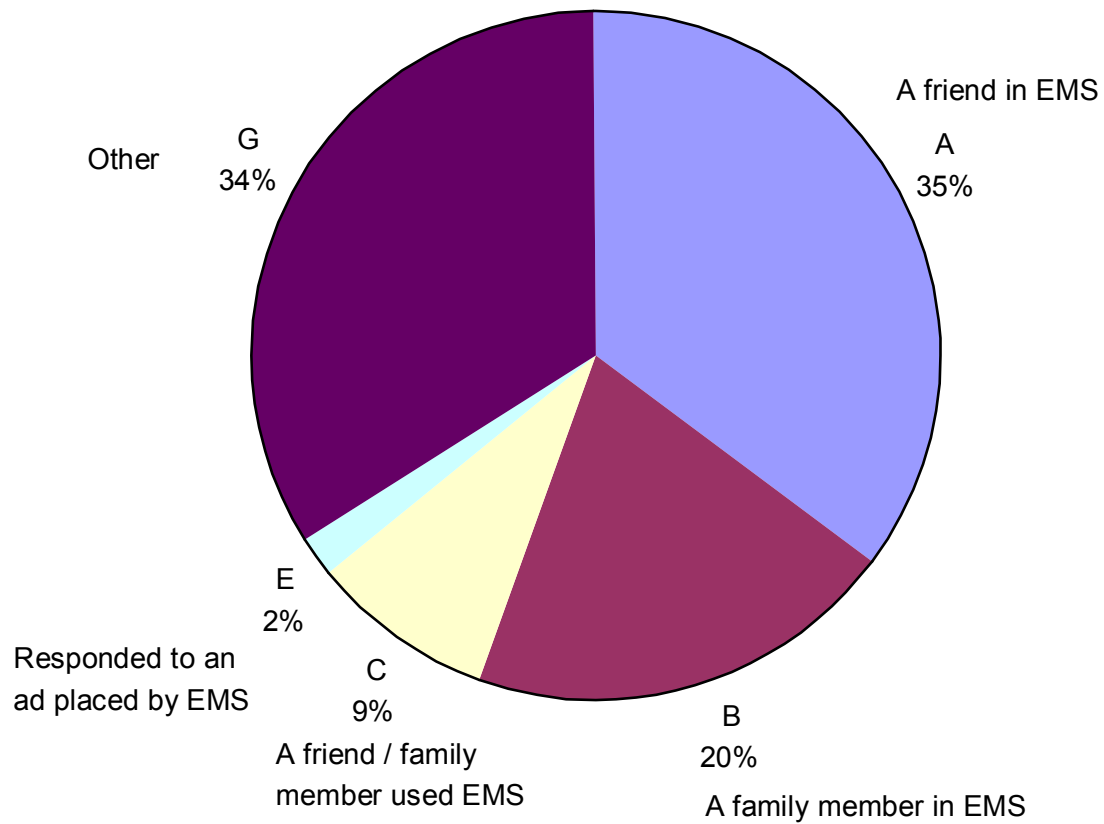
2. Are you involved in other EMS agencies?

17% replied yes; 83% replied no

3. If yes (to question 2), is it volunteer or paid?

80% replied volunteer, 20% replied paid

4. What originally attracted you to EMS volunteering?

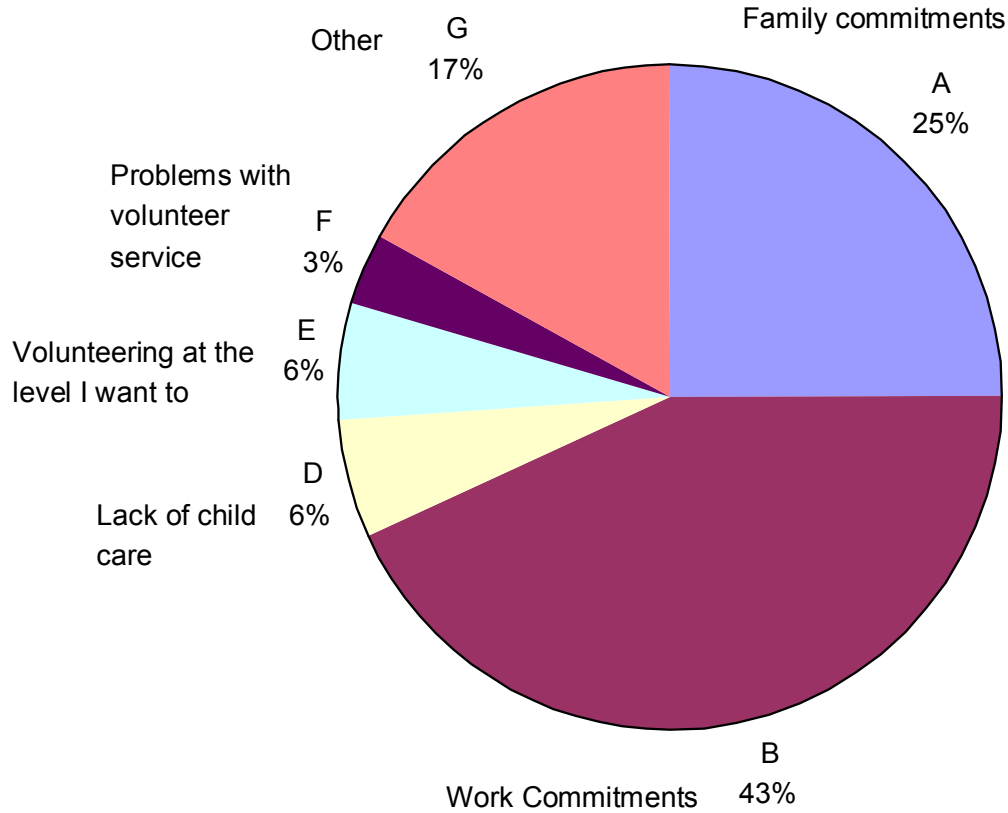


Information given by respondents verbatim for “Other”

- when I got hit by a car
- long standing interest in EMS
- captains from Fallsburg and Hurleyville came to my place of work & asked for volunteers
- college brochure received in mail
- college flyer received in the mail
- wanted to be of help to my community.
- formation of ambulance service
- I was in an accident.
- Family not in EMS
- personal desire for community service
- provide service to community
- wanted to help people within the community
- noticed other ambulance's in our town because ours couldn't get a crew
- family member critically ill-no training to assist at that time
- wanted to help people
- free CPR class
- to help my community.
- need to help
- volunteer firefighter
- went to class because no one else in FD would.
- member fire company 17 years many calls needed EMS skills
- wanted to help in the community
- asked to join by President & Capt. 1st female non veteran on all male veteran volunteer corp considered it an honor to be asked
- my family is involved, so I decided to join, because I love helping those in need.
- cross training from fire rescue
- I wanted to help sick/injured people.
- job
- husband was very sick amb service was very good to him. I wanted to give something back.
- EMS' response to a family member's injury
- wanted to utilize first aid training received from Red Cross & react
- original member
- work for a hospital & an ambulance co.
- community involvement
- need
- mass casualty
- interest
- already a firefighter

- wanting to help my community
- Fire Dept

5. *The primary factor that keeps you from volunteering more hours*



6. *I envision volunteering for ___ more years with my service.*

Average = 19.3 years

7. *Is your paid employment within 20 minutes of your ambulance squad station?*

Yes = 64%

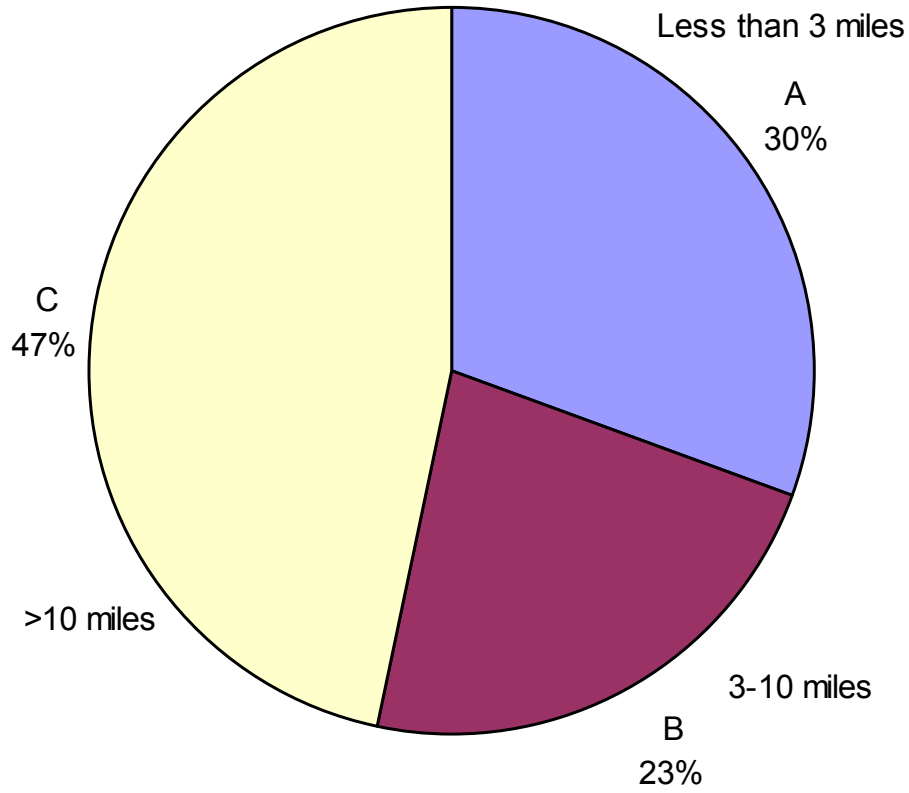
No = 36%

8. *If yes to the previous question, does your employer allow you to leave work to answer EMS calls?*

