

State EMS Rural Needs Survey 2004

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Executive Summary

This State EMS Rural Needs Survey was conducted as part of the development of the national “*Rural/Frontier EMS Agenda for the Future*”. It replicates part of “*Challenges of Rural Emergency Medical Services – An Opinion Survey of State EMS Directors*” a report published by Bob Bailey, Inc. for the Office of Rural Health Policy in 2000. The portions replicated include the identification of needs and issues important to the provision of rural EMS, and the perceived need for capital budget items for the provision of rural EMS.

Personnel “recruitment/retention” remains the single most significant issue or need in the provision of rural EMS according to both the 2000 and 2004 surveys. “Financing” remained a prominently identified need through both surveys, while “24/7 coverage”, “communications”, and “response time” emerged as far greater concerns in the 2004 survey than in 2000.

“Communications equipment” was the most often cited capital equipment/facility need in both surveys by slight margins. “Training equipment”, “medical equipment”, and “ambulances” were also strong finishers in 2004.

Introduction

On June 22, 2000, “*Challenges of Rural Emergency Medical Services – An Opinion Survey of State EMS Directors*” was released by Bob Bailey, Inc. and published by the federal Office of Rural Health Policy located in the Health Resources and Services Administration (HRSA). It cited the encouragement of the then HRSA Administrator, Dr. Claude Earl Fox, in increasing the focus on rural EMS. It continued:

“In order to obtain a better understanding of the needs facing rural EMS delivery, the Office of Rural Health Policy (ORHP), in conjunction with the Health Resources Service Administration’s Maternal and Child Health Bureau, Emergency Medical Services for Children (EMSC) program, provided funds to the National Association of State EMS Directors (NASEMSD) to conduct an opinion survey of its members. NASEMSD contracted with Bob Bailey, Inc., to develop and analyze the results of the survey.

“NASEMSD developed the survey with input from ORHP, the National Highway Traffic Safety Administration (NHTSA) EMS Division, the National EMSC Data Analysis Resource Center (NEDARC), and the Maternal and Child Health EMSC program. The survey was mailed to all 56 State and Territorial EMS Directors on March 17, 2000. NASEMSD made follow-up telephone calls and sent follow-up e-mails to ensure a high return rate of surveys. Forty-one of the 56 State EMS Directors responded to the opinion survey. While this data collection effort is based on opinion and is not a scientific survey, the respondents are in a unique position to provide valuable information in an area that has little, if any, validated data.”

In early 2003, the National Rural Health Association, with ORHP funding and in conjunction with NASEMSD and the National Organization of State Offices of Rural Health (NOSRH), embarked on a project to develop a leadership guide entitled the

“Rural/Frontier EMS Agenda for the Future”. This document is based on the 1996 National Highway Traffic Safety Administration’s *“EMS Agenda for the Future”* and is to be published in October, 2004. One element of this guide was attempting to replicate the 2000 survey to update information on state EMS directors’ perception of needs and issues in the provision of rural EMS. Two specific questions, one on general needs and issues and the other on capital equipment/facility needs from the earlier survey were readministered.

Methodology

Copies of the June 22, 2000, *“Challenges of Rural Emergency Medical Services – An Opinion Survey of State EMS Directors”*, and a related May 16, 2000 document entitled *“A Discussion of the NASEMSD Rural EMS Survey Presented to the Office of Rural Health Policy”* were obtained from the author. The survey instrument originally used was not available. Based on the reports, a survey instrument (attached) was created and distributed to 56 state or territorial EMS directors in person and by e-mail from late 2003 through early 2004. Forty-one surveys were returned. The instrument addressed two questions:

Question 1: What rural EMS system development needs in your state would you rank as the highest priority to address (place an **“X”** under **“Priority 1”** or **“P1”** in the table below), second highest (**“P2”**), and so on through fifth highest (**“P5”**)?

Question 2: What rural EMS capital equipment/facility needs would you rank as the highest priority for funding (place an **“X”** under **“Priority 1”** or **“P1”** in the table below), second highest (**“P2”**), and so on through fifth highest (**“P5”**)?

Some confusion resulted in several surveys being returned with all 23 items for Question 1 being assigned a priority ranking, rather than just the **“top five”**. A similar problem occurred with question 2. These were returned; corrections sought and collected a second time.

