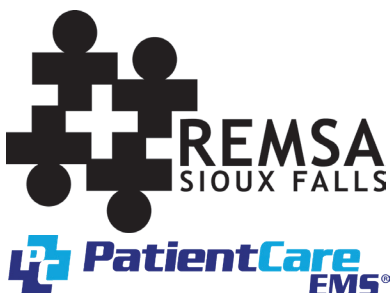




Ambulance Contract Performance Report

May 20, 2024

Submitted July 16, 2024



AMBULANCE CONTRACT PERFORMANCE REPORT

CONTRACT YEAR ENDING MAY 20, 2024

A Franchise Agreement (“Agreement”) between the City of Sioux Falls and Paramedics Plus (now PatientCare EMS) for ground 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 current Agreement term expires on May 20, 2026.

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**

As the city navigates through this time of extreme growth, PatientCare EMS and the first responder entities that partner with EMS (Fire and Police) are set up well to meet this increase in demand. Quality and contract compliance continue to be above the benchmarks set, and the relationship continues to be strong. I have no doubts that the community of Sioux Falls is well protected when it comes to pre-hospital medical care and response.

—Matt McQuisten, REMSA Chair



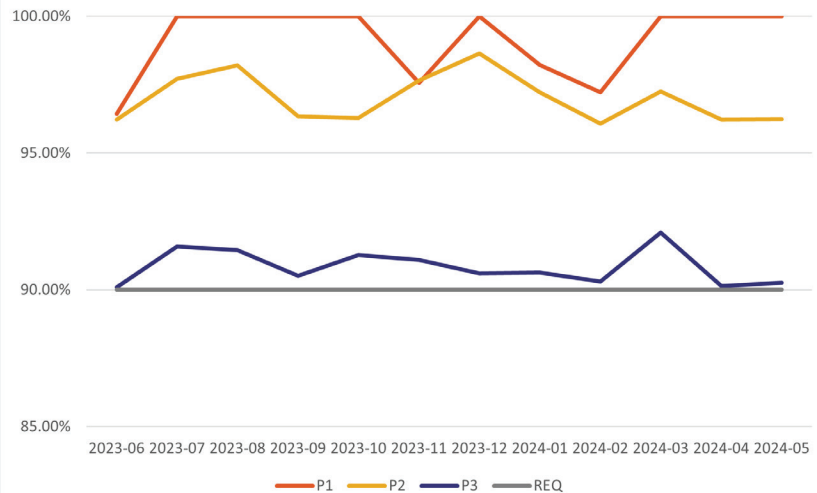
Response Time Performance

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

Response time requirements:

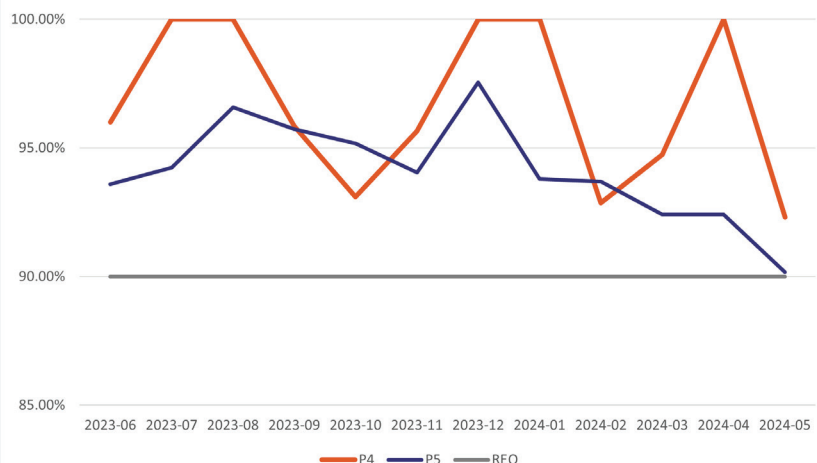
- 911 calls:
 - **Priority 1**
[Life-threatening emergencies] require a Paramedic ambulance on the scene within 8 minutes, 59 seconds, for not less than 90 percent of all Priority 1 response requests.
 - **Priority 2**
[Non-life-threatening emergencies] require a Paramedic ambulance on the scene within 11 minutes, 59 seconds, for not less than 90 percent of all Priority 2 response requests.
 - **Priority 3**
[Nonemergency 911 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.

