# Rural and Frontier EMS:

Needs Assessment,
Analysis and
Recommendations

## Presented to:

Kansas Board of EMS Dennis Allin, M.D., Chair Robert Waller, Executive Director

Prepared by:

Critical Illness and Trauma Foundation

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## **Table of Contents**

Executive Summary	
Key Recommendations	
Introduction	
Methods	
On-Line Survey	5
Town Hall Meetings	6
Results	7
On-Line Survey	
Quantitative	
Qualitative	
Recruitment, Retention, Staffing	
Stable Funding	
Education/Training	
State Leadership	
Regulations	
Turf Issues	
Clinical Issues	
Public Support	
Aging Local Leadership	
Disaster Preparedness	
Analysis Rather Than Action	
Town Hall Meetings	
Survey Discussion	
Major Issues	
Recruitment and Retention	
Financial Stability/Sustainability	
Training/Education	
Support and Leadership from State	28
Support and Leadership from Regions	
Medical Director Involvement	
Lack of Management Training/Support	
Regionalization	
Town Figure 2 valuations	31
Quantitative	
Qualitative	
Anger	
Appreciation	
Frustration with KBEMS	
Need for Follow-Up	
Optimism	
Skepticism	
Discussion	3/
Recommendations	

## **Executive Summary**

This report documents the processes, findings and recommendations associated with a two-step assessment of rural Emergency Medical Services (EMS) needs in Kansas. The first of these processes was an on-line survey which was followed by a series of facilitated regional town hall meetings.

The Kansas Board of Emergency Medical Services, along with its staff, is to be complemented on their willingness to solicit input from rural EMS service managers and providers. There was a general appreciation for the effort as witnessed by the response rate on the electronic survey and the participation level at the town hall meetings. Clearly, some of the respondents were driven to the process out of a sense of frustration with current activities and policies of the KBEMS. However, most participated out of a sense of wanting to make a difference for rural citizens of Kansas.

There are extraordinary challenges facing rural EMS providers in Kansas. Foremost among these are recruitment and retention of personnel and financial viability. For many services the day-to-day challenges are as basic as "putting gas in the truck and a crew in the back". If Kansas is to do business in the same manner that it has always done business, some rural EMS agencies will fail, leaving residents without an important strand in the rural health care safety net. Unfortunately, once that strand is broken the entire safety net is in jeopardy of unraveling.

The participants have provided the KBEMS and other leaders of EMS within the state of Kansas with an extraordinary opportunity to acknowledge these challenges and respond with bold and decisive action to help identify and deploy effective solutions. The leadership along with the EMS providers themselves, must be willing to step outside the box and implement strategies that have an opportunity to make a lasting effect.

Several recommendations are provided in the final section of this report. These recommendations are distilled from the comments, ideas and challenges presented by the survey and town hall participants. Of these recommendations the following were considered to be the most important.

## **Key Recommendations**

- Identify methods by which additional field-based representation can be achieved on the Kansas Board of EMS such as seating one (1) active provider elected from each region as full voting members with at least three of those meeting rural criteria.
- Identify and support through grant funding one or more localities that focuses on development, or application of, strategies for recruitment and retention, with a strong emphasis on evaluation and the dissemination of findings.
  - Replicate successful strategies.
- Identify and support through grant funding one or more multiple EMS
  agency consortia that can develop and apply policies and
  procedures relative to a broader "regional" approach to EMS, with a
  strong emphasis on evaluation and the dissemination of findings.
  - Replicate successful strategies.
- Develop a formal EMS plan for the State of Kansas (in concordance with the NHTSA TAT and KBEMS Strategic Plan) using a consensusbased process accessible to all EMS providers in the state to serve as a guiding document for the development, growth, sustainment, and evaluation of EMS in Kansas.
- Make all future grant application processes transparent, consistently applied, and equitable by including active field-based providers in grant application review and award processes.

Additional recommendations are found on page 35 of this report.

## Introduction

The Kansas Board of EMS (KBEMS) has a longstanding awareness of challenges facing EMS agencies and providers serving rural and frontier communities in Kansas. In the 2001 Strategic Plan KBEMS noted some of those challenges in the following paragraph taken from the environmental trends section of that plan.

The population as a whole is aging with rural areas aging more dramatically as young employable workers migrate to more dynamic education and job markets in urban areas. This aging creates two distinct but related problems. First, as the population ages, the utilization rate and response type for Emergency Medical Services agencies change. The nature of response shifts from high-impact trauma to low-impact injury and chronic illness. Along with this shift in the nature of the response, comes a change in the type of care provided from "life saving" to "palliative." Second, as Kansans age, the potential pool of future Emergency Medical Services providers, both volunteer and paid, shrinks. This recruitment challenge is further exacerbated by a perceived change in the work ethic dynamic of youth in the United States. Reinforced by a strong economy over the past decade, many young adults have been lured into portfolio building and away from public service, again creating a smaller pool of qualified and interested people. Young employees also seem more likely to change jobs more often, making retention of Emergency Medical Services personnel difficult from both a "mindset" perspective and because of the relocation that comes with upward mobility. (p. 8)

In 2002, KBEMS partnered with the Kansas Department of Health and Environment, Kansas Hospital Association, and Kansas Medical Society to sponsor a Rural EMS Summit. That meeting had an excellent combination of in and out of state speakers. The purpose of this conference is to inform attendees about the many new federal and state initiatives targeting EMS, and to formulate action steps that will support the development of a statewide policy agenda to support EMS in Kansas. So compelling was the content and input from that gathering that it led to the establishment the Rural EMS and Trauma Technical Assistance Center by the Office of Rural Health Policy.

In 2002-2003, the Kansas Board of EMS with funding support from the Kansas Office of Local and Rural Health worked with the Critical Illness and Trauma Foundation to conduct a series of EMS Community Assessments. Assessments were conducted with Thomas County EMS, Norton County EMS, Finney County EMS, Ness County EMS, Coffeyville Regional Medical Center, Stafford County EMS, Linn City Ambulance, City of Emporia Ambulance. Additional assessment processes were conducted in NE Kansas the following year. These assessments identified a number of common challenges persistent in rural Kansas but also pointed out the heterogeneity of individual communities.

In September of 2007 another EMS Summit, sponsored by KBEMS and the Kansas Office of Local and Rural Health was held that had several tracks that focused on rural EMS issues. This workshop introduced participants to, among other things, a changing reality for rural emergency medical services as outlined in the Institute of Medicine's Report on the Future of Emergency Care in the US Health Care System.

In spite of these multiple efforts there had never been a formal needs assessment and gap analysis of rural EMS in Kansas that could be utilized as the basis for formal policy development. The access to funds, specifically identified to support rural EMS agencies in Kansas, underscored the need to be able to allocate those funds in areas of highest need and, potentially, the greatest impact. It is the KBEMS stated desire to distribute those funds in a manner which reflects a high degree of transparency and accountability.

