

Final Project Report Office of Emergency Medical Services Ambulance Provider Survey

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SECTION I: SURVEY PLANNING

The survey instrument was constructed by the South Dakota's Office of Emergency Medical Services with some minor modifications made by project director Dr. Shane Nordyke, Director of the Government Research Bureau, in collaboration with Marilyn Rutz, Director of the Office of Emergency Medical Services. The final survey version contained 24 questions, including a mix of open ended and multiple choice questions designed to assess the operations of and challenges faced by ambulance survey providers throughout the state. The survey was designed to take no longer than 10 minutes to complete in order to maximize response rate. The final survey was implemented online through the PyschData platform from June 23 – July 8, 2014. Survey responses were analyzed by the GRB, and the GRB's findings are delivered in this final project report.

The purpose of the survey was to provide South Dakota's Office of Emergency Medical Services with feedback on the current operations of ambulance service providers throughout the state and the particular challenges that they face, particularly in terms of employee retention and shift coverage. The survey was sent by email, with follow up reminders, to 121 ambulance service providers in South Dakota. **The survey received 75 complete responses for a response rate of 62%.**

SECTION II: SURVEY RESULTS

The following section details the findings from the 24-item survey. The results of the survey have been organized into sections by topic. The actual survey instrument can be found in Appendix A of this report. We have noted here common trends and themes in responses; however, Appendix B provides all of the qualitative responses for survey questions.

CHARACTERISTICS OF THE ORGANIZATION

The first few questions of the survey asked respondents to describe basic characteristics of the agency's operation. First, we asked about the nature of the agency's ownership. The responses to this question reveal a great deal of variety in the structure and nature of the agencies that operate ambulance services in South Dakota. Figure 1 illustrates that the most frequent response was actually "Other" followed by "City" and "County". Given the number of "Other" responses, we also categorized the specifications provided by agencies with this response in Figure 2. Many of these responses refer to the public or private nature of their agency ownership, which is addressed in question two. They also reveal meaningful alternatives to the answer options we provided in Question 1, including tribal entities and tax or ambulance districts.

Fig. 1: Q.1 Which of the following best describes your agency's ownership?

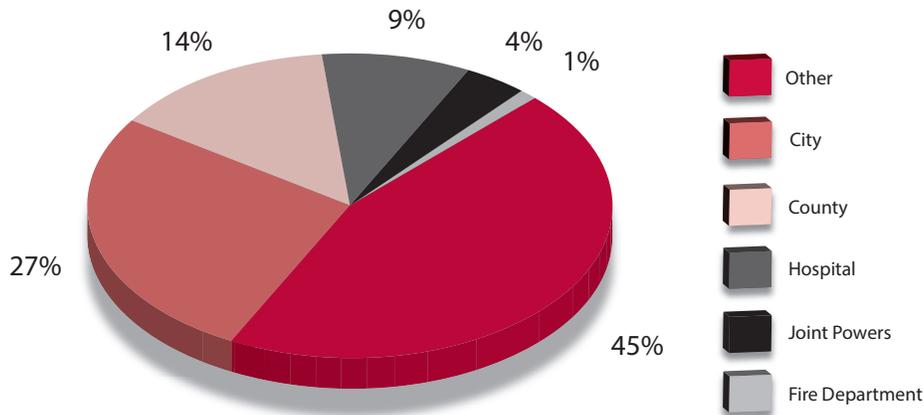
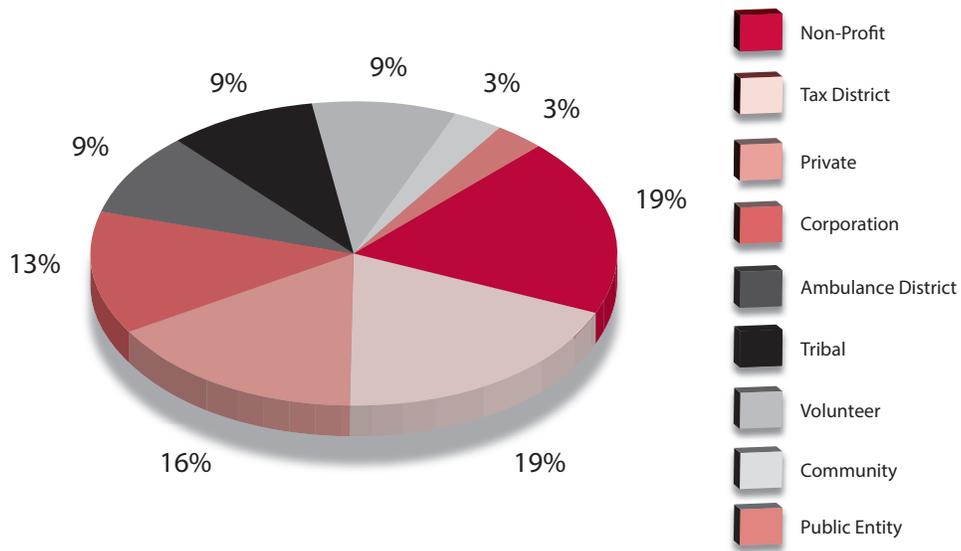
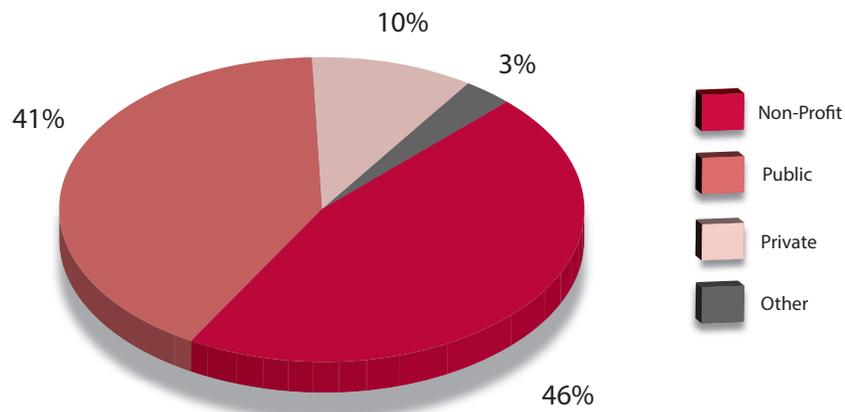