Priority 1, 2 and 3 Response Time Compliance



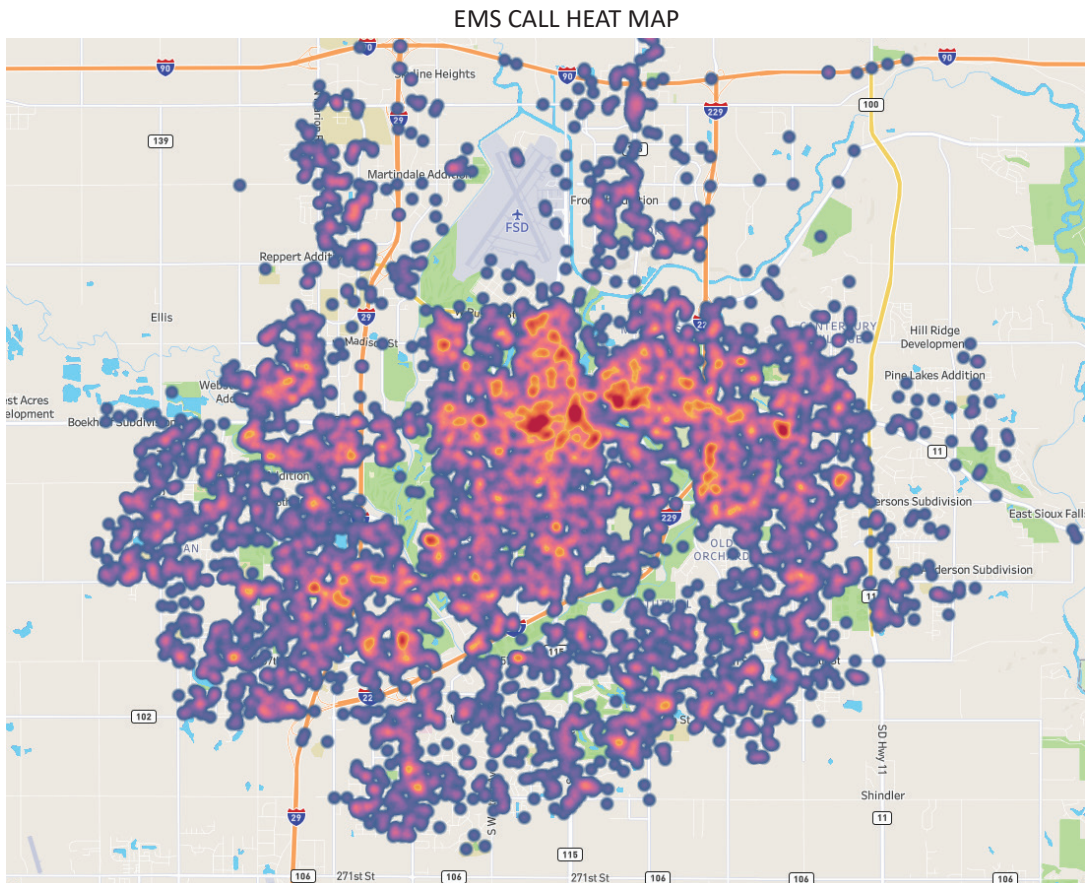
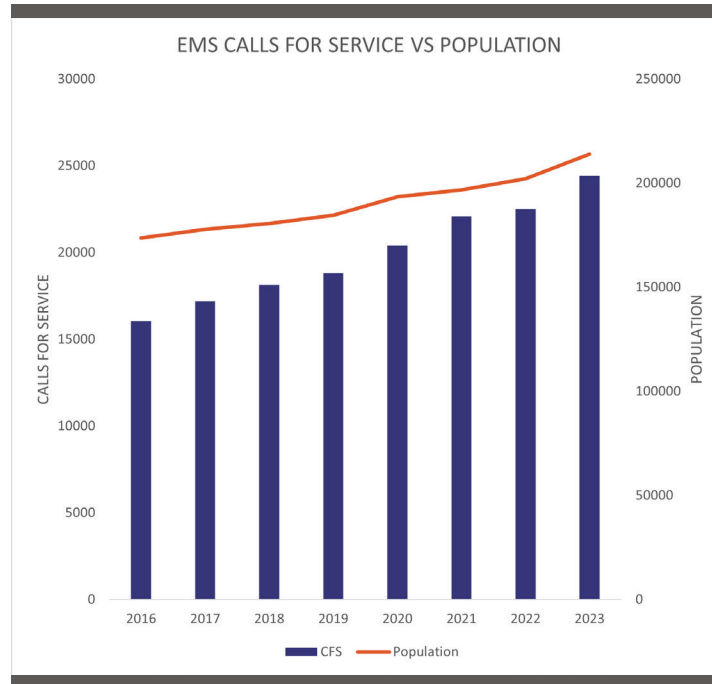
- Interfacility Transfers:
 - **Priority 4**
[Scheduled interfacility ambulance requests] require a Paramedic ambulance on the scene within 30 minutes of the requested pick up time 90 percent of the time.
 - **Priority 5**
[Unscheduled interfacility ambulance requests] are scheduled with a goal of a Paramedic response within 90 minutes of the request. This is a customer service target not a compliance requirement.

