NC Rural Health Research & Policy Analysis Center

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Rural Volunteer EMS: Reports from the Field

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OVERVIEW

Prehospital emergency care services (EMS) are an essential component of a comprehensive health care system. Rural residents and visitors to rural areas rely on EMS for treatment and transport in the event of an injury or other health emergency. In many areas where the number of emergency calls is too small to support a full-time paid EMS service, volunteers are the mainstay of prehospital emergency care.

Reports that rural volunteer EMS is threatened appear frequently in local newspapers and online news sources. Surveys have also documented the difficulties in maintaining viable EMS. This report explores the current state of rural EMS by surveying 49 local rural directors from all-volunteer services in 23 states. The following characteristics describe the 49 participating agencies:

- Most (63%) are Basic Life Support (BLS) services and the majority (78%) transport patients.
- Two-thirds have EMT-Intermediates or EMT-Paramedics on their volunteer rolls.
- There are 17 volunteers, on average, on the rolls of each agency, but an average of 11 take calls on a regular basis.
- EMS-only agencies are more common than fire department-based agencies (59% vs. 41%).
- Median call volume is 163 calls per year, just less than one every other day. Agencies with the lowest demand (the lowest 25%) average 38 calls per year.

The semi-structured interview format encouraged respondents to speculate on the future viability of their local service, describing the challenges they face and what they need to ensure continuance. The findings presented represent the perceptions of those interviewed but are likely to resonate with other rural EMS administrators.

FINDINGS

Recruitment and Retention: Most agencies (69%) have problems recruiting and/or retaining volunteers. EMS-only services are more likely to have problems than are fire-based ones (72% vs. 65%). Half of all agencies reported that their problems remain the same or are getting worse; only 14% reported improvement. For some, recruitment is more of a problem than retention. Challenges include a small population base, few employment options requiring that residents work out-of-town, and competing time demands for volunteers. Few successful strategies to recruit volunteers were reported and included using personal connections, restructuring the organization, and improved access to training. Suggestions to improve recruitment and retention included pay and benefits such as the Length of Service Awards Program (LOSAP), paying EMTs to cover certain shifts, and employer incentives to support employee volunteers.

Paying Volunteers: Half of agencies pay their volunteers in some way, e.g., by the run or standby pay. Among those that do not pay, only one-third have considered or are considering payment. Some have considered but rejected paying, primarily because volunteers do not want to be paid, but also because they do not have the funds. Other services are actively seeking ways to pay volunteers to be on standby or for daytime coverage.

Sources of Funding: Most rural agencies (83%) rely on multiple sources of financial support. Almost three-quarters are supported by local/county funds and most hold fundraising events. More than half have received one-time state, local or grant funds. Of those with a single source of support, half rely on fundraising and donations alone and the others receive only tax dollars or only billing revenue. Most that reported a change in revenue noted that donations are down or that tax support is up.

Billing for EMS Services: Billing for services is the norm rather than the exception. Two-thirds of agencies bill for their services but few bill hospitals. Variations in billing practice exist such as special consideration for community residents or not pursuing collection of unpaid balances. The majority of agencies that do not bill have considered but rejected billing for reasons that include the potential hassle, pushback from EMTs and/or county officials, and concern that billing might discourage citizens from calling for assistance. Only a few that do not bill are actively exploring the possibility of adding this revenue stream.

Interfacility and Nonemergency Transports: Among the 40 services with transport capability, 20% provide interfacility transport and average eight transports per month. Slightly more transporting services (28%) provide nonemergency transports, mainly taking patients to a nursing home, to a rehabilitation center, or to the patient's home. Transport of an inpatient for short-term care at another facility, e.g., for dialysis or a diagnostic test, is provided by only five of the surveyed agencies.

Relationships with Other EMS Providers: Virtually all respondents reported that they have Mutual Aid Agreements with other services and many noted that these agreements work well. Some also reported good working relationships with agencies to provide ALS intercept or transport.

Predicting the Future: Respondents were asked to rate the likelihood that they could operate as they currently do over the next five years. More than two-thirds were optimistic about their viability, 20% thought they could go either way (choosing 5 on a 10 point scale) and four were pessimistic. Services that were stable did not differ from those that were threatened on characteristics such as organization, billing, or payment of volunteers. Problems recruiting volunteers was the most striking difference with many more respondents in the threatened group reporting that these problems were getting worse. EMS agencies that are stable and for which the future looks good reported that they have both an adequate number of volunteers and good community support for funding.

DISCUSSION

Many rural volunteer EMS directors are optimistic about their ability to maintain their service in the future, but 20% are uncertain and 8% are frankly pessimistic. Ability to recruit volunteers appears to be the main limiting factor. The potential loss of 8% of volunteer EMS services across the country would present a significant challenge to providing essential emergency care services and underlines the need for solutions to address this potential loss.