Figure 2: Q.1 Specification of “Other” Responses



We also asked agencies about the ownership of their agency. As can be seen in Figure 3, the majority of ambulance service providers in the state are owned by either non-profit or public entities.

Fig. 3: Q.2 Is your agency ownership public, private, or nonprofit?



Next, we asked respondents about the number of personnel that their agency currently has on the roster. The mean for all agencies was just under 22 members with the median response slightly lower at 15. However, there was a substantial range in responses between the smallest and largest organizations. Figure 4 shows that a majority of the organizations have less than 20 personnel on their roster, while a few (3) agencies have over 50. The most personnel listed for any agency was 124. When asked about the number of active personnel, the figures were slightly lower. The mean response was just under 14 personnel per agency with a median value of 10. Figure 5 shows a similar distribution to that in Figure 4, with a slight reduction in overall values.

Figure 4: Q.3 How many ambulance personnel are currently on your roster?

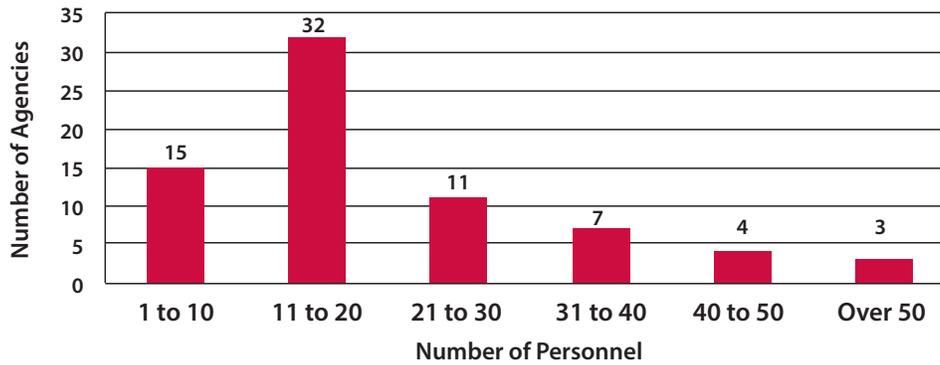
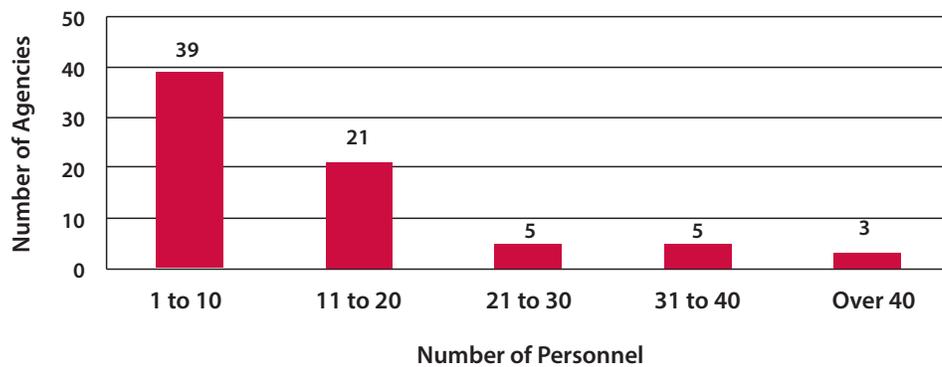


Figure 5: Q.4 How many of the ambulance personnel on your roster are currently active (take calls at least 5 time per month)?



Respondents were also asked to provide more specific detail about the number of each type of personnel they had on their roster. As can be seen in Table 1, Emergency Medical Technicians (EMTs) comprised more of the agencies' personnel than any other classification. Figure 6 provides a further breakdown of the full time, part time, or volunteer status of each of the EMTs. More agencies report having higher numbers of volunteer personnel than either full or part time staff. Table 2 provides the minimum and maximum response provided by agencies for each given personnel type. The vast majority of agencies have 10 or fewer of each. While most agencies had zeroes for many of the categories, larger agencies had many of personnel of several types. Larger agencies were more likely to employ full time personnel. Agencies were also given the opportunity to list counts for other personnel types, only a few agencies responded with any counts for these types, though a few agencies specifically listed nurses to be included in their personnel.