Yes = 42%

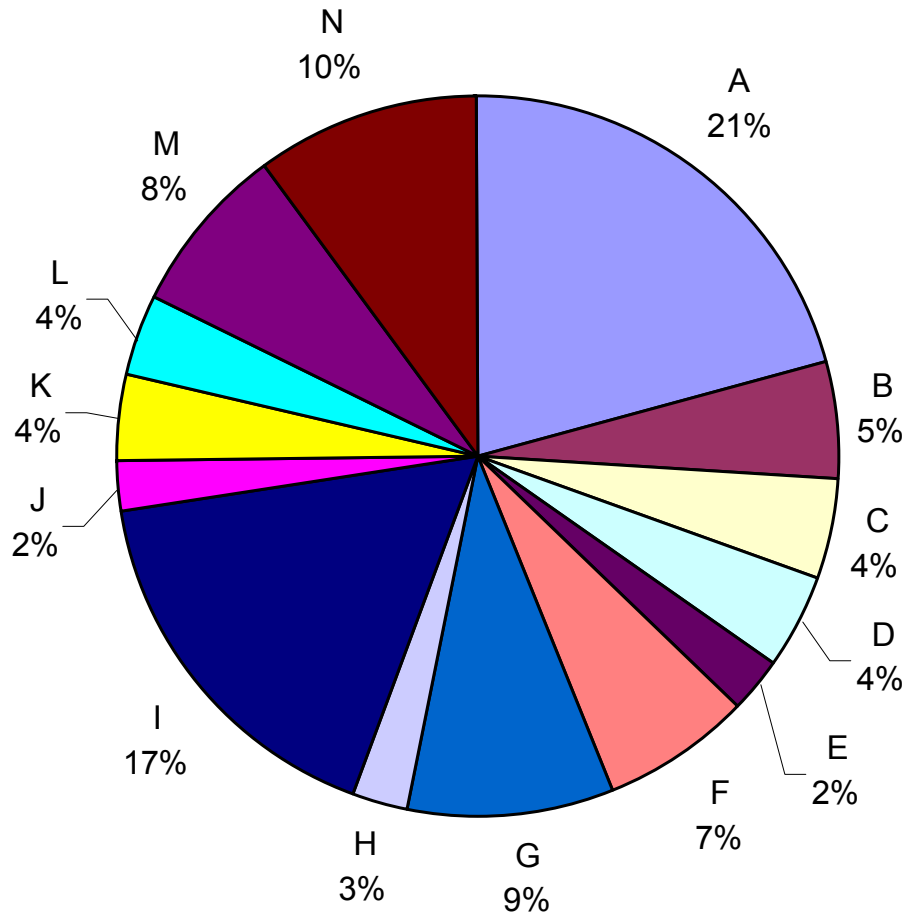
No = 52%

9. *How many miles is it from your employment to your ambulance squad station?*

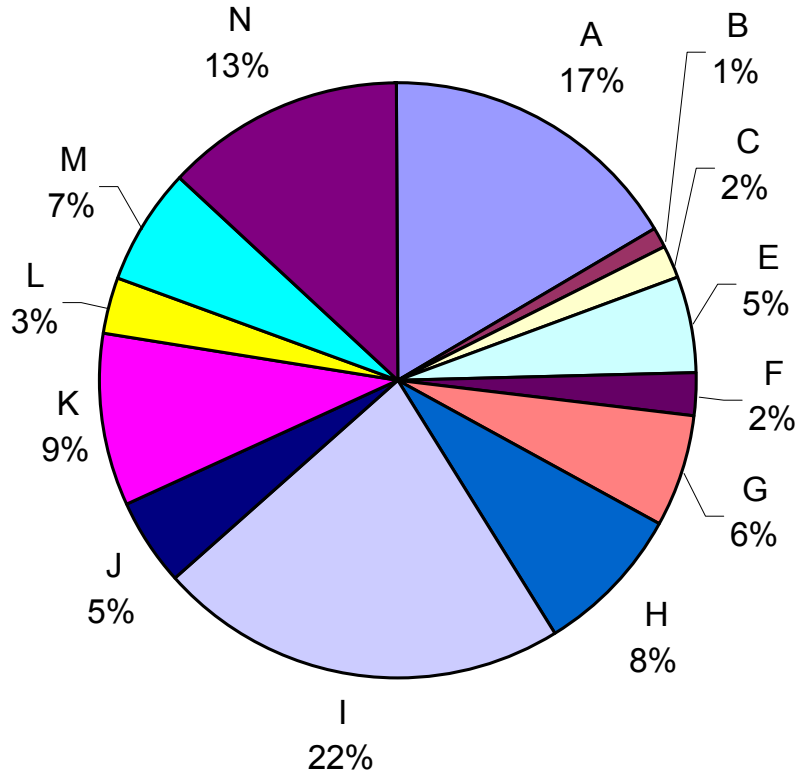


- | | |
|--------------------------------------|--|
| a. Volunteer retention | h. Conflict management within the service |
| b. Customer service | i. Volunteer recruitment |
| c. Meeting NYS regulations | j. Strategic planning |
| d. Financial management | k. Public education |
| e. Fund raising | l. Quality management |
| f. Having the best medical equipment | m. Continuing education |
| g. Meeting volunteer needs | n. Communications between leaders and volunteers |

10. Which three issues from the above list do you believe are the most important to the success of a volunteer ambulance service?



11. Which three issues from the above list do you believe your department needs the most improvement in?



12. What do you consider to be acceptable BLS / ALS response times for a serious medical call that occurs one mile from your station (Response time in this case means the amount of time from your pager activation to arrival of an EMT with defibrillator for BLS, and arrival of a EMT-CC/P at patient side for ALS)?

Average of replies for BLS = 7.48 minutes
 Average of replies for ALS = 9.75 minutes

13. How could your department improve response BLS / ALS response times in your community?

Information given by respondents verbatim:

- Our dept. has it's own paramedics
- Our squad has the best response times in the county
- mandate house numbers to be posted and visible from the road
- have the crews and ALS service at base at all times
- our response time has never been a problem day time crew-problem
- this corp has an exceptional response time to most calls
- they could have a crew at the building for eight hour shifts.
- having enough volunteers to have a 2nd crew in quarters at all times. Currently we have a primary crew and EMTP's at the bldg at all times
- we stay at our building when on call and I don't feel we have a problem with our response times.

