

WASHOE COUNTY HEALTH DISTRICT

ENHANCING QUALITY OF LIFE

Washoe County EMS
Strategic Plan
2019-2023



Public Health
Prevent. Promote. Protect.

The Washoe County Emergency Medical Services (EMS) Five-Year Strategic Plan was created with EMS Advisory Board support, and developed and/or reviewed by the following agencies:

Stakeholder Organizations and County Departments

Airport Authority Fire Department
Gerlach Volunteer Fire Department
North Lake Tahoe Fire Protection District
Pyramid Lake Fire Rescue
REMSA
Reno Dispatch
Reno Fire Department
Sparks Dispatch
Sparks Fire Department
Truckee Meadows Fire Protection District
Washoe County Communications
Washoe County EMS Oversight Program
Washoe County Shared Communication System

Approved By

District Board of Health
EMS Advisory Board

Distributed To

Incline Village Community Hospital
Northern Nevada Medical Center
Renown Regional Medical Center
Saint Mary's Regional Medical Center
Stakeholder Organizations and County Departments
Veterans Affairs Sierra Nevada Health Care System

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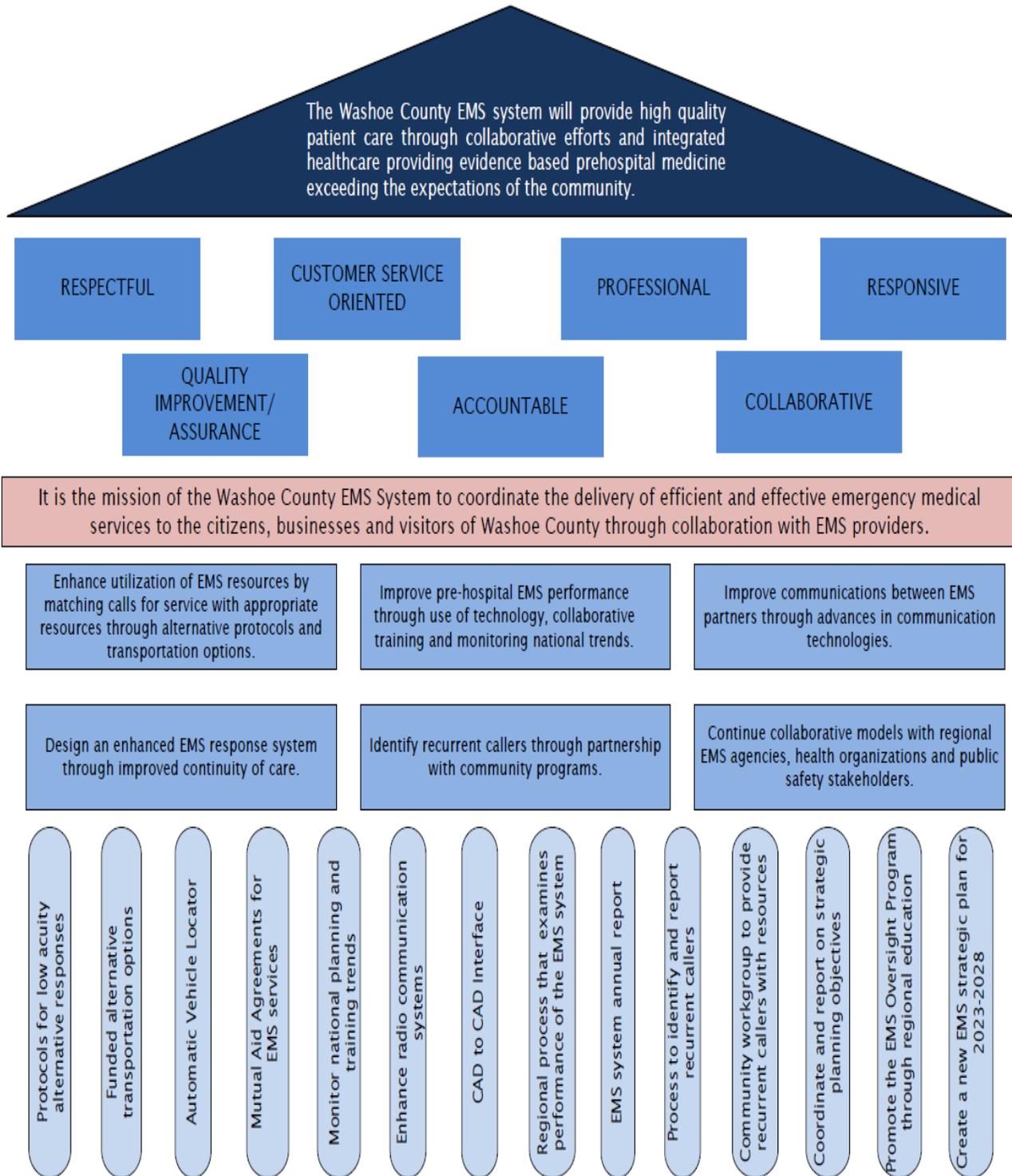
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Strategic Plan at a Glance



Executive Summary

Washoe County is the second largest EMS region in the state of Nevada. It is 6,551 square miles in size and has approximately 433,000 residents. Washoe County is diverse geographically in its mountainous, urban, suburban, rural and wilderness/frontier terrain.

