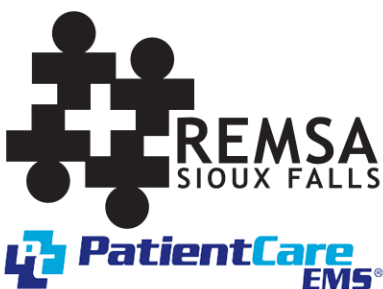




Ambulance Contract Performance Report

May 20, 2023
Submitted July 5, 2023



AMBULANCE CONTRACT PERFORMANCE REPORT

CONTRACT YEAR ENDING MAY 20, 2023

A Franchise Agreement (“Agreement”) between the City of Sioux Falls and Paramedics Plus (now PatientCare EMS) for ambulance service within the city went into effect on May 21, 2015. This Agreement was extended for a six-year term by City Ordinance approved on December 11, 2018. The Agreement term now runs through May 20, 2026.

PatientCare EMS and the City of Sioux Falls have a strong partnership that will ensure quality, reliable EMS services for people well into the future.

—Matt McQuisten, REMSA Chair

The Agreement requires an annual report from Sioux Falls Regional Emergency Medical Services Authority (REMSA) to the City Council detailing performance in these areas:

- **Response Time Performance**
- **Clinical Performance**
- **System Improvements**
- **Workforce Stability**
- **Pricing Compliance**
- **Reporting Compliance**



Response Time Performance

Response time performance is the result of a coordinated effort of the PatientCare EMS contractor's total operation.

Response time requirements:

■ Emergency calls:

• **Priority 1**

(Life-threatening emergencies) require a Paramedic ambulance on the scene within 8 minutes, 59 seconds, for not less than 90 percent of all Priority 1 response requests.

• **Priority 2**

(Non-life-threatening emergencies) require a Paramedic ambulance on the scene within 11 minutes, 59 seconds, for not less than 90 percent of all Priority 2 response requests.

• **Priority 3**

(Nonemergency ambulance requests) require a Paramedic ambulance on the scene within 15 minutes, 59 seconds, for not less than 90 percent of all Priority 3 response requests.

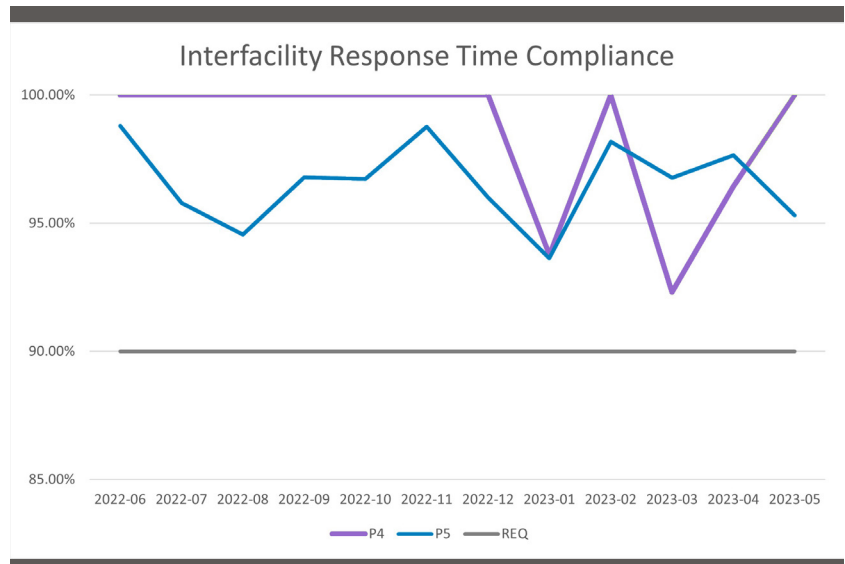
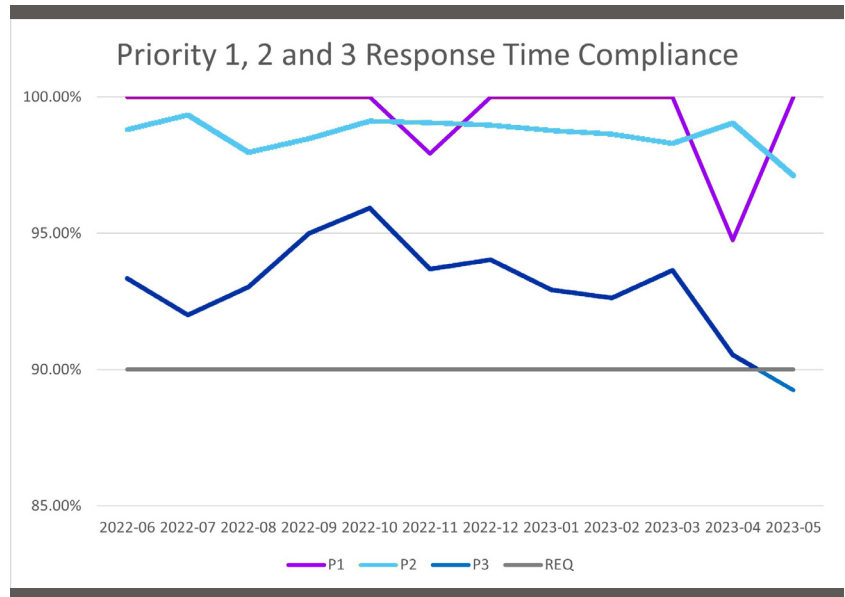
■ Interfacility Transfers:

• **Priority 4**

(Scheduled interfacility ambulance requests) require a Paramedic ambulance on the scene within 30 minutes of the requested pick up time 90 percent of the time.

• **Priority 5**

(Unscheduled interfacility ambulance requests) require a Paramedic ambulance on the scene within 3 hours of the request 90 percent of the time.



Findings:

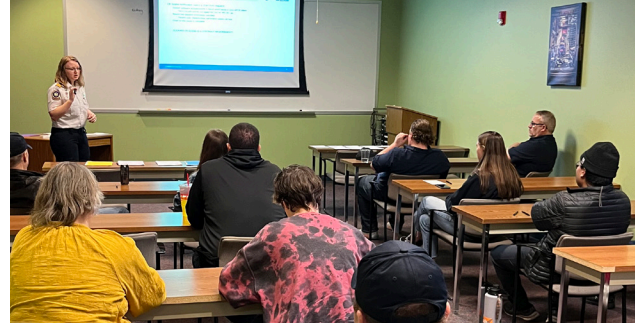
- Response Time requirements have been met for Priority 1, 2, 4, and 5 every month. Priority 3 compliance fell just below the 90 percent threshold in May of 2023 during a record setting month for call volume.

Clinical Performance

REMSA utilizes local patient care protocols based on national standards and evidence-based best practices. The REMSA Medical Director and REMSA Medical Board approve these protocols that are then adopted by REMSA. REMSA, PatientCare EMS, and Sioux Falls Fire Rescue worked for over one year to develop new integrated EMS protocols that were implemented in 2020 and updated yearly since.

EMS continues to face challenges. While COVID-19 call volume has declined, overall call volume has increased significantly with several record-setting months in the past year. The percent of calls for respiratory complaints has dropped since the COVID-19 peak months but continues to be 1-3 percent higher than pre-COVID-19 when adjusted for the season.

Because EMS schools and field training were shut down during the initial COVID-19 waves, the availability of new hires dwindled, creating continued staffing challenges. This is a problem across the nation, not just in Sioux Falls. Staffing continues to recover slowly, but the implications of COVID-19 on EMS in general are still being felt. Fewer young people are choosing EMS as a career due to the risks of practicing in this environment.



External quality assurance is provided under the direction of the REMSA Medical Board and REMSA Medical Director. Random ambulance calls are audited to ensure compliance with protocols. High-risk calls, including all medication-assisted airway management calls, are reviewed by the REMSA Medical Director, who found no calls outside the expected performance. All pediatric calls, cardiac arrests, strokes, heart attacks, and major trauma calls are reviewed. Additionally, the FirstPass system provides 100 percent chart review and flags any calls for in-person review.

ESO, an EMS documentation software provider, publishes an index of key EMS performance metrics based on more than 2,600 agencies and 11 million 911 calls. Comparing Sioux Falls PatientCare EMS performance to the ESO key metrics:

Sioux Falls Compared to EMS Benchmarks from 2021 ESO INDEX		
	ESO	Sioux Falls
Bystander CPR	25%	67%
Weight recorded for Ketamine administration	80%	100%
Transports without lights and siren	83%	94%
Suspected Opioid overdoses as percent of encounters	2%	0.69%
Pediatric respiratory calls as percent of all 911 calls	0.60%	0.82%
Respiratory assessment documented for pediatric respiratory distress	86%	99%

Over the past seven years, PCEMS has provided excellent care to our community. Whether it is responding to 911 requests, providing EMS services for large events and concerts, offering interfacility transportation or, more recently, wheelchair transportation services, they do it all with confidence and expertise.