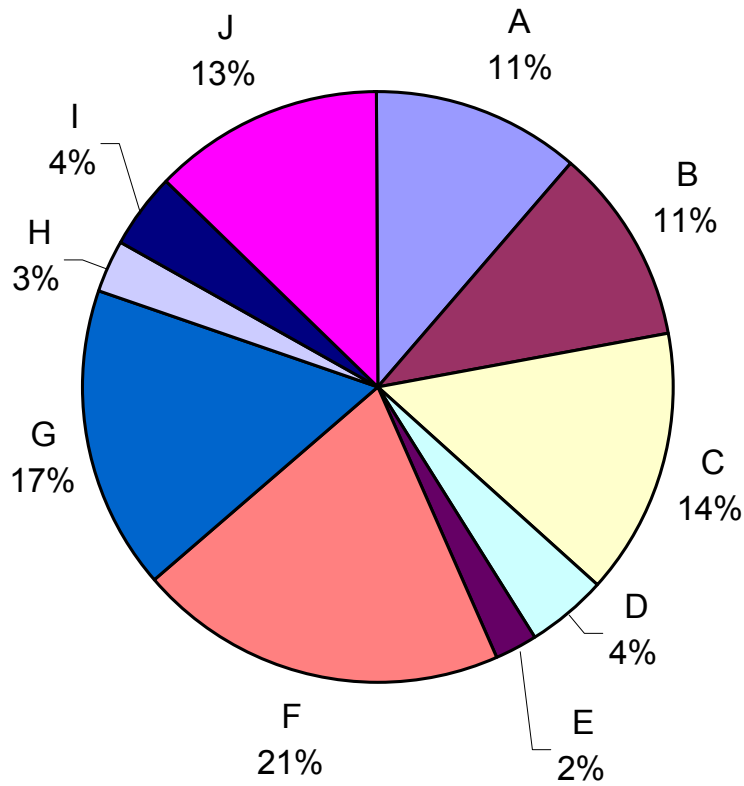
- consolidate all the squads into one county wide squad funded by taxes and having paid paramedics and EMT's.
- more volunteers available
- more personal
- become a higher level ALS dept
- if people were based at the station all the time the response time could improve. However, that is not feasible with a volunteer service with a limited number of members who cover many shifts.
- we should have a crew on standby at all times.
- paid local crews
- closer available ALS
- don't know
- having paid crew at base
- crews at base
- more active volunteers not burnt out ones.
- we could have BLS providers that go on calls & not miss. ALS care usually speedy
- have volunteers at the station
- depends which area & where they coming from
- by having more people available during the day to respond to calls
- no improvement needed
- have a manned day crew(BLS) have a fly car in the area(ALS)
- more volunteers
- have more ALS closer to our base location
- unknown
- could improve ALS time by having paramedic squad closer.
- more people ,better paging system from the county, not all pages are heard everywhere; ALS: we should be able to use the closet ALS unit available at all times, not just when the county & certain ALS corp determine it
- we responded in ?? Time
- recruit area merchants
- closer ALS
- they are already good for BLS ALS needs a fly car system
- BLS-crew on-site ALS-Local fly car
- fly car for ALS
- recruiting more volunteers
- BLS response times could improve if we had more people at the organization possibly becoming a billing agency & hiring EMT's would help However, I'm not sure how the current members would respond to become a billing agency as far as ALS geographically the area is huge to cover with only 2 ALS agency. It would help have more competition for ALS assist.
- having an ALS service closer to us if not our own
- fixed squads our area subject to severe weather travel restrictions create problems
- have our own ALS
- give small volunteer agencies the ability to become ALS agencies. We don't live in an urban area-ALS counts, but our local system does not
- have on duty/at station/volunteer crew 24/7

- have members that can respond all times
- more defibs & 2 way radios to complement 02/firstaidkits that members have so member can go to a scene ahead of ambulance. The state to help us set up our own ALS service.
- more daytime rides, don't forget-we have snow & bad roads & wildlife(deer) in winter which increases response times for all level of svc's. Lets be realistic-in our county each vol agency covers a large area-w/the commercial svc on average of 25 min away & we response time aprox 14 min to response from initial page
- by having ALS on our corp.
- more volunteers with flexible work hours
- help to make volunteering worthwhile so more ppl will join. Give more competition to the ALS provider in our area.
- have more EMT's available all hrs of the day and night. Also having a commitment by the EMT's to 1st respond to the scene when practical
- having more EMT's first respond with the equipment in their cars.
- more than 1 ALS provider more volunteers.
- stay at station on your shift. If you had shifts
- we generally do a good job with this
- getting people to respond
- I think the response times are excellent 90% of the time.
- we are an Intermediate corp so can have start of ALS quicker than prior 2-4 mins. Have already done this by having 1st response by members directly to scene because we have such a large rural area in many cases the fastest response is greatly than 5-10 minutes depending on EMS's location from victim
- more volunteers
- our response time are usually within 4-5 mins. in our community because some of our members live with in 2-3 miles from our station.
- set crew hours a dependable ALS service
- our department has good response times.
- response time is already very good
- in a small dept. in a large area you can't do much more.
- by having a paid staff 24/7 at building.
- having a full crew at all times in quarters
- get more crews to be at base rather than respond from home.
- need more volunteers during day
- use helicopters
- BLS-not waiting on apron for secondary persons (4th's &/or drivers) ALS response time is adequate in our district. & given the territory we cover it often takes a min. of 20 min. to get to a scene & that is at high speeds.
- more active members and more members who are around during the day-or paying day crews and billing insurance companies & Federal/State Health Programs
- do not know
- sullivan county radio system is outdated, too many other radio systems on same freq. Should have repeater system so we can talk to each other. Dispatch information often inaccurate. Need better digital maps for EMS.
- couldn't
- ALS fly car

- set crews ALS in town
- have a set crew-ALS stationed in the area
- EMT should go to base or call, which ever is closer.
- I think our dept. actually has excellent response time. Almost always a full crew on 1st page
- people that do not live close to base should go to the scene
- having people on call ex assigned days
- our dept usually has great response times.
- county dispatchers doing their job -many times dispatchers have no clue about location- nor do they care - fully equipt first responders
- have more personal
- our response time is usually very good. Especially ALS. BLS needs more volunteers. Most of our time is spent waiting for responders.
- We need more of our members to be more active and ALS units placed more strategically in our area. Within a 10-15 mile cover area
- we are a organized company & usually have no problem getting a crew!!! And our ALS is usually very prompt!!
- have a schedule & more active members. We are BLS
- our department does not usually have a problem getting a crew together, and our response times are reasonable.
- get ALS closer to town
- I think we are doing our best
- get more members
- more volunteers for all shifts we have a very good system already -we provide our own paramedic system and they are on the scene in an average of 6 min. or less
- we need more volunteers with quality time to volunteer than time.

14. From the following list, please check what you believe are the three most valuable volunteer benefits

- | | |
|--------------------------------------|---|
| a. Recognition within the department | f. Reimbursement for education/training |
| b. Property tax break | g. Recognition in community |
| c. Squad level training | h. Motor vehicle registration |
| d. Awards banquets | i. Child/elder care |
| e. Uniforms | j. Other community support |



15. *What is your age and gender?*

Average age = 41.3

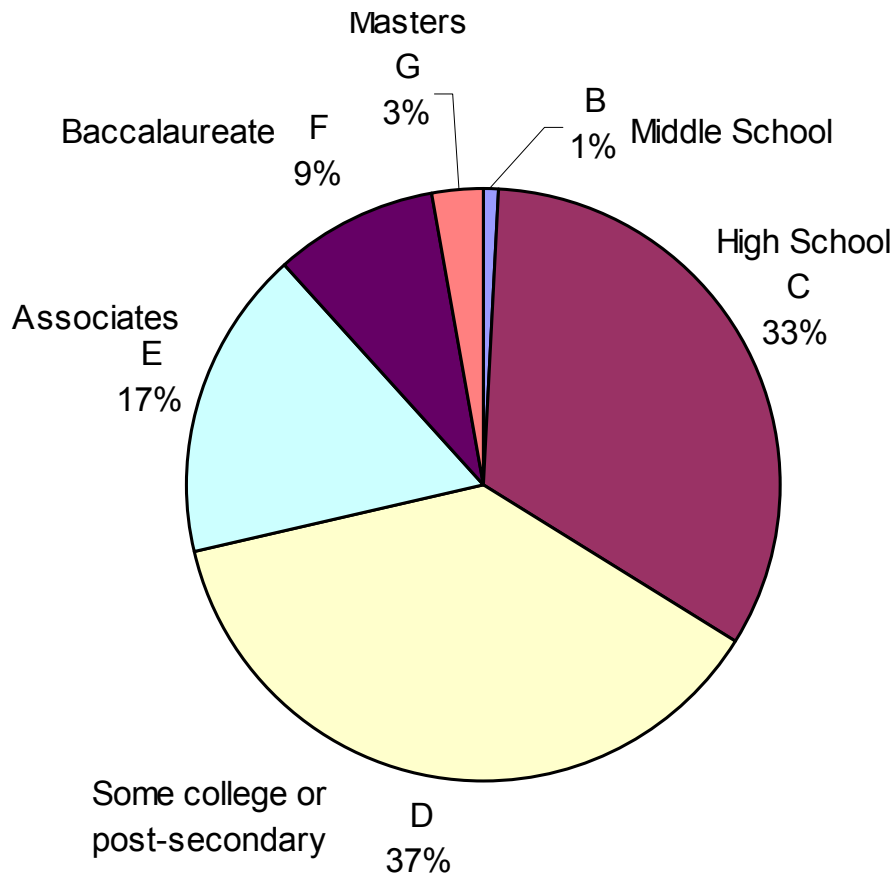
Males = 50.5%

Females = 49.5%

16. *How many years have you worked in EMS (based on total time served in a volunteer or paid capacity)?*

