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# Experiences of Critical Access Hospitals in the Provision of Emergency Medical Services

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This study was conducted to better understand the experiences of Critical Access Hospitals in operating an EMS unit. Using key informant interviews, we examine motivations for acquiring EMS services and the effect of these services on the level of emergency care available in a community. The benefits and challenges that CAH providers face in operating EMS services are discussed.

Our findings and analyses are based on a review of the literature on rural ambulance services and structured interviews, conducted in 2005 and 2006, with administrators and ambulance staff from five CAHs located across the country. Each of the hospital representatives contacted as part of this study indicated that Medicare was their largest single payer for EMS services and that they were reimbursed under the new ambulance fee schedule. These interviews served to confirm many of the findings from the literature review and provided valuable insights on the experiences of CAHs that acquire ambulance services and are reimbursed under the fee schedule.

Regardless of the fact that the CAH administrators that Walsh Center staff spoke with described similar experiences and generally supported information in the literature, the number of hospitals represented was small. Therefore, findings from this study must be interpreted with caution.

## POLICY CONCLUSIONS

- Reconsider elimination or relaxation of the 35-mile rule for cost-based reimbursement of EMS services;
- Consider funding research to determine the efficiencies achieved by direct involvement of EMS staff in hospital-based patient care (when not engaged in EMS-related activities);
- Evaluate state laws that may unnecessarily limit involvement of EMS staff in hospital-based patient care to determine the extent to which these laws also limit access to essential manpower in rural areas;
- Continuous monitoring of the financial performance of CAHs with EMS units is necessary to ensure access to hospital services in small rural, frontier, and isolated communities;
- Resources devoted to training EMS management and administrative staff may be necessary to ensure the continued operation and success of these programs.

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## Background on Emergency Medical Services in Rural Communities

Despite extensive need, rural areas have particular difficulties maintaining adequate Emergency Medical Service (EMS) capacity. Low call volumes contribute to higher costs per transport, and make it difficult for staff to retain specialized skills. In many cases, rural areas lack the resources to train and attract skilled personnel, and must rely on volunteers to staff EMS agencies.

For some time, the Government Accountability Office[1] has expressed concern that the EMS industry is excessively reliant on volunteers, particularly in rural areas of the country. Volunteers are often unavailable or difficult to recruit and they must financially support themselves. Commutes to and from EMS stations may also be long. Moreover, ambulance providers, particularly those that are volunteer- or local-government based, have historically been reluctant to bill patients. Volunteer services, for instance, "have considered patient billing as contrary to the community-service nature of their operation [and some providers] have had no expertise or infrastructure for collecting fees or maintaining the business function."[2]

The lack of predictable funding has made it difficult for many volunteer and private EMS agencies to upgrade equipment, furnish vehicles to respond to emergencies in a timely fashion, train staff in the provision of advanced life support services or even remain operational. Despite the importance of fundraising activities and financial support available from the community, resources are often insufficient to meet day-to-day operational needs. These factors place EMS agencies that depend on volunteer or financial support from the local community in a weak and unstable position.

### Basics of the Ambulance Fee Schedule

Phase-in of the fee schedule began in 2002. With temporary provisions enacted by the Medicare Prescription Drug Improvement and Modernization Act (MMA), the phase-in period is expected to continue until the year 2010. In general, the ambulance fee schedule reimburses providers a base rate, adjusted for differences in case mix and mileage. Specific components of the ground ambulance fee schedule include the following :

- relative value unit (RVU) that ranges from 1.00 for basic life support to 3.25 for specialty care transport;
- conversion factor used to set a base rate for ground transportation;
- geographic adjustment factor to account for regional cost differences (based on location of beneficiary);
- mileage rate for loaded (beneficiary in the ambulance) mile; and
- rural adjustment factor (applicable until the end of calendar year 2008), equal to 25 percent of the ambulance fee schedule mileage rate, for transports exceeding 50 miles.