The current assessment process was twofold in nature. The first component of the process involved the development, validation, posting, data capture and analysis of a web-based electronic survey. Once completed, the results of this survey served as the basis for a town hall meeting in each of Kansas' six EMS regions. This report documents the findings of those two activities.

To accomplish the aforementioned survey and town hall meetings, the KBEMS contracted with the Critical Illness and Trauma Foundation (CIT) of Bozeman, Montana to complete those tasks. CIT is nationally renowned for its work in rural and frontier emergency health care and also has a strong historical perspective on issues facing Kansas based on work with KBEMS spanning more than a decade.

## Methods

## On-Line Survey

The purpose of the on-line survey was to gather information across the entire spectrum of rural and frontier EMS agencies on issues of importance to their local and regional operations. The results of the survey were to be used as a basis for additional face-to-face discussions at the town hall meetings and, ultimately, to guide the actions of the KBEMS relative to the distribution of rural EMS funds.

Based on research conducted by CIT relative to general national concerns affecting rural and frontier EMS and those gathered from previous work in Kansas a 20 question survey was developed for on-line posting using Survey Monkey TM. The survey was subjected a check of face validity by exposing it to a select group of rural and frontier EMS managers in the State of Montana. Face and construct validity was tested by a panel of nationally renowned EMS

researchers during the *Big National Conference for Leaders of Little and Medium EMS Agencies* held in Omaha, Nebraska. Content validity was further established by rural and frontier EMS agency managers, representing several states, at that conference. Refinements in the survey instrument were made following each validity check. A final approval of the survey instrument was given by the KBEMS staff.

The survey was posted on November 19, 2008 and was "live" until January 5, 2009. The responsibility for agency notification of the availability of the survey was assigned to regional EMS staff. Randomly drawn incentives were provided at the regional level to encourage completion. Likewise, a grand prize incentive was drawn from the entire pool.

#### **Town Hall Meetings**

CIT staff and each of the six Kansas EMS Regions worked to define mutually convenient times to conduct a town hall meeting in each region. The purpose of the meetings was to further validate the findings of the electronic survey and to identify other issues or challenges that might not have been captured by the survey process. Additionally, it was hoped that best practice solutions or strategies might be identified by talking with dedicated EMS professionals that wrestle with the challenges on a daily basis. The town hall meetings were conducted during the week of January 12-16, 2009.

The results of the electronic survey were captured and integrated into a PowerPoint ™ presentation in, statewide, aggregate form. Additional stratification was conducted by regional to help identify any regional differences. This presentation served as the primary "jumping off" point for discussions at each of the meetings. An agenda was developed and initially included some discussion of the rural grant process. However, after the first of the town hall meetings that discussion point was dropped to help keep the discussion focused on priority issues and suggested solutions. Formal feedback on the process and outcome of the town hall events was solicited and analyzed.

## Results

## On-Line Survey

## Quantitative Analysis

One hundred twenty (120) individuals completed all, or portions of, the on-line survey. The respondents most frequently (27.7%) identified themselves as being affiliated with a "third service" model of EMS delivery followed closely by volunteer (25.2%). (Figure 1) The majority (66.7%) of the respondents indicated that their agency was licensed at a BLS level. (Figure 2) Sixty two percent (61.7%) indicated that their agencies did fewer than 500 transports per year, excluding transfers. (Figure 3) These demographic characteristics suggest that the preponderance of the respondents represented EMS agencies in rural and frontier locales.

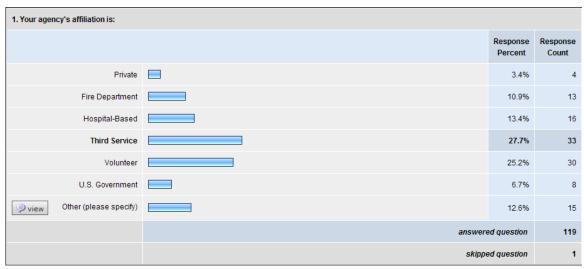


Figure 1

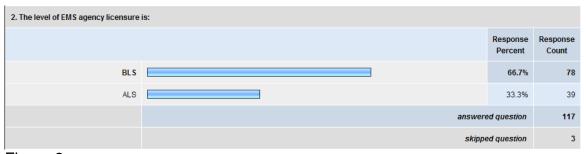


Figure 2

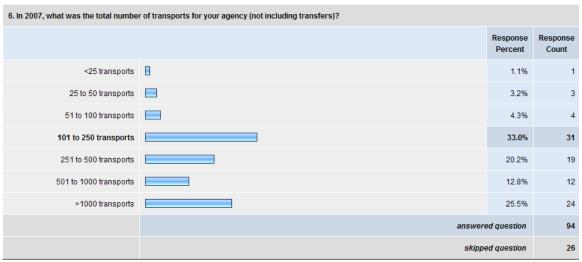


Figure 3

When asked to rank the greatest challenges facing their agency the greatest challenge was noted to be 1.recruitment of personnel, followed by 2. agency funding/financial viability, 3. retention of personnel, 4. aging building/equipment and 5. billing/accounts receivable. Following into the bottom half of the top ten was 6. initial/continuing education, 7. medical director involvement, 8. support from the state, 9. support from the region and, 10. administrative support. (Table 1).

	1 (most challenging)	2	3	4	5	6	7	8	9	10 (least challenging)	Rating Average	Response
Agency funding/financial viability?	27.4% (20)	11.0%	15.1% (11)	12.3% (9)	9.6% (7)	1.4%	5.5% (4)	5.5% (4)	8.2% (6)	4.1% (3)	0.00	7.
Aging building/equipment?	5.5% (4)	20.5% (15)	15.1% (11)	15.1% (11)	5.5% (4)	6.8% (5)	5.5% (4)	11.0% (8)	1.4% (1)	13.7% (10)	0.00	7
Recruitment of new personnel?	41.1% (30)	19.2% (14)	12.3% (9)	11.0%	6.8% (5)	0.0%	2.7% (2)	2.7% (2)	1.4% (1)	2.7% (2)	0.00	7
Retention of personnel?	8.2% (6)	27.4% (20)	17.8% (13)	8.2% (6)	12.3% (9)	8.2% (6)	2.7%	6.8% (5)	4.1% (3)	4.1% (3)	0.00	7
Medical director involvement?	0.0% (0)	6.8% (5)	6.8%	2.7% (2)	13.7% (10)	16.4% (12)	13.7% (10)	11.0% (8)	16.4% (12)	12.3% (9)	0.00	7
Billing/accounts receivable?	4.1% (3)	5.5% (4)	9.6% (7)	9.6% (7)	17.8% (13)	11.0%	12.3% (9)	11.0% (8)	8.2% (6)	11.0% (8)	0.00	7
Initial/continuing education?	1.4% (1)	2.7%	6.8%	6.8% (5)	12.3% (9)	20.5% (15)	16.4% (12)	12.3% (9)	12.3%	8.2% (6)	0.00	7
Support from the State?	5.5% (4)	1.4% (1)	5.5% (4)	16.4% (12)	8.2% (6)	16.4% (12)	17.8% (13)	15.1% (11)	8.2% (6)	5.5% (4)	0.00	7
Support from the Region?	2.7% (2)	1.4%	5.5% (4)	6.8% (5)	5.5% (4)	9.6% (7)	13.7% (10)	15.1% (11)	21.9% (16)	17.8% (13)	0.00	7
Administrative support?	4.1% (3)	4.1% (3)	5.5% (4)	11.0% (8)	8.2% (6)	9.6% (7)	9.6% (7)	9.6% (7)	17.8% (13)	20.5% (15)	0.00	7
										answered	auestion	

