

NORTH DAKOTA RURAL EMS IMPROVEMENT PROJECT

May 2011

*A Report on the
Urban and Rural
EMS Cooperation
and Collaboration in
Cass County North
Dakota*

Table of Contents

Introduction	2
Overview of Cass County and Its EMS	2
A Rural Ambulance and Rescue Association.....	4
A Needed Forum for Information Exchange and Education.....	5
Association Involvement in Financial Issues.....	6
Support From an Urban Service.....	7
Collaboration on ALS Intercepts	9
Regional Medical Direction.....	11
A Physician With a Passion for Rural Medical Direction.....	11
Challenges.....	12
Convincing rural communities and services to work together.....	12
Convincing high-volume, paid ambulance services and low-volume, rural ambulance services to work productively together.....	13
Overcoming working paradigms and personalities.....	14
Addressing problems before they get out of control.....	14
Addressing declining volunteerism.....	14
Lessons	15
1) The value of a systems approach to EMS.....	15
2) The importance of prepared and capable leadership	16
3) Rural volunteer services and large paid services have much to offer each other.....	17
4) Experienced and dedicated regionalized Medical Direction improves uniformity and continuity.....	18
5) The importance of relational trust in EMS regionalizing efforts.....	18
Conclusion.....	19

Introduction

Volunteer-staffed rural ambulance and medical first-responder services across the United States face increasing challenges as rural demographics and rural socioeconomics change, healthcare resources consolidate and regionalize, public expectations for emergency medical care remain high, and governmental preparedness demands increase. However, several best practices from Cass County North Dakota suggest that leadership and regional collaboration based on relational trust may make rural ambulance and first-responder services stronger and more sustainable.

Specifically, these best practices are:

- Leadership in creating a regional organization for collaboration between ambulance and first-responder services;
- Dedicated support and help for rural volunteer services from a large, paid urban ambulance service;
- Collaboration on creating patient-oriented, provider-respecting and financially workable intercept practices; and
- Leadership in regional Emergency Medical Services (EMS) Medical Direction from a large, tertiary healthcare center.

This document is part of the North Dakota Rural EMS Improvement Project, a state-funded project to assess and strengthen EMS in North Dakota. A portion of the project's work examines what *is* and *is not* working for EMS in North Dakota. This report is not a comprehensive assessment of EMS in Cass County; rather, it is an exploration of why Cass County's volunteer ambulance and first-responder services appear to be doing better than other volunteer services in North Dakota in terms of number of active members, member enthusiasm, and creating a strong and sustainable regional approach to providing rural EMS. This document reports findings, interpretations of the findings and lessons learned. The objective of this document is to inform and educate others about the possible application and adaptation of these best practices. In an effort to promote readership, this document is presented more as a feature article than a typical consulting report.

What Is a Best Practice?

For the purposes of this document, a best practice is a practice that has proven to be consistently successful in one location or organization and may hold promise for possible application or adaptation in another location or organization.

Overview of Cass County and Its EMS

Cass County is located on the southeastern border of North Dakota and Minnesota along the Red River. Spread over 1,768 square miles, the County is a mix of rural farms, farm communities, and the growing urban area of Fargo and West Fargo. Busy interstate 29, which

runs from Kansas City to the Canadian border, crosses the eastern edge of the County. Bisecting the County from east to west is Interstate 94, which connects the Great Lakes to the intermountain region of the United States.

Most of the land in Cass County lies in the Red River Valley flood plain and is used for agriculture. Fertile farms produce a wide variety of crops and livestock and support more than a dozen independent, small towns scattered across the County. Increasingly, these communities are being impacted by economic changes and ongoing urban development on the eastern edge of the County. As one rural resident said of Cass County, “We have it all — farms, open country, great hunting, fishing, and the conveniences of a big city without too much congestion.”

Despite a long history of floods, fires and tornados, Fargo continues to grow; with a population of 105,000, it is the largest city in North Dakota. West of Fargo proper is the rapidly expanding suburban population, and across the Red River is the growing Minnesota community of Moorhead. According to the recent Census data, the greater metropolitan area of Fargo has a population that exceeds 200,000. The area has many healthcare resources, including two major medical centers in Fargo (Essentia Health Center and Sanford Medical Center), which provide level II trauma care and a variety of specialties.

Populations of Rural Communities

- Casselton: 2,329
- Kindred: 614
- Page: 125
- Hunter: 325
- Horace: 915
- Davenport: 216
- Harwood: 607
- Buffalo: 220
- Leonard: 223

Out-of-hospital EMS for rural Cass County is provided by a multi-tiered EMS system made up of five first-responder agencies and four Basic Life Support (BLS) ambulance services. An Advance Life Support (ALS) ambulance service from Fargo assists the BLS services when advanced clinical care is needed. On occasion, a helicopter from Fargo will arrive on-scene to assist the BLS services. Most patients are transported to medical centers in Fargo. Fire departments assist with extrication, rescue and hazardous material situations.