Factors that help ensure provision of EMS include financial support. The creativity needed to maintain funding is illustrated by the multiple sources reported by most agencies, but still some directors reported threats to their funding. While most did not report that finances were a struggle, some did note that they did not know where the funds would come from if they took on the additional cost of paying volunteers.

Billing clients and/or insurance for EMS care is a potential source of revenue for paying EMTs. However, most respondent agencies already bill, and for most that do not, adding this revenue stream would not be feasible (they are nontransporting) or would not be accepted by the volunteer community. Several directors in agencies that do bill reported that they regularly review and adjust their rates, indicating that these agencies may already be obtaining the optimal benefit from billing for services.

Although all of the EMS agencies in this study are staffed by volunteers, half of them already pay these volunteers in some way. Given the low call volume for many services, the cost to provide limited call-based payment for volunteers is significantly less than the cost of maintaining a full-time paid staff. A compromise solution being implemented in some areas is to hire full-time staff for periods that are difficult to cover with volunteers. Such a hybrid system may be difficult to implement in areas where long-time community volunteers may object to paying some EMTs full-time and others only when working or not at all. However, in areas where the population base is both decreasing and aging, the community activism that sustains volunteer services may not be enough to keep these services viable no matter how dedicated the citizens who run the organization.

Sustainability of rural volunteer EMS is inextricably tied to the local community and community characteristics that hinder essential volunteer services often cannot be addressed by the EMS agency alone. Community economics determine if citizens can work locally or if they must travel out-of-town to work, limiting their availability for EMS calls. Despite challenges, many rural volunteer EMS agencies are stable and regularly obtain the human and financial capital they need. The need for prehospital care in small communities continues to be recognized and met by local residents and local officials who have stepped up with considerable creativity when market-based solutions were not available. In a significant number of areas, however, the ability of community volunteers to provide EMS is being stretched to the breaking point and requires new creativity. Consolidation of local services to benefit recruiting and to increase run volume and revenue must be considered. Although rural volunteer EMS grew locally from local need, the need to work together with other EMS agencies or other health care providers in systems of care is inevitable and offers options to maintain these important services.

METHODS

A sample of 200 local EMS directors was randomly selected from respondents to a national study conducted previously by the authors. To be eligible, respondent agencies had to be located in a nonmetropolitan county or in a metropolitan county with a Rural Urban Commuting Area (RUCA) code of four or higher. In addition, they had to have identified themselves as an all-volunteer service in the previous study.

A semi-structured interview form was developed for the study. Respondents were asked to describe their service and the volunteers that staff it. Their ability to recruit and retain EMTs was queried as well as compensation for volunteers, including compensation being considered. Sources of revenue for maintaining the local service, which might be used to compensate volunteer staff, were assessed including information regarding billing for services. Finally, local directors were asked to speculate about whether their service could continue to operate as it currently does over the next five years.

The interview contained both close-ended and open-ended questions. The purpose of the study was to explore the challenges to continued service identified by local rural volunteer EMS agencies. Because of the relatively small number of respondents and the open-ended structure of many questions, results were tallied but not tested for statistical significance. Data presented here provide a snapshot of rural volunteer EMS. The descriptions presented here represent the perceptions of those interviewed but are likely to resonate with other rural EMS administrators.

Agency directors were contacted by letter to introduce the study and later by telephone, if possible, to set up an interview if the director did not initiate contact him or herself. Directors who agreed to participate were sent the interview questions in advance and given the opportunity to review and correct the completed interview. The study was reviewed and approved by the University's Institutional Review Board.

The ability to reach local volunteer EMS agencies by phone presented a major challenge to the completion of this study. The telephone number for local EMS agencies is sometimes the home number of the local director and is not always updated when the director changes. Frequently, the number listed is for a phone that is regularly unattended and used only for outgoing calls. Of the 200 agencies that were contacted by letter, only three appeared to be closed (mail was returned or other indication of closure). Project staff could not reach a person by phone at 89 services and voicemail messages were left at many numbers. Contact was made with personnel at 109 services, although the person reached was occasionally a volunteer who may or may not have relayed the message to the director. Forty-nine (49) services participated in the study representing 24.5% of the entire sample and 55% of services where personal contact was made. The difficulty in scheduling these interviews is further illustrated by the fact that ten interviews were scheduled but never completed despite numerous attempts to reschedule. Only three directors who were reached in person refused to participate.

More detailed study results can be found in the final report "Rural Volunteer EMS: Reports from the Field" located at http://www.shepscenter.unc.edu/research_programs/rural_program/.

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