Average = 9.8 years

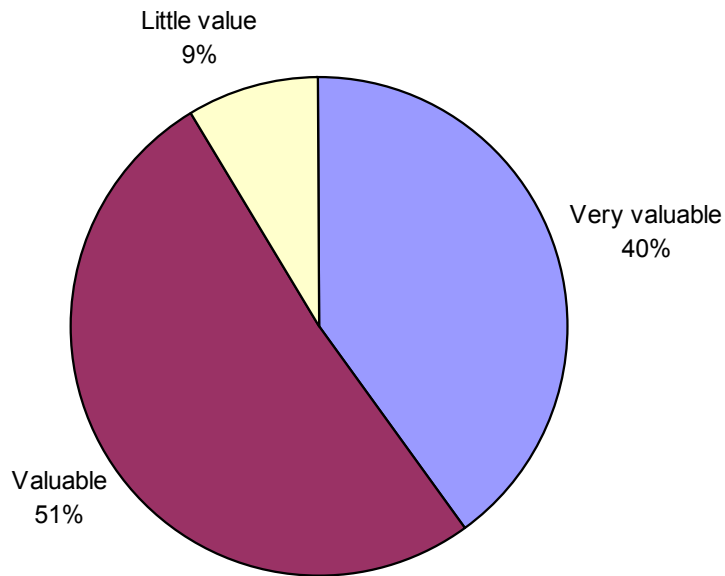
17. *Highest level of education completed*



18. Please rank how each of the following changes in the EMS system in your areas would affect patient care in your community

	Negative impact	Little / No Impact	Positive Impact
a. Increasing the number of EMTs	1%	3%	96%
b. Adding paid staff to supplement volunteers	28%	30%	42%
c. Add additional paid paramedic fly cars	8%	30%	62%
d. Adding paid ambulances to supplement volunteers	48%	29%	23%
e. Merging existing volunteer services	38%	34%	27%

19. How would you rate the value of the quality improvement feedback you receive as an EMT?



20. *Please describe how quality improvement could be more valuable to you*

Information given by respondents verbatim:

- having an ambulance squad who is on their toes 24-7 days a week at all time of the day.
- so I can improve my service more.
- it could help me learn more & be able to help people in a better manner.
- I feel we have a good system here. I learn from my mistakes and learn new techniques from other EMS members.
- improve skills to better treat patients
- improve skills
- help me become a better EMT-I
- if done by more qualified individuals. Our QI was done by a fairly new EMT (3yrs) and I have been teaching EMS for the past 13 yrs.
- quality improvement will help me to be able to perform my duties more efficiently.
- unknown?
- n/a
- it could be more valuable to me because I could work harder on the calls that I go on.
- we need more inventive program from state that encourage to join in volunt. Service.
- if it was done on a set time frame-example: 2 call audits a month
- having no negative comments from some paid ALS units against the volunteer squad
- quality improvement is not available in my squad as a volunteer, half of the members do not know what QI is.
- I'm still in learning process of EMS so all QI is valuable to me
- if it was at my end of the county
- if there was a larger base of volunteers to learn from
- more interagency contact and joint training with fire pd other local amb agency's.
- Following ICS(1-100 guidelines
- In house training was lacking up until 1 yr ago that has since improved but needs to catch up with other agency's in the area. However we are headed in the right direction. Note Hope your response with recruitment & retention survey were more successful than the one the region put out over a yr ago Recruitment and retention is a national issue. I think any agency would benefit from any ideas you may have that would improve this major problem. Some agency's have put up web sites that have helped in getting new members. Most of the problem lies with time commitment. I have worked in the vol-capacity as well as in a paid capacity. Most of my yrs has been as a paid paramedic.. There are no real career ladders defined for EMT's or paramedics. the responsibilities a paramedic has hardly even begins to touch the low pay scale of a medic compared to a nurse. I hope you can come up with some useful advice in how to retain & recruit new members.
- it would better serve the community and relations
- better service
- would like feed back on all calls delivered to local hospital not just the complaints.
- I feel it is detrimental to have private ALS within the same area as volunteer BLS
- make it more accessible to the volunteers so it has little impact on their already busy schedules.

- QI is not the problem at this time. I need more free time to devote to EMS and I don't see that happening unfortunately the people best qualified to serve as EMT volunteers really don't have the time to do it properly. That's the real problem with volunteerism today
- We do QI on a monthly basis and if there is a problem after a call we discuss it right away so our QI area is already great and informative. Thanks.
- have others respond to the scene for logistical and manpower support if needed at any one scene. Would enhance the overall care of the patient in need of medical att.
- I believe in some cases it can be very much a deterrent for volunteer EMS being more added resentment & pressures but on other hand it can be a valuable tool to help improve quality of care given to patient. QI helps to fine tune skills of EMT
- learn more
- as a younger generation of volunteer in EMS improvement would be valuable by keep volunteer organization continuing for years and to help the community and neighboring communities.
- a person learns from their mistakes. If somebody take time to tell you how you could do something better you learn. There is always more than one right way to do the same thing.
- it helps us all to do a better job in caring for the patients we are trying to help.
- toluac system is a good one as is
- the training you need for EMS service need to be less hours so more people would join.
- more fishing time
- sharing of information is always helpful & we can always learn from feedback & change-it helps us to grow. 18B&D of course those services would improve pt. Care do I want to see this NO, will it come to that someday, maybe. But I personally feel nobody knows the people in this rural area better than those who live right here. Those of us who are presently members!
- we need to constantly improve our ability to care for patients, relate to various publics including paid services who want to put us out of business, politicians, the community and other EMS/Fire agencies. We learn this through collaboration, team work and effective PI and PI programs.
- it can not be more valuable than it already is
- better equipment
- quality improvement in equipment would mean better patient care without interruption
- update information update equipment correct dispatch information about call
- the only real quality improvement received was from a paid company. I've seen some really horrible care & documentation from fellow volunteers. I truly believe that the state has made it way to easy to become an EMT therefore having a negative affect on the care our patients our receiving . this is truly a shame.
- to do more hands on
- will direct us on how to better serve the community.
- sullivan county EMS advisory board & EMS coordinator offer little to no help to our services-Harris hospital acts as though there doing you a favor by accepting your patients
- the learning experience-needs to be put on a diff. Night. They only offer Mon. and I have prior commitments
- the more you know, the better prepared you will be. The better the feedback & knowledge given, I believe the better the squad.

- working together as companies (paid or volunteer) to serve our community!!
- if the public recognized us more.
- people need to work together better and work as a group instead of as I've seen in other departments of one person trying to do all just for the credit and say "I" or "me" when it should be "we" or the "crew" or "us"
- to be more educational for the individual tech rather than being an opportunity to downgrade or ridicule another person.
- it helps us know where we are doing well, and where we could use improvement.
- it would improve the quality of our patient care
- Quality improvement means we will provide the best possible care to our patients. Our system here reviews each PLR and deficiencies are brought to the attention of the EMT/Paramedics. Discussion is encouraged and reviewed calls are kept on file and often used in training sessions.
- more training for EMS and fire dep

Results – Captain / Chief Survey

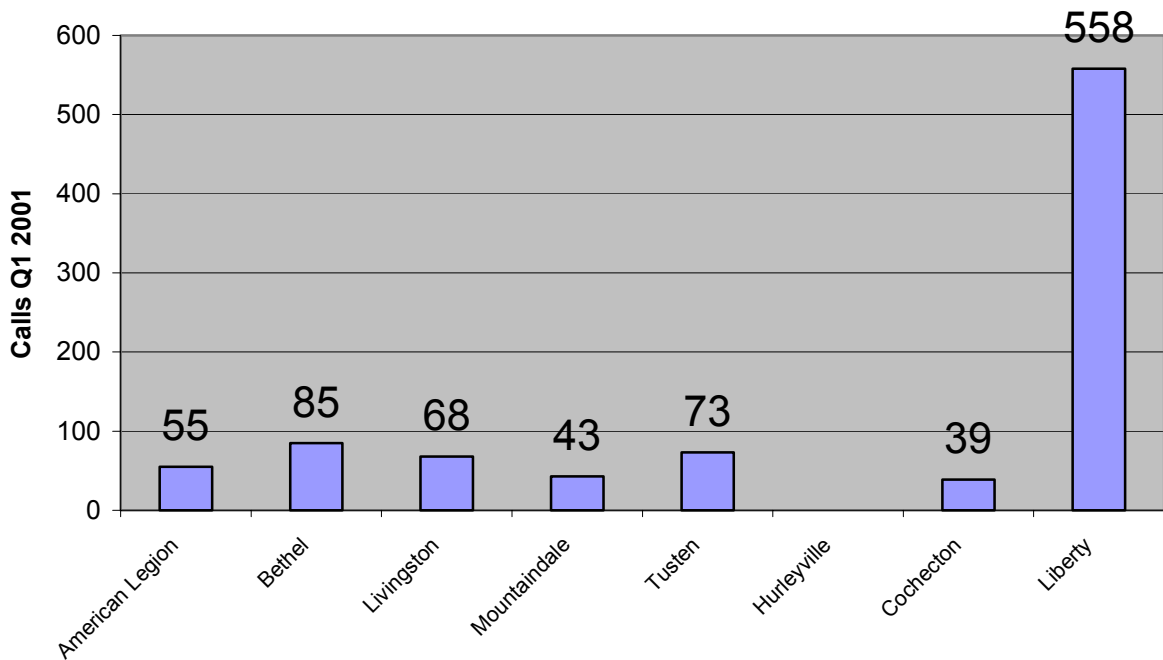
1. *What is the name of your volunteer ambulance agency?*

Participants in this survey were from the following agencies: American Legion, Bethel, Livingston, Mountaindale, Tusten, Hurleyville, Cochection, and Liberty.