Table 1.

Nearly one half (47.1%) of the respondents noted that in the past three years difficulties in recruiting personnel have worsened with only 11.4% of respondents indicating that they have improved. (Figure 4). When asked what recruitment methods are employed the respondents indicated that they rely primarily (71%) on media announcements on the radio and/or newspapers. Many provider recruit at community events (47.8%), high schools (36.2%), and at colleges (33.3%). Many offer training incentives (47.8%) and others offer financial incentives (24.6%). (Figure 5.)

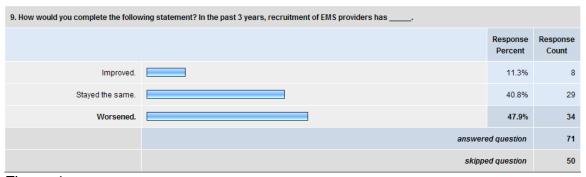


Figure 4.

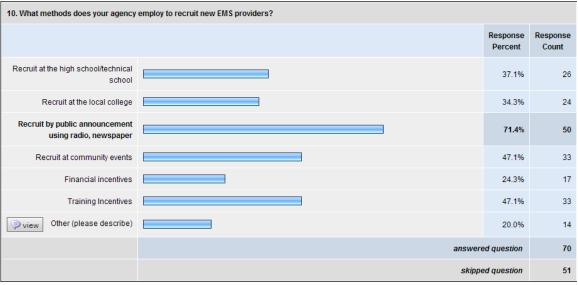


Figure 5.

The retention of personnel was reported to have, largely (56.3%), remained constant over the past three years. However, 33.8% note that it has worsened while only 9.9% report an improvement. (Figure 6) Strategies for retaining personnel include increased educational opportunities (61.4%), financial incentives (58.6%), and increased benefits (31.4%). (Figure 7)

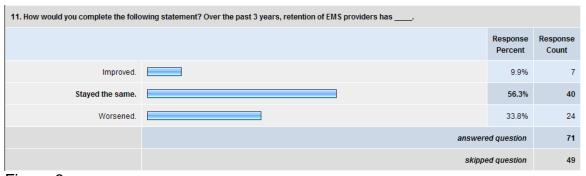


Figure 6

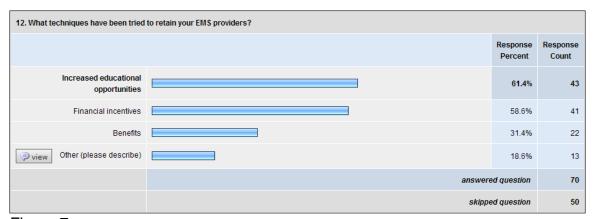


Figure 7

As a result of both recruitment and retention challenges, forty five (45.1%) percent of the respondents indicate fewer personnel on their roster than three years ago. Only 22.5% indicate an increase in personnel. (Figure 8) Additional stress is added to many agencies by the fact that, in many cases (46.5%), individual providers are taking fewer calls than three years ago. (Figure 9)

13. Do you have more or fewer members on your roster than you did 3 years ago?								
	Respons Percent	-						
More	22.50	6 16						
Same	32.4	6 23						
Fewer	45.1	6 32						
	answered question	71						
	skipped question	49						

Figure 8

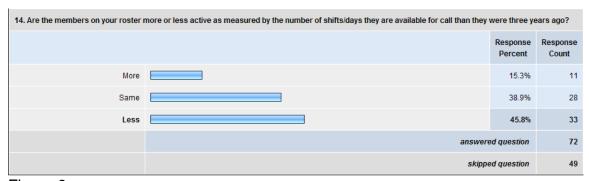


Figure 9

Changes within the community environment are placing additional stress on local EMS agencies. Among these changes in access to health care in local communities is noted as the largest concern. Changing population characteristics, assumedly and aging phenomena in rural areas, ranks second with increased expectations of EMS also noted. (Table 2).

18. Your community needs for EMS have been affected by: Please rank -1 = most challenging/3 = least challenging								
	1	2	3	Rating Average	Response Count			
Changes in emergency care delivery (lack of: primary care physicians, lack of health care insurance, etc.)	41.7% (30)	30.6% (22)	27.8% (20)	0.00	72			
Changing population demographics	40.3% (29)	27.8% (20)	31.9% (23)	0.00	72			
Changing perceptions/expectations of EMS	18.1% (13)	41.7% (30)	40.3% (29)	0.00	72			
	answered question							
	skipped question							

Table 2

Not surprisingly, funding for individual agencies comes from two sources, tax subsidy and patient charges/collections. Fundraisers/donations and subscription services account for only a small fraction of total budgets. (Table 3)

17. What PERCENTAGE of your agency's funding comes from each of the following funding streams? (Total must equal 100%)							
			Response Average	Response Total	Response Count		
view	Fundraisers/donations		3.48	146	42		
view	Patient charges/collections		50.85	3,153	62		
view	Subscription services		0.03	1	37		
view	Tax subsidy		54.41	3,700	68		
		answered question					
skipped question					50		

Table 3

When asked what they would apply an unexpected windfall of \$25,000 towards the highest ranked response was 1. a specific item of clinical equipment. This was followed by 2. retention programs/incentives, 3. new training equipment, 4. a specific item of operational equipment, 5. additional training opportunities, 6. recruitment programs/incentives, and 7. toward a new ambulance. (Table 4)

