Profile of Rural Ambulance Services in Minnesota

Emergency services include a variety of medical services that supply essential pre-hospital care during crises. Much of the information presented in this profile is based on a 2002 study of rural ambulance services in Minnesota.

Background
Every Minnesotan expects to have access to emergency services when necessary. An integral component of emergency services in greater Minnesota is the rural ambulance system. The current system in Minnesota relies heavily on trained and dedicated volunteers as well as trained paid personnel. Recruitment and retention of EMS personnel are vital to rural communities to ensure continued existence of emergency services. The rural areas are more likely to have volunteer staff (77 percent volunteer) than urban areas, which have more paid staff (77.2 percent paid). Rural ambulance personnel are also likely to be older and female compared to their urban counterparts. It is estimated that Minnesota’s rural ambulance volunteers contribute between $28 and $37 million per year in volunteer labor.

Regulatory Oversight
In 1995, the Minnesota Legislature established the Emergency Medical Services Regulatory Board (EMSRB) as the regulatory agency of ambulance services and personnel making it independent from the Minnesota Department of Health. Minnesota is divided into eight EMS regions (See Map 1) that receive financial assistance through the Emergency Medical Services (EMS) Fund. Other sources of funding are: seat belt fine revenue, General Fund support for personnel training, local tax support and subsidies, service charges, the Revenue Recapture Act, insurance, and public programs including Medicare, Medicaid, General Assistance Medical Care (GAMC), and MinnesotaCare.

Eighty-five percent of ambulance services are located outside of the state’s urbanized areas. Close to 70 percent of rural services are Basic Life Support (BLS) services, while roughly half of urban services are BLS. The southeast and southwest regions account for one-third of all ambulance services, with the fewest services in the northwest region (7.4 percent). See Map 2.

Quick Facts:
- The average ambulance run in rural Minnesota costs $415.
- Ambulance personnel currently on the rosters of ambulance services in Minnesota total 6,983: 59% are volunteers, 25% are full-time paid staff, and 16% are part-time paid staff.
- 45% of rural ambulance personnel are age 40+ years compared to only 34% of urban staff.
- The median age of the state’s ambulance fleet is 6 years, with 11% reporting ambulances 12 years or older.
- In 2001, falls were the leading cause of non-fatal injury for all ages in greater Minnesota.¹

¹Injury and Violence Prevention Unit, Center for Health Promotion, Minnesota Dept. of Health.
According to the EMSRB, distances for ground-based ambulance services vary from 2 miles in a metropolitan county to as many as 70 miles in northern Minnesota. The average carry distance is 20 miles statewide.

Roughly 60 percent of ambulance services serve a primary service area (PSA) with fewer than 10,000 people. See Figure 1.

Medicare reimbursement, on average, accounts for 41 percent of revenue for rural services compared to 31 percent for urban services. See Figure 2.

A Typical Ambulance Service

What does the typical service look like?

Based on the licensing data from the EMSRB, the typical Minnesota service is a BLS service that is located outside of the state’s urbanized areas, most likely in the southern part of the state. The service is likely municipally owned and is staffed entirely by volunteers who service a primary service area of fewer than 10,000 people.

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Issues:

**Recruitment and Retention of Personnel**

Staffing shortages are intensified by rural EMS providers’ traditional reliance on volunteer labor, (See Figure 3) which is becoming increasingly unavailable. Perceptions about the nature of the work, time and training demands, compensation, and changing demographics and their effects on volunteerism are challenging to keeping a healthy volunteer workforce.
Financial and Reimbursement Issues
The Medicare fee schedule combined with mandatory assignment is resulting in lower reimbursement for Minnesota providers. (Mandatory assignment means that providers have to accept what Medicare reimburses as payment in full. They are not allowed to bill Medicare patients for any costs in excess of Medicare’s reimbursement.) The new fee schedule is especially damaging to rural Minnesota because Medicare eligible patients are the single largest segment of ambulance service users in these areas. Other crucial financial issues facing rural ambulance services are inconsistent billing practices, rising costs, increases in bad debt, mandates and requirements (i.e. HIPAA compliance) and no reimbursement for unloaded miles (miles traveled without a patient aboard).

Quality of Ambulance Garages/Facilities and Equipment
Experts agree that the largest cost for ambulance services is the cost of preparedness, including all of the fixed costs related to purchasing and maintaining communication systems, vehicles and equipment, personnel training and continuing education, etc.¹ Since rural ambulance services generally have lower call volume than those in more densely populated areas, they have fewer runs over which to spread the fixed costs.

Hazards
Methamphetamine labs, which are being discovered at an increasing rate across Minnesota, present new dangers for ambulance personnel. Other hazards are blood borne pathogens and transport vehicles carrying hazardous or flammable materials. Potential for exposure due to the lack of protective clothing and equipment make these dangerous situations an ongoing safety concern.

Critical Access Hospital-Based Ambulance Services
The Rural Hospital Flexibility Program (Flex Program), a federal program established to preserve access to a full range of health care services in rural communities, includes the integration of emergency medical services in rural health networks as one of its major program objectives. To accomplish this, ambulance services owned by a Critical Access Hospital (CAH) can receive cost-based reimbursement from Medicare as long as the CAH is more than 35 miles away from the next nearest ambulance service provider. In Minnesota, there are ten CAHs that own the local ambulance service. However, only one meets the 35-mile criterion for cost-based reimbursement.

Resources:

Websites:
http://www.emsrb.state.mn.us/ - website of the Emergency Medical Services Regulatory Board, the state regulatory agency of all emergency services in Minnesota. The website is a source of information regarding EMS law, licensing, grant funding and volunteer training.

Minnesota Emergency Medical Services Regions
Percentage of All Ambulance Services by Region of Operations, 2002

Source: EMSRB 2002