2. *Your position*

All participants indicated they were captains.

3. *Call volumes for 2001, first quarter*

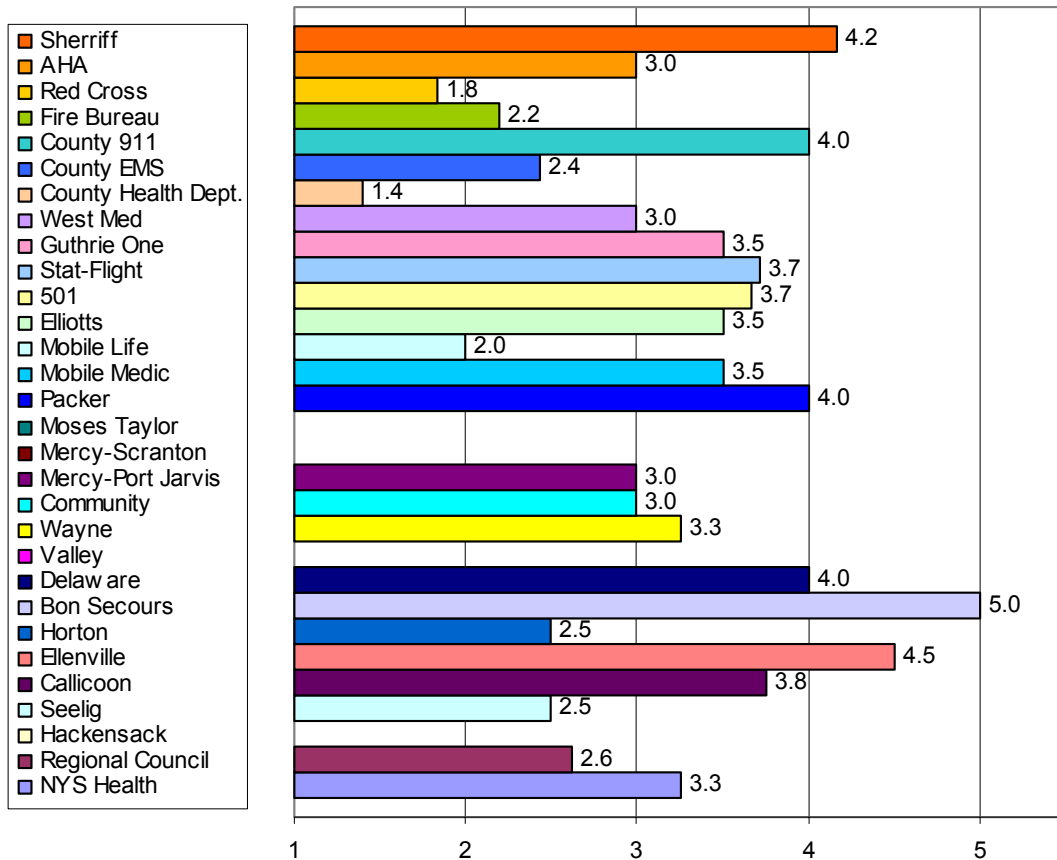


4. Please describe how helpful the following agencies are to you – the leader of a volunteer EMS service (If you have no interaction with an agency, check 'not applicable')

The following graph shows the average rating for each agency using the scale below. (Where no rating information on an agency was provided, its bar on the graph is absent.)

Rating	Number
5	Extremely helpful
4	Very helpful
3	Neutral
2	Little help
1	No help

Average Agency Rating

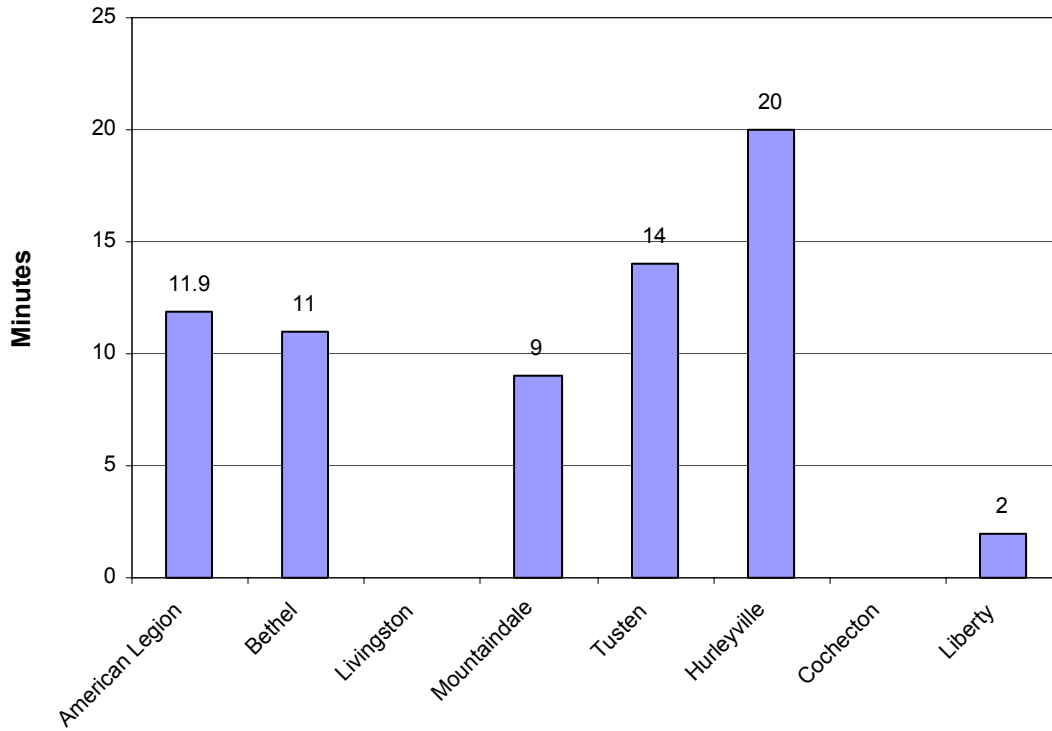


5. *Please describe how some of the outside agencies from the previous question could assist you better in the three most important challenges you face as a leader of a volunteer department.*

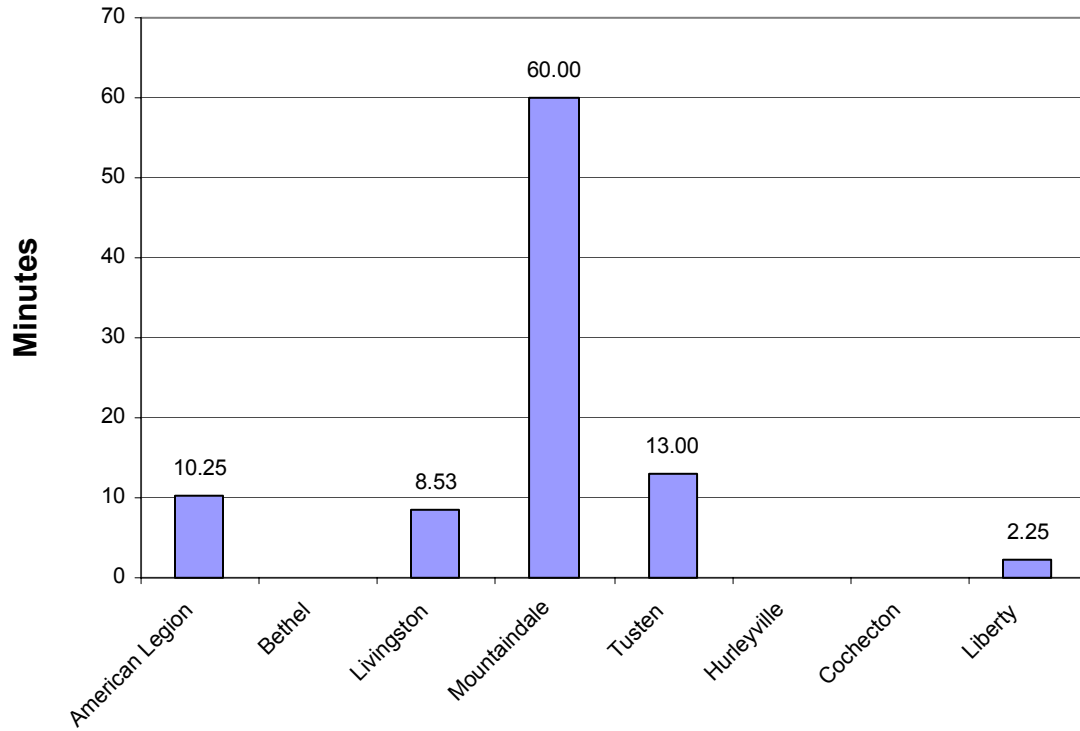
Information given by respondents verbatim:

- DOH could be more timely in what is sent out. eg - CEVO - not received yet - due and of Sept.
- Incentives from state and county government to recruited retain volunteers. Initiative by state health department.
- Improve relationship between volunteers and catskill Regional Medical Center (prev. Harris Hospital)
- State DOH & Regional councils should get memorandums out in timely fashion & uniformly throughout region or state. Often agencies receive info in a staggered manner or not at all
- Not relevant-Biggest problem is recruitment & retention-residency in the district required
- Become more fourth coming with classes in your primary area
- Regional could be more prompt with replies to questions and problems
- Reduce some training requirement and license EMTs as nurses and others are licensed.
- Improve availability of training and updates by bringing it "closer to home" - workshops or training sessions given at our location or other ways to spark member interest.
- ALS stationed in Western Sull. Co could improve pt care.
- License E.M.T.'s as professionals with con-ED classes to retain license
- CGH - Harris could have ER recognize the volunteer as a professional
- Help recruit new members.
- trauma pts could be transported directly to trauma centers if ALS was available
- Help promote unity between all agencies

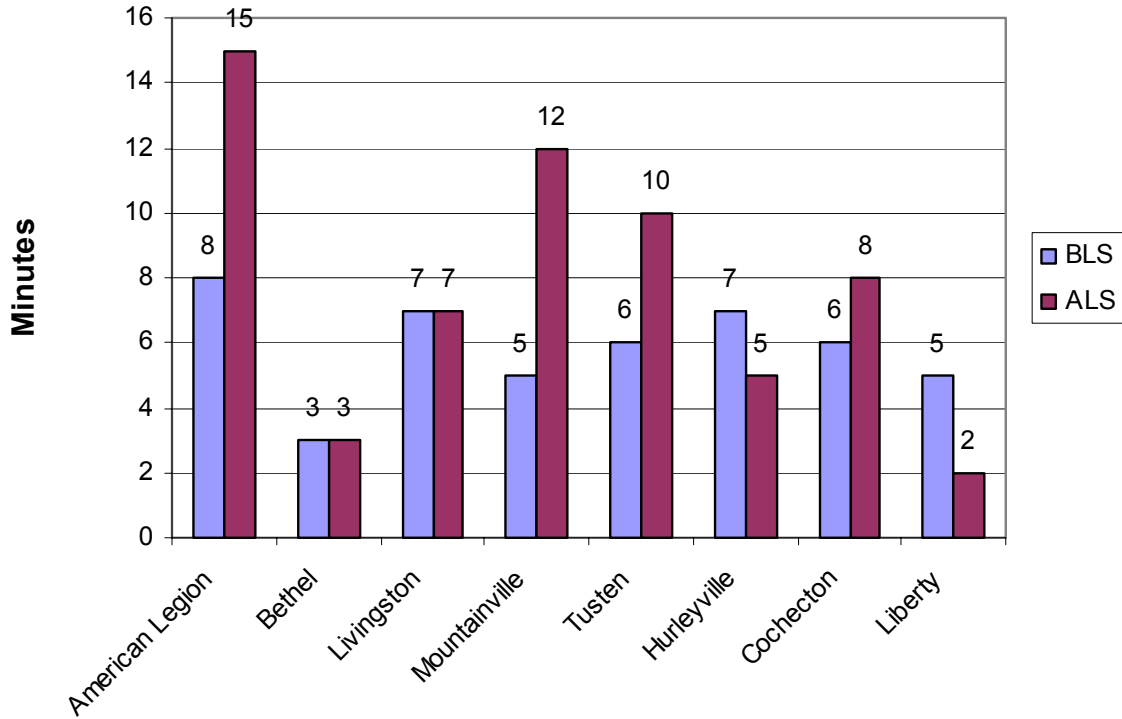
6. What was the average response time for your ambulance service for the first quarter of 2001 (emergency responses only)?(Where no information on an agency was provided, its bar on the graph is absent.)



7. What was the 90th percentile response time for ambulance service for the first quarter of 2001 (emergency responses only)? (e.g. less than 10 minutes 43 seconds with 90% reliability) (Where no information on an agency was provided, its bar on the graph is absent.)



8. What do you consider to be acceptable BLS/ALS response times for a serous medical call that occurs one mile from your station (for this question, response time = time from your pager activation until arrival of an EMT with a defibrillator at the patient’s side for BLS and arrival of a EMT-CC/P at the patient’s side for ALS)?

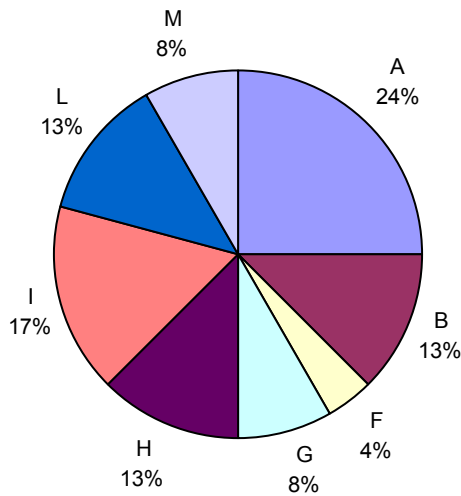


9. What department resources routinely respond to EMS calls before the ambulance (check only one)?

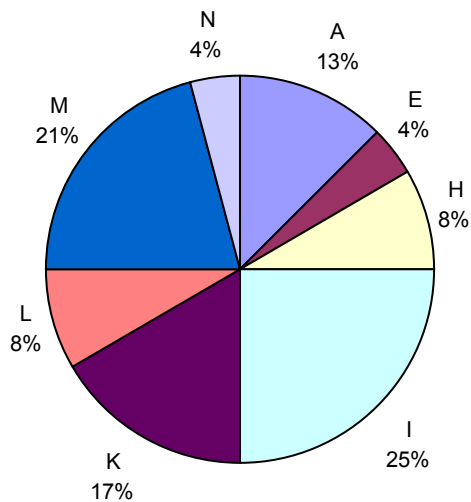
	None	Non-certified personnel	CFR/EMT	CFR/EMT with defibrillator	Paramedic
American Legion			X		
Bethel			X		
Livingston	X				
Mountaindale	X				
Tusten			X		
Hurleyville	X				
Cochection			X		
Liberty					X

- a. Volunteer retention
- b. Customer service
- c. Meeting NYS regulations
- d. Financial management
- e. Fund raising
- f. Having the best medical equipment
- g. Meeting volunteer needs
- h. Conflict management within the service
- i. Volunteer recruitment
- j. Strategic planning
- k. Public education
- l. Quality management
- m. Continuing education
- n. Communications between leaders and volunteers

10. Which three issues from the above list do you believe are the most important to the success of a volunteer ambulance service?



11. Which three issues from the above list do you believe your department needs the most improvement in?



12. Please rank how each of the following changes in the EMS system in you area would affect patient care in your community

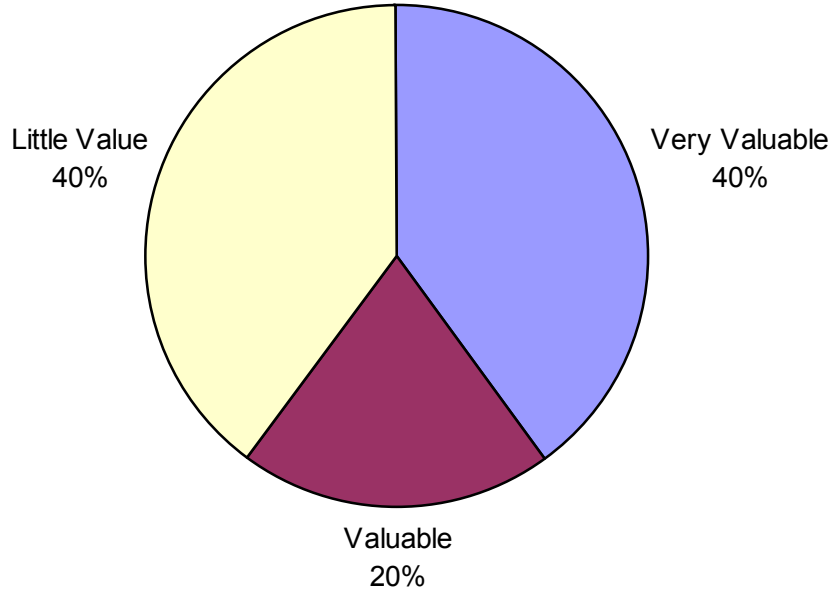
	Negative impact	Little / No Impact	Positive Impact
a. Increasing the number of EMTs	0%	0%	100%
b. Adding paid staff to supplement volunteers	50%	12%	37%
c. Add additional paid paramedic fly cars	0%	37%	62%
d. Adding paid ambulances to supplement volunteers	62%	12%	25%
e. Merging existing volunteer services	12%	37%	50%