The first-responder services, also called Quick Response Units (QRUs), are located in the communities of Horace, Davenport, Harwood, Leonard and Buffalo. These volunteer services provide rapid response to their communities in areas where ambulance services are not nearby. They respond with trained personnel and equipment to provide an assessment of patients and basic medical care until an ambulance arrives. QRUs respond when they have staffing available and if their services are not needed 24/7, as are ambulance services in North Dakota. QRUs do not transport and do not respond to all ambulance calls.

The BLS ambulance services are located in the communities of Casselton, Kindred, Page and Hunter. These ambulance services provide emergency response and transportation to approximately 550 patients per year. Calls for EMS are received and dispatched by the Red River Regional Dispatch Center. First-response, fire and BLS resources are dispatched as appropriate to the call. The ALS ambulance service from Fargo is automatically started on calls

meeting specified clinical criteria or as requested by the BLS services. Intercepts, where BLS and ALS services meet at the scene on route to the hospital, are frequently utilized to ensure the appropriate level of patient care.

Rural Cass County Ambulance Service Call Volumes

	2010	2009	2008	2007
Casselton	277	310	303	259
Kindred	131	143	100	93
Page	42	29	55	34
Hunter	73	73	86	71
TOTALS	523	555	544	457

Over the past 40 years, the rural ambulance services developed locally and organically, without countywide planning, where there was a need, resources, leadership and a local commitment to providing services. While these services have operated as separate individual agencies, they share many commonalities and needs, including:

- The need to survive as vital agencies serving the needs of their rural communities;
- Limited response resources and a common reliance on each other for back-up;
- A relatively small number of calls limiting the experience of the responders;
- Limited financial resources and the need to find efficiencies;
- Limited leadership resources and time;
- The need to attract and keep committed and qualified volunteers;
- Ongoing EMS education and training needs;
- The need for supportive and competent quality assurance;
- The need for cooperative relationships with ALS resources from Fargo;
- The need for accurate information on all aspects of emergency services;
- The need for knowledgeable and engaged EMS physician Medical Direction; and
- The need for professional support and leadership coaching.

Over the years, planned and unplanned circumstances inspired these nine rural services to draw upon these commonalities and begin to collectively address their needs by: creating a formal association of their services; welcoming the support efforts of the urban ALS ambulance service; creating patient-oriented and provider-respecting intercept practices; and obtaining engaged, unified Medical Direction from a large, urban medical center.

A Rural Ambulance and Rescue Association

Historically, rural first responder and ambulance services have taken a great deal of pride in their independence and local identity. Often, EMS services are territorial, and Cass County is no

exception. EMS providers in rural Cass County proudly boast of wanting to “take care of their own,” and they wear jackets, shirts and hats that display their local service’s name and emblem. Each service has its own local history, response area, distinctly logoed vehicles and local identity.

However, in the late-1980s, the County’s rural EMS service leaders began to recognize the need for a common entity to work together on issues of mutual concern. The ambulance services and QRUs acknowledged that they had many common concerns. As such, they requested a forum where they could discuss issues and take action collectively, while maintaining their own individual identities and services. Together, they formed the Rural Cass County Ambulance and Rescue Association (Association) with the goal of working together to ensure the citizens of their communities had the best possible emergency medical care and transportation in every emergency medical crisis. The Association created bylaws, a code of ethics (that all member services agreed upon), and a process for electing leadership and conducting business. Each service was granted a voting member in the Association, who together elected officers (president, vice president, secretary and treasurer) for one-year terms.

A Needed Forum for Information Exchange and Education

Over the years, the Association has served as an important forum for discussion and collaboration among services. Its quarterly meetings are lively, and participants do not hesitate to speak out on issues of concern. During meetings, a variety of issues are discussed, including response issues, medical care issues, quality issues, mutual aid, dispatching and communications, initial and continuing EMS education, equipment needs and purchasing. Conflicts and potential conflicts are addressed before they become problems and impinge upon the Association’s unwritten mission of providing reliable professional EMS. Each service learns from each other’s successes and failures, and best practices are frequently shared.

Over the years, the Association has served as an important forum for discussion and collaboration among services.

In recent years, an important function of the Association has been to facilitate the regional exchange of information and engage in regional planning, not only for everyday response, but for multiple casualty incidents and disaster planning. These activities have drawn in a number of important emergency services stakeholders. Participating in Association meetings (but not voting) are F-M Ambulance, the Cass County Sheriff’s Department, the Cass County Public Safety Answering Point (PSAP), Life Flight (the regional medical helicopter service), and other regional emergency, community and healthcare organizations as needed.