Comparison of Question 1 results (Table series 1 and 2) should have been direct because there were 41 respondents to both the 2000 and 2004 surveys. A **“weighted total”** ranking for needs/issues was created by assigning a weight of 5 for a **“P1”** vote, 4 for a **“P2”** vote, 3 for a **“P3”** vote, 2 for a **“P4”** vote, and 1 for **“P1”** vote. Some discrepancies in numbers in the earlier survey do not make this direct comparison entirely possible however. For instance, each column of Table 1A (taken verbatim from the earlier report) should total 41 but do not; and the grand total of the Weighted Total (**“Wgt’d. Total”**) column should be 615 ($41 \times \{5+4+3+2+1\}$) but is not). The validity of comparing **“losses and gains”** of priority among the 23 listed needs/issues (**“Wgt’d. Total Change”** column in Table 1B) is affected by this apparent error especially where the **“losses and gains”** are in the single digit range.

Question 2 results (Table series 3) are affected by an apparent inconsistency of method from 2000 to 2004. It appears that the question in 2000 may not have attempted a priority ranking as was assumed in 2004, but simply asked an open-ended question (e.g. **“list capital needs priorities”**) or allowed multi-voting on the list of capital needs found in Table 3A. Also, additional categories of equipment type were surveyed in 2004 (e.g. **“decontamination equipment”**). Therefore, these results should be not be relied upon to establish any historical pattern from 2000 to 2004, but rather priorities within each year.

Results

Question 1: Issues/Needs in the Provision of Rural EMS

“Recruitment/retention” of personnel was the most prominent issue/need in both surveys. It captured the most first (“P1”) and second (“P2”) place votes in 2000 and the most first, second and third place votes in 2004, though prominence may have declined as demonstrated by a decrease in first place votes and weighted total from 2000 to 2004.

The money issues of “financing”, “compensation”, and “reimbursement” all remained strongly in the top half of the list.

Notable “gainers” of prominence from 2000 to 2004 included “24/7 coverage”, “response time”, and communications. Marginal gainers of prominence were “integration with health care system” and “access to definitive care”.

Besides the decline in weighted total for “recruitment/retention”, other marginal issues/needs “losers” of prominence were “transport time”, “medical oversight”, “continuing education”, and “skill retention”. Tables 2A and 2B are generally consistent in supporting the “weighted totals” findings.

Table 1A: Total Responses by Priority (2000)

Need	P 1 High	P 2	P 3	P 4	P 5 Low	Wgt'd. Total
Recruitment/Retention	18	7	3	3	1	134
Financing	2	5	4	4	3	53
Medical Oversight	0	6	6	3	3	51
Reimbursement	3	3	2	2	3	40
Skill Retention	1	4	2	4	2	37
Management Training	2	3	1	4	3	36
Compensation	2	4	1	1	4	35
Continuing Education	1	3	5	1	1	35
Transport Time	3	0	4	2	2	33
Quality Improvement	1	1	2	5	1	26
Communications	1	3	1	2	1	25
Information Systems	3	1	0	1	2	23
Equipment	0	1	4	1	2	20
Integration with Health Care System	1	1	2	0	3	18
Initial Training	0	2	1	3	0	17
Emergency Medical Dispatch	1	0	1	1	4	14
Injury Prevention	0	2	0	0	0	8
Access to Definitive Care	0	0	0	2	3	7
Transport Options	1	0	0	1	0	7
Response Time	1	0	0	0	0	5
Public Information	0	0	0	2	0	4
24/7 Coverage	0	0	1	0	0	3
Managed Care	0	0	0	0	2	2

Table 1B: Total Responses by Priority (2004)

Need	P 1 High	P 2	P 3	P 4	P 5 Low	Wgt'd. Total	Wgt'd. Total Change
Recruitment/Retention	11	6	7	4	2	110	-24
24/7 Coverage	4	5	3	2	1	54	51
Communications	4	1	5	5	4	53	26
Financing	2	4	2	5	2	44	-9
Response Time	3	2	3	2	1	37	32
Compensation	3	2	2	3	1	36	-1
Integration with Health Care System	4	1	2	0	4	34	16
Reimbursement	2	3	1	1	5	32	-8
Medical Oversight	1	2	3	3	4	32	-19
Management Training	2	4	1	0	2	31	-5
Quality Improvement	1	1	1	5	1	23	-3
Information Systems	0	0	3	5	3	22	-1
Access to Definitive Care	2	1	1	1	2	21	14
Skill Retention	0	4	0	1	2	20	-17
Continuing Education	1	0	3	1	1	17	-18
Equipment	1	0	1	2	2	14	-6
Transport Time	0	2	1	0	0	11	-22
Emergency Medical Dispatch	0	1	1	0	0	7	-7
Transport Options*	0	0	1	1	1	6	-1
Initial Training	0	1	0	0	1	5	-12
Public Information	0	1	0	0	0	4	0
Injury Prevention	0	0	0	0	2	2	-6
Managed Care	0	0	0	0	0	0	-2

