



SOUTH DAKOTA
DEPARTMENT OF HEALTH

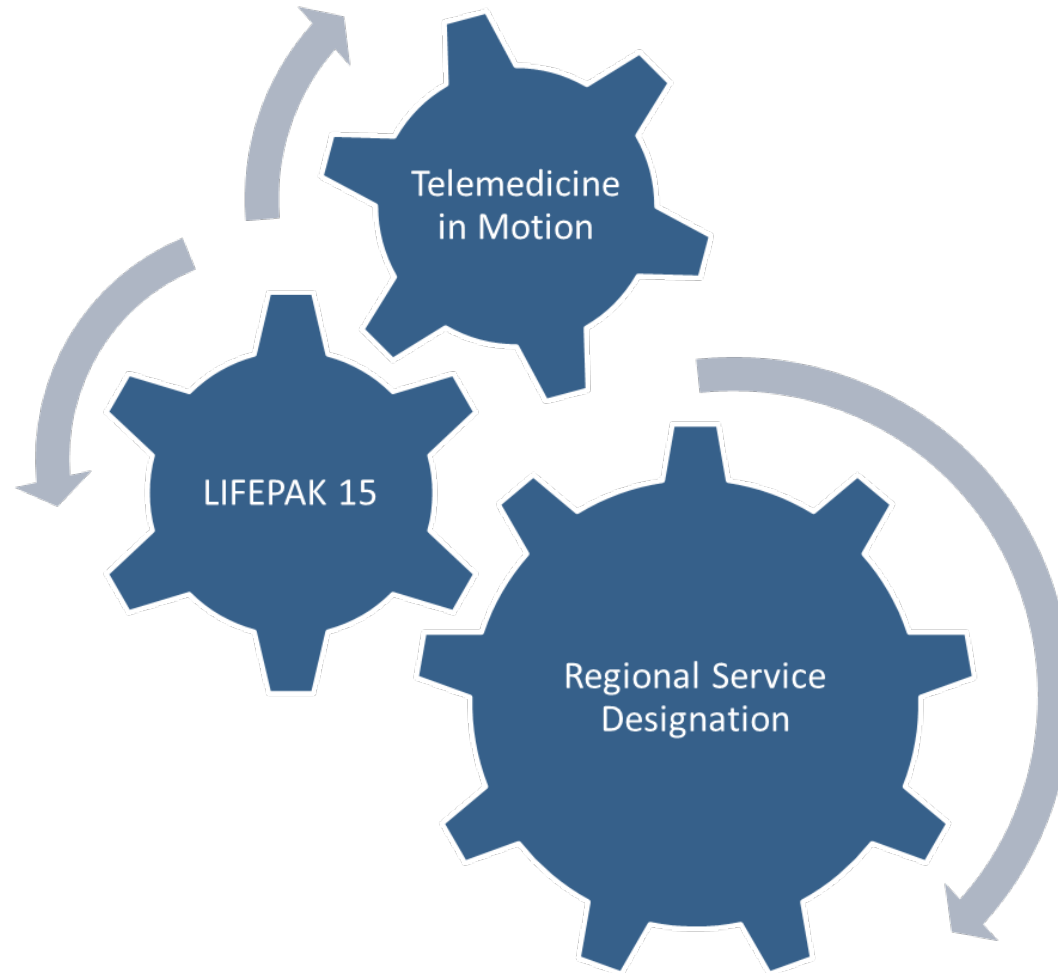
Emergency Medical Services Initiatives

Presented By: Emily Kiel and Marty Link

November 14, 2024

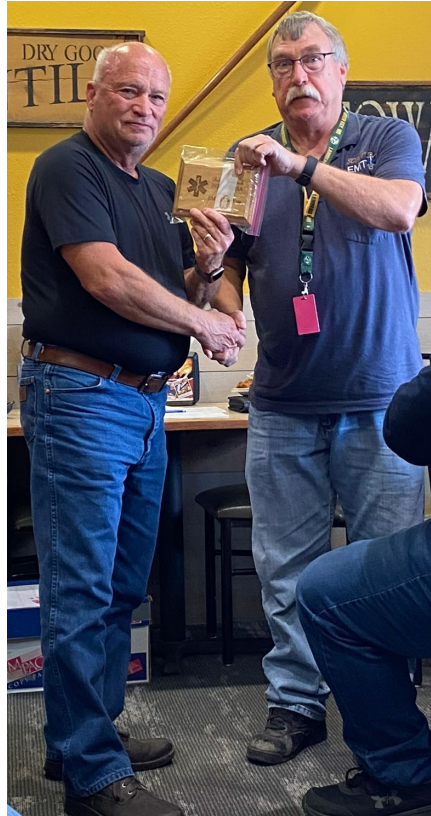
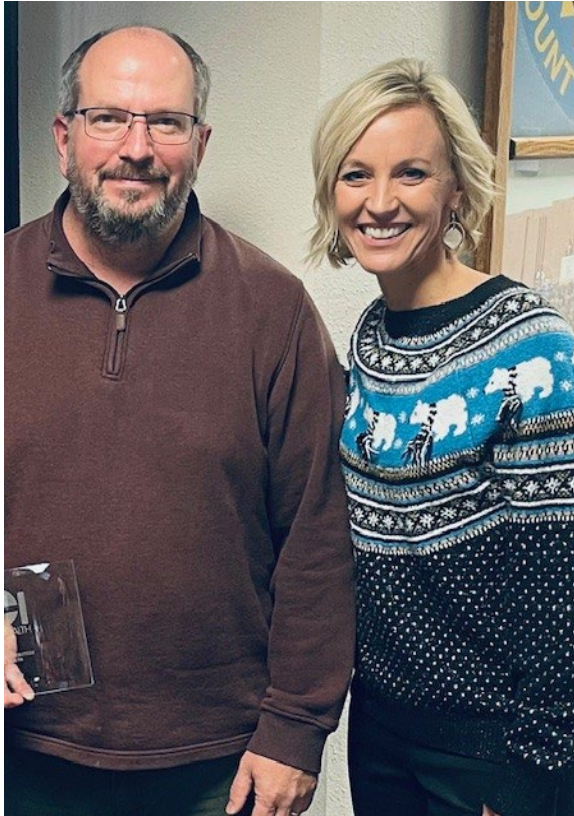


Emergency Medical Services





Division of Healthcare Access | Office of EMS and Trauma Program





EMS REPORT:

Male attacked by buffalo multiple times



Telemedicine in Motion | Overview

The service has been a lifeline for South Dakota's numerous volunteer EMS agencies.

- 107 South Dakota communities have this service for EMS personnel.
- Over 80% of the state's 120 ambulance services are staffed primarily by volunteers.
- Telemedicine in Motion equips them with the tools and expertise needed to deliver top-tier care.
- By providing real-time consultation and guidance from Avel's experienced team, even the most remote and resource-limited EMS teams can feel confident in delivering care that meets modern healthcare standards.



First agency Live with *Telemedicine In Motion*

Nov. 15, 2022

Dec. 10, 2022

Kimball, SD EMS activates Avel to treat man mauled by a bison