Currently, the Association provides a forum to discuss the growing challenge of recruiting and retaining volunteers. Because rural EMS services do not have large enough ambulance call volumes or local tax subsidies to sustain paid staff, they rely heavily on the subsidization of volunteer workers.

However, because of ongoing changes in socioeconomic conditions, rural demographics, and attitudes about volunteering, the level of volunteerism in rural areas has sharply declined. Like other rural areas, Cass County ambulance services and QRUs are experiencing significant declines in volunteerism. Area EMS leaders attribute these declines to aging populations, a lack of interest by young people, people leaving town during the day for employment, the need for multiple jobs and incomes for many households, the training demands to gain and maintain EMS certification, the increasing number of calls, time commitment demanded by calls, and changing attitudes about community involvement.

While the Association has not come up with a single solution for declining volunteerism, members are working on the problem collectively. They share various recruitment and retention strategies for getting potential volunteers into initial training programs. They also work together on creating an EMS culture in rural Cass County that is professional, education-oriented, and appealing and hospitable to volunteers. While all of the ambulance services and QRUs in Cass County are experiencing difficulties associated with declining volunteerism, their numbers of active members suggest they are doing better than many services across North Dakota.

Association Involvement in Financial Issues

An important function the Association performs is the distribution of the approximately \$145,000 of County mill levy funds. The ambulance services and QRUs have agreed on an equitable allocation of these monies, with equal payments to each of the ambulance services and lesser amounts to each of the QRU teams. A part of these funds are utilized to cover EMS Medical Direction and other support services provided by F-M Ambulance.

Further evidence of the Association's ability to foster cooperation can be seen in the ambulance services subscription program. Each of the four rural ambulance services offers their own \$35 per household annual subscription plan to the households in their service area. Like a mini-insurance plan, these subscriptions allow users to utilize the ambulance services and limit or avoid out-of-pocket expenses. These funds assist in the operational budget for the services.

The four ambulance services honor each other's subscriptions. If one service transports a patient who has a subscription from another Association service, the same conditions are placed on the collection of the bill as if the subscribing service did the transport. When questioned about one service needing to pay the other service for a transport, Dale Torgerson from the Kindred Ambulance Service said, "We don't worry about that too much. It all comes out even sooner or later."

According to leaders of the EMS services in rural Cass County, the Association plays a significant role in helping to keep these services viable and able to make the best of challenges facing rural EMS.

Support From an Urban Service

Sanford Health, headquartered in Fargo and Sioux Falls, South Dakota, owns and operates the sole ALS ambulance service in the Fargo Morehead metropolitan area, called F-M Ambulance (F-M). Responding to nearly 15,000 requests for service per year with more than 65 employees — including 45 paramedics — F-M is the largest and busiest full-time ALS ground ambulance provider in North Dakota. Its activities in emergency response, EMS education and quality assurance make it one of the most-experienced centers of knowledge and practice in the state. F-M is an accredited ambulance service by the Commission on Accreditation of Ambulance Services (CAAS). The accreditation process demands adherence to stringent standards and less than 150 ambulance services nationally have achieved accreditation. One of CAAS’s standards calls for collaboration with local first responders.

More than 20 years ago, F-M adopted a philosophy and practice of promoting the survival and success of the rural volunteer ambulance services and QRUs in Cass County. F-M viewed this philosophy as a smart business and community practice. “We want the rural services out there,” said F-M Executive Director Dean Lampe. “It wouldn’t be good for us if those services don’t survive. We can’t cover those areas as well as the people out there. We want those services around.”

Lampe explained that if the rural services ceased to exist, F-M would be confronted with two options: As an ALS-licensed ambulance service, it would be forced to deploy expensive resources into the rural communities — meaning, F-M would have station trucks and paid EMTs and paramedics in rural communities where the number of calls would not cover costs; or F-M would have to respond to the rural communities from Fargo, making rural communities and emergency patients endure long response times. Over the years, neither option has been palatable to F-M, and it has therefore maintained that it is in the best interest of its urban customers, neighboring rural communities, and own business health to invest in helping the rural EMS services survive.

“We want the rural services out there!” said F-M Executive Director Dean Lampe.

However, just offering to help rural ambulance services and QRUs is not always easy. In areas where urban and rural areas overlap, rural EMS is often suspicious of any gesture by a large urban ambulance service to become involved in a rural area. The suspicion centers around three fears:

- The urban ambulance service’s crews will treat rural providers poorly and without respect;
- The urban ambulance service will eventually take all the interesting and challenging calls, leaving the rural services to handle only minor calls; and
- The urban ambulance service will eventually take over the rural service area and put the rural services out of business.