19. If your agency were to receive a donation of \$25,000 tomorrow, what would be your spending priority? Please rank - 1 = highest priority/7 = lowest priority/9 = lo									
	1	2	3	4	5	6	7	Rating Average	Response Count
Toward a new ambulance	16.7% (12)	8.3% (6)	9.7% (7)	1.4% (1)	13.9% (10)	6.9% (5)	43.1% (31)	0.00	72
Specific item of clinical equipment (e.g. EKG)	29.2% (21)	20.8% (15)	5.6% (4)	11.1% (8)	8.3% (6)	15.3% (11)	9.7% (7)	0.00	72
Specific item of operational equipment (e.g. radio)	8.3% (6)	12.5% (9)	23.6% (17)	15.3% (11)	18.1% (13)	13.9% (10)	8.3% (6)	0.00	72
Additional training opportunities (e.g. crew to conferences)	4.2% (3)	11.1% (8)	13.9% (10)	37.5% (27)	19.4% (14)	8.3% (6)	5.6% (4)	0.00	72
New training equipment (e.g. high tech manikin)	9.7% (7)	16.7% (12)	26.4% (19)	12.5% (9)	11.1% (8)	11.1% (8)	12.5% (9)	0.00	72
Recruitment programs/incentives	22.2% (16)	8.3% (6)	12.5% (9)	13.9% (10)	11.1% (8)	25.0% (18)	6.9% (5)	0.00	72
Retention programs/incentives	9.7% (7)	22.2% (16)	8.3% (6)	8.3% (6)	18.1% (13)	19.4% (14)	13.9% (10)	0.00	72
answered question								question	72
skipped question								48	

Table 4

#### Open-Ended Responses

Sixty-three of the respondents provide one or more additional comments to the final open-ended question on the survey. The wording of the question was: What do you think are the major issues affecting EMS in Kansas (please describe)? A qualitative keyword matching process was used to fit each comment into an appropriate category. The following pages reflect the frequency and types of comments received. Note: Many of the comments are taken directly from the survey and are, therefore, presented in the respondents own words without regard to grammatical correctness. In other instances multiple responses of a similar theme have been synthesized into a single comment.

#### Qualitative Analysis

#### Recruitment/Retention/Staffing

Twenty-two respondents noted that recruitment and/or retention of personnel is their primary challenge, regardless of whether the system is volunteer, paid or a combination of the two. Twelve individuals specifically noted that volunteer systems are in jeopardy of becoming unsustainable. The issue of declining volunteerism is attributed to a decreasing population, an aging population, challenging economic conditions, and changes in attitudes concerning volunteering. The following excerpt from one respondent summarizes the issue.

Frontier areas are losing population and with that goes technicians. We
are treating an older population needing more attention with fewer
volunteers, smaller tax base which reduces the chances for a full time
service, yet recruitment is getting tougher as there are fewer people to
draw from. A vicious circle that we need to attempt to stop.

Additional comments further underscore the challenges.

- Rural services have traditionally staffed utilizing volunteers, volunteerism is a dying component of today's society. Making the transition to career EMS from volunteer is a difficult task.
- Everyone is working harder, longer to stay afloat that the available time to volunteer is getting less and less
- Finding people willing to give their time to become certified and then taking the time to be on call.
- Having a volunteer service, and employers being able to let there employees off to make ambulance calls.
- In rural communities: decrease in employers willing to allow employees to be on call for EMS, EMS staff is more limited on time available to cover call due to outside activities or need for full time job pay.
- There is a lack of volunteers during the "normal" working hours of the day. Volunteers are also busy with work and family and have less time to give.
- Individuals not wanting to be an EMS person because of volunteer time and commitment, plus it takes away from family time.

Even in areas where EMS providers are paid, issues of parity in compensation with other health professions are noted to be stressing the system.

- I would have to say that in today's world people do not care about benefits they care about making more money. We in EMS are fighting with the nursing profession for people due to hospitals paying more then EMS can afford to pay.
- Workers salaries are considered low for the training they have received.

The magnitude of the staffing challenge is summarized in the following statement.

 In my opinion staffing is and will continue to be the most significant issue facing Kansas EMS.

#### Stable Funding

Twenty individuals noted that funding is an issue. The range of concerns included insufficient funding for the KBEMS, instability of grant programs, changes in 3<sup>rd</sup> party payment schedules, and lack of local governmental support. The issues are summarized below.

- I believe that the state needs to set programs that they can stick to. I feel that they start a good program then lose funding. Set grant programs that services can depend on. I understand that state funding varies but set reasonable grants are needed. Education incentive grant was great but ensure the students you give it to complete the requirements. The region grants are great but ensure that you disperse them evenly. I think that the number one problem is <a href="EMS">EMS</a> is not a well know but major service that the citizens of the state depend on. I believe we need to have a push to promote EMS as a public service and ensure the same benefits as Fire and Police. The majority of services in the state are county funded and not associated with Fire so let's work to get the same funding and benefits as fire.
- Major issues are going to be funding and being able to maintain services
  with decreasing or delayed reimbursement, self-pay, and non-medically
  necessary transports because of lack of physicians. This with continued
  increase in operations cost will force some to make some very tough
  decisions in the near future.
- Lack of county funds due to population decrease
- Reduction of reimbursement from Medicare
- Lack of affordable training, lack of funding to assist in education of new and current personnel.
- Keeping the small rural services from going under

- Pay for Service Directors, I currently make \$750.00 per month & no benefits, Need funding from somewhere to correct this
- Most EMS agencies in attendance rely more heavily on tax subsidy than patient generated revenue.

#### Education/Training

Thirteen respondents noted challenges pertaining to education and training.

- As training becomes more intense, fewer people are capable of filling the needs of a frontier area. Leaving those who are dedicated to their service becoming burnt out because of a lack of help for their service.
- Paramedic shortage due to lack of training schools and the difficulty out of state medics have with obtaining reciprocity.
- The frustration of trying to run educational programs and having to deal with the frustration of going back and forth with the state for approval.
- We are a hospital based EMS system. With the RN bridging program it is proving difficult to keep pace with RN wages. I have 4 RNs on staff currently, and 7 who will be entering the program in the next 2 years. Of those 7, I anticipate losing 4 to nursing.
- Lack of available bodies to take the EMS training in the frontier areas.

The following statements which, at least appear on the surface, represent dichotomous views on the National Registry certification process exemplify some of the challenges facing the KBEMS as they sort through the pros and cons of training issues.

 Adopting National Standards such as the National Registry for all levels and not trying to be so different from other states.

The decision of either becoming a National Registered state or maintaining our own state certification. Kansas needs to identify what is best for Kansas. Are we going to dummy down to be recognized nationally? Our educational standards vary from instructor to instructor, regarding who can intubate or who can not.

#### State Leadership

Eleven respondents expressed a perception that the Kansas Board of EMS could do a better job in the areas of leadership and communication. There is a perception that the KBEMS is out of touch with local and rural issues. Those concerns are summarized in the following excerpts.