13. Does an outside agency perform the quality improvement services for your department?

Yes = 62.5%

No = 37.5%

14. How would you rate the value of the quality improvement feedback that you receive from those outside agencies?



15. Please describe how quality improvement could be made more valuable for your department

Information given by respondents verbatim:

- By positive feedback rather than negative
- More call reviews at times accessible to volunteers
- Make it more available, hands-on, informal and personal.
- When done in house, corps often don't take the QI seriously. Needs county backup
- Can only help if members show up for drills

16. What has been the impact of Medicare's refusal to directly reimburse for paramedic intercept (fly car) services?

Information given by respondents verbatim:

- none on us
- No impact
- Has caused a "contest" to see who can be first to respond. Has caused "arguments" in front of family and patients as to who should care for and transport patient
- Higher cost in the long run since they will pay for transport but not fly/car care.
- Hardship for our senior citizens on fixed incomes
- Severe Impact-Patient who desperately need A.L.S. intervention refuse A.L.S. due to previous experience with the paid provider and his billing practices.
- None - We provide our own ALS paramedic service

17. *Does your department have a youth oriented program (e.g. explorer post)?*

All replies were 'No'

18. *How would you redesign the EMS system in your area?*

Information given by respondents verbatim:

- Spend more time on public relations and building a better image, thereby hopefully to improve recruitment and increase funding
- Have the ALS service transport the ALS patient and not have 2 ambulances take 1 patient to the hospital
- Increase volunteers through incentives and reducing recertification requirements. Build an ALS service which is county or hospital based whose only concern is patient care.
- Develop more inter-dependence between local squads, as well as between squads, hospital, and EMS control.
- My immed area has good service from PA. Our neighboring areas have long response times.
- Centralize volunteer EMS on a county-wide basis with standardized dispatching/responses
- Implement a county wide A.L.S. fly car system-county run or contracted-paid for by tax base
- Need revamp of laws pertaining to C of N's and process to get and/or expand one - also need to throttle paid services it creates situations, stretches the rules and abuses the system

Fly Car Services

The information in this survey speaks to some of the issues related to implementation of a paramedic fly car service by the Sullivan County Rural Health Network. The scope of a needs assessment is beyond what a survey of this nature can adequately address.

Determining the need, cost/benefit, and political acceptability for a fly car is a much more complicated issue. However, several of the responses to question # 18 in the captain's survey does suggest some support for a fly car. Responses to #17 in the Captain's survey points out several problems in the current fly car process related to scene control and fees for services. That would need to be addressed. Replies to question #12c in the Captain's survey showed very strong support for implementing more fly cars (62%) and the balance of replies were neutral – none were negative to the idea. The same question in the Volunteer's survey (#18c) showed 62% for it, 30% neutral, and 8% thought it would have a negative impact. The Volunteer survey question asking about suggestions for improvement to the system had only one mention of an ALS fly car out of many text replies.

It would appear that on the basis of this survey, there is strong support for more paramedic fly cars.

GLOSSARY OF TERMS

Accept Assignment:

Medical providers bill and receive payment directly from third-party payer. Under Medicare, the beneficiary is not required to pay any difference between actual charges and those charges deemed reasonable by Medicare when the provider accepts assignment. However, the beneficiary must still pay any deductible and co-insurance amounts due.

Advanced Life Support (ALS):

Includes the services of basic life support (BLS) and advanced emergency care.

ALS personnel provide: intravenous therapy, endotracheal intubation, PASG application (considering new protocols), cardiac monitoring (ECG), cardiac defibrillation and external pacing, drug therapy, relief of pneumothorax, and other invasive procedures and services.

Personnel who respond in either a transport-capable ambulance vehicle or in a non-transporting vehicle such as a fire department engine or separate response vehicle can provide ALS.

Non-transporting ALS responders are referred to as ALS first responders or ALS Quick Response Services (QRS).

Actual Charge:

A charge made by an ambulance service for specific service at a specific time.
(The actual charge may not reflect the customary charge.)

All-Inclusive Rate:

A flat fee charged for services rendered.

Allowable Charge:

A generic term referring to the fee that a third party will pay in reimbursing a provider for a given service.

Allowable Charge:

Items or elements of a provider's costs that are reimbursable under payment formula.

Medicare, Medicaid and most Blue Cross plans reimburse providers for certain costs, but do not allow reimbursement for all costs.

Ambulance Patient:

Any person being transported to or from a health care facility in a reclining position from any point.

Ambulance Service Contract:

An agreement between a private contractor and any local governing unit incorporating clinical standards and financial provisions consistent with those set forth in a master contract.

Ambulance Service Contractor:

A private ambulance service.

ANI/ALI:

Automatic Number Identifier/Automatic Location Identifier, one of the enhancement features of the 911 system that aids in the identification and location of incoming calls.

Assignment of Benefits:

Written authorization by a patient permitting payment benefits directly to the provider. (See Accept Assignment)

Automatic Vehicle Locator (AVL):

A system used to exhibit the location of vehicles and/or assignments on a computerized mapping system.

AVL systems are often used by the communications center to identify and dispatch the closest appropriate EMS unit to the scene of an incident.

Average Response Time:

A response time calculation method in which all cumulative elapsed times are divided by the number of incidents to determine an average.

Bad Debts:

Amounts considered to be uncollectable from accounts and notes receivable that were created or acquired in providing services.

Basic Life Support (BLS):

The basic level of care provided by basic first responders and emergency medical technicians (EMTs).

Care includes: basic airway management, care of choking victims, oxygen administration, hemorrhage control, splinting fractures and immobilization of spinal injuries.

In some areas, BLS personnel are also certified to perform automatic external defibrillation (AED) - referred to as EMT-Ds.

CAD:

Computer-assisted dispatching including, but not limited to, primary dispatch data entry and automated time-stamping, 911 data interface, demand pattern analysis, system status management, automated patient locator aids, response time reporting and documentation, and (when installed) automatic vehicle tracking.

An SSM-based CAD is a CAD capable of handling on-line systems status management (SSM) controls and off-line SSM reporting required for on-going refinement of the system status plan (SSP).

Call Queuing:

Stacking of calls waiting to be processed.

Call Reception:

The process of answering the telephone and processing the information for the caller in an emergency dispatch center.

Call Screening:

A process in which requests for service are screened and either refused ALS service, referred to other providers or assigned to BLS units for response.

Co-Insurance:

Established percentages indicating the portion of covered expenses, beyond the deductible, to be paid under the portion to be borne by the subscriber (patient).

Communications Center:

The central point where emergency and non-emergency lines terminate and units are dispatched. Sometimes referred to as the dispatch center or an Emergency Operations Center or EOC.

Contract Service Area:

The geographic area encompassing the Regulated Service Area as defined by the local government unit and such other cities or counties as may choose to contract with the provider. The services provided in this geographic area are subject to a contract incorporating clinical standards and financial provisions consistent with those contained in the Master Ambulance Service Contract.

Contractual Allowance:

An accounting adjustment to reflect the difference between charges for service rendered to insured persons and the amount paid for those services under contract with the third-party payer.

Co-Payment:

A type of health care cost-sharing in which the insured or covered person pays a fixed amount per unit of medical service or unit of time (e.g., \$2 per physician visit, \$10 per inpatient hospital day) and the insured pays the rest of the cost.

The co-payment is incurred at the time the service is used, and the amount paid does not vary with the cost of the service (unlike co-insurance, which is payment of some percentage of the cost).

Customary Charge:

Used interchangeably with the term usual charge and referring to that amount the provider normally and usually charges the majority of patients for a particular medical service.

Demand Analysis:

The deployment of ambulances in a specific service area based on experience and the predicted likelihood of requests for service in that area at the time deployed.

Deployment:

The procedures by which ambulances are distributed throughout the service area. Deployment includes the locations at which the ambulances are placed (or posted) and the number of ambulances placed in service for the particular time period.

Dispatch Time:

Common unit of measurement from receipt of a call until a unit has been selected and notified it has an assignment.

Emergency:

An unforeseen condition of a pathophysiological nature, which a prudent layperson, possessing an average knowledge of health and medicine, would judge to require urgent and unscheduled medical attention.

Emergency Medical Dispatch (EMD):

A process (pioneered by Dr. Jeff Clawson, MD, of Salt Lake City) in which protocols are used to prioritize calls for assistance and pre-arrival instructions are provided to the caller.