Our growing community is lucky to have such reliable and responsive services of all types. PCEMS faces continual challenges in population growth, increased traffic, increased calls for service and changes in types of calls—and they are always working on improving.

—Abigail Polzin, MD, FACEP, CMET, REMSA Medical Board Chair

Additional Clinical Highlights

CARDIAC

12 lead EKG done for patients with sustained pulses after cardiac arrest	90.9%	Aspirin given to patients with cardiac chest pain	83.6%
12 lead EKG done for patients with acute coronary syndrome	88.1%	Heart attack patients transported to appropriate hospital	100.0%
12 lead EKG done for patients > 35 with chest pain within 10 minutes	83.1%	Hospital notification within 10 minutes from an EKG that shows a heart attack	91.7%
Patient contact to cath lab in 90 minutes or less	95.8%	STEMI alert if STEMI	100.0%
Average time on scene for heart attack 15.4 min.			

STROKE

Stroke scale documented	72.9%
Average time on scene for stroke patients	13.6 min.
Last known well time documented	95.3%
Blood glucose documented	95.3%
Large vessel occlusion stroke patients transported to stroke center	97.7%

CARDIAC ARREST

Advanced airway used	90.9%	Defib < 5 minutes from initial shockable rhythm	100.0%
CPR performed	96.4%	AED used prior to arrival	85.5%
Pulses returned	54.6%	Appropriate cardiac arrest medications given	100.0%

TRAUMA

Average time on scene for trauma patients	12.5 min.
Trauma patients transported to trauma center	100.0%
Average Early Trauma Team activation	3.6 min.

GENERAL

2 sets of vital signs	92.2%	History, medications, and allergies documented	92.4%
Glascow coma scale	99.9%	Oxygen administered if oxygen saturation is below 94%	98.0%
Narrative	100.0%	Broslow tape used if age < 12	97.9%
Transport percent 76.9%			

AIRWAY MANAGEMENT

Ventilation assistance provided	100.0%
Single airway type used	100.0%
Confirmation of placement with ETCO2	100.0%
Multiple ETCO2 values	83.9%
RSI (medication-assisted airway management)	38.7%
Overall airway success	100.0%

The past year has shown unprecedented levels of cooperation between all our EMS agencies. I couldn't be more proud of each EMS system provider and their dedication to the City of Sioux Falls. Each Paramedic and EMT at PCEMS has impressed me with their devotion to their career and the people they serve.