Table 1. Average Number of Personnel Types in Agencies

	Full Time	Part Time	Volunteer
Emergency Medical Responder – EMR	0.10	0.13	0.32
Emergency Medical Technician – EMT	2.55	2.76	6.07
EMT-Intermediate/85	0.62	0.48	0.55
Advanced EMT-AEMT	0.15	0.20	0.23
Paramedic	3.38	0.65	0.42
EVOG Driver	0.83	0.38	2.54

Figure 6: Q.6 Number of Emergency Medical Technicians in Agency:

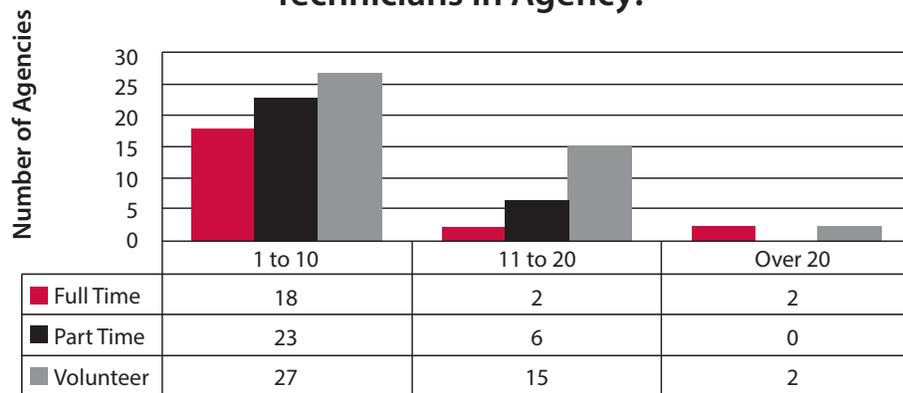


Table 2. Min/Max Number of Personnel Types in Agencies

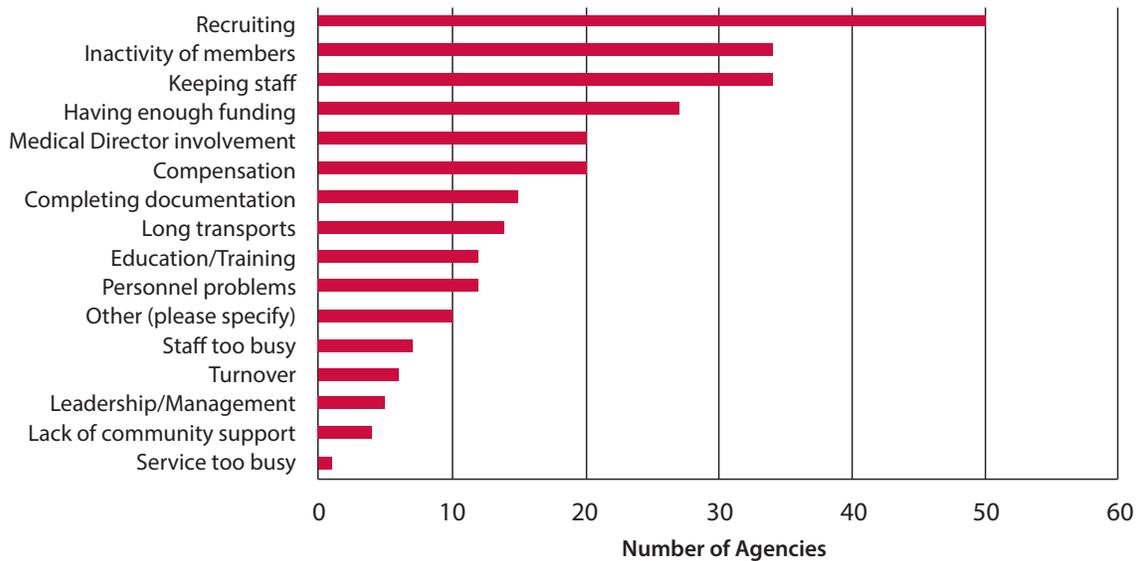
	Full Time	Part Time	Volunteer
Emergency Medical Responder – EMR	0/7	0/7	0/20
Emergency Medical Technician – EMT	0/60	0/19	0/36
EMT-Intermediate/85	0/7	0/7	0/5
Advanced EMT-AEMT	0/2	0/2	0/5
Paramedic	0/50	0/10	0/7
EVOG Driver	0/36	0/7	0/16

Taken in total, the survey responses reveal that while there are a few large, more professional agencies in the state, most ambulance service providers in South Dakota are smaller agencies that rely primarily on volunteers. The provision for these volunteer agencies though takes a variety of forms, including public, non-profit, and corporate.

