Ambulance Contract Performance Report

May 21, 2017
A contract between the City of Sioux Falls and Paramedics Plus, LLC, for ambulance service within the City went into effect on May 21, 2015. This contract requires an annual report from Regional Emergency Medical Services Authority (REMSA) to the City Council detailing performance in these areas:

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

**Response Time Performance Standards**

Response time performance is the result of a coordinated effort of the Contractor's total operation.

Response time requirements:

- **Priority 1** (life-threatening emergencies) require a paramedic ambulance on the scene within 8 minutes, 59 seconds, on not less than 90 percent of all Priority 1 response requests.
- **Priority 2** (nonlife-threatening emergencies) require a paramedic ambulance on the scene within 11 minutes, 59 seconds, on 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, on not less than 90 percent of all Priority 3 response requests.
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 90 minutes of the request 90 percent of the time.

Findings:

- Response Time requirements for each priority have been met every month.

**Clinical Performance Standards**

REMSA utilizes local patient care guidelines based on national standards and industry supported best practices. The Medical Director and REMSA Medical Board approve these guidelines, which are then adopted by REMSA. Ambulance call audits for compliance with guidelines are undertaken for random calls. High risk calls, including 100 percent of drug-assisted intubation calls, were reviewed by the Medical Director with no calls outside the expected performance. All pediatric calls, cardiac arrests, heart attacks, and serious trauma calls were reviewed, with no calls outside of the standards.

“My observations have concluded excellent performance in all categories reviewed. Our system is very progressive, utilizing best practice standards through evidence-based criteria, as well as peer review and consensus-driven approval of changes to all guidelines and protocols through our medical board.”

—Dr. Jeff Luther, REMSA Medical Director
**Mission Lifeline Data Silver Plus Recognition**

Paramedics Plus received the American Heart Association’s 2016 Mission: Lifeline® EMS Silver Plus Recognition Award based upon achievements identified through the agency’s online application submission of data, representative of care delivered in 2016. Paramedics Plus received one of two Mission: Lifeline® awards in the state of South Dakota for 2016 and is one of only 625 awards given nationally. In 2015, Paramedics Plus received the Bronze Award.

Collaboration among pre-hospital and hospital providers is the essence of Mission: Lifeline. The American Heart Association (AHA) recognizes the vital importance of the Emergency Medical System to the overall success of Mission: Lifeline STEMI Systems of Care. The correct tools and training allow EMS providers to rapidly identify the STEMI, promptly notify the destination center, and trigger an early response from the awaiting hospital personnel.

The criteria to achieve the Mission: Lifeline EMS Silver Plus award is based on meeting an aggregated annual score at a minimum of 75 percent compliance for these individual measures:

- Percentage of patients with nontraumatic chest pain ≥ 35 years, treated and transported by EMS who received a pre-hospital 12-lead electrocardiogram (ECG).

- Percentage of STEMI (heart attack) patients treated and transported directly to a STEMI receiving center, with prehospital first medical contact to device time ≤90 minutes.

- Percentage of 12-lead ECGs performed on patients in the field with an initial complaint of nontraumatic chest pain ≥ 35 years, within 10 minutes of EMS arrival to the patient.

**Cardiac Arrest Outcomes (2016)**

**THE CARDIAC ARREST REGISTRY TO ENHANCE SURVIVAL (CARES)**

Each year, approximately 300,000 persons in the United States experience an out-of-hospital cardiac arrest (OHCA) or sudden death; approximately 92 percent of persons who experience an OHCA die. Despite decades of research, median national reported rates of survival to hospital discharge are poor (7.8%) and have remained virtually unchanged for the past 30 years.

Without a uniform and reliable method of data collection, communities cannot measure the effectiveness of their response systems, nor can they assess the impact of interventions designed to improve OHCA survival. Participation in an OHCA registry enables communities to compare patient populations, interventions, and outcomes with the goal of identifying opportunities to improve quality of care and ascertain whether resuscitation is provided according to evidence-based guidelines.

Data is taken from the 2016 CARES registry, comparing cardiac arrest survival in Sioux Falls to survival in all CARES registry communities, including 66 communities in 23 states and 19 additional statewide registries.

- All cardiac arrests of cardiac etiology:
  - Sioux Falls—15 percent survival
  - All CARES—10 percent survival

- Witnessed cardiac arrests with a rhythm that can be helped with defibrillation:
  - Sioux Falls—55 percent survival
  - All CARES—33 percent survival

**MEDICAL AUDITS/ CASE REVIEW**

- Paramedics Plus participated 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 is a valuable process and will continue.
OTHER CLINICAL MEASURES

- As required by contract, every ambulance rendering emergency ambulance services under the Agreement was staffed and equipped to provide paramedic-level care and transport with a minimum of one state-certified and locally-certified paramedic and one state-certified 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, Homeland Security, HIPAA, and compliance—has been completed and documented.

*Initiation of Innovative Programs to Improve System Performance*

Paramedics Plus has been engaged in facilitating innovative programs to improve system performance within the city of Sioux Falls. Examples of Paramedics Plus’s commitment to system innovation include:

- **PULSE Process (Performance Utilization Late-Call System Evaluation)**
  A daily conference call is conducted Monday through Friday and includes, at minimum, one management representative from REMSA, Paramedics Plus, and Metro Communications. Additionally, it is open to all partners of the Sioux Falls REMSA system, including the Sioux Falls Police Department and Sioux Falls Fire Rescue.