First ambulance to serve a tribal community; Rosebud, SD

Mar. 22, 2023

May 18, 2023

Milestone Achieved: 60th Agency



1 Year Anniversary of *Telemedicine In Motion*

Nov. 15, 2023

Jan. 9, 2024

Governor Noem gives Heroism Award



1000 Patients Impacted

Feb. 25, 2024

July 31, 2024

100th agency in South Dakota



SDDOH and Avel are invited to present at EMS World

Sept. 12, 2024



Telemedicine in Motion | Funds

Description	Amount	Paid
HARDWARE Technology Packages Consisting of a Computer/Tablet, Speakerphone, Mount, and Equipment necessary to facilitate sustained Cellular Connectivity	\$ 404,700.00	Yes
SOFTWARE Consisting of 2-Way Audio/Video, Telehealth Event Documentation and Clinical Workflow, Tablet Data Management, Router Management, as well as Cellular Data Packages to both AT&T FirstNet and Verizon	\$ 187,500.00	Yes
Installation, Implementation & Training Fee - OCTOBER 2022 – TO DATE	\$ 395,300.00	Yes
Total Monthly Service Fees for FY23	\$ 750,000.00	Yes
	\$ 1,737,500.00	FROM GRANT
Total Monthly Service Fees for FY24 – from General Funds	\$ 937,500.00	Yes
Data, Licensure, and Monthly Service Fees for FY25--To Date from General Funds	\$ 500,000.00	Ongoing