ORGANIZATIONAL CHALLENGES

Next, the survey turned to ask respondents about specific challenges their organizations face. Respondents were provided a list of specific challenges (the full list can be seen in the survey instrument provided in Appendix A) and asked to choose all that applied. Figure 7 illustrates that the primary challenges facing ambulance service providers in South Dakota relate to staffing. The most frequent responses relate to recruiting and keeping personnel. Also important are financial challenges relating to overall funding and compensation more specifically. Only a few agencies cited a lack of community support or being too busy as particular challenges. Similarly when asked which of these challenges they consider to be the top challenges their organization faces, more respondents indicated recruiting than any other, followed closely by the inactivity of members.¹ Likewise, when asked in question 14 if they ever experience challenges in covering, 69% of respondents said “Yes.”

Figure 7: Q.13 Which of the following are challenges your ambulance service currently faces?



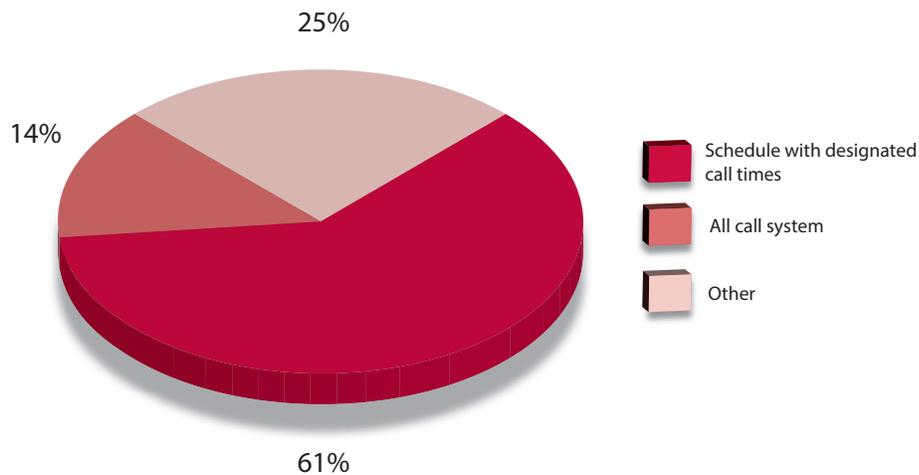
We followed up question 14 by asking respondents to explain why they thought they had difficulty covering shifts. The responses varied but many pointed to just not having enough staff or enough volunteers. In many agencies, the burden of covering calls tends to fall on just a few individuals. Issues of funding were also mentioned and are likely related to the staffing issues. A full list of responses to this question is provided in Appendix B. We also asked respondents about the reasons former employees gave for resignation. Far and away the most common response was that the individual moved, but employee burn out, and higher paying jobs were also frequently cited as reasons for leaving.

¹ The full list of comments provided with counts is included in Appendix B.

CALL DETAILS

Next, we asked respondents to provide detail about the calls to which they respond. Similar to previous questions, there was a substantial range in responses based on the size and location of the agency. When asked about the system they use to ensure call response, a majority (61%) of respondents said they use a formal schedule with designated call times. Another quarter of respondents said they use an all call system. Of the 14% of respondents that indicated they use some other system, most used an informal system similar to all call, with a few reporting they rely on a text message or radio system.

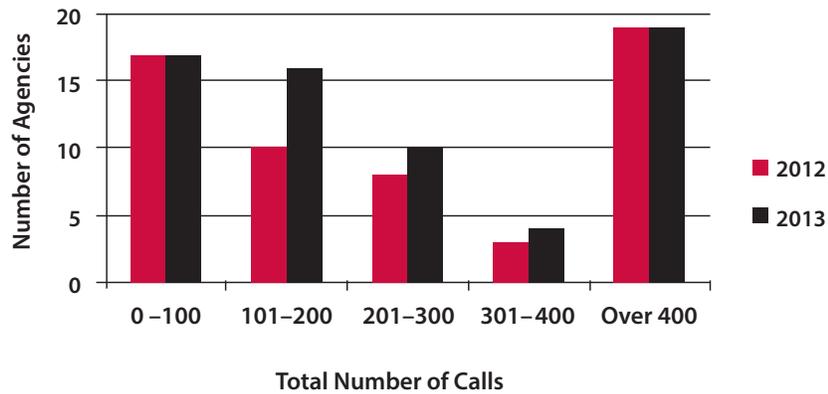
Fig. 8: Q.17 Method to ensure call response



The average number of calls received by agencies was 747 in 2012 and slightly higher in 2013 at 766. However, there was significant variation in responses, which ranged from 10 calls per year at the low end to 11,668 on the high end. In this case, the few agencies with very high numbers are outliers, which skew the mean upward. The median number of responses in both years was just over 200 calls. Figure 10 provides the overall distribution of the number of agencies that provided an answer within each category. Almost one-third (31%) of the agencies reported receiving over 400 calls per year.² Another 28% of agencies received less than 100 calls per year, and 21% of agencies reported receiving between 101 and 200 calls per year. The last 20% reported responses ranging somewhere between 201 and 400 calls.

² The percentages for 2012 and 2013 were identical.