## Medicare Reimbursement to Rural Providers

Since Medicare began paying for ambulance transports under a prospectively-determined national fee schedule, some policymakers have been advocating increased payments for small rural ambulance providers. The rationale for these payment increases is based on two factors—first, that per transport cost of the rural low-volume provider may be higher than for the average provider because low-volume providers must spread the cost of emergency stand-by capacity over fewer transports and, second, because rural providers often incur higher costs associated with longer distance transports. If not adequately addressed under the fee schedule,

[1] United States Government Accountability Office. Ambulance Services: Medicare Payments Can be Better Targeted to Trips in Less Densely Populated Rural Areas. GAO-03-986, Washington, DC: United States Government Accountability Office, September 2003.

[2] McGinnis KK. Rural and Frontier Emergency Medical Services: An Agenda for the Future" October 2004.

each of these factors may result in financial losses to hospitals. Particularly vulnerable are those CAHs that do not meet criteria for cost-based reimbursement for EMS; this includes EMS providers located in a 35-mile range of another EMS provider.

Although there is some speculation that the opportunity to receive cost-based reimbursement may encourage Critical Access Hospitals to acquire or operate an EMS unit, a CAH/FLEX National Tracking Project survey found that 92 percent of CAH-owned EMS providers did not qualify for cost-based reimbursement due to the 35-mile rule.

## Why do Critical Access Hospitals Choose to Acquire an EMS Unit?

Frequently, CAHs acquire an EMS unit from financially vulnerable community or private organizations. The prior organizations that operated the EMS or ambulance service often have a long history of unprofitable operations, despite government subsidies. In some cases, to ensure that an EMS unit exists to serve the community, local governments have requested that the hospital assume ownership of the unit. As one of the hospital administrators interviewed for this study stated, "…the county was pleased to find a reliable entity to fulfill the county's requirement that it have an ambulance service." However, financial difficulties were not the sole reason for the failure of these operations; problems in recruitment and retention of volunteer staff also contributed to problems in maintaining an EMS service.

Commitment to the community is a major reason why a CAH might acquire an ambulance service. Although many CAHs have no prior experience in the operation of emergency medical services, the decision to acquire an EMS unit is considered a benefit to the community. A number of our hospital respondents described the community's issues with the prior EMS owner, including long waits for transports to non-emergency facilities, lack of higher-level EMS staff, and unreliability of service. The hospital and the community believed that the CAH had systems in place and could better manage the EMS service. In some cases, the hospital received donations (such as a new ambulance from the city) to start up operations and, access to county-paid management fees, tax referendums, and state grants were frequently provided to the CAH to offset the cost of its services.

## How Is the Level of EMS Service Affected?

Acquisition or operation of an EMS unit typically increases the community's access to advanced emergency service levels. Prior to CAH acquisition, many of the community or volunteer EMS units only provided basic life support services. After acquisition by the CAH, many hospitals hired intermediate-level EMTs or additional paramedic personnel. Most hospital staff interviewed for this study indicated that they now provide the full range of services, from basic to advanced life support. As an unusual example, one of the hospital representatives that Walsh Center staff spoke with indicated that the CAH had acquired and used an EMS unit primarily, albeit not exclusively, for transport of patients to and from local nursing homes and to a regional hospital that served as part of the referral network. In fact, while this hospital rarely responded to 911 calls, it continued to staff EMS services using one paramedic, one cardiac technician (EMT-I) and two other intermediate EMTs.

## What is the Relationship between Hospital-based and Local EMS Providers?

Hospital-based EMS units that operate within the same service area as other emergency providers often have an agreement that clarifies services and fosters cooperation when necessary. In some cases, these other providers are volunteers, whereas in others instances, they are paid, government employees, (e.g., fire fighters) or employees from neighboring hospitals. The hospital representatives interviewed for this study indicated that they desire to be respectful of volunteer EMS providers and are careful not to "step on toes." Perhaps the best example of this is the hospital (described above) that had limited itself to patient transports to nursing homes and referral hospitals. This hospital had signed a "mutual aid agreement" with a volunteer EMS agency in

the community. As part of this arrangement, the hospital agreed to respond to 911 calls only when volunteer units were unavailable or could not be staffed.