- Lack of strong leadership from the Kansas Board of EMS that has to true understanding of the needs of EMS services in Kansas. Not knowing the issues and the effects of the changes they implement. Not having administrative leadership that has a firm background in Kansas EMS and its challenges.
- We lack state level leadership which is causing a divide in Kansas EMS.
   The Board needs to worry about the big picture and leave the stuff local people are good at, responding to calls and operations, to the local folks!
- I truly think the board could do more to promote EMS as a profession, they
  could do more to treat the service's better, KBEMS does not do a very
  good job of communication with many services.
- Lack of coordination/teamwork among the board staff.

## Regulations

Seven respondents noted having issues with over regulation and/or changes in regulations. Among these concerns are.

- Opening of statutes this year
- Too many regulations
- Having a reciprocity process that is not burdensome.
- Our Neo Nate Teams fear to much State control.

In at least one instance an example of under regulation was noted.

Utilization of Air Transportation-They are certain services close to metro
areas that use them way to much. The time it takes to summon the air
unit, arrive on scene, land, shut-down, assess the patient, load the patient,
and transport a ground ambulance could already have the patient at a
hospital assessed and stabilized and then decide if the patient needs to be
transferred to a more qualified Hospital.

#### Turf Issues

Six individuals noted that there is a lack of cooperation and coordination between and among various organizations and special interest factions in many areas. These challenges are noted to occur at the state, regional and local levels. Interestingly several respondents noted a friction between urban and rural providers. The following summarize those concerns.

- I also believe having a single voice in a state association is important, instead of a divided voice (KEMSA vs. KEMTA).
- The lack of organizations that want to work together such as regionalization between counties.
- There is still too much in-fighting that takes place between EMS departments and EMS personnel. There is not the same "professional" attitude that is needed to drive EMS workers to the next level of professional respect. EMS still appears to be "good old boy volunteers"; that do "OK". EMS workers must understand and respect the profession if they want to receive respect in return as a legitimate healthcare provider. Pay and benefits come as a direct result of these factors.
- Remembering the Rural Areas that do not have everything like the bigger places

#### Clinical Issues

Five respondents felt that there are challenges related to clinical care.

- Limitations of glucagon<sup>™</sup> administration by ALS only.
- Changes in Clinical Care
- Good hospitals are farther away.
- Many small community medical directors not getting out of the 70's and, not allowing EMS to improve in their communities.
- Think thoroughly before making changes (like the scope of practice)

#### Public Support

Three individuals directly noted that lack of public awareness is an issue.

- Public relations program for EMS exposure to public
- Promoting prehospital as a profession
- I also believe that staff, in general, don't feel very welcome by the public, they are not looked at as a profession nor are they looked at as being professional.

### Aging Local Leadership

The challenges of an aging rural population are noted, once again, to be having an impact in the area of leadership.

- Lack of new blood in the profession
- The age and Lack of Youth in the group

#### Disaster Preparedness

Two individuals noted issues around disaster preparedness.

- Interoperability for disasters is still a ways off for statewide preparation.
- Readying for a pandemic outbreak or any type of biological warfare involving numerous patients.

#### Analysis Rather Than Action

Finally, one respondent noted that the time for assessment and planning has expired and it is time to begin applying solutions to the issues.

All the reasons that have already been identified in the zillion dollars worth
of surveys and assessments in the past 30 years. We've identified the
problem 100 times. I'll only get excited about these kinds of surveys and
projects when we start working on solutions!

#### **Town Hall Meetings**

A town hall meeting was held in each of the six EMS regions between January 13 and 16, 2009. The meetings times/locations were set by the regional director in collaboration with CIT staff. CIT provided 2-3 staff to serve as facilitators and recorders of each meeting. Participation in each meeting ranged from 2-9 with an average of 6 persons. The small group nature allowed for significant discussion between the participants and the facilitators and among the participants, themselves. The discussion in each region started with an overview of the aggregate on-line survey findings and a comparison/contrast with regionally stratified results. The following summary indicates an aggregate discussion of each survey question.

#### Survey Discussion

### Question 1: Your agency's affiliation is:

- There was some concern about the numbers of agencies responding. In some cases there were more responses than licensed EMS agencies. It was noted that there was no method for limiting responses to one person per agency.
- There was also concern expressed about the difficulty in selecting an "agency affiliation type" since the definition of volunteer is somewhat fluid. Many folks thought that several of the respondents who indicated that their affiliation was a "third service" were probably staffed, largely or entirely, with volunteer personnel. It was noted that the affiliation descriptors were taken from the LEADS surveys previously conducted by the National Registry of Emergency Medical Technicians to add some consistency across surveys for comparative purposes.
- Additional discussion suggested that the agency picture becomes clearer when subsequent questions concerning licensure level and staffing patters are taken into account.

## Question 2: The level of EMS agency licensure is:

 The major concern with this question revolved around the fact that some licensed BLS services can provide limited ALS services.

#### Question 3: Your agency is located in Region:

No concerns were noted with this question.

Question 4: What is your agency's staffing/compensation pattern:

 Since paid providers outnumbered volunteer staffing patterns some participants suggested that it was, perhaps, because smaller volunteer agencies did not respond.

Question 5: Your agency's total geographic service area is:

 Again, it was noted that multiple responses from the same agency may have skewed this response.

Question 6: In 2007, what was the total number of transports for your agency (not including transfers)?

- It was noted that these answers are, in many cases, estimates. Agencies
  probably know the total run volume, including transfers. However, many
  do not have the ability to electronically sort primary transports from
  transfers.
- Some participants felt that the 25% of respondents noting more than 1,000 primary transports was, in all likelihood, too high.
- Some frustration was noted around the absence of an electronic data collection system and high hopes were expressed for the current effort to install ImageTrend ™ in all agencies.

Question 7: In the last year, what PERCENTAGE of calls are for the following ages? (Total must equal 100%)

 Again, it was noted that due to the lack of an electronic patient care reporting system that these responses are, in most cases, estimates.

Question 8: Please RANK the following ten issues from the most challenging to the least challenging issues facing your agency.

- Although ranking third in the aggregate survey results, retention of personnel was noted to be the highest priority for many participants. It was noted that some rural areas become "pipeline training programs" for larger, higher volume services with personnel leaving once trained. In more rural areas, the repeated stress of responding to family and friends was noted to be a factor in retention.
- Agencies which were not having a challenge retaining personnel had, largely, already migrated to a fully-paid ALS system. Some of them noted that the salary burden left few resources for other activities such as capital improvements.

- Some participants felt that agency funding/financial stability should be the number 1, rather than the number 2 priority. It was noted that most agencies have sufficient funds to maintain at current distressed levels of operation but that any additional reduction in resources will be catastrophic.
- Educational issues tended to be of higher concern in the more rural areas. A need to more fully explore the benefits of on-line education and to not, automatically, favor continuing education that is traditionally delivered.
- There was variability noted between the regions relative to support from the state. It was felt that those areas closer to Topeka are more often represented at KBEMS meetings and other policy events and, therefore, make their needs known. In contrast, in the most remote locales, there is limited interface between the KBEMS and EMS agency staff.