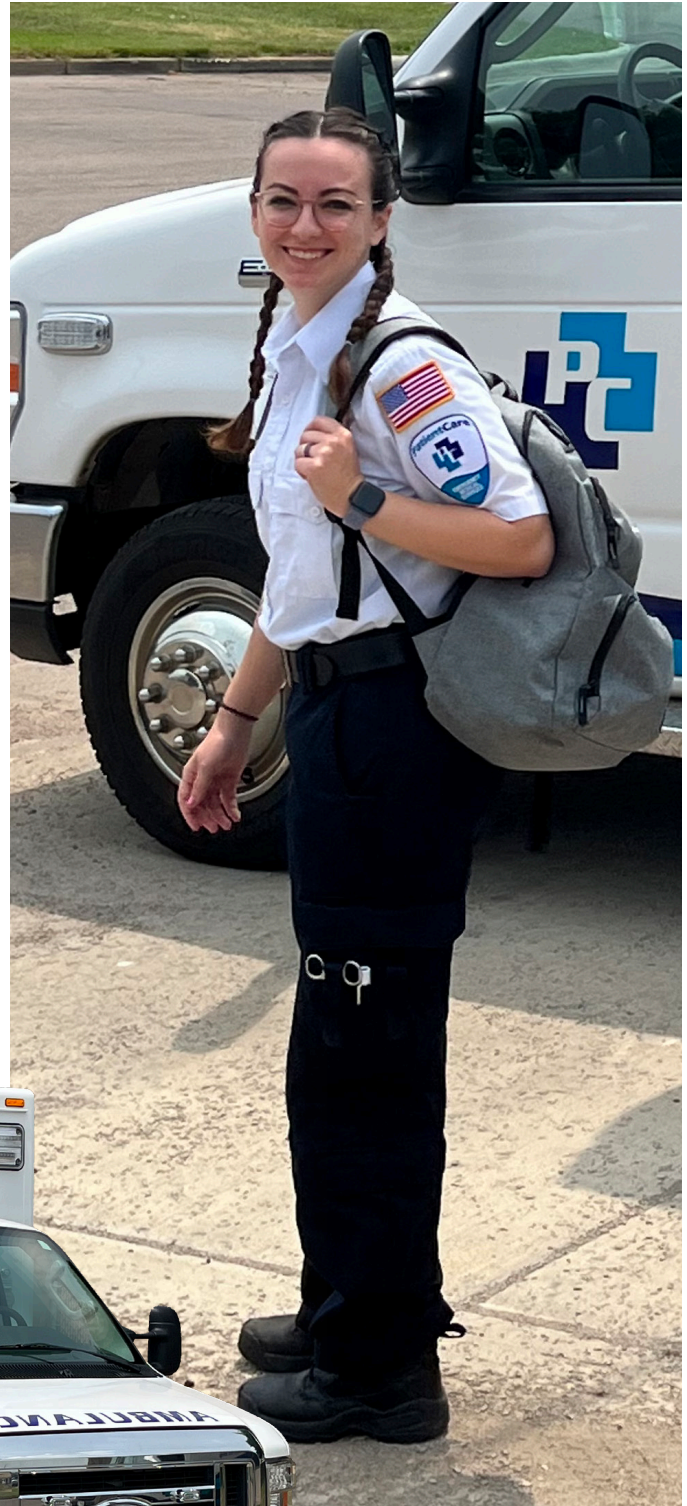
—Jeff Luther, MD FACEP, REMSA Medical Director

**Mission: Lifeline®
Gold Plus Recognition**

Mission: Lifeline® is the American Heart Association’s national initiative to advance the SYSTEM OF CARE for patients with acute, high-risk, time-sensitive life, and/or quality of life-threatening disease states, such as ST Elevate Myocardial Infarction (STEMI Heart Attack), Non-ST Elevated Myocardial Infarction (NSTEMI Heart Attack), Stroke, and Out-of- Hospital Cardiac Arrest. The overarching goals of Mission: Lifeline are to bring stakeholders together in a collaborative manner and to reduce mortality and morbidity for these patients while improving overall quality of care and patient outcomes.

For 2023, PatientCare EMS submitted data in support of the Gold award. Awards have not been awarded yet for this year. Mission: Lifeline awards represent a commitment to both cardiac and stroke systems of care.

Mission: Lifeline awards cannot be achieved without collaboration from hospitals and other responding agencies. Mission: Lifeline communities are communities that strive to achieve the highest levels of care for cardiac and stroke patients.



Cardiac Arrest Outcomes (2022)