Telemedicine in Motion | Outcomes

Agency Insights

Contracted Sites: 104 | Active Sites: 104 | Equipped Sites: 104

EMS Encounters

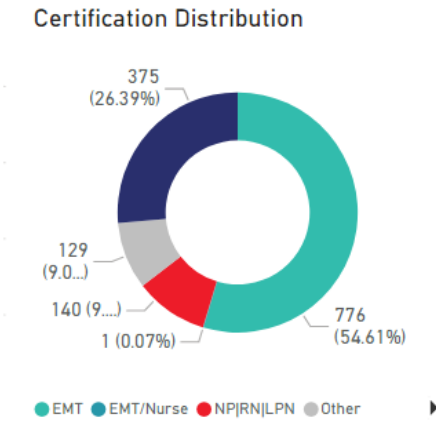
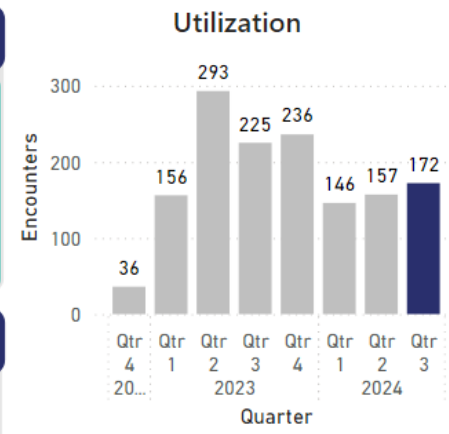
Agency Activations: 1421

Median Encounter Time: 15 minutes

Median Patient Age: 62 years old

Median Patient ESI*: 2 severity

*ESI = Emergency Severity Index is an algorithm that stratifies patients 5 triage groups. Most Urgent (1) to Least Urgent (5) based on acuity and resource needs.



Top 15 Chief Complaints

Complaint	#
Neurological / Altered Mental Status	238
Cardiac / Chest Pain	206
Trauma Level 2	152
Pulmonary	110
Trauma Minor	90
Trauma Level 1	78
Cardiac Arrest / Full Arrest	71
Gastrointestinal	62
Weakness / Lethargy	57
Overdose / Ingestion	55
Musculoskeletal	43
Syncope/Near Syncope	36
Sepsis / Infectious Disease / Fever	27
Endocrinology	18
Other	17

Top 10 Receiving Facilities

Facility	#
Avera St Mary's - Pierre	27
Avera Queen of Peace - Mitchell	21
Avera St Luke's - Aberdeen	17
Sanford Chamberlain	17
Avera McKennan Sioux Falls	14
Monument Health - Rapid City	14
Hawarden Regional	12
Sanford - Sioux Falls	12
Avera McKennan - Sioux Falls	11
Sanford - Chamberlain	11

EMS Agency Post Encounter Survey

% Completed Post Encounter Survey: 45.9%

Value & Experience

Average Experience with eCare Staff: 4.74

Value of Service Average: 4.61

Poor (1) | Fair (2) | Good (3) | Very Good (4) | Excellent (5)

Technical Success

95.4%

Defined as encounters where the team reported no significant technical issues



Telemedicine in Motion | Excellence in Customer Service

Post Encounter Survey Comments

“You guys run a great service, super appreciative especially with our service which is very short-staffed. Having an extra brain to throw out thoughts/ideas/procedures to is huge.”

“This is my first time using Avel. Excellent service; especially for rural South Dakota ambulance services.”

“Video was clear, sound was clear, and staff were great!”

“Resolved before patient was in ambulance. Awesome first run. Thank you for being there.”



“The encounter was great. We stayed focused on patient care while the hospital was called and LifeFlight was enroute. They reminded us not to focus on 1 or 2 issues, but to treat what we could.”



Telemedicine in Motion | Testimonies



Kris Escott

Faith Ambulance Director

I just wanted to reach out to you to express my appreciation for all of the people who assisted in any way for the telehealth implementation. From Governor Noem on down. I am SO proud to be a part of this giant leap forward for EMS! I know all of you have put a lot of time and thought into this project.

It shows by how well it is being presented and implemented.

The communication has been amazing!

Avel has been wonderful to work with, I was a little hesitant in the beginning, but Avel made the whole process very easy.

THANK YOU for being proactive and for everything you do for EMS in South Dakota.



