FACT SHEET

Personnel and Care Provision Needs Among Rural North Dakota EMS Squad Leaders

Introduction

In Spring 1999, the University of North Dakota Center for Rural Health’s Rural Emergency Medical Services Initiative (REMSI) surveyed all North Dakota EMS squad leaders regarding squad characteristics, personnel issues and facility/equipment/supply needs. A list of 309 squad leaders was received from the state Division of Emergency Health Services. Two mailings of the questionnaire produced 157 completed surveys (53.2% response rate). Fourteen individuals were eliminated from the study population due to incorrect address. For this analysis, only responses from rural-based squad leaders (N=150) were included (Urban-based squad leaders were removed [N=7]).

Results

Squad Characteristics. Most (61.3%) respondents were leaders of Basic Life Support (BLS) ambulance squads (see Figure 1). Other squad types that were represented were quick response units (27.3%), rescue squads (26.7%), fire services (22.0%), Advanced Life Support (ALS) ambulance (11.3%) and other type (3.3%). Some squads were a combination of types (ex: fire/rescue or fire/ambulance). Squad sizes ranged from one to 75 members with an average of 18 members.

Figure 1. Squad Type

<table>
<thead>
<tr>
<th>Squad Type</th>
<th>% of Squads</th>
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<tbody>
<tr>
<td>BLS</td>
<td>60</td>
</tr>
<tr>
<td>QRU</td>
<td>20</td>
</tr>
<tr>
<td>Rescue</td>
<td>10</td>
</tr>
<tr>
<td>Fire</td>
<td>10</td>
</tr>
<tr>
<td>ALS</td>
<td>5</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
</tr>
</tbody>
</table>

Less than one-half (45.2%) said they financially compensated their personnel in some way. The most common forms of compensation were pay per EMS run (26.0%), hourly wage (15.3%), salary (7.3%) and payment for continuing education (2.7%).

Virtually all of the respondents (97.3%) said their squad engaged in training their members. More than four-fifths (88.7%) offered recertification/refreshers, 83.3% provided continuing education and 55.3% offered EMT-B training. Further, 95.9% of the squad leaders said their squad pays for the education of their members to some extent. Squads paid for members’ participation in refresher courses (86.7%), continuing education (82.0%), initial training (80.0%), and conference expenses (78.0%).

Personnel Recruitment. Squad leaders were asked to rate their squad’s level of difficulty in recruiting new personnel on a scale from 1 (no problem) to 5 (great difficulty). Over one-half (60.4%) said that recruiting new members to their squad was difficult (i.e., provided ratings of 4 or 5) (see Figure 2). Also, one-third (32.3%) said personnel recruitment was at least somewhat difficult (i.e., provided ratings of 2 or 3) and 7.4% said it was not a problem (i.e., provided a rating of 1).

Figure 2. Squads’ Level of Difficulty With Recruitment and Retention

Recruitment methods that were most frequently used by squads were word of mouth (86.0% of squads used it ‘frequently’), presentations to groups (29.2%), newspaper articles/advertisements (26.4%), flyers (14.2%) and other methods (12.7%) (see Figure 3).

Squad leaders were provided a list of factors and asked to rate the extent to which each factor acts as an EMS recruitment barrier in their local area. Factors were rated on a scale from 1 (not a barrier) to 5 (major barrier). Respondents most frequently stated the training requirement (62.7% provided ratings of 4 or 5) was a major barrier, followed by time away from family (51.0%), time away from job (50.7%), low interest in EMS (43.2%), stress of EMS work (32.9%),
inadequate/no pay (24.7%), poor recruitment efforts (12.3%), physical demands (8.5%), medical liability (7.8%) and health hazards (5.0%) (see Figure 4).

Figure 4. Prominent Barriers to Recruiting New Squad Members

Prominent Barriers to Recruiting New Squad Members

Personnel Retention. Figure 2 indicates that one-fifth (21.4%) of the squad leaders stated that retaining their present squad members was difficult (i.e., provided ratings of 4 or 5). Two-thirds (65.8%) said that personnel retention was somewhat difficult (i.e., provided ratings of 2 or 3) and 12.8% said they had no retention problems (i.e., provided a rating of 1). The most common methods for enhancing retention of current members were provision of continuing education (73.8%), longevity awards (29.0%), financial reimbursement/incentives (27.2%), free uniforms (26.8%), socials (25.0%), public recognition (24.8%), retirement program/plan (21.4%), and other methods (5.3%) (see Figure 5).

Squad leaders were also asked about factors that significantly hindered local efforts to retain their current EMS personnel. Results indicated that retention barriers appeared to mirror those factors that negatively affected recruitment. The most significant obstacles to successful retention included: training requirement (59.9%); time away from family (46.4%); time away from job (45.0%); stress of EMS work (31.7%); inadequate/no pay (23.4%); low interest in EMS (20.6%); physical demands (18.7%); medical liability (17.1%); and health hazards (12.1%).

Conclusion

Results supported the notion that recruitment and retention of EMS personnel are serious problems in rural North Dakota. According to squad leaders, the most significant barriers to recruitment and retention were extensive training requirements, time away from family and job, low interest in EMS and stress of EMS work.

Results documented several areas of need regarding EMS equipment, supplies and facilities. Among ALS squad leaders, the most pronounced needs pertained to vehicles, end tidal CO2, IV pumps, garages, facilities (meetings, etc.) and training materials. Leaders of non-ALS squads (e.g., BLS ambulances, rescue squads, quick response units and fire departments) rated several EMS service items as sub-optimal, including (most notably) medications, training materials, vehicles and garages.