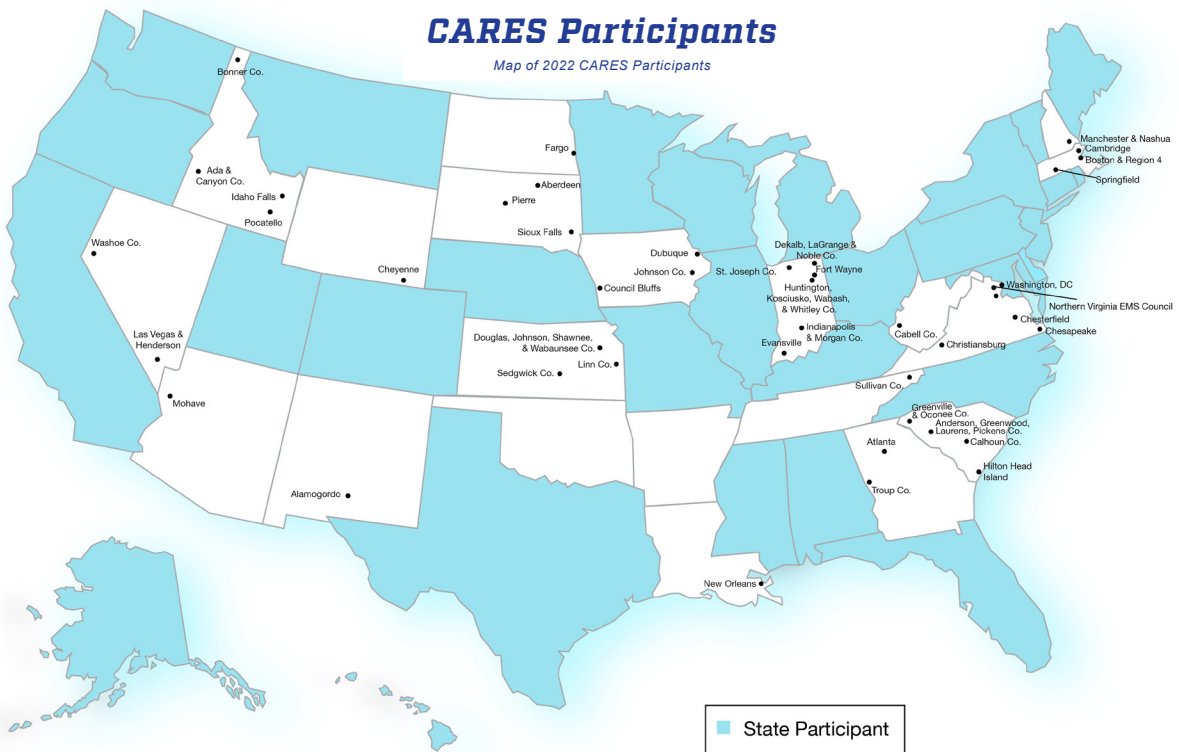
Sioux Falls has participated in the Cardiac Arrest Registry to Enhance Survival (CARES) since 2007. This registry allows our community to compare our cardiac arrest causes and outcomes to an aggregate of other community's results.

EMS-treated out-of-hospital cardiac arrest (OHCA) affects more than 250,000 Americans each year and is the third leading cause of disability-adjusted life years (DALY) in the United States, behind cardiovascular disease and back pain. Typically, one in ten patients survives to hospital discharge, with 80 percent having no or moderate neurological disability. Cardiac arrest resuscitation is an important measure of a community's emergency response readiness. Successful resuscitation requires involvement by a range of individuals including bystanders, emergency medical dispatchers, first responders, paramedics, and hospital providers.

2023 data taken from the CARES Registry, comparing cardiac arrest survival in Sioux

Falls to survival in all CARES registry communities, including 30 states and 500 communities in 16 additional states, shows the excellent cardiac arrest outcomes our community achieves. Cardiac arrest survival in our community continues to exceed that in the aggregate CARES communities. Patterns, etiologies, and outcomes of cardiac arrest have changed during the COVID-19 pandemic. Local and national investigation of these pandemic-related changes is ongoing.

- 20 lives were saved in Sioux Falls in 2022
- All nontraumatic cardiac arrests
 - Sioux Falls—12 percent survival
 - All CARES—9 percent survival
- Witnessed cardiac arrests of cardiac etiology with a rhythm that can be helped with defibrillation
 - Sioux Falls—44 percent survival
 - All CARES—31 percent survival
- Bystander CPR Rates
 - Sioux Falls—67 percent
 - All CARES—41 percent





CARES

Cardiac Arrest Registry
to Enhance Survival



	OVERALL CARES	SIOUX FALLS
2022 REGISTRY STATISTICS		
Total registry records	800,000 (since 2005)	1,858 (since 2007)
Nontraumatic arrests in 2022	147,714	162
Catchment area	175,000,000	202,611
2022 EMS STATISTICS		
EMS transporting agencies	2,300	1
Cardiac arrests who were female	37%	35%
Median age of cardiac arrests	65	63
Arrests in the home	72%	71%
2022 BYSTANDER STATISTICS		
Bystander-witnessed arrests	37%	36%
Bystander CPR	41%	67%
Bystander AED	20%	19%
2022 HOSPITAL STATISTICS		
Hospitals	2,500	3
Patients admitted	25%	32%
Patients discharged alive	9%	12%
Utstein survival (witnessed with shockable rhythm)	31%	47%
Cardiac Utstein survival	31%	44%
Lives saved from cardiac arrest in 2022	13,731	20

Medical Audits/CASE Review

PatientCare EMS participates in quarterly case reviews with all EMS system agencies. Specific calls with learning opportunities or other insights are reviewed by all agencies participating in care. This on-going multi-discipline review process is a valuable process for all agencies involved in the response process. Additionally, specific cases are reviewed with the REMSA Medical Director on an ad hoc basis.