Early on, the rural Cass County ambulance services and QRUs were hesitant to accept F-M's offer of help. However, over time, as the F-M staff invested heavily in building relationships and getting to know the rural EMS providers, the rural services began to trust. F-M's actions demonstrated that it truly wanted to help these service not only survive, but thrive — not just as independent services, but as engaged and equal partners with F-M. Over the years, F-M's primary support of the rural ambulance services and QRUs includes continuing education, training, information, planning, encouragement, ALS intercepts, and simply taking an interest in the rural services and the individual rural EMS providers.

While F-M does not provide staffing assistance or direct leadership coaching, its support in other areas enables local leaders to focus more energy and resources on issues such as staffing and recruitment. Having F-M's involvement assists local leaders in presenting their services as a professionally connected organization, which is helpful in recruiting from a shrinking and dubious pool of potential volunteers.

In May 2006, to better streamline their message and offer a more consistent method of support, F-M committed 75% of one of its paramedic's time to be a liaison to the rural ambulance services and QRUs. Prior to this, F-M had a variety of staff members involved, which at times resulted in conflicts. In assigning a single coordinating liaison person, F-M was able to deliver consistent support and dependable message.

The paramedic selected for this liaison role came from a small rural service just outside the Cass County Association's boundaries, where he had been a farmer and understood the dynamics of rural communities and rural EMS. "Farmer Bob," as paramedic Bob Klein is fondly known by the rural services, attends each of the four ambulance services' monthly meetings, as well as attending bimonthly meetings of all the QRUs. In these meetings, Klein serves as the messenger, bringing new protocols, practices and introductions to equipment.

Klein also helps to plan and deliver monthly education in cooperation with the needs of the services and their Medical Director. These monthly training sessions not only keep the rural EMS providers' clinical skills sharp, they also help busy volunteers obtain convenient and local continuing education hours (essential to re-certification).

Rural service leaders and providers said that as a result of this monthly education, their services are becoming better educated, particularly in strengthening the basic level provider's awareness of important clinical situations, such as STEMI (ST segment elevation myocardial infarction) and strokes. In addition, they reported F-M's monthly education programs have served to bring the rural services closer together.

QRU members are invited to attend monthly ambulance service meetings and training sessions. Klein sees first responders as a key element of the rural EMS system and works hard to make them feel a part of the team and system, regardless of their training level or the number of responses they may have experienced. Speaking for the QRU members, Jim Jager, of the Buffalo

QRU and current president of the Association said, “Ag Man [Jager’s nick name for Klein] has never told us what to do; only offers suggestions as to how we can do things and to do things better.”

From an idea birthed through conversations initiated by the BLS services, the EMT and First Responder refresher programs that F-M helps to conduct have a slightly different make up than other programs. The EMT Refresher had six modules. The first four modules comprise the First Responder refresher course and provide opportunities for team training between ambulance services and QRUs. A schedule is published, outlining where and when each module is being conducted. Attendance is required for each of the assigned modules, but *where* each individual takes that module is up to them. With volunteers working a variety of full-time job schedules in other vocations, volunteers reported that this kind of flexibility and spirit of cooperation among all is a tremendous benefit.

One of Klein’s key roles is to serve as a mediator and peacemaker. In emergency situations where multiple agencies respond and adrenalin and emotions are high, there is always a potential for misunderstandings between response crews. The suspicions and fears mentioned above are easily activated in the heat of a rescue scene. However, if a rural volunteer has a question about a response or feels he or she was mistreated on a call by an F-M crew, they are encouraged to contact Klein, who promptly addresses the situation. And this works both ways. If the F-M EMT or paramedic has a question or problem with the rural providers, they too can contact Klein for help with resolution.

“It is good business to stay buddies with these services,” Klein said. “Our families live in these communities, and by helping them provide better service, we are helping our families too.”

F-M does not charge the Association or the rural services for Klein’s time and involvement. F-M does charge some fees for specific educational programs, such as first-responder and EMT training. According to Lampe, F-M’s investment pays high dividends in keeping the rural services strong and building relationships of trust and collaboration.

Collaboration on ALS Intercepts

Since 2008, North Dakota law (33-11-01.2-15) requires that BLS ambulances call for an intercept with ALS ambulances (when it will not delay transport time) for patients with major trauma, cardiac chest pain or acute myocardial infarction, cardiac arrest or severe respiratory distress, or respiratory arrest. Intercepts involve the BLS and ALS ambulances meeting and working together to ensure the patient has the best possible care with no significant interruption in the continuity of care. This often presents challenges for both BLS services and ALS services in terms of working together, financial compensation and follow up. However, the leadership of F-M and the rural ambulance services of Cass County have worked together to create intercept practices that are collaborative and focus on mutual trust and the best care for patients.