Interfacility Response Time Compliance



Findings:

- In the face of remarkable growth in EMS calls for service, PatientCare EMS has been compliant with all response time requirements each month this contract year. EMS calls for service have increased 30 percent over the past five years—nearly double the rate of Sioux Falls’ population growth over the same period.



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 due to increased calls for influenza and RSV in addition to the continuing low level of calls for COVID.

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 is recovering slowly, but the implications of COVID-19 on EMS in general are still being felt. With fewer young people choosing EMS as a career, PCEMS is recruiting young people with the goal of interesting them in an EMS career. They offer paid scholarships to prepare EMT and Paramedic staff for the future.

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 needing in-person review.



PCEMS has continued to meet the standard of care and exceed this in our community. The team has done this even with an increasing population, increasing calls, and high acuities. They continue to meet the needs of our community despite the challenges we face. Innovative recruitment strategies, dynamic ambulance placement, and continued program development have helped accomplish this. We are fortunate to have them providing ambulance service in our community.

—Nicholas Dowling, DO, REMSA Medical Board Chair

Additional Clinical Highlights

CARDIAC

12 lead EKG done on patients with sustained pulses after cardiac arrest	96.0%	Heart attack patients transported to appropriate hospital	100.0%
12 lead EKG done on patients with acute coronary syndrome	100.0%	Hospital notification within 10 minutes from an EKG that shows a heart attack	91.7%
12 lead EKG done on patients ≥ 35 with chest pain within 10 minutes	82.3%	STEMI Alert if STEMI	100.0%
Aspirin given to patients with cardiac chest pain	83.3%	Average time on scene for STEMI	14.5 minutes

STROKE

Stroke scale documented	100.0%
Stroke Alert performed	100.0%
Last known well time documented	95.7%
Blood glucose documented	97.6%
Large vessel occlusion stroke patients transported to stroke center	100.0%

CARDIAC ARREST

Advanced airway used	84.4%	Defib < 5 minutes from initial shockable rhythm	100.0%
CPR performed	100.0%	AED used prior to arrival	86.3%
Pulses returned	35.0%	Appropriate cardiac arrest medications given	100.0%

TRAUMA

On scene less than 10 minutes	54.6%
Trauma patients transported to trauma center	100.0%
Trauma Alert called	100.0%

OTHER MEASURES

2 sets of vital signs documented	93.3%	History, medications, and allergies documented	85.9%
Glasgow coma scale documented	100.0%	Oxygen administered if oxygen saturation is below 94%	98.0%
Narrative completed	100.0%	Broslow tape used if age < 12	98.1%
Transport percent	75.3%	Weight recorded when medications administered	100.0%
Hospital offload time 20 minutes or less for 911 calls	83.7%	PCR completion in 24 hours or less	98.9%
Transport without lights and siren 94.6%			

AIRWAY MANAGEMENT

Ventilation assistance provided	100.0%
Single airway type used	100.0%
Confirmation of placement with ETCO2	100.0%
Multiple ETCO2 values	100.0%
RSI (medication-assisted airway management)	31.9%
Overall airway success	100.0%

PatientCare and their partner agencies continue to provide high-quality, expedient, and comprehensive care to our residents and visitors. They have met and exceeded industry benchmarks and contractual requirements. It has been a pleasure to provide quality assurance to this agency as well as their EMS partners. Notwithstanding nationwide personnel challenges, PatientCare EMS has continued to fill their ranks with qualified and committed EMS professionals. The residents of Sioux Falls can be assured they are being provided with the highest quality prehospital care in the region.

—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-Elevation Myocardial Infarction (STEMI 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 2024, PatientCare EMS received the Gold Award. Mission: Lifeline awards represent a commitment to both cardiac and stroke systems of care.