## Does Acquisition of EMS Services Provide Any Benefits to CAHs?

**Integration of EMS Staff in Support of Hospital:** The most frequently-cited benefit of operating an EMS unit is the ability to ease staffing shortages by integrating EMS personnel into other hospital units. Typically, EMS personnel experience "down time," or a period in which they are neither responding to calls nor being used for routine EMS activities (e.g., stocking the ambulance). Although the amount of downtime varies by hospital, the staff we interviewed stated that their downtime ranged from 20 to 50 percent. Interviews with hospital administrators confirmed that hospitals make use of paramedic or EMT downtime to assist in moving patients for tests or to different hospital rooms, entering data into electronic medical record systems, and supporting emergency room physicians as needed.

**Integration of Administrative Support Functions:** Prior to acquisition by hospitals, private and government-run EMS units maintain human resource functions, billing departments and other support services that are typically necessary to run the organization. Hospital representatives that we interviewed indicated that they have been able to achieve some efficiencies, such as lower overhead costs, by integrating EMS administrative functions into the hospital's administrative functions. Although respondents acknowledged that training of administrative staff in these areas is still required, in the longer-term, some cost savings were anticipated.

**Goodwill:** Despite several challenges associated with operating an EMS unit (discussed below), managing an EMS unit, particularly with the hospital's name on the side of the ambulance or transport vehicle, creates goodwill among members of the community and is seen as an important marketing opportunity. As one administrator stated "(i)t's good PR to be first on the scene…many persons in the community know our paramedics…" This goodwill is believed to increase business to the hospital.

## What are the Challenges to CAH Operation of an EMS Unit?

CAHs with an EMS unit face many difficult challenges. Among these are the following:

**Staffing:** CAHs attempting to run an EMS unit are frequently confronted with staff recruitment and retention problems. To some extent, recruitment of health care professionals, such as nurses, physicians, ancillary hospital staff, as well as paramedics is a problem that is endemic to many small rural areas. However, with specific regard to paramedics and EMTs, a CAH may compete with physician offices for qualified staff. More than one of the hospital staff we interviewed said that, because EMS staff are paid less than nurses and are able to perform many of the same duties as nursing staff, physician practices often find that it is cost-effective to hire EMTs and paramedics rather than nurses. EMTs often prefer to work in physician offices or private practices because of the regular hours, higher salaries, and better benefits, relative to those offered by the CAH. To the extent that emergency personnel find physician offices or other private practices a more desirable work environment, the pool of candidates to staff the CAH's EMS unit is limited.

In addition to the challenges of recruitment and retention, CAHs often experience difficulties in locating appropriate educational and training services for EMS staff. While some hospitals indicated that EMS personnel receive training along with other hospital personnel, specific training necessary for EMS licensure and continuing education requirements may not be available within the area or may be very costly for the hospital to arrange.

**Limits of Integration:** There may be difficulties integrating EMS staff into the hospital. Although experiences working with paramedic and EMT staff in the hospital are generally positive, one hospital representative indicated that it has been difficult at times to use EMS staff in the hospital, in part because these professionals are not trained to

practice in a hospital setting, as part of a patient care team.

The ability to integrate EMS staff into patient care activities varies across states. Two hospital representatives said they could not understand why state laws precluded paramedics and certain classes of EMTs from performing procedures or interventions in a hospital setting, even though by law they are permitted to perform the same procedures outside the hospital in the course of an emergency run.

**Management of EMS Departments/Units:** Special management skills may be required in order to effectively operate an EMS unit. According to one hospital administrator, "(o)versight of EMS operations carry a disproportionate amount of problems and issues relative to other hospital services." This same respondent was not well informed about the relationship between EMS revenues and costs at their facility, and cited the poor communication between the CAH billing office and EMS management staff for this lack of information. Respondents voiced the critical importance of recruiting administrative personnel who are trained in EMS management, financing and accounting.

**Negative Financial Impact:** Ownership of an EMS unit appears to be a financially unprofitable venture. None of the CAH hospital administrators we spoke with could make a strong business case for ownership of an EMS unit. Several respondents indicated that payments frequently failed to cover costs and that hospitals were forced to rely on county subsidies, management fees, tax levies, grants, donations or fund-raising activities to meet costs associated with service provision. The amount of subsidy received from cities and counties varied across hospitals; in one case subsidies were almost 70 percent of costs.