Here's how that practice works. When a 9-1-1 call is received by the Red River Regional Dispatch Center and determined by the emergency medically trained dispatcher to possibly involve the need for ALS care, the BLS ambulance service assigned to the location of the call is dispatched. F-M Ambulance is then notified. An ALS ambulance from F-M is automatically sent (or auto-launched) toward the same location. Upon arrival, the BLS ambulance crew will determine if ALS is needed, and either allow the ALS ambulance to continue to the scene of the emergency or begin transportation of the patient and meet the ALS ambulance along the highway. A paramedic from the ALS ambulance with ALS equipment joins the BLS crew and begins advanced treatment, as transportation to the hospital continues. If the BLS ambulance arrives and the crew determines ALS care is not needed, the ALS ambulance is cancelled. Crews from Casselton Ambulance Service and Kindred Ambulance Service estimate that F-M ALS ambulances are auto-launched on about 70% of their 440 annual calls.

Payers for ambulance transportation (private insure, Medicare and Medicaid) will reimburse only one ambulance service on a call, and the amount reimbursed is limited. Therefore, BLS and ALS ambulance services must work out a mutually acceptable system for dividing intercept payments. Desiring to maintain trust with rural ambulance services and ensure that rural services received adequate reimbursement for their transport, F-M currently limits its charges for ALS intercepts to \$180.00 plus any supplies and medications. This rate is significantly lower than some other ALS services in North Dakota (some charge as much as \$500 per intercept). According to Lampe, this is another way in which F-M ensures that the rural services stay strong and the relationships between the services remain positive.

To ensure that future F-M employees understand the relationship between F-M and the rural services, paramedic students from the F-M paramedic training program attend an all-day, hands-on clinical class with the rural providers. During this class, they are introduced to the rural ambulance operations and given an opportunity to interact with the rural staff. Leaders of the rural ambulance services reported seeing the benefits of this activity in terms of witnessing healthy interactions between their crews and the former students as they become paramedics for F-M.

Requirements for ALS Intercepts

33-11-01.2-15. Required advanced life support care. When it would not delay transport time, basic life support ambulance services must call for a rendezvous with an advanced life support ground ambulance, or an advanced life support or critical care air ambulance, if the basic life support ambulance is unable to provide the advanced life support interventions needed to fully treat a patient exhibiting:

1. Traumatic injuries that meet the trauma code activation criteria as defined in section 33-38-01-03.
2. Cardiac chest pain or acute myocardial infarction.
3. Cardiac arrest.
4. Severe respiratory distress or respiratory arrest.

Regional Medical Direction

All ambulance services in North Dakota are required to have a physician Medical Director. Medical Direction is the physician oversight, or clinical supervision, of licensed EMS personnel. North Dakota EMS Code requires that all licensed EMTs and paramedics may only function under the supervision of a physician. The physician is required to credential the provider and provide protocols for patient care. It is the job of the Medical Director to:

- Ensure the EMT and paramedics skills competency;
- Determine skills and treatment modalities with North Dakota scope of practice;
- Delegate authority for provider practice; and
- Restrict or revoke authority for provider practice.

Most rural ambulance services in North Dakota have a local physician serve as their Medical Director. This physician often does not have extensive emergency medicine or EMS knowledge and experience. As such, knowledge and experience is not a requirement of North Dakota laws or rules. In addition, these physicians often have busy local practices and are unable to invest significant time in an ambulance service. In 2008, an assessment of EMS in North Dakota by the Office of EMS of the National Highway Traffic Safety Administration recommended that North Dakota explore the “creation of regional models for medical direction.” Rural Cass County is such a model and practices a regional approach to Medical Direction in which regional services share a single Medical Director and utilize common medical protocols, educational modules and quality practices.

More than a decade ago, Essentia Health (formerly Innovis Health), one of two large hospital healthcare providers in Fargo, became involved in rural EMS activity by offering Medical Direction to the rural ambulance services and QRUs surrounding Fargo. The leadership of the rural ambulance services accepted the offer, and an emergency medicine trained physician began providing oversight of their clinical care. This arrangement allowed all of the County’s rural ambulance services to receive consistent Medical Direction from a single physician, with time dedicated to the development of uniform practices at an affordable cost.

A Physician With a Passion for Rural Medical Direction

For more than six years that Medical Director has been Brian Sauter, M.D., a board-certified emergency medicine physician who is affiliated with Essentia. Born and raised in California, Sauter attended medical school at Loyola University Stritch School of Medicine but came to North Dakota to return to his wife’s native state. Sauter is clearly enthused to be in North Dakota and to be providing rural EMS Medical Direction. “These are my services,” he boasted proudly. “I get to work with these great people.”

Sauter takes a hands-on approach to Medical Direction and works closely with each ambulance service and QRU. In describing his approach, he said, “We meet, discuss calls, talk about what is best for patients, laugh, drink coffee, eat a meal together, and at the same time, benefit the patients we serve. How many rural volunteer ambulance services and QRUs get this kind of training?”