  Every noncompliant medical call is reviewed by the participants, and other issues relevant to the EMS system are identified and addressed by stakeholders during this conference call.

- **System Status Management (SSM)**
  Paramedics Plus 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 both the level of available resources and the best possible location for response.

- **Pit Crew CPR**
  Paramedics Plus, along with system partners at Sioux Falls Fire Rescue and Sioux Falls Police, developed and implemented a new method for handling cardiac arrests, called “pit crew CPR.” Taken from the car racing “pit stop” model, where every crew member has a specific role to play and multiple interventions happen in a timely and choreographed manner, this method of handling calls with CPR in progress has already proven to be highly effective in managing resuscitation. After implementation, the model was adjusted to address the specific goal of capturing a 12-lead EKG whenever pulses are restored. Compliance with that goal increased from 60 to 100 percent.

- **Resource Allocation Pilot Program**
  The EMS System Leadership Team, led by Paramedics Plus, along with all system partners (Metro Communications, Sioux Falls Fire Rescue, Sioux Falls Police Department, Sioux Falls Health Department and REMSA), identified an area for improvement in managing resources during periods of system overload. The team developed a pilot program which was tested in the last quarter of 2016. The program goals included:

  - Keeping Sioux Falls Fire Rescue resources available for emergencies.
  - Refining best practices for appropriate resource allocation.
  - Improving the mutual aid process.

  All program goals were met and the pilot program was fully implemented in January of 2017. The EMS System Leadership Team continues to meet to address additional areas of performance improvement.
Workforce Stability

Paramedics Plus took several key steps to help mitigate unnecessary employee turnover.

- Paramedics Plus initially committed to a 3-percent wage increase for all nonsalary employees for the first two years of operations in Sioux Falls, to be awarded on an employee’s anniversary date of hire. In May of 2016, all nonsalary employees were given an additional wage increase of 6 percent. An additional 4 percent wage increase was added in June of 2017. Overall, this represents a cumulative wage increase of 16 percent over two years.

- In early 2017, in addition to the cumulative wage increase, Paramedics Plus raised starting wages for new staff by 7 to 10 percent and starting wages for new experienced staff by 3 percent per year of experience.

- Paramedics Plus has partnered with Great Life for company-assisted membership as a commitment to employee wellness.

- Paramedics Plus utilizes a Professional Development Program to prepare new employees through a two-week orientation period conducted in a classroom setting. Included in this period is an introduction to the company’s guiding principles and standard operating procedures; an overview of the Sioux Falls REMSA system; and a comprehensive emergency vehicle operator course. This classroom period builds a strong foundation for new employees and helps assure their success with Paramedics Plus. New employees are then assigned a Field Training Officer, who evaluates their performance and skill level while working in the system. The Field Training Officer acts as an instructor and mentor as the employees progress through several stages of training with incrementally increasing levels of responsibility until the new employees are prepared to function.
independently. Throughout this field experience, the new employee is the third team member of a functioning in-service ambulance.

- Paramedics Plus continues to refine and improve the Professional Development Program that guides new employees and Field Training Officers through the critical first months of employment. According to a recent new hire with experience at other agencies, “This is the most comprehensive training I’ve ever had.”

- Paramedics Plus provides all required continuing medical education to employees through its ownership of The School of EMS located in Sioux Falls.

- Paramedics Plus made significant investment into employee appreciation, including a holiday party, catering holiday meals for on-duty employees, and an entire week of events for EMS Week.

- Paramedics Plus conducts Employee Engagement Surveys in the Sioux Falls system. Based on the respected Gallup Q12, this 15-question survey provides guidance for workforce stability and employee engagement. The graphic on the next page shows the 15 questions and the areas they address.

- Survey results showed 77 percent of employees are satisfied with their work environment, while 94 percent reported feeling neutral or satisfied with their work environment.

- In addition, because this industry best practice employee engagement survey showed supervisor and team satisfaction at 60 percent, all supervisors are currently enrolled to attend SafeTech Solutions, LLP, EMS Leadership Academy. This is a dynamic, four-level 80-hour educational program designed to prepare participants to lead and manage today’s EMS.

- Employee retention rate is currently 81 percent. This number will be used for future local benchmarking.

**Compliance of Pricing and Revenue Recovery Efforts**

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

Paramedics Plus has engaged a qualified entity to conduct a claims review as described in the Office of Inspector General Compliance Guidance. The independent audit reviewed a minimum of 50 randomly selected Medicare claims for compliance with Centers for Medicare and Medicaid Services rules and regulations, appropriate documentation, medical necessity, and level of service. Paramedics Plus submitted this audit report to REMSA as required in the agreement.

**Compliance with Information Reporting Requirements**

All reporting requirements were met.

- Response time reports were submitted monthly as required.

- Clinical, operational, and personnel data is available online at all times for REMSA review.

- Community affairs data were reported monthly at REMSA meetings.

**Summary**

REMSA finds 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 are reaping benefits. There were no breaches of the contract and the required performance security remains in place. We look forward to Paramedics Plus’s next year of service to the community.