Figure 9: Q.18 Total Number of Calls Received in Each Year



The survey also asked respondents to report the percentage of calls received that were 911 calls and the percentage received that were transfers. The percentage of calls that were 911 calls was identical for 2012 and 2013 and is presented in Figure 11. The figure illustrates that a sizable majority of calls received (77%) were 911 calls. All of the agencies reported that at least some of their calls were 911 calls with most agencies reporting that at least 50% of their calls were. A few agencies even reported that 100% of their calls in both years were 911 calls. Likewise, as can be seen in Figures 12 and 13, the vast majority of calls that respondents received were non-transfer calls in both 2012 (76%) and 2013 (72%). However, again, there was substantial variance amongst responders in both years with some agencies reporting that none of their calls were transfers and others reporting as high as 98% of their calls were transfers.

Fig. 10: Q.21 Percentage of Calls that were 911 Calls in 2012 & 2013

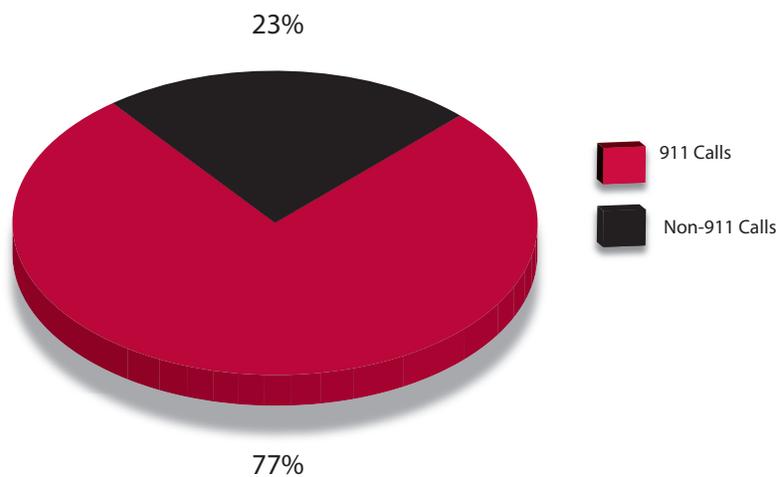


Fig. 11: Q.22 Percentage of Calls that were Transfers in 2012

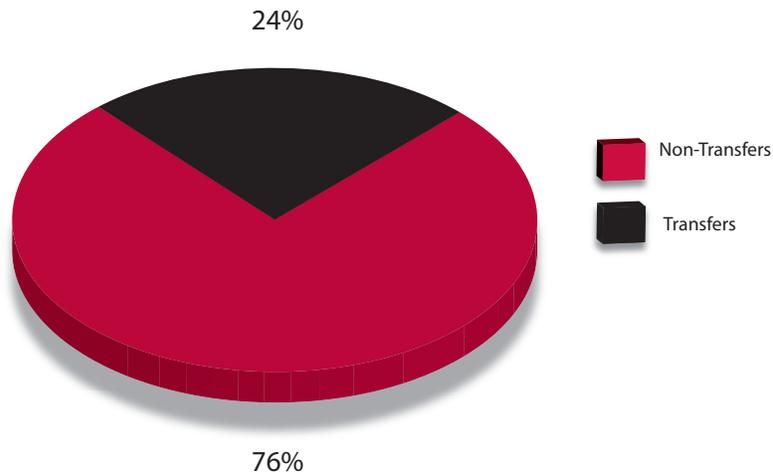
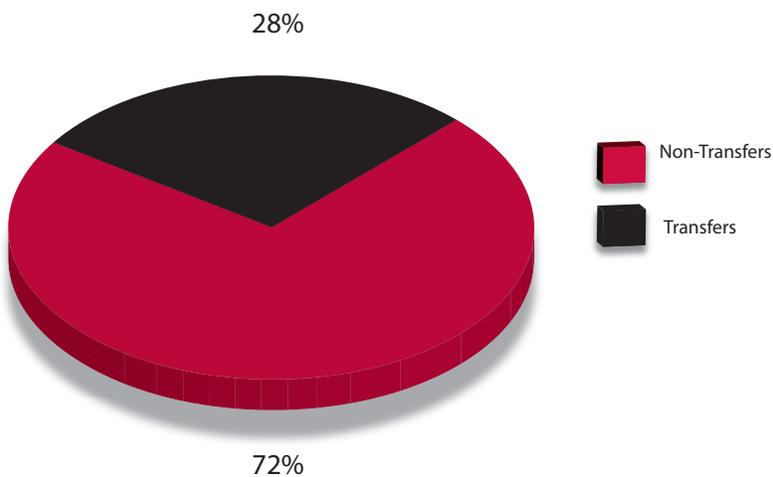
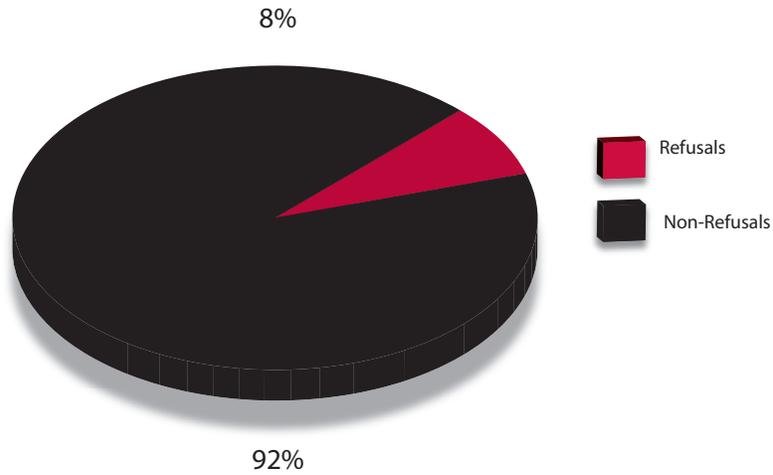


Fig. 12: Q.22 Percentage of Calls that were Transfers in 2013



Finally, survey respondents provided information about the number of calls they received where patients refused services. The responses for 2012 and 2013 were again the same so responses were combined. On average agencies reported that on 8% of their calls they were refused by patients. The highest refusal rate reported by any agency was 30%.