Question 9: How would you complete the following statement? In the past 3 years, recruitment of EMS providers has \_\_\_\_\_.

• This question generated limited additional discussion.

Question 10. What methods does your agency employ to recruit new EMS providers?

• This question generated limited additional discussion.

Question 11. How would you complete the following statement? Over the past 3 years, retention of EMS providers has \_\_\_\_\_.

- Some participants felt that mandatory "on-site" participation in transition courses would create additional stresses on retention. Some favored online options.
- It was noted that retention is not only a volunteer issue but that some paid services also have challenges because of transition to more attractive locations, e.g. higher quality of life, increased volume and better pay. Also noted that local expectations such as a strict response time to the ambulance headquarters created retention challenges.
- When talk about ret of volunteers, have no problem w/that, keeping them. Problem w/ret of full time ppl b/c of residency requirement. Our dept has residence requirement, have to be w/in 6 minutes of shed. Have only had full time for 4 years.
- Board going to take away card if EMTs don't go to mandatory transition courses. Mandatory CE hours have to be met, online doesn't count.

• It was noted that those agencies that "grew their own" personnel fared better in terms of retention.

Question 12. What techniques have been tried to retain your EMS providers?

Several examples of successful retention campaigns include:

- Increased financial incentives
- Tuition payback program with agencies paying for paramedic training in exchange for a set service longevity commitment.
- Using all members in a teaching/training capacity.

Question 13. Do you have more or fewer members on your roster than you did 3 years ago?

- It was noted that while not all rosters are dwindling, what is happening in many locales is that the number of persons available and willing to take call has diminished, often to three to five core people taking the vast majority of calls.
- Some agencies suggested that they are in "dire straights".

Question 14. Are the members on your roster more or less active as measured by the number of shifts/days they are available for call than they were three years ago?

 It was noted that there was substantial regional variation in response to this question. There was some anxiety noted in that as the economy has worsened, fewer business owners are willing to allow their personnel to respond.

Question 15. Retention of skills for your agency's providers is:

 It was suspected that there is high agency and individual variation in skill levels despite the relative confidence the survey respondents. Question 16. How often is education and training available for your EMS providers?

The participants shared some unique approaches and successes to training along with some ongoing challenges.

- Run reviews/performance improvement used a source of education.
- Biannual competency fair is rated highly be crew members.
- Some challenges were noted in terms of getting personnel to participate, regardless of frequency and convenience. Paid personnel will sometimes only participate during normal shifts. Volunteer personnel tend to wait until close to recertification time.
- Outsourcing can create additional interest.

Question 17. What PERCENTAGE of your agency's funding comes from each of the following funding streams? (Total must equal 100%)

- It was noted that in some instances as patient collections increase there is a commensurate reduction in county subsidy.
- Cost of readiness is the key issue in rural Kansas.

Question 18. Your community needs for EMS have been affected by: Please rank

- Aging and diminishing population.
- Migrant influx creates needs for Spanish speaking personnel. Also migration from hurricane Katrina. Mostly uninsured or underinsured.
- Lack of access to a trauma center in the region.
- Critical Access Hospitals are seen as a benefit to rural EMS.
- Rural physicians are unwilling to clear certain conditions, e.g. suspected C-spine injury, resulting in long, unnecessary transfers. Transfers increasing substantially, placing more stress on existing personnel.
- EMS does not have ability to deny service, and need to be able to do that
  if not an emergency issue. But everyone knows system & can't refuse,
  know that won't have to wait to be seen at ER if busy because if come in
  on ambulance will be seen right away.

- Challenges to rural always same: aging population, special needs homes.
   Real change has been general practitioner not wanting to clear. Not serviced by specialty hosp.
- Calls for issues that could be handled by home health or public safety agencies, such as help getting out of tub.

Question 19. If your agency were to receive a donation of \$25,000 tomorrow, what would be your spending priority? Please rank.

- It was noted that responses to this question likely varied by agency size and type. If you are a high volume service with hundreds of employs and a limited number of ambulances, then the loss of an ambulance affects delivery. If you are a small agency with 10 staff and 3-4 ambulances then the loss of a single person affects delivery.
- People are our most important asset but a single lump sum payment doesn't fix the problem.
- \$25000 not even worth the effort w/the amount of problems I have, money would be nice to have, but not enough to help me
- Some agencies/regions noted that ambulance replacement is a high priority.
- It was noted that some agencies don't invest in essential equipment like power cots until there has been an incident, e.g. back injury.
- It was felt that recruitment and retention wasn't at the top of the list because there aren't "off the shelf" solutions that people can buy. It was also noted that with the current burn out of an aging leadership at the local level there isn't the enthusiasm necessary to launch and sustain such campaigns. It was felt that the state hurt self in retention area. Bridge program from paramedic to RN was intended to be a 2 way street. However, what is happening is that people are transitioning from EMS to RN since RN has standard hours, pay better, etc.

Question 20. What do you think are the major issues affecting EMS in Kansas?

This question evoked a number of responses across a variety of topics. The following categories were derived from a qualitative keyword matching process. Note: Many of the comments are taken directly from the meeting transcript and are, therefore, presented in the discussant's own words without regard to grammatical correctness. In other instances multiple responses of a similar theme have been synthesized into a single comment.

Major Issues

#### Recruitment and Retention

The challenges of recruitment and retention were, collectively, foremost in the participant's minds. The following comments help clarify the problem and offer some solutions, or at least, strategies.

- In rural areas programs to "grow your own" are very important. Several examples of efforts to recruit from out-of-state, or even out of the area, were noted to have been, largely, unsuccessful.
- Local agencies tend to rely on traditional methods of "getting the word out", including local radio and newspapers. It was noted that direct contact and persistent invitation by current crew members directed at a targeted age range is often the best strategy.
- Local agencies do not have the budget, time or expertise to develop more sophisticated marketing campaigns. It was felt that this could be an area where state leadership might be helpful.
- Getting local residents into the healthcare pipeline by conducting First Responder and EMT-B classes in high school has met with variable success.
- The centralization of educational programs is seen as a real or potential threat to future recruitment since it will involve additional travel commitments for students.
- It was felt that recognition of employers to allow personnel to respond from work should be recognized on some formal, statewide, level.
- A retirement plan and access to other benefits for volunteer EMS providers were seen as a potentially powerful retention tools.

- There is variable commitment by county commissioners, ranging from full support within the limitations of the budget, to a general apathy, or a complete lack of awareness of the dire challenges facing EMS in their county.
- Transfer to paid staff presents numerous challenges beyond the fiscal impact including a changing relationship and uncertain role for the remaining volunteers.