Telemedicine in Motion | Building Awareness

South Dakota EMS
TELEMEDICINE IN MOTION

Now Live!

60 sites **GOAL** by 6/1

38 sites **LIVE** as of 4/13

Gregory Ambulance Association
Gregory, SD

Centerville Community Ambulance Service
Centerville, SD

South Dakota EMS
TELEMEDICINE IN MOTION

Now Live!

60 sites **GOAL** by 6/1

43 sites **LIVE** as of 4/18

Butte County Ambulance Service
Newell, SD

South Dakota EMS
TELEMEDICINE IN MOTION

Now Live!

60 sites **GOAL** by 6/1

44 sites **LIVE** as of 4/19

Aberdeen Fire and Rescue
Aberdeen, SD



South Dakota EMS
TELEMEDICINE IN MOTION

Now Live!

60 sites **GOAL** by 6/1

45 sites **LIVE** as of 4/24

Deuel County Ambulance, Inc.
Clear Lake, SD

South Dakota EMS
TELEMEDICINE IN MOTION

Now Live!

60 sites **GOAL** by 6/1

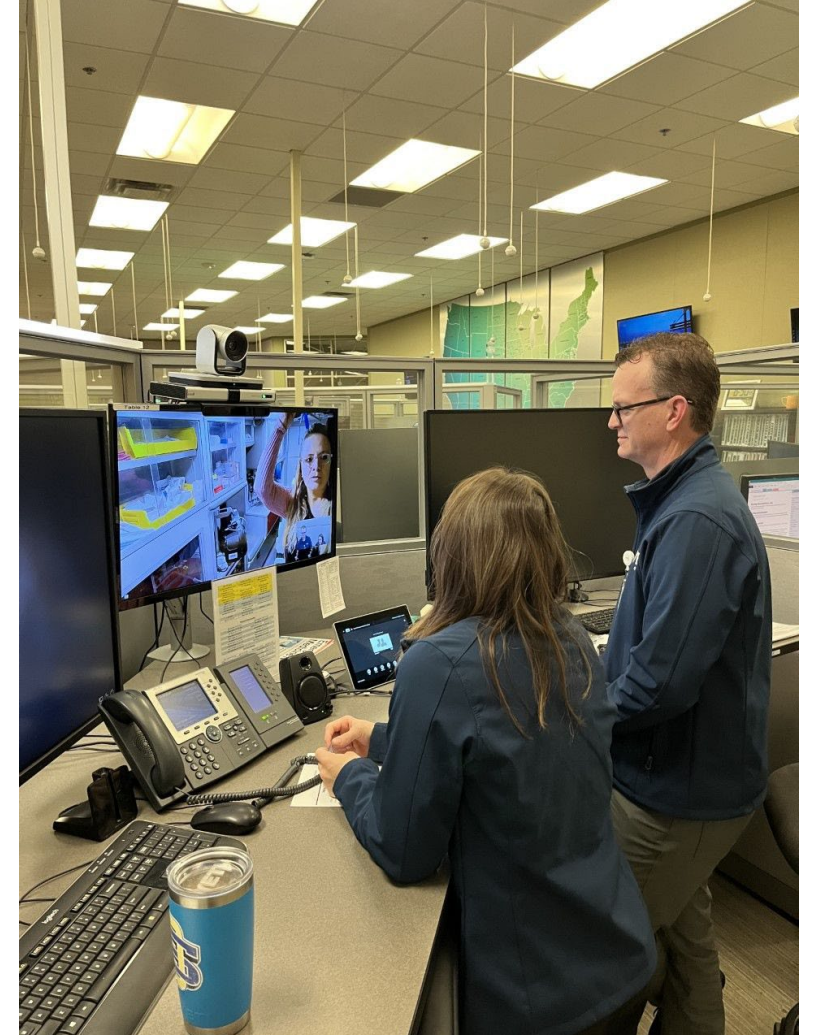
46 sites **LIVE** as of 4/25

Day County Ambulance
Webster, SD



SOUTH DAKOTA DEPARTMENT OF HEALTH

Telemedicine in Motion | Building Awareness





LIFEPAK 15 Replacement Devices

Overview





LIFEPAK 15 Replacement Devices | Fun Fact

Where Telemedicine in Motion and LIFEPAK 15 Intersect

- As EMS agencies acquired their LIFEPAK 15 and “go-live” with Telemedicine in Motion, EMS technicians are able to share vital patient data directly to Avel – strengthening patient care.
 - If a patient has a confirmed ST Elevated Myocardial Infarction (STEMI), minutes equate to heart muscle being deprived of oxygen.
- Early notification to the receiving facility is essential to bring key medical personnel into the ER and in many cases prepare for patient transfer to a tertiary facility.