Fig. 13: Q.23 Percentage of Refusals: 2012 & 2013



Finally, respondents were asked what the South Dakota Office of Emergency Medical Services might do to better assist their services. While many respondents offered no suggestions, others provided detailed comments. Within those, a few major themes emerge:

- Encouragement to continue with current operations including grant programs for needed equipment, providing education, and positive changes in testing requirements;
- Requests for more administrative assistance in updating and communicating policy and procedures;
- A desire for a greater level of state-wide coordination, perhaps through an association to lobby for needed legislative, ordinance, and administrative changes, particularly in terms of reimbursement rates, regulations and certification requirements. City ordinances were specifically mentioned as a challenge; and
- Requests for increases in education opportunities or making them easier to attend.

SECTION III: CONCLUSIONS AND RECOMMENDATIONS

Ambulance service providers in the State of South Dakota are varied in nature and their differences in size and location are reflected in the types of challenges they face. Recruiting, keeping, and training employees are the most significant challenges facing providers currently. These challenges are likely exacerbated by the geographic sparseness of the state and heavy reliance on volunteers. High turnover within these agencies likely contributes to a variety of administrative issues, and the ability of the Office of Emergency Medical Services to effectively communicate with agency leadership. It is possible that a few larger agencies in the state located in more urban areas and relying on professional staffs may be able to play a greater role in coordinating state-wide collaboration of providers.

APPENDIX A

Ambulance Provider Survey

2014 South Dakota Ambulance Provider Survey

Thank you! Now we'd like to ask you a few questions about your organization.

*1) Which of the following best describes your agency's ownership?

- City
- County
- Joint Powers
- Fire Department
- Hospital
- Other (please specify)

*2) Is your agency ownership public, private, or nonprofit?

- Public
- Private
- Nonprofit
- Other (please specify)

*3) How many ambulance personnel are currently on your roster?

*4) How many of the ambulance personnel on your roster are currently active (take calls at least 5 times per month)?

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How many of each of the following types of personnel do you have within your agency? (If none, please enter 0.)

	Full Time	Part Time	Volunteer
*5) Emergency Medical Responder–EMR	<input style="width: 100%; height: 100%; border: 1px solid black;" type="text"/>	<input style="width: 100%; height: 100%; border: 1px solid black;" type="text"/>	<input style="width: 100%; height: 100%; border: 1px solid black;" type="text"/>
*6) Emergency Medical Technician–EMT	<input style="width: 100%; height: 100%; border: 1px solid black;" type="text"/>	<input style="width: 100%; height: 100%; border: 1px solid black;" type="text"/>	<input style="width: 100%; height: 100%; border: 1px solid black;" type="text"/>
*7) EMT-Intermediate/85	<input style="width: 100%; height: 100%; border: 1px solid black;" type="text"/>	<input style="width: 100%; height: 100%; border: 1px solid black;" type="text"/>	<input style="width: 100%; height: 100%; border: 1px solid black;" type="text"/>
*8) Advanced EMT–AEMT	<input style="width: 100%; height: 100%; border: 1px solid black;" type="text"/>	<input style="width: 100%; height: 100%; border: 1px solid black;" type="text"/>	<input style="width: 100%; height: 100%; border: 1px solid black;" type="text"/>
*9) Paramedic	<input style="width: 100%; height: 100%; border: 1px solid black;" type="text"/>	<input style="width: 100%; height: 100%; border: 1px solid black;" type="text"/>	<input style="width: 100%; height: 100%; border: 1px solid black;" type="text"/>
*10) EVOC Driver	<input style="width: 100%; height: 100%; border: 1px solid black;" type="text"/>	<input style="width: 100%; height: 100%; border: 1px solid black;" type="text"/>	<input style="width: 100%; height: 100%; border: 1px solid black;" type="text"/>
*11) Other	<input style="width: 100%; height: 100%; border: 1px solid black;" type="text"/>	<input style="width: 100%; height: 100%; border: 1px solid black;" type="text"/>	<input style="width: 100%; height: 100%; border: 1px solid black;" type="text"/>

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Now we would like to ask you a few questions about challenges your organization may face.

12) Which of the following are challenges your ambulance service currently faces?

- Recruiting
- Keeping Staff
- Inactivity of members
- Personnel problems
- Service too busy
- Completing documentation
- Turnover
- Leadership/Management
- Staff too busy
- Long transports
- Having enough funding
- Compensation
- Medical Director involvement
- Lack of community support
- Education/Training
- Other (please specify)

*13) Which challenges from the above list would you consider the top two challenges currently facing your organization?