"If your not from here, your not going to stay here. Everyone working for me now has been raised in western KS". Town Hall participant.

## Financial Stability/Sustainability

Many rural EMS agencies reported that they are just "hanging on". Their continued operation depends on the continued good will of less than a handful of dedicated volunteers. Some of the challenges that they face, along with a few ideas about how to make it better, are included below.

- In many communities a combination of tax support and patient fee collection are insufficient for anything more than keeping gas in the truck.
   No funds for capital improvements or transition to paid personnel.
- There is a fear that EMS agencies will have to fail in some substantial number to get the attention of the county commissioners.
- There is a lack of public awareness and support, employers won't allow EMS providers to respond but if the fire whistle blows the whole town responds.
- There is a need to orient/train/inform county commissioners about EMS needs before the budgeting process.
- Grant funds are a way to purchase items or services that we, otherwise, would have to do without.
- In rural areas, neither the community nor the commissioners understand the "cost of readiness" which translates into a huge cost per run.
- Medicare needs to be fixed to allow for billing when we do not transport, change back to a cost-based system, and support a cost of readiness charge.
- State level compensation for unfunded care rendered is needed.

## Training/Education

There were many opinions expressed about current and future training and education activities. There was a clear consensus on some items but less so on other issues.

- Offering continuing education opportunities are not, largely, seen as a method of retention of personnel.
- Approval mechanism for continuing education is seen as cumbersome, at best.
- Associate's degree requirement for EMT-P thwarts inter-state reciprocity as individuals have to demonstrate curriculum equivalency, even if they are Nationally Registered.
- Opportunities exist for KBEMS to make training more accessible in rural areas, while still maintaining quality by streamlining free-standing instructor process and, at the same time, implementing a performance improvement process.
- Requirements that will involve excessive travel for participants to centralized facilities will hurt recruitment efforts in rural locales.
- It is perceived that there has not been a forum for rural educators/trainers to sit down together to work on solutions to challenges facing rural Kansas.
- Concern was expressed that, historically, in challenging financial times, training is one of the first line items to suffer.
- Tuition support from the KBEMS is good, however, the KBEMS needs to follow-up with those who renege on their contract.
- There were varying opinions about whether National Registration is good, or bad, for rural EMS in Kansas.
- Some people felt that the decision to require an associate's degree at the EMT-P level to increase professionalism was a good one, but without a commensurate increase in remuneration, might backfire making it even more difficult to recruit EMT-P or to "grow their own" in rural Kansas.

#### Support and Leadership from State

When asked how the KBEMS and/or other state agencies could help achieve solutions to rural EMS issues, a great deal of frustration was expressed in each region. The frustrations and concerns involved both the KBEMS and its staff. The following statements summarize those concerns.

- There is a perceived lack of representation from all areas of the state on the KBEMS. It was felt that, instead of its current composition, which is viewed as largely political, there should be representation from each of the regions with a formal seat on the KBEMS, elected by the regions.
- There is a great deal of skepticism about what will happen with the results
  of this survey and town hall process. Many individuals don't think that the
  input will be heeded, nor will any substantive action result from the effort.
- A few people questioned the wisdom of spending money on a contractor (CIT) to conduct another survey when nothing will become of it.
- Participants feel like there is a lack of consistency in the policies and programs of the KBEMS, "we go down one track for a little ways, then switch gears".
- There is perceived lack of respect coming from the KBEMS staff towards the regions and individual EMS agencies.
- Concern was expressed by several participants about the current legislative effort.
- Perception exist that previous grant awards were not evaluated and awarded in a fair and impartial manner.

Several people made positive suggestions about how the KBEMS and staff could be more helpful in their local struggles.

- Effective state leadership is one of the keys to overcoming current issues and challenges.
- Create a partnership between KBEMS and local providers to address issues in a thoughtful and mature manner.
- Listen more closely to constituents needs and work to address those needs in a timely manner.
- Ensure that KBEMS staff are respectful of providers and their issues.
- Distribute future grant funds in a transparent and equitable manner.

#### Support and Leadership from Regions

There was both optimism and frustration expressed by participants around the current regional structure. People are optimistic about using a regional approach to helping solve problems facing the local agencies. They are a bit less optimistic about whether the suggestions or solutions that they might develop will have any credence with KBEMS. Comments included:

- Many participants are in favor of exploring a more regionalized approach to the delivery of EMS, fully understanding that there will be significant political and "turf" issues. The existing regions are seen as a logical forum to begin to address some of those barriers.
- Several people noted that if there was formal representation from the regions to the KBEMS that there would be greater participation in regional meeting and processes.
- In their current form, the regions are not, necessarily, a cohesive voice for agencies within their region or as a multi regional voice.

#### Medical Director Involvement

With a variety of other pressing issues, the challenges of medical direction did not receive much discussion. However, the following comments were noted.

- The new on-line medical directors training option is a good program for rural physicians.
- It is a challenge to get local physicians involved or engaged.
- A system of regionalized medical control may be a solution in some areas.

#### Lack of Management Training/Support

It was noted that there is limited training and support for new (or experienced) EMS service managers.

- KEMSA was noted to have a 3 day service director training program.
   However, many volunteer director/managers are challenged to be away from their services for that amount of time and distance is also an issue.
   KEMSA was noted to be very supportive in helping to find funding to offset cost of participation.
- While it was felt that the KBEMS could help organize such training, the instructors should be current and active EMS managers.

#### Regionalization

This discussion, in some forums became part of the regional support discussion. However, some participants wanted to discuss the two separately. The following captures key comments.

- Agree with the IOM report that regionalization is the way of the future, particularly in rural areas.
- Can't continue to afford/maintain duplication of services, competing for the same group of volunteers just a few miles apart.
- All services can not attain EMT-P staffing.
- Impediments are tradition and "turf" issues. Will, ultimately be driven by economics but must have a patient focus also.
- Need to be proactive to overcome barriers and resistance to the concept.

"...need to take a step back and look at the delivery of prehospital care as a whole and reevaluate it. In our region we could get by, probably more efficiently and with a consistently higher level of care by substantially reducing the number of EMS agencies through some well planned mapping and consolidation process". – Town Hall participant

## **Town Hall Evaluations**

#### Quantitative

Each participant in the town hall meetings completed a feedback form. The structured questions were based on a modified Likert scale (semantic differential) with 1 being low and 5 being high. The results of that form and additional comments are provided in the following summary table (Table 5.) and comment section.

