



North Dakota Rural Hospitals and Emergency Medical Services Collaboration

Part of a series of fact sheets on Critical Access Hospitals and the North Dakota Medicare Rural Hospital Flexibility (Flex) program.

In 2011 the North Dakota Flex Program surveyed the state's 36 critical access hospitals (CAHs) and asked specific questions related to the hospital's relationship with local emergency medical service (EMS) providers as well as their attitudes toward these local partners. One of the Flex program's goals is to support the integration of CAHs and rural EMS.

About EMS in North Dakota

- North Dakota has 134 ground ambulance services, seven air medical, and four industrial responding to more than 61,000 calls annually, 16% of which are responded to by rural ambulance services.
- North Dakota has 5,627 licensed EMS providers.
- There are 81 non-transporting first responder agencies known as Quick Response Units.
- For the past 40 years, more than 75% of the cost of providing EMS in rural North Dakota has been subsidized by donated labor.

EMS Challenges

The North Dakota Department of Health's extensive statewide EMS assessment, completed in 2011, found the following challenges:

- The recruitment of volunteers is significantly more difficult than a decade ago and this aging workforce is not being replaced by new volunteers.
- Of all people listed on service rosters, 46% are inactive and 35% of ambulance services have difficulty filling schedules during certain times.
- The need to provide financial incentives for volunteers to be on a schedule for calls and to respond on calls is increasing.
- Some EMS workers are taking more than 120 hours of call time per week (one service leader reported being on call continuously for more than 200 days without relief).

- Some services reported expecting to close within the next five years.

Critical Access Hospitals and EMS

- Nine ambulance services are owned and operated by critical access hospitals, of which there is considerable variability in terms of how EMS personnel are paid with most combining a "normal hourly wage" plus time for call on weekends or other.
- Pay per shift ranges are dependent on licensure level such as paramedic (\$42), EMT intermediate (\$25) or basic (\$12), and driver with CPR (\$10).
- CAHs estimated annual costs to run a hospital-based ambulance which ranged from \$88,500 to \$285,000 (average \$166,000).
- Five CAHs reported having reoccurring annual losses from operating the ambulance; annual losses ranged from \$10,000 to \$60,000 in 2011.
- Paid ambulance employees of the CAH are used for duties other than ambulance service responsibilities including the following:
 - Emergency department
 - Provide education such as CPR
 - Inpatient care
 - Cardiac rehabilitation
 - Building maintenance
 - Community relations
 - Public health
 - Stress lab
 - Same day surgery
 - Disaster planning
 - Transport long term care residents
 - Human resources
- CAH administrators were asked to rate the level of local collaboration with ambulance services not owned by the hospital. Seventeen CAHs rated their relationship as

above average or excellent, nine rated it as average, and one rated it as poor or below average.