Several of the administrators interviewed indicated that these financial losses might have been averted had the hospital been eligible to receive cost-based reimbursement. In one instance, a CAH found it necessary to transfer their EMS unit to an affiliated network prospective payment system (PPS) hospital in order to improve the CAH's overall financial performance that resulted during the fee schedule phase-in period. Another hospital was also experiencing significant financial losses, but was unable to eliminate or transfer its EMS unit to another service because, by state law, the hospital was considered a district hospital and was required to assume responsibility for EMS services. Despite the fact that the hospital was incurring financial losses, the administrator indicated that the hospital was unable to "give EMS back…[since it was] not a viable political alternative." In this instance, the hospital operated with the support of a local government subsidy.

## Key Policy Issues

**Community Subsidies and Financial Support:** The National Rural Health Association (NRHA) report "Rural and Frontier Emergency Medical Services: An Agenda for the Future"[3] recommends that "EMS should not only weave itself into the local health care system but into the fabric of the community itself." However, this report acknowledges that "(o)ther than reimbursement provisions for ambulance services attached to the hospital, there has been no federal, and limited state focus on maintaining a safety net of critical access ambulance services." Walsh Center findings indicate that CAH dependence on community subsidies and outside financial sources to maintain EMS services places these providers in a precarious financial position if, for any number of factors, these financial resources are unavailable or reduced. Loss of this revenue would not only affect the viability of the EMS unit but,

[3] McGinnis KK. Rural and Frontier Emergency Medical Services: An Agenda for the Future" National Rural Health Association, October 2004.

[4] U.S. Government Accountability Office, Ambulance Providers: Costs and Expected Medicare Margins Vary Greatly, GAO-07-383, May 2007.

[5] A "super-rural" transport was defined in the GAO study as one that originated in the 25th percentile of rural areas; areas were designated as based on population density in a rural county.

in instances where the hospital is unable to divest itself from EMS responsibilities (e.g., due to state law or regulations), the viability of the hospital itself.

**Hospital Efficiencies Resulting from EMS Staffing:** Rural hospitals have long been recognized as facing challenges in the recruitment and retention of health care professionals. As noted in our discussions with hospital representatives, CAHs with an EMS unit have found opportunities to fill gaps in staffing and reduce downtime by integrating these emergency personnel in patient care, when not otherwise engaged in EMS duties. In addition to understanding how EMTs and paramedics may best be utilized to enhance patient care, research examining state laws governing activities of emergency medical professionals may be necessary to understand the opportunities that are available to CAHs to maximize staffing efficiencies.

**Changes in Reimbursement to Critical Access Hospitals:** As the Medicare ambulance fee schedule is fully implemented, it is necessary to monitor CAH performance to ensure that these facilities are able to remain financially viable under the existing fee schedule. The GAO[4] noted that between 2001 and 2004, the number of ambulance transports in "super-rural"[5] areas declined by eight percent and concluded that "(d)eclining utilization coupled with potentially negative Medicare margins in super-rural areas, which could be exacerbated when the MMA temporary payment provisions expire, raise questions as to whether Medicare payments will be adequate to support beneficiary access in super-rural areas."

The GAO study included only ambulance providers that did not share costs with other institutions or those that shared costs but reported ambulance costs separately. As such, it is not possible to generalize these findings to all CAH-based EMS providers. Nevertheless, combined with the findings of our study, these analyses suggest that the 35-mile rule may need to be eliminated or relaxed in order to ensure access to emergency medical services in many small, rural communities.

Conclusions: Findings from this study suggest the need to continuously monitor CAH experiences with EMS units. The purpose of this monitoring is to ensure the continued availability of EMS resources in a community and that operation or acquisition of an EMS unit does not pose negative financial repercussions for CAHs. Moreover, hospitals and local governments must continue to collaborate in order to strengthen the EMS infrastructure, enhance levels of service availability, reduce service duplication and employ limited funds in the most cost-effective manner.

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