Mission: Lifeline awards are achieved with 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 (2023)

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 communities' results.

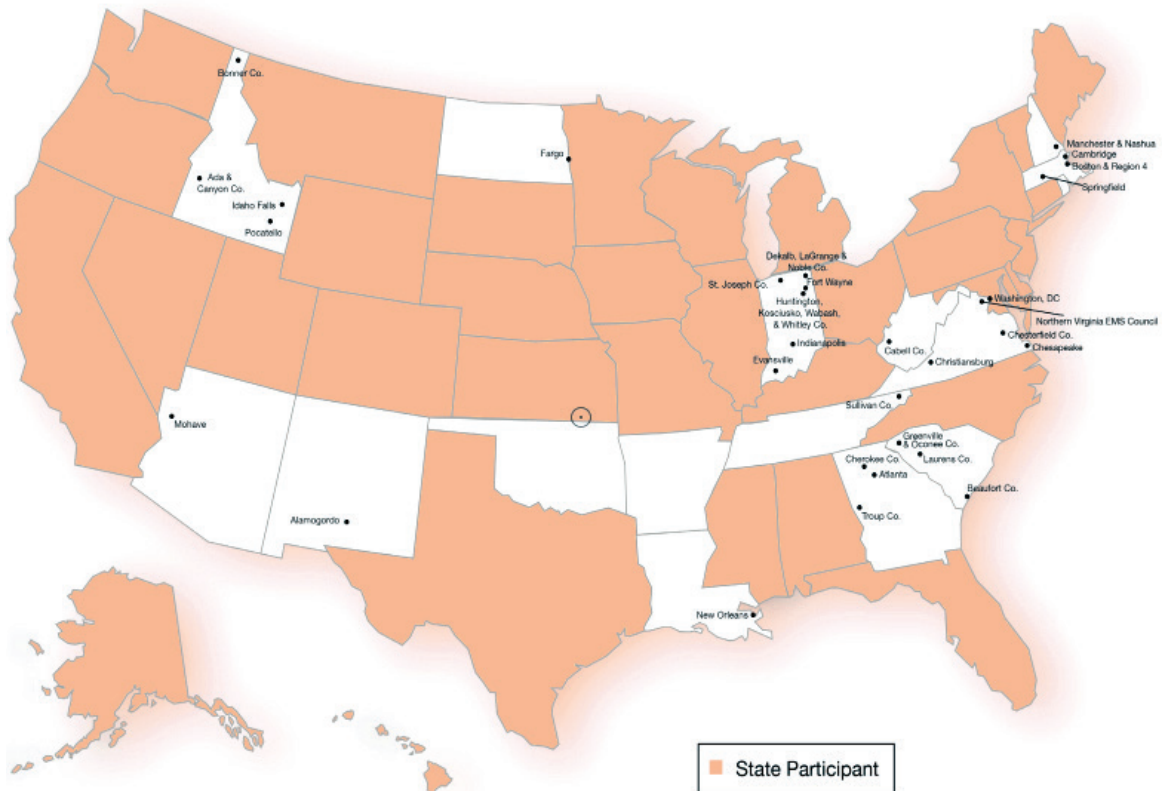
EMS-treated out-of-hospital cardiac arrest (OHCA) affects more than 250,000 Americans each year and is the third leading cause of disability-adjusted life years (DALY) in the United States, behind cardiovascular disease and back pain. Typically, one in ten patients survives to hospital discharge, with 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, shows the excellent cardiac arrest outcomes our community achieves. Cardiac arrest survival in our community continues to exceed that in the aggregate CARES communities.

- 32 lives were saved in Sioux Falls in 2023
- All nontraumatic cardiac arrests
 - Sioux Falls—20 percent survival
 - All CARES—10 percent survival
- Witnessed cardiac arrests of cardiac etiology with a rhythm that can be helped with defibrillation
 - Sioux Falls—45 percent survival
 - All CARES—33 percent survival
- Bystander CPR Rates
 - Sioux Falls—75 percent
 - All CARES—41 percent