*14) Do you ever experience difficulty in covering shifts?

- No
- Yes

15) If you answered Yes to Question 14, please explain:

16) When employees resign, what are the reasons they give for resignation?

*17) To ensure that someone is available to respond to calls, which of the following do you use?

- A schedule with designated call times
- All call system
- Other (please specify)

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Finally, we'd like you please provide the following information for calls that you received in 2012 and 2013:

	2012	2013
*18) Total number of calls	<input type="text"/>	<input type="text"/>
*19) Average response time (time from page to when the ambulance is moving toward the scene)	<input type="text"/>	<input type="text"/>
*20) Average total time on a call	<input type="text"/>	<input type="text"/>
*21) % of 911 calls	<input type="text"/>	<input type="text"/>
*22) % of Transfers	<input type="text"/>	<input type="text"/>
*23) % of Refusals	<input type="text"/>	<input type="text"/>

24) What could South Dakota's Office of Emergency Medical Services do to better help your service?

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2014 South Dakota Ambulance Provider Survey

Thank you!

For maximum confidentiality, please close this window.

APPENDIX B

Complete Qualitative Comments

Q13: Which challenges from the above list would you consider the top two challenges currently facing your organization?

Being able to pass written exam x3

Compensation x9

Completing documentation x3

Currently we do not have enough EMT's to staff the ambulance with recently losing 2 EMT's due to all the qualifications and trainings EMT's are now required to do on a "Basic" Level. Also having a hard time finding people to take an EMT course due to the extra training involved. We feel all the federal regulations that may be good in a larger cities, do not pertain as well to many of the rural ambulances or their particular settings.

Difficulty covering day shifts with an all-volunteer staff

Encouraging them to complete the trip reports on med-media in a timely fashion. Updating this program would help immensely with more choices for rural areas. There are areas where nothing is relevant to the problem with the patient; You have to choose a close choice it should not be that way.

Finding quality personnel x2

Funding x17

Getting staff involved in training x4

Inactivity of member's x18

Lack of community support

Leadership x3

Long transports x3

Medical director involvement x4

Multiple members either unable or unwilling to take an active roll, and when these personnel then do take call are out of practice x2

N/A x2

Need more EMT's willing and able to be on call

Personnel problems x2

Recruiting x31

Turnover x11

Service is to busy for the amount of staff we have x2

We have a great service here in Springfield. The ONLY problem we run into is having 2 certified EMT daytime people to go

Q14: Do you ever experience difficulty in covering shifts? If yes, why?

Always on call x2

Can't cover two calls at once

Daytime- most people have full-time jobs x14

Difficulty covering night's x2

Difficulty covering shifts x4

Difficulty getting weekends/ holidays covered x7

Many are farmers or own their own business, so can't do transports during the day x2

Most staff lives out of town x4

No staff x2

No volunteers to cover when full-time employees take off x2

Not enough funding to keep full-time staff x2

Not enough staff x6

People do not have time/do not want to spend all of their time on-call/ transporting x3

Recruiting/inactivity of members

There are always changes

We are a combination of paid and volunteer. We pay people while they carry pager and pay a given amount per run. There is no structure in place to keep staff here when they are not on call. This can be a problem when one on call person can't cover their shift, and there is no one else around to help out.

We are currently on a hardship exemption where we can run 1 EMT and an EVOC driver

We developed a schedule with 5-6 people per week, if we can 2 drivers and 4 EMT/Nurses. They are on call 7pm-6am. It has helped considerable when we changed to this to ease the burden on only a few members. With that being said we still have problems covering some shifts, especially weekend shifts! And even though we have 43 members on staff. It is always the same few that are doing the majority of the work!

We only have 3 people that live in the local area. Everyone else travel down for the Rapid City area to cover for us. We get several students from Western Dakota Tech that we train to get experience then they move on to another job. With having to pay to have 90% of our coverage come down from Rapid City it has created a funding problem. We have a tax district - but in my opinion was not set up properly. We are only able to tax on residences. They did not include the Ag land in the tax district because they would not be able to get it to pass in a vote. The Pennington Co. Commissioners could have created the district for us but they did not want to deal with the upset people. So they put it up for a vote. Now here we are with not enough tax bases to pay for the operations of the ambulance service. Once our savings is gone and if nothing is done to include Ag land, we will not have enough funding to operate. I give it two years.

Q16: When employees resign, what are the reasons they give for resignation?

Back to college x2

Difficulty keeping up on certification/ training x6

Distance of travel is too much

Don't have time/ too many hours x4

Don't want to do weekend's x2

Family priorities

Health issues

Higher paying job/ different career x10

Inactivity x2

Low pay x3

No one resigns you have to die to get off our service (not kidding)

None have resigned since new management; prior to new management the reason was the previous management

Moving x21

Old/retired x14

Tired of being on-call/burned out x10

Unprofessional co-workers x2

Volunteer so don't resign

Want to do fire and EMS and we are only EMS- want more money

We have many students, so often it is at the end of college or as they move on to other studies

**Q17: To ensure that someone is available to respond to calls, which of the following do you use?
(Other)**

24-hour call schedule—2 person crew

A calendar writing down the days you will be gone, otherwise you are on call

All call during week/-scheduled weekends x2

Always on call

Director of service is available for calls plus a few other members that are unable to leave there

Full-time department then all-call system x2

Full time/ have set schedules

Local contact between members by phone

On call for the weekends only on transfers

Radios and text message

We do have an ambulance bar but the best response system we use is the code red text message

We have no way to ensure this with our limited roster and people working out of town

Whoever is around goes on call x3

Q24: What could South Dakota's Office of Emergency Medical Services do to better help your service?