Sauter routinely reviews calls and monitors each service’s clinical performance. He attends two of the four monthly ambulance service meetings and training sessions coordinated by Klein. Sauter divides his time evenly among the services and makes a point of ensuring that he knows what is happening among the services. If he is at an ambulance station when a call comes in, he is likely to jump on the ambulance and respond with the crews.

While Sauter is not the Medical Director for F-M ambulance service, he works closely with Klein and serves on F-M’s protocol development committee. He and Klein work together to develop the training modules presented at training sessions, and Sauter ensures that the patient care guidelines developed in cooperation with F-M are followed.

The rural ambulance service members reported being grateful to have Sauter as their Medical Director. Beyond being Medical Director, service members reported seeing Sauter as a champion and advocate for them to the healthcare community and an asset in helping them gain the credibility needed to do their job. They also view Sauter as an important link in maintaining a healthy relationship with F-M. When issues arise between their services and F-M, Sauter — along with Klein — serve as advocates.

Ken Habiger of the Casselton Ambulance Service summed up the general feeling by telling us, “We’re fortunate to have a Medical Director like Dr. Sauter and to have two hospitals, a professional ambulance service, area QRU's, fire services, police and an air ambulance service supporting us. We are all better for it.”

Challenges

While these practices hold promise for adaptation by services, they are not without challenges.

Convincing rural communities and services to work together.

While the benefits of rural ambulance services working together to gain efficiencies are easy to grasp, the real challenge is convincing ambulance service leaders, EMS providers and communities that such an effort does not necessarily mean the loss of local services or local control.

North Dakota rural communities have a long history of self-sufficiency. In many communities, this self-sufficiency has been translated into a deep pride and local identity of which residents are fiercely protective. This protectiveness can be seen in the resistance some communities display with rural school consolidation. Residents believe that in consolidating schools, they will lose a part of their community's unique identity and, thus, lose a sense of their own local self-sufficiency.

The same issues surround the suggestion that rural ambulance and first-responder services collaborate on serving their region. While many rural volunteer ambulance services and QRUs in North Dakota are struggling to staff their services 24/7, some are still resistant to working with other services to find solutions. This resistance is rooted in the following fears, beliefs and attitudes:

- Working together is the first step toward losing local services;
- Working with other services will reveal local weaknesses;
- Another EMS organization in a neighboring community is on a mission to take over;
- A neighboring service cannot be trusted because of an old or current inter-community rivalry;
- Working together will eventually lead to a loss of local control and the ability to meet local needs.

Cass County is not immune to these challenges. However, over time and with visionary service leadership, the QRUs and ambulance services have been able to clearly see and trust the intention of the regionalizing efforts of the Association, F-M Ambulance and Medical Direction. Successful regionalization is a slow process.

Convincing high-volume, paid ambulance services and low-volume, rural ambulance services to work productively together.

Both high-volume, paid ambulance services and low-volume, rural ambulance services face risks in working together that include the issues mentioned above, as well as issues about reimbursement and competition for limited monies, the differing culture of paid and volunteer services, and the way in which each works with patients.

Because rural services deal with a smaller population and infrequent calls, responders often know their patients and how they are connected in the community. A large, busy, paid responder may not know a patient, anything about his or her life, or how any particular emergency event is connected to the rural people and the rural place.

While this challenge continues to exist in Cass County, the rural services and F-M have come to recognize that, despite their organizational cultural differences, both types of services have much to offer and can work together with frequent and open communication. An obvious key to success in Cass County is the willingness of both sides to invest the time it takes to build

trust. Both Sauter and Klein emphasized the importance of having an attitude of wanting to work together.

Overcoming working paradigms and personalities.

Another particular challenge is the working paradigms of rural volunteer and busy, paid services and the differing attitudes those paradigms sometimes engender. Rural volunteer EMTs may perceive paramedics from a busy service as arrogant because of their additional EMS training and salaried position. Likewise, the paramedics may view the volunteer EMT dismissively because they have less experience and are “merely volunteers.” Sauter acknowledged that new, aggressive paramedics are sometimes a major source of frustration for the BLS services. “They are not sure how to interact with the BLS people,” he explained. “Some come in with a ‘better than you’ attitude, and that doesn’t sit well with my services.”

This challenge often manifests during intercepts. If a BLS service feels the care they have provided prior to ALS arrival is being discounted or discredited, the relationship suffers. If ALS personnel fail to allow BLS personnel to continue participation in care, or if ALS entirely removes the patient from BLS care, the relationship suffers. If the BLS service does not utilize the ALS service appropriately or fails to assist upon ALS arrival, the relationship suffers. Both F-M and the rural Cass County services have worked hard to ensure that BLS and ALS work together as a team. According to Klein, this is an ongoing challenge and indicator of the health of the relationships and the system.

Addressing problems before they get out of control.