Emergency Medical Services (EMS):

This refers to the full spectrum of pre hospital care and transportation (including inter-facility transports), encompassing bystander action (e.g., CPR), priority dispatch and pre-arrival instructions, first response and rescue service, ambulance services, and on-line medical control.

EMS Administrative Agency:

The agency established by one or more local governments to monitor performance of the master ambulance service contract to perform various administrative services and functions.

EMS System:

The EMS System consists of those organizations, resources and individuals from whom some action is required to ensure timely and medically appropriate response to medical emergencies.

Emergency Medical Technician (EMT):

A licensed or certified person who performs basic life support.

EMT-D:

An EMT who has received additional training to administer cardiac defibrillation via an automatic defibrillator.

En-route Time (Out of Chute):

The elapsed time from unit alert to unit en-route.

For emergency requests, an out-of-chute standard of 30 seconds maximum is not uncommon.

First Responder:

The initial response to more serious emergencies by a non-transporting rapid response unit, usually capable of performing basic life support procedures, and in some systems, automatic defibrillation.

Some first responders operate at the paramedic level and render ALS care to the patient prior to the arrival of the ambulance, which may be staffed by paramedics. In high-performance systems, the early arrival by a paramedic first responder engine is often termed as "stopping the clock." This means that the primary response-time goal for delivery of ALS care to the patient is accomplished by the early arrival of the ALS first responder engine.

The purposes of first responders are to:

- * Provide initial patient care very rapidly
- * Provide extra staffing at the scene of complex situations
- * Provide extra staffing on board the ambulance during transport of critical patients
- * Provide redundant response to serious emergencies as an added safety measure

It is generally accepted that all good EMS systems incorporate a first responder component.

Fee-For-Service:

A method of reimbursing for services rendered. In an insurance plan, a schedule of benefits covered is prepared and a fee is established for each benefit. This becomes the fee for service.

This definition can also be applied to non-insured patients (self-pays) or benefits not covered by insurance plans. In this case, a schedule of services and fees would be available at the location rendering the service. This is the usual method of billing by the majority of the country's ambulance services.

Fractile Response-Time Measurement:

A method of measuring ambulance response times in which all-applicable response times are stacked in ascending length. Then, the total number of calls generating response within eight minutes (for example) is calculated as a percent of the total number of calls.

A 90th percentile, or 90 percent, standard is most commonly used. When a 90th percentile response time standard is employed, 90 percent of the applicable calls are answered in less than eight minutes, while only 10 percent take longer than eight minutes.

Indirect Cost:

A cost that cannot be identified directly with a particular activity, service or product of the program experiencing the cost.

Indirect costs are usually appointed among the program's services in proportion to service's share direct costs.

Inflation-Indexed Charge:

A limitation placed by Medicare on reasonable charges for ambulance services to restrict annual updates to an inflation adjustment factor.

Intervention Time:

The actual time spent by field personnel directly with the patient, including treatment at the scene and transport to the destination.

Life-Threatening Emergencies:

Those situations determined in accordance with the local medical direction that are likely to result in loss of life without immediate intervention.

Master Contract:

The contract document labeled Master Contract for Paramedic Ambulance Service, An agreement between the sponsoring unit of local government's EMS Administrative Agency and the ambulance contractor.

Medical Control-On-Line:

The availability of "live" medical consultation and direction via radio or telephones from a base hospital.

Medical Director:

The physician under whose license and authority EMTs and paramedics provide services.

Mutual Aid:

The ambulance service provided within the Contract Service Area by neighboring providers other than the ambulance contractor at the request of the ambulance contractor, pursuant to an agreement governing the exchange of service assistance when requested.

Non-Allowable Charge:

A charge for service that is not recognized as payable by a third-party payer because the service is not covered under the plan. Also, charges for covered services that are above those allowed under reasonable, customary or prevailing charges.

Non-Life Threatening Emergencies:

Those situations determined, in accordance with local medical direction, as not likely to result in the loss of life.

On-Scene Time:

The elapsed time from unit arrival on scene to initiation of transport.

Paramedic:

An individual trained and licensed to perform advanced life-support (ALS) procedures under the direction of a physician. Also know as an EMT-P.

Patient Mix:

The numbers and types of patients served by a hospital or other health program. Patients may be classified according to their geographic location, socioeconomic characteristics, diagnoses or severity of illness.

Peak Load Staffing:

The design of shift schedules and staffing plans so that coverage by crews matches the System Status Plan's requirements. (NOTE: peak load demand will trigger peak load staffing coverage)

Post-to-Post Move:

Movement of an ambulance from one designated posting (positioning) location to another designated post.

Post:

A designated location for ambulance placement within the system status plan (SSP). Depending upon its frequency and type of use, a "post" may be a facility with sleeping quarters or day rooms for crews, or simply a street-corner or parking lot location to which units are sometimes deployed.

Priority Dispatching:

A structured method of prioritizing requests for ambulance and first responder services based upon highly structured telephone protocols and dispatch algorithms. Its primary purpose is to safely allocate available resources among competing demands for service.

Productivity:

The measures of work used in the ambulance industry that compare the used resources (unit-hours) with the production of the work product (patient transports). Productivity is expressed and calculated by determining the number of transports per unit-hour.

Prospective Reimbursement:

Any method of paying ambulance services or hospitals in which amounts or rates of payment are established in advance for the coming year. The programs are paid these amounts regardless of the costs actually incurred. These systems of reimbursements are designed to introduce a degree of constraint on charge or cost increase by setting limits on the amount paid during a future period. (Synonymous with prospective payment.)

PSAP:

Public safety answering point - i.e., a communications center capable of receiving 911 calls. In some systems, the EMS control centers serves as a "secondary" PSAP, meaning that any 911 caller can be directly transferred to the EMS control center.

Reasonable Charge:

Under Medicare, it is the lowest of the actual charge, the customary charge of the provider, the prevailing charge in the locality, the inflation-indexed charge and other factors that may be found to affect the reasonableness of the charge.

Response Time:

The elapsed time from the moment the call is received until the unit arrives on the scene, from the patient's point of view.

Revenue:

Increases to equity from any source. Ambulance sales are usually reported as gross (billed) revenue amounts or in net terms that reflect adjustment for write-offs.

Subsidy:

Revenues provided to an ambulance service from local government tax sources.

System Standard of Care:

The combined compilation of all priority-dispatching protocols, pre-arrival instruction protocols, medical protocols, protocols for selecting destination hospitals, standards for certification of pre-hospital personnel, as well as standards governing requirements for on-board medical equipment and supplies, and licensing of ambulance services and first responder agencies. The System Standard of Care simultaneously serves as both a regulatory and contractual standard.

System Status Controller (SSC):

Personnel with special SSM training (usually paramedics who have completed Level 2 SSM training) who are responsible for on-line implementation and management of the system status plan.

System Status Management:

The process of matching the production capacity of an EMS system to the changing patterns of demand placed on the system. SSM is designed to manage the system's resources before and between calls.

System Status Manager:

An experienced System Status Controller with advanced SSM training (Level 3) who manages control center operations and oversees the development and continuous refinement of the SSP.

System Status Plan:

A planned protocol or algorithm governing the deployment and event-driven re-deployment of system resources, both geographically and by time of day/day of week. Every system has a system status plan. The plan may or may not be written, elaborate or simple, efficient or wasteful, effective or dangerous.

Transport Volume:

The actual number of requests for service that result in patient transport.

Unit Activation Time:

The time interval on an ambulance call measured from the time the ambulance crew is first notified to respond until it is actually en route to the scene.

Unit Hour (UH):

One hour of service by a fully equipped and staffed ambulance assigned to a call or available for dispatch.

Unit Hour Utilization (UHU) Ratio:

A measurement of how hard and how effectively the system is working. It is calculated by dividing the number of transports (not calls) initiated during a given period of time, by the number of unit hours (hours of service) produced during the same period of time.

Units involved in long-distance transfer work, special event coverage and certain other classes of activity are excluded from these calculations.

Unit Response Time:

The time interval of an ambulance call measured from the time the ambulance crew is first notified to respond until it actually arrives at the scene.

Usual, Customary and Reasonable (UCR):

A method of payment that allows the ambulance service's usual charge as long as it does not exceed the customary allowance, or the amount customarily charged for the service by the other ambulance services in the area, unless it is determined to be a reasonable amount for the services rendered.

Utilization:

A measure of work that compares the available resources (unit-hours) with the actual time that those unit-hours are being consumed by productive activity. The measure is calculated to determine the percentage of unit-hours actually consumed in productivity with the total available unit-hours.

Workload:

A measure of work performed by on-duty units during any given period of time.

Source: American Ambulance Association - Guide for Contracting Emergency Ambulance Services

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