A little more administrative help would be nice for updating policy and procedure.

BC/BS of SD should have to pay the service the full bill direct to the service. Title XIX needs to pay at least Medicare rates not 1990 rates. We need a strong ambulance association. The state governor, senators, and representatives need to get on board if they want a good EMS. \$1000.00 to become an EMT is way out of line. Too many third parties are making money to keep the EMS and EMT going. Also, any time we speak out, the state audits us for nothing and we still get nowhere.

Change basic EMT requirements

Change the rules and allow first responders, fire personnel, law officers that have had EVOC to drive when there are non-emergency calls. A state certified EMR program that requires them to recertify every 2 years might help some of the struggling small communities with personnel issues.

Continue to offer grant programs for needed equipment.

EMT-B's should be trained to be able to attend ambulance transports with an IV is running i.e. ... (saline, LR)

Establish County-wide ambulance service, like we have for police. The majority of the rural services in the state is in the same boat. We lost a large number of services last year. People are not willing to volunteer their time to keep an ambulance staffed. There are many groups that are trying to make an EMT a career type position. Which is fine, but in the rural areas there is not enough funding to be able to hire career people to cover the ambulance. So that is why many ambulances are closing. Many of the services that surround Wall are in the same boat as we are. The ambulance service to our West already closed down. If we were to close down that would be a huge area of people that would have to wait a minimum of an hour for an ambulance to arrive from Rapid City. Lives will be lost.

Find EMTs. Provider different avenues of training EMT's Increase in pay x3

Get people to take EMT classes.

Implement bridge curriculum for EMR to EMT. Change staffing law that requires two EMTs to allow one EMT and an EMR.

Individuals interested in taking an EMT Class usually lose interest once they find out how intense and demanding the class is. Longer class time, easier access to national test site; encourage funding source to compensate EMT's enough to create full time positions within their ambulance service. Compensation with benefits in order for EMT's to have one profession - EMS, and not have to work a regular full time job

In our service it would help to have them visit to go over some of the rules and regulations of being an EMT. It seems that this subject gets forgotten over time and doesn't seem to be included in the yearly conference. And if it is in the conference not all EMT's attend so they don't get the information. (even if the director gives them that information they don't seem to feel that as a 'volunteer' they should have to follow all the rules & regs compared to a Paid Service).

Just keep up with education: 1

Make it so one place—department of health, handles all the EMT and paramedic licensing, not the SD Board of Osteopathic.

Make taking class more friendly for small towns to take. Farming community people are busy. They just want to help they don't need to be national certified. In my time you got to pick either national or state testing. When they here the number of hours the class is they run.

No answer/ nothing they can do x3

Online recertification, redo the check sheets for the license process what supplies are needed

Produce or rent an EMT Basic examine that our students could pass so that we can restock our ambulance crews with EMTs. Our failure rate is over 80% regardless of who or how the course is being taught. If SDEMS needs help securing funds for this type of project, we will campaign the State Government for the necessary funds!

Regulate city ordinances that tie the hands of EMS agencies.

Secure a funding source (Tax levy) just like for non-profit ambulance services in South Dakota. Not saying that every service needs to get paid. But some extra funds for each service would help. But I understand that just putting money into something won't fix it. But I think that is a good place to start.

The biggest thing to do is getting businesses to understand the importance of letting their employees go during the day! Other than the few night and weekend shifts that we have trouble filling, our biggest downfall on response times is during the day! I am unsure on how to get members active like they were when they first decided to become an EMT. Something has to change in our attitude as an EMT I guess. Anything to promote the involvement of your WHOLE service to make the workload easier in the long run. It took me a long time to convince my crew that if we had 5-6 people on each week it really doesn't mean you are going to be on every night. Lots of hands make little work!

They are doing it by changing the testing methods

They need to have a better understanding of how difficult it is to recruit volunteers in the rural areas that are able to pass the tough national registry exam. We have a lot that take the class that would be good

providers but are unable to pass the exam for whatever reason. They also need to understand the type of care required in the remote areas where we sometimes have a response of 20 miles or more.

Update EMS laws in legislature

We will be switching to a First Responder Unit due to not being able to staff the ambulance 24/7. Our City is 46 miles from the County Ambulance and nearest Trauma facility. When we switch to first responder, this means we will no longer be able to transport patients...with some medical emergencies requiring quick response and transport, we feel that we should at the very least be able to transport patient & meet with the county Ambulance if they are farther away from scene and their estimated arrival time could take a little longer.

Work with med media and improve PCR reporting update to window7. Have a leadership class at conference to help with retention and recruiting.



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