* One respondent noted "Inter-facility transports; emergency and non-emergency"

Table 2A: Top Five Priorities by Total Response and % of Total Response (2000)

Priority	Need	# of Votes	% Total Votes
1	Recruitment/Retention	31	15%
2	Medical Oversight	17	8%
2	Financing	17	8%
3	Skill Retention	12	6%
3	Management Training	12	6%
4	Compensation	11	5%
5	Continuing Education	10	5%
5	Reimbursement	10	5%
5	Transport Time	9	5%
5	Quality Improvement	9	5%

Table 2B: Top Five Priorities by Total Response and % of Total Response (2004)

Priority	Need	# of Votes	% Total Votes
1	Recruitment/Retention	30	15%
2	Communications	19	9%
3	Financing	15	7%
3	24/7 Coverage	15	7%
4	Medical Oversight	13	6%
5	Reimbursement	12	6%
5	Information Systems	11	6%

Question 2: Capital Equipment/Facility Needs in the Provision of Rural EMS

Tables 3A and 3B demonstrate that “communications equipment” was the most often cited capital equipment/facility need in both the 2000 and 2004 surveys, though by narrow margins. “Training equipment”, when added to the 2004 survey, supplanted “medical equipment” in second place, with “medical equipment” followed by “ambulances” as it was in 2000. In both 2000 and 2004 survey results, a considerable margin separates the next lower echelon of items which were “buildings” and “other” in 2000, and “decontamination equipment”, “buildings”, “other EMS response vehicles”, and “computerized run reports” in 2004.

Table 3A: Capital Needs by Rank (2000)

Rank	Capital Need	Total Responses
1	Communications Equipment	30
2	Medical Equipment	28
3	Ambulances	22
4	Buildings	14
5	Other	12

Table 3B: Capital Needs by Rank (2004)

Rank	Capital Need	Total Responses
1	Communications Equipment	40
2	Training Equipment*	39
3	Medical Equipment	37
4	Ambulances	36
5	Decontamination Equipment	25
6	Buildings**	20
7	Other EMS Response Vehicles	7
8	Computerized Run Report	1

** A respondent specified needs for sleeping and training quarters.

* 2 respondents specified needs for manikins for mobile training labs.

5 Minute (TOPS!) Opinion Survey - Rural EMS Priorities in Your State

State: _____

Your Name: _____

These 2 questions replicate a part of a survey done by Bob Bailey for the Office of Rural Health Policy in 2000. Responses will be compared with data from the original survey and included in the *Rural/Frontier EMS Agenda for the Future* when it is published next year. A summary will be made available to you after the annual meeting.

Question 1: What **rural EMS system development needs** in your state would you rank as the highest priority to address (place an “X” under “Priority 1” or “P1” in the table below), second highest (“P2”), and so on through fifth highest (“P5”)? You may add and rank needs in the blank rows if required.

Need	P 1 (Hi)	P 2	P 3	P 4	P 5 (Lower)
24/7 Coverage					
Access to Definitive Care					
Communications					
Compensation					
Continuing Education					
Emergency Medical Dispatch					
Equipment					
Financing					
Information Systems					
Initial Training					
Injury Prevention					
Integration with Health Care System					
Managed Care					
Management Training					
Medical Oversight					
Public Information					
Quality Improvement					
Recruitment/Retention					
Reimbursement					
Response Time					
Skill Retention					
Transport Options					
Transport Time					

Question 2: What rural EMS capital equipment/facility needs would you rank as the highest priority for funding (place an “X” under “Priority 1” or “P1” in the table below), second highest (“P2”), and so on through fifth highest (“P5”)? You may add and rank needs in the blank rows if required.

Need	P 1 (Hi)	P 2	P 3	P 4	P 5 (Lower)
Ambulance Vehicles					
Buildings					
Communications Equipment					
Medical Equipment					
Other EMS Response Vehicles					
Training Equipment					
Decontamination Equipment					

Thanks! You will receive a summary of this survey by e-mail, and it will be posted on the NASEMSD web site (as well as appearing in the Rural/Frontier EMS Agenda for the Future).