Other Clinical Measures

The nationwide opioid crisis is being felt in Sioux Falls as well. PatientCare EMS and our system's first responder partners administered naloxone, an opioid reversal agent, 182 times last year, compared to 221 times the previous year. While opioid-specific calls are concerning, the total volume of EMS calls involving drugs including meth and/or alcohol is also considerable. Last year, 22 percent of EMS calls (excluding interfacility transfers) were noted to involve drugs and/or alcohol. In 2022, 24 percent of cardiac arrests were due to drug overdose, up from 15 percent in the previous year.

PatientCare EMS is an active partner in transportation to and from the Link, the triage center for behavioral health issues, that opened in June 2021.

As required by contract, every ambulance rendering emergency care services has been staffed and equipped to provide paramedic-level care and transport with a minimum of one (1) state certified and locally certified paramedic and one (1) state and locally certified EMT.

As required, every call had a REMSA-certified paramedic providing care to the patient in the back of the ambulance during transport.

All Paramedic and EMT staff have the required licensure and certifications. All required staff training, including mass casualty, driving, infection control, Incident Command, HIPAA, and reimbursement compliance, has been completed and documented.

System Performance

PatientCare EMS takes an active role in improving system performance within the City of Sioux Falls. Some examples of their commitment to system performance improvement include:

■ CAAS Accreditation

PatientCare EMS completed a reaccreditation process through the Commission on Accreditation of Ambulance Services in the fall of 2022. This reaccreditation process requires the organization to complete a self-assessment, a comprehensive application, an off-site review of the application documents, an on-site review conducted by three industry experts, a panel review of findings, and ultimately accreditation.

Value of Accreditation: "CAAS accreditation is designed to help EMS agencies increase organizational performance and efficiency, increase clinical quality, and decrease risk and liability. Accreditation provides a template for making comprehensive organization changes that improve the overall performance of the organization. An independent review validates that accredited agencies are adhering to the highest standards in the industry."

By meeting the requirements of reaccreditation, PatientCare EMS—Sioux Falls, is ensuring that the work they do each day provides the highest quality of emergency care to our community, while investing in the health, safety, and well-being of our employees. The on-site review includes interviews with field staff, inspections of ambulances and facilities, as well as review of our record keeping and inventory management. PatientCare EMS's on-site inspection resulted in zero deficiencies.

PatientCare EMS remains the only CAAS accredited ambulance service within the state of South Dakota.

■ Red Lights and Sirens Project

PatientCare EMS was an active participant in the Red Lights and Sirens Project. This was the first ever national quality improvement project. This project was meant to evaluate the use of response modes to ensure the appropriate use of lights and sirens. Members of the PatientCare EMS leadership team met regularly with representatives from REMSA, Sioux Falls Fire Rescue, and Metro Communications to evaluate data then make data driven decisions regarding priority dispatch within the city of Sioux Falls. These changes contributed to improvements in community safety, provider safety, and patient safety.

■ P25 Radio Project

Project 25 is a national initiative to improve radio communication among first responders. This project prioritizes the upgrading of both hardware and software to support increased interoperability of radios within the public service community. PatientCare EMS has worked to ensure compliance with these technological improvements. Through a state initiative, PatientCare EMS received new mobile radios inside all ambulance and command vehicles. Additionally, new portable radios were purchased to support these improvements. These enhancements will allow PatientCare EMS to transition onto the new digital radio network and support encryption services as the public service system within the city of Sioux Falls upgrades in the fall of 2023.

■ Video Laryngoscope

Through grant funding, PatientCare EMS was able to obtain new video laryngoscopes for every ambulance. Laryngoscopes are used for intubation of patients. In the field, this high acuity skill has a higher success rate with video-guided technology. The UEScope allows the provider to manipulate the viewing angle to provide for better ergonomics and clinical accuracy. The new UEScopes also provide for variable blade sizes, allowing for video intubation capabilities for infants up to large adults. This is the first time the EMS system within Sioux Falls has had

video laryngoscopes for pediatric patients. Additionally, the new video laryngoscopes can record high-definition video of the procedure. These videos can be reviewed for quality assurance and training purposes.