Because emergency work involves crisis, high adrenalin and elevated emotions, conflict between services and crews is inevitable. The challenge is having respected and skilled leadership and processes in place to mediate conflict before it spins out of control.

Both Sauter and Klein have invested enough time in the Cass County EMS system to develop the needed credibility and respect to be effective mediators for both sides of any issue. Both emphasize the need to intercede and resolve issues quickly. In addition, there are known reporting processes in place to ensure that issues receive early attention and action.

Addressing declining volunteerism.

Like most rural areas in North Dakota, the leading challenge for the Cass County rural services is declining volunteerism. This challenge necessitates making the most of current volunteers, effectively recruiting from a smaller pool of potential volunteers, and preparing for a future where exclusive volunteer staffing may not be viable.

All four of the rural ambulance services have concerns about volunteer staffing. While not yet at a critical stage, ambulance service representatives reported that the current volunteers are aging, and the needed numbers of new volunteers have not materialized. When asked about the future, both Casselton Ambulance Service and Kindred Ambulance Service predicted that they would need paid daytime staffing in the next five years to survive.

During Association discussions, members have talked about the risk of discouraging the few volunteers they have if they start paying some staff members. They have also discussed trying to convince the State of North Dakota to lower provider licensure requirements or requirements that ambulance services must be available 24/7.

Currently, the most successful rural volunteer ambulance services are those that have:

- Engaged, prepared and respected leadership;
- Inviting, friendly, education-oriented, professional and fun organizational culture; and
- Recruitment strategies that make the most of a small pool of potential volunteers.

By providing support to the rural services, both F-M and Essentia are allowing the rural services to focus more time and resources on recruitment and retention in the communities they serve, while assisting them in offering a higher quality of organizational culture and competence. This may make the services more attractive to some potential volunteers.

However, the most significant advantage these services have in addressing the challenge of declining volunteerism is their collaboration. By working together, they know each other's staffing situations; can continue to evolve back-up and contingency plans; and can collectively work on strategies for future staffing, the deployment of resources and fundraising. Most importantly, they can tell a collective County-wide story to their communities and the evolving situation.

Lessons

A regional approach to rural EMS offers important benefits.

1) The value of a systems approach to EMS.

If the critical mission of out-of-hospital EMS is to provide reliable response and the best possible patient care and transportation every time there is a need, this mission is best served by an *EMS system*. An EMS system is made of a variety of agencies, organizations and entities, all working together to accomplish the goal of providing rapid emergency medical response and treatment. An EMS system includes:

- Public access, dispatch and communication capabilities;

- Emergency medical first response;
- Rescue, extrication, hazardous materials and fire suppression response;
- BLS, ALS and airmedical ambulance capabilities;
- Advanced life support ambulance response;
- Public safety resource;
- Hospital resources and specialty care centers;
- Law enforcement agencies;
- Medical oversight, direction and medical control;
- Quality assurance activities;
- Education and training; and
- Large incident and disaster planning.

Through the Association and the regular involvement and teamwork of vital key stakeholders, a true EMS system is emerging in Cass County. Some advantages of this approach are:

- Patients receive consistent and uniform levels of clinical care, and providers know what to expect from each other;
- Resources are shared across the system to promote system strength;
- EMS is being integrated into a larger healthcare system;
- Interagency cooperation is promoted as mission critical;
- Interagency competition is limited, and interagency agreements are based on relationships, trust and knowledge;
- Problems and challenges have a forum, and any local QRU or ambulance services' individual challenge is a regional challenge;
- A large group of involved leaders are continually assessing the system performance and working toward improvement; and
- A ready-made group with experience in working together stands ready to collectively address emerging challenges and develop solutions.

2) The importance of prepared and capable leadership

Cass County EMS collaboration emphasizes the importance of visionary, engaged, committed and courageous EMS leadership. The system would not exist, nor would it continue to work, without leaders in rural services seeing the need to come together; leaders at F-M recognizing and acting on concerns they share with the rural services; leaders in the medical centers recognizing the value of rural EMS to regional healthcare; and all the involved organizations appointing capable and respected leaders to do the job daily.

Historically, leadership in rural EMS at a service level has often been a role or duty rotated among service members. Primarily, this role focused on the management tasks of seeing that operational issues were addressed and bills were paid. Leadership decisions were often made through a group process. In the past 5–10 years, the leadership of rural ambulance services has

increasingly become more complicated, time intensive, and requiring specific preparation, passion and skills. This is a result of increased expectations for service performance, the difficulty in recruitment and retention, the increase cost of providing EMS, and increasing people management challenges.

SafeTech Solutions (STS) has found that leadership is one of the most important determinants in survival and success in rural EMS. Where there is prepared, committed, and courageous leadership, EMS services thrive. Where there is a leadership deficit, services struggle.