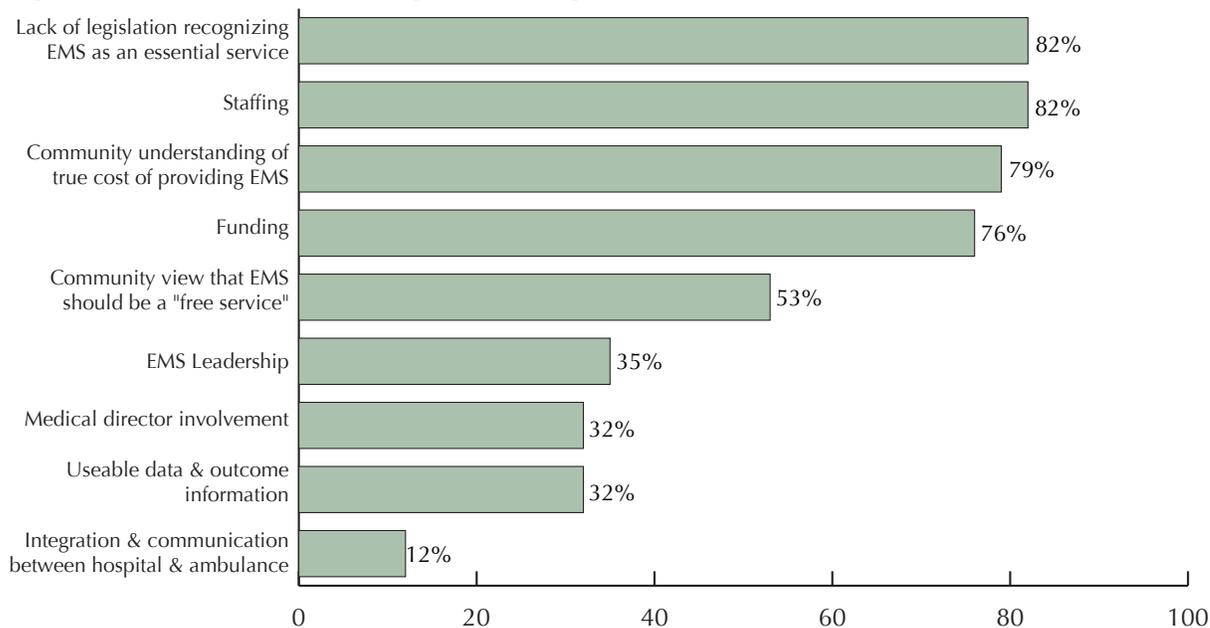
- All CAHs, regardless of their ambulance operations, were asked if they included EMS personnel in quality improvement activities: 15 CAHs (44%) indicated 'yes,' 12 (35%) indicated 'no.'
- Over half of the CAHs (62%) viewed having "adequate patient transport services" positively while 38% noted this as a problem; a positive change since 2005 when the same question resulted in 54% of CAHs identifying this as a problem.
- Other positive findings include CAH satisfaction with ambulance response times, timeliness of patient care reports, and ambulance delivery of appropriate care.

- There are opportunities to strengthen CAH/EMS relationships thereby strengthening coordination of care and quality improvement efforts.
- There are significant opportunities for the Flex program to support rural EMS and CAH integration. Suggestions included: 1) offering education and training; 2) support collaboration between hospitals and EMS; 3) assist with regional approaches; 4) foster health information exchange solutions; and 4) share EMS's story with others.

CAH Administrator Perception of EMS Issues

- North Dakota CAH administrators were asked to review a list of issues and assess the degree of significance they felt of each for their local ambulance (See Figure 1).

Figure 1. EMS Issues - CAH Perspective of Significance of Each as a Problem



Conclusions

- Despite an EMS system heavily reliant on volunteer labor and overall low volume in rural areas, CAH Administrator perception of EMS quality of care is high.
- CAH Administrator perception of EMS issues indicates they believe the top three areas of concern are: 1) staffing, 2) lack of legislation that recognizes EMS as an essential service (like law enforcement and fire); and 3) community understanding of the true cost of providing EMS.
- There is considerable variability throughout the state's CAH communities in terms of their relationship with local EMS, support provided to local EMS, ownership, and involvement with quality improvement.

References

2011 Flex CAH Administrator Survey, Center for Rural Health, UND School of Medicine and Health Sciences, August 2011.

A Crisis and Crossroad in Rural North Dakota Emergency Medical Services. SafeTech Solutions, LLP. June 2011. http://www.ndhealth.gov/EMS/pdfs/NDREMSIP_final_report.pdf.

For more information, contact

Marlene Miller, MSW, LCSW
701.777.4499 • marlene.miller@med.und.edu

Brad Gibbens, MPA
701.777.2569 • brad.gibbens@med.und.edu

Center for Rural Health

The University of North Dakota
School of Medicine & Health Sciences
501 North Columbia Road, Stop 9037
Grand Forks, ND 58202-9037
701.777.3848 • ruralhealth.und.edu