■ Lifepack 15 Cardiac Monitor Project

As part of a state initiative, PatientCare EMS has received new Physio Control Lifepack 15 Cardiac Monitors. The new cardiac monitors provide the user with the ability to transmit data and information via cellular network rather than relying on Wi-Fi. PatientCare EMS has installed cardiac monitor mounts in all ambulances. The mounts provide a secure environment for the equipment and promotes safety through adopting industry best practices.

■ Ambulance and Command Vehicle Fleet

PatientCare EMS supports and maintains an ambulance and command vehicle fleet that meets or exceeds 130 percent of peak ambulance deployment. PatientCare EMS maintains a fleet department that can complete nearly all mechanical repair of ambulances in-house. This ensures sound preventative maintenance schedules and efficient repair of any mechanical or cosmetic concerns pertaining to the fleet. All vehicles with PatientCare EMS's fleet contain driver monitoring systems that allow for behavior modification to ensure safe operation.

■ Performance Utilization Late-call System Evaluation (PULSE)

PatientCare EMS meets daily with a minimum of one management representative from REMSA, PatientCare EMS, and Metro Communications. A thorough review of all late calls is completed during this meeting. This meeting is open to system stakeholders such as Sioux Falls Police, Sioux Falls Fire Rescue, and the Sioux Falls Health Department. Any issues relevant to the EMS system are discussed during this conference call. This ensures that any issues that are identified are addressed in a timely fashion to support strong partnerships.

Workforce Stability

PatientCare EMS prioritizes the recruitment and retention of qualified individuals to support a strong and engaged workforce. An annual employee satisfaction survey is conducted and action planning is created based on the feedback from the employee group. PatientCare EMS continuously seeks feedback and creative ideas to support employee engagement. The survey conducted in 2022 demonstrated an 8 percent increase in employee satisfaction. The survey indicated an 89 percent employee satisfaction.

Staffing challenges within the Emergency Medical Services nationally have affected the availability of EMTs and Paramedics. However, PatientCare EMS has taken proactive steps to mitigate the local impact of these staffing concerns. PatientCare EMS offers competitive benefit packages, sign on bonuses up to \$10,000 for new full-time paramedics, shift bonuses, and has prioritized impactful wage increases for many consecutive years.

PatientCare EMS has recognized the value in promoting education and development of its current workforce. Scholarships to both EMT and Paramedic school are regularly offered to employees seeking career development. PatientCare EMS also prioritizes the professional development of their leadership staff. Multiple members of the leadership team were sent to attend EMS leadership training conducted by SafeTech Solutions. SafeTech Solutions is a well known and respected leadership academy within the EMS industry.

PatientCare EMS provides a supportive and engaging environment for the onboarding of new EMS professionals into the Sioux Falls EMS system. New employees attend a week-long classroom orientation before being assigned to a Field Training Officer as a provisional clinician. This week-long classroom orientation lays the framework for understanding as they transition into the field and further develop their clinical acumen. The Field Training Officer provides a hands-on learning experience that generates understanding of the components that comprise the EMS system. The provisional employee will



remain with the Field Training Officer through several stages of training as they progress toward being cleared to work independently within the system. PatientCare EMS works with several system stakeholders to provide field training opportunities for students and other EMS professionals within the system.

Pricing Compliance

REMSA's review of total billing charges compared to total calls of each type shows that all were billed at the level approved in City Ordinance.

Annually, PatientCare EMS engages a qualified entity to conduct a claims review as described in the Office of Inspector General Compliance Guidance. The independent audit reviews randomly selected Medicare claims for compliance with Centers for Medicare and Medicaid Services rules and regulations, appropriate documentation, medical necessity, and level of service. PatientCare EMS submits this audit report to REMSA within 120 days of the end of each contract year as required in the Agreement.

Reporting Compliance

All reporting requirements have been met.

- Response time reports have been submitted monthly as required.
- Clinical, operational, and personnel data are available online at all times for REMSA review.
- Community affairs data has been reported monthly at REMSA meetings.

Ambulance Contract Performance Report

Summary

REMSA finds the ambulance contractor performance to be acceptable for the past year. The required services were delivered while improving system quality. Specific system improvements and actions to improve workforce stability continue.

There were no breaches of the Agreement. The required performance security bond remains in place. We look forward to PatientCare EMS' next year of service to the community.