CARES Participants

Map of Current CARES Participants





CARES

Cardiac Arrest Registry
to Enhance Survival



	OVERALL CARES	SIOUX FALLS
2023 REGISTRY STATISTICS		
Nontraumatic arrests in 2023	139,822	160
Population	179,000,000	213,891
2023 EMS STATISTICS		
EMS transporting agencies	2,600	1
Cardiac arrests who were female	37%	40%
Median age of cardiac arrests	65	64
Arrests in the home	71%	76%
2023 BYSTANDER STATISTICS		
Bystander-witnessed arrests	37%	42%
Bystander CPR	41%	75%
Bystander AED	12%	18%
2023 HOSPITAL STATISTICS		
Hospitals	2,500	3
Patients survived to hospital admission	26%	35%
Patients discharged alive from the hospital	10%	20%
Utstein survival (witnessed with shockable rhythm)	33%	46%
Cardiac Etiology Utstein survival	33%	45%
Lives saved in 2023	14,300	32

Medical Audits/CASE Review

PatientCare EMS participates in quarterly case reviews with all EMS system agencies and local hospitals. 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 as needed.

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, 166 times last year, compared to 182 times the previous year. While opioid-specific calls are concerning, EMS calls involving drugs, including meth and/or alcohol, are also considerable. Last year, 22 percent of EMS calls (excluding interfacility transfers) were noted to involve drugs and/or alcohol. Nearly a quarter of all cardiac arrests in the EMS system are due to drug overdose.

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 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 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.

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 their community while investing in the health, safety, and well-being of their employees. The on-site review includes interviews with field staff, inspections of ambulances and facilities, as well as review of record keeping and inventory management. PatientCare EMS's on-site inspection resulted in zero deficiencies.

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



■ Red Lights and Siren Project

PatientCare EMS was an active participant in the Red Lights and Siren Project, the first ever national quality improvement project with a goal of decreasing ambulance use of lights and siren in ambulance response and transport. The project team implemented incremental changes in response priorities resulting in a 16 percent decrease in lights and siren responses. Lights and siren transports are consistently low in this system, near the 5 percent benchmark.

■ Performance Utilization Late-call System Evaluation (PULSE)

PatientCare EMS meets daily with a minimum of one management representative from REMSA 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.

■ System Status Management (SSM)

PatientCare EMS utilizes a SSM model in the City of Sioux Falls that focuses on dynamic deployment, whereby ambulance resources are strategically placed at different locations within the city, based upon the level of available resources and the best possible location for response. PatientCare EMS reviews system status and posting plans regularly to ensure the most efficient response standards.

■ Handtevy Mobile for EMS

PatientCare EMS has been an active participant in the implementation and pending roll-out of a mobile app that gives clinicians access to EMS system-based protocols and medication information. The app provides clinical teams rapid access to lifesaving information proven to save lives and reduce errors. Handtevy Mobile aligns the EMS medication formulary to established protocols.

■ Improved Data Analytics

PatientCare EMS worked with system stakeholders and partners to improve data analytics regarding operational efficiencies and clinical quality assurance. PatientCare EMS uses dashboards to monitor key performance indicators regarding operational and clinical performance. This timely feedback allows for data driven operational and clinical improvements as the EMS system continues to grow.

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 to develop an action plan. PatientCare EMS continuously seeks feedback and creative ideas to support employee engagement.

Staffing shortages within the Emergency Medical Services industry have affected the availability of EMT's and Paramedics.

It is believed that using lights and siren helps patients receive life-saving emergency care more quickly, leading to better patient outcomes. The use of emergency vehicles' lights and siren does not, however, save clinically significant amounts of time, according to numerous studies, systematic reviews, and position papers. The fortunate fact is that few patients actually require critically time-sensitive, life-saving interventions in virtually all EMS systems. As a result, using lights and siren fails to accomplish the desired goal and significantly raises (by more than 50 percent) the chance of an ambulance crash. The judicious use of lights and siren, only when necessary, should be standard practice in order to increase the safety of patients, healthcare clinicians, and the general public.

—National EMS Quality Alliance (NEMSQA)

PatientCare EMS has taken proactive steps to recruit, train, and retain qualified candidates. They have implemented sign-on incentives for new EMS professionals entering the EMS system, including a \$10,000 sign on bonus for Paramedics and \$2,500 sign on bonus for EMT's.

A variety of scholarship opportunities within the organization provide a path for individuals to enter the industry, obtain scholarships for education, and seek career progression within the EMS system. 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 has continued to provide impactful wage increases for current employees and new employees entering the organization. In addition to increasing the base rate of pay, they have implemented a wage structure that addresses wage compression within the workforce. This assists with employee retention and rewards both current and prospective employees for their experience 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 towards 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.



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