LIFEPAK 15 Replacement Devices | Funds

Appropriated = \$11.6 Million

Description	Amount	Paid
LIFEPAK 15 Devices, Training, and Accessories	\$ 6,608,822.40	Yes
CODESTAT	\$ 471,016.00	Yes
LIFENET Alert	\$ 1,119,118.00	Yes
Modem and Data Plan	\$ 1,166,704.00	Yes
ProCare = 8 years of services and supports	\$ 2,192,652.00	Yes
Trade-in Agreement	\$ (929,500.00)	Yes
Shipping	\$ 66,612.60	Yes
Total:	\$ 10,695,425.00	



LIFEPAK 15 Replacement Devices | Training and Distribution





LIFEPAK 15 Replacement Devices | Outcomes

Distributed Devices = 308 total devices distributed.

- **8 services opted out:**

- Main reason—they recently purchased their own devices.
- They wanted to remain with their current vendor.

- **Eagle Butte and Pine Ridge-IHS**

- Both agencies received one-on-one training



LIFEPAK 15 Replacement Devices | Testimonies



From the Field:

“I have used LIFEPAKS for 22 years and am still learn some great tips. It was great to dig in deeper to the tips. Very good use of my time.”

“My team learned things about the LIFEPAK we did not know about.”

“I thought I knew all about the LIFEPAK already - but I learned some new things today. It was a well run training and the instructor was very good.”



Regional Services Designation | Overview

Primary Goal

Create a pre-hospital system of care that ensures long-term sustainability.

- 1. Statewide Comprehensive assessment + Final Report**
- 2. Grant application and funding opportunity**



Regional Services Designation | Comprehensive Report Funds

Description	Amount	Paid
1. Finalize work plan, strategies, and project kick-off meeting	\$27,400	Yes
2. Interviews, listening sessions, data analysis	\$47,950	Yes
3. On Site Meetings	\$32,320	Yes
4. Final EMS Assessment and Strategic Plan	\$61,650	Yes
5. Facilitation of best practice and subject matter expert webinars	\$17,125	Yes



Regional Services Designation | Key Findings from Report

Workforce

- Recruitment and retention are the greatest challenges facing ambulance availability in South Dakota.
- Require mutual response with fire departments.
- Promote grants for services to purchase auto-loading gurneys to extend the working tenure of volunteers.
- Create possible legislation to incorporate CPR and other life-saving training for all South Dakota middle and high school students and offering college-level credits for high school students who complete emergency medical technician training.
- Improve test scores and passing rates for the National Registry of EMT Examination by offering more instruction and support to potential volunteers.



Regional Services Designation | Key Findings from Report

Short Term (less than 2 years)

- Unawareness of the EMS profession
- Minimal state on-site interaction
- Lack of report-writing skills
- Lack of continuous quality improvement and statewide metrics
- Lack of EMS medical director coordination

Medium Term (2-4 years)

- Inter-facility transports are delayed
- Lack of formal recruitment drives
- Not all dispatch centers use Emergency Medical Dispatching
- Students are not passing the National Registry of EMT Examination
- Lack of volunteers

Long Term (4 years or more)

- Patients transported unnecessarily



Regional Services Designation | Planning Grants

Things to Know:

- Competitive grant opportunity with each grant award limited to \$500,000 in funding.
- Applicants must be knowledgeable in the report findings + incorporate components into their grant application.
- Grant recipients must comply with state and federal grant guidance.
 - Furthermore, all grant recipients will be responsible for submitting monthly progress reports and invoices.
 - **Funds awarded must be spent by November 2026.**
- **Timeline** – Two grant periods were provided in 2024 - deadlines for those were March 15 and October 21.



Regional Services Designation | Round 1 Outcomes

39 applicants | \$1.6 million

HIGHLIGHTS:

- Development of a quality assurance/improvement program
- Consultant services for struggling agencies
- EMT classes and training programs
- Regional training hub models and equipment
- Purchase of high-fidelity simulators



SCHEELS

12 25