Question	Mean	Range	Median	Mode
I found the Town Hall meeting to be	3.7	2-5	4	4
The facilitators helped lead the discussion	4.1	3-5	4	4
The input will have an influence on rural EMS issues	2.1	1-5	3	3
The survey and the discussions helped identify the key issues in rural EMS in KS	3.4	1-5	4	4
From a rural EMS perspective meetings like this are	2.3	1-5	3	3

Table 5

#### Qualitative

Participants were given a chance to provide additional comments through an open-ended response. The following summary provides all comments obtained, sorted by logical categories that are presented in alphabetical order by category. Note: Many of the comments are taken directly from the evaluation forms and are, therefore, presented in the respondent's own words without regard to grammatical correctness. In other instances multiple responses of a similar theme have been synthesized into a single comment.

#### Anger

 We have had the same discussion with 100s of people. Why is KS blowing \$75,000 to identify what we have already told KBEMS – why are they thinking you can help?

#### Appreciation

- Only attended about 45 minutes. What I heard was really good.
- Thanks for your time and leadership. This type of meeting is critical. Small group's with other involved in local community health.
- We appreciate the opportunity to provide input, nice job.
- I think these types of meetings are very good discussion and may help EMS in rural areas but we need more participation.
- Good program.
- It was good for region (region number removed to ensure anonymity) to have an evening to gather again. I don't have high hopes for the outcome of this latest survey. Thanks Teri and Amy for your time. We appreciate you.

#### Frustration with KBEMS

- Change makeup of the Board of EMS
- Structure of BEMS should be changed to have one representative from each region!
- Good discussion on difficult issue. All regions need Board representation
   (6). There is a Board and service disconnect.

#### Need for Follow-up

- Direction and follow-up on report. Outcome assessment.
- After specific issued identifies, specific meetings to discuss resolution to the problems – follow-up with the information to the participants.

#### **Optimism**

- Can always hope this discussion will make a difference.
- I hope these issues finally reach some resolution.
- If the Board takes the comments to heart then this is an excellent meeting.

#### Skepticism

- Sorry to be negative sounding but over and over we try to "assess the rural/frontier" problems. When we start really working on solutions – I'll buy a ticket.
- We had great discussion on main concerns. However, the Board needs to listen to what CIT presents.
- Most important to relay truthful comments to the Board of EMS -vscompiled statistics.

## Discussion

The two step process has yielded a good bit of information concerning the state of rural EMS in Kansas. Clearly, there are environmental stressors impacting the overall state of rural EMS including demographic changes in rural Kansas, challenges in recruitment and retention and questions about the long-term financial viability of many rural EMS agencies. These challenges are not unique to Kansas and, in fact, are common in most of rural America.

One thing that is, largely, unique to the State of Kansas is the degree of unrest concerning the lead agency. In most states the lead agency is viewed as either helpful, or at least perceived as neutral, in their attempts to assist rural EMS agencies and individuals. Several of the survey and town hall participants see the KBEMS and its staff as being neither helpful nor supportive. This lack of trust and belief clouds the discussion substantially. Rather than collaboratively searching for solutions, much of the provider community is focused on trying to "fix" the KBEMS or at least blame it for their current lot. The nature, composition and charge of the KBEMS makes it difficult to transcend the regulatory component of its duties and to also assume a nurturing and supportive posture. However, ways of bridging the regulatory and technical support chasm must be identified and implemented.

This report, coupled with the NHTSA Technical Assistance Team and KBEMS Strategic Plan, provide sufficient direction to move the EMS system in the State of Kansas forward. However, it will not be until a significant level of trust and respect can be cultivated between the KBEMS and the EMS providers that substantive improvements can be made. This trust and respect must flow in both directions.

There are two immediate opportunities for the KBEMS to begin to gain the trust and respect of one of its primary constituent groups. The first is how it chooses to respond to and distribute this report. CIT, as an agent of KBEMS, assured respondents and participants that their input would be shared truthfully and openly. The respondents have a vested interest in viewing the report and seeing that their message was, indeed, delivered. The second immediate opportunity is how the rural EMS grant program is established and conducted. It is crucial that it be done with transparency and equity.

These two actions alone will not overcome a distrust that has been building over time. However, it will mark a new beginning in the relationship between the KBESM and the EMS community in Kansas. The following recommendations, if implemented, will further engrain the trust and respect.

There are also many opportunities for improvement for other institutions, organizations, agencies and individuals. EMS Regions could be more supportive of agencies within their region and vice versa. Regions could collaborate more with each other, sharing common issues and solutions. KEMSA and KEMTA are positioned to provide proactive leadership and to also provide support to KBEMS initiatives. They can only achieve such successes by working collaboratively with each other and with other key elements of Kansas EMS. EMS agencies within any of the regions could, and should, shed their turf issues and begin to look at opportunities for the efficiencies gained by regionalization of emergency and specialty response. The decades of replicating high cost services in every small town and hamlet have, long since, past. It is time to explore and implement new models that not only achieve economies of scale but efficiencies in patient care. In short, every entity needs to become part of the solution, rather than contributing to the problem by persistent inaction and blamesmanship. Solutions will only come in a collaborative and supportive environment.

## Recommendations

- Identify methods by which additional field-based representation can be achieved on the Kansas Board of EMS such as seating one (1) active provider elected from each region as full voting members with at least three of those meeting rural criteria.
- Identify and support through grant funding one or more localities that focuses on development, or application of, strategies for recruitment and retention, with a strong emphasis on evaluation and the dissemination of findings.
  - o Replicate successful strategies.
- Identify and support through grant funding one or more multiple EMS
  agency consortia that can develop and apply policies and
  procedures relative to a broader "regional" approach to EMS, with a
  strong emphasis on evaluation and the dissemination of findings.
  - Replicate successful strategies.
- Develop a formal EMS plan for the State of Kansas (in concordance with the NHTSA TAT and KBEMS Strategic Plan) using a consensusbased process accessible to all EMS providers in the state to serve as a guiding document for the development, growth, sustainment, and evaluation of EMS in Kansas.
- Make all future grant application processes transparent, consistently applied, and equitable by including active field-based providers in grant application review and award processes.

- Increase technical assistance from the KBEMS staff to field-based providers in areas in which KBEMS has sufficient technical expertise to provide helpful and consistent messages. In areas where KBEMS staff does not have sufficient expertise identify in-state resources, where possible, to act as consultants on various topics.
- Mitigate field-based perceptions that the KBEMS staff is unresponsive and disrespectful by ensuring that all staff adhere to the core values outlined in the KBEMS strategic plan. Implement 360 degree evaluations as suggested in the strategic plan (process measure section).
- Convene an educational task force comprised of KBEMS members and staff, academically-based instructors, free-standing instructors and local EMS service managers (including rural representatives) to develop a Kansas EMS Education Agenda for the Future that will move EMS providers toward professional recognition while simultaneously accommodating rural recruitment and staffing needs.
- Partner with the Office of Local and Rural Health to help identify a process by which active field-based providers can provide structured input into the Rural Hospital Flexibility Grant program at the state level.