Effective rural EMS leadership demands the following endowments or capabilities:

- Time for the leader to do the job (in most cases this means the job can no longer be exclusively volunteer);
- Specific education and training for the role of leader and manager;
- A passion and commitment to leading (as opposed to just managing);
- A vision for the organization's future;
- An ability to inspire followers; and
- An ability to execute (get things done both personally and through delegation).

3) Rural volunteer services and large paid services have much to offer each other.

The emerging Cass County EMS system suggests that large paid services can be helpful to rural volunteer services, and rural volunteer services can be helpful to large paid services. The future of rural volunteer EMS in North Dakota remains uncertain. However, it is becoming increasingly clear that the old, exclusively independent volunteer system will not continue to exist in the same form as it has previously. Large paid ambulance services have the potential to bring the following:

- Extensive experience in EMS delivery, finance, reimbursement and out-of-hospital clinical care;
- Paid staff resources;
- Educational capabilities;
- Quality assurance experience and capabilities;
- Leadership and management expertise; and
- Connections inside and outside of EMS and healthcare.

Rural volunteer services have the potential to bring the following:

- Local coverage and response in areas of low call volume;
- Personal knowledge of people being served;
- People dedicated to the mission of EMS;
- Knowledge of local politics, geography and resources;

- Extensive experience in the delivery of rural EMS; and
- Support of local residents, governments and business.

However, bringing rural volunteer services and large paid services together can be a challenge, especially if mutual trust and respect are low. The Cass County experience suggests collaboration begins with leaders on both sides recognizing the potential mutual benefits, and then, leading collaborative efforts from the top.

4) Experienced and dedicated regionalized Medical Direction improves uniformity and continuity.

The Cass County experience suggests that approaching Medical Direction from a regionalized perspective (meaning a group of services share a common Medical Director, who helps to connect EMS to the larger healthcare system) is beneficial for the following reasons:

- A group of service is more likely to attract a Medical Director who is specifically trained in emergency medicine and interested in the provision for out-of-hospital emergency medical care;
- A group of services presents opportunities for more efficiencies in terms of meetings, education and review protocols and runs;
- Protocols, practices and approaches are uniform across all services covered by the Medical Director;
- Clinical issues between agencies have one place of address and appeal;
- Uniform messages about EMS are carried to the region’s medical profession and healthcare communities; and
- Costs of Medical Direction can be shared.

5) The importance of relational trust in EMS regionalizing efforts.

The Cass County collaboration emphasizes the importance of people learning to trust each other by developing relationships. Because of the way in which rural EMS developed, trust levels are often low when EMS organizations consider working together.

When talking with people involved in the Cass County system, it is clear that an investment in relationships is as important as the EMS issues. When STS visited with members of the Association, we witnessed a lot of storytelling, laughter, kidding and genuine concern about each other. It appeared that people at all levels took the time to know each other and ensure they had good working relationships. The result has been a high level of relational trust.

Relational trust is a term first used by educators to define the importance of trust between people, teams and organizations that serve a common mission. It is about building trust through relationships. Trust is not always a given — especially if people do not know each

other or if they know each other and there is some event, memory, belief or suspicion in their history together that questions trustworthiness.

In working with rural EMS organizations, STS has noticed that relational trust is a key ingredient in building a regional approach to EMS. STS has found that relational trust:

- Is built through day-to-day social exchanges in the EMS community;
- Supports a common commitment to take on the difficult work of building strong, reliable and sustainable rural EMS systems;
- Facilitates accountability for shared performance standards while also allowing people to experience autonomy and mutual support for their own independent local efforts;
- Reduces the vulnerability that local EMS leaders feel when asked to reveal current operational performance agency health; and
- Facilitates the safety needed to experiment with new practices and relationships.

The payoff for developing trust through relationships often emerges in the midst of a difficult emergency or when there is a misunderstanding or performance question. The payoff is also seen when change is all-around and the future is uncertain.

Conclusion

The EMS services of Cass County have much to be proud of in their collaborative efforts. Their work toward creating an EMS system is an example that has applications in many other locations in North Dakota.

One STS consultant wrote the following note after visiting a meeting in rural Cass County that included various EMS stakeholders:

“Watching the interaction, listening to the conversation, and understanding the passion each of these people bring to their roles in EMS, I did not get the impression I was talking with different services, but rather, one unified system. All were complementary toward the others and appreciated the views being shared. At no time was there discussion of an individual or one specific service being more important than the others.”

In commenting on the emerging system, Lampe, the executive director of F-M, concluded, “If you look up the definition of an EMS system in a text book, this is it. Larger services need to be involved in supporting the smaller volunteer services. The state should recognize this as something working and offer incentives to other systems to do something similar.”

“If you look up the definition of an EMS system in a text book, this is it.” – Dean Lampe