There are many EMS system stakeholder organizations including police and fire agencies, dispatch centers, healthcare organizations, and a contracted ambulance provider. The current ambulance contractor provides service to Washoe County; excluding the Gerlach Volunteer Fire Department service area and the North Lake Tahoe Fire Protection District.

The best EMS systems are based on collaborations among the diverse organizations that comprise the EMS system. When these organization's strengths are emphasized by system-wide integration and a culture of trust, the EMS system can more effectively capitalize on new opportunities and mitigate threats to the system. The planning process for Washoe County was supported by and involved EMS stakeholder leadership.

The initial Washoe County EMS Five-Year Strategic Plan was created between August 2015 and October 2016 to guide the future direction of the Washoe County EMS System. The assessment process evaluated the strengths and weaknesses, as well as the opportunities and threats facing the EMS system from national, regional and local influences. The information obtained through the analysis created goals to optimize the structure, processes, and outcomes of the EMS Strategic Plan, focusing on: 1) maintaining or improving clinical care and patient satisfaction; and 2) improving operational efficiency and collaboration across the region.

The strategic planning process was collaborative and included consensus building processes within the region and provided periodic updates to the EMS Advisory Board and District Board of Health. The results of this process were the EMS System's Mission, Vision, Values, Goals and Objectives. The first iteration of the EMS Strategic Plan was approved by the EMS Advisory Board on October 6, 2016, and approved by the District Board of Health on October 27, 2016.

In August 2018, the stakeholders reconvened to conduct an assessment of the current EMS Strategic Plan and discuss additional ideas for improving the EMS system. The stakeholders then met on a monthly basis to revise the plan and develop new goals, objectives and strategies. The Washoe County EMS Strategic Plan (2019-2023) was approved by the EMS Advisory Board on May 2, 2019, and approved by the District Board of Health on May 23, 2019.

The six goals within Washoe County EMS Strategic Plan are most relevant to the EMS

system's ability to adapt to the changing healthcare environment, specifically focusing on pre-hospital care. Three goals within the strategic plan focus on improvements related to clinical care and matching resources with patient needs. The remaining three goals focus on improving operational efficiencies within the county, both internally and externally through collaboration. These include proposed changes to existing processes that will positively impact the EMS System in its entirety.

Emergency Medical Services Mission, Vision and Values

Mission Statement

It is the mission of the Washoe County EMS System to coordinate the delivery of efficient and effective emergency medical services to the citizens, businesses and visitors of Washoe County through collaboration with EMS providers.

Vision

The Washoe County EMS system will provide high quality patient care through collaborative efforts and integrated healthcare, providing evidence-based prehospital medicine exceeding the expectations of the community.

Values of the Washoe County EMS System

- **Respectful:** To be open-minded of all stakeholder's views and ideas.
- **Customer Service Oriented:** To be responsive to our customers' needs, striving to provide high quality services in a respectful and courteous manner.
- **Accountable:** To be responsible for our behaviors, actions and decisions.
- **Professional:** To be dedicated in our service to the region and ourselves through adherence of recognized policies, rules and regulations. This includes maintaining the highest moral and ethical standards.
- **Responsive:** To rapidly identify emerging issues and respond appropriately.
- **Quality Improvement/Assurance:** To continuously evaluate operations, procedures and practices, to ensure the EMS system is meeting the needs of our patients and stakeholders.
- **Collaborative:** To work together toward delivering efficient and effective emergency medical services to the citizens, businesses, and visitors of Washoe County.

Emergency Medical Services Authority

Washoe County is comprised of three political jurisdictions, the City of Reno, City of Sparks and unincorporated Washoe County. In addition to the political bodies and their operational policy decisions, the State Division of Public and Behavioral Health also oversees EMS licensing and certifications within Washoe County.

There are multiple regulations that impact how the EMS system operates in Washoe County. At the State level, Nevada Revised Statute 450B is the overarching legislation that identifies minimum requirements for EMS services. In addition, the Nevada Administrative Code includes codified regulations for EMS personnel and agencies.

At the local government level, by the authority established through Nevada Revised Statute (NRS 439.370 et seq.) and the 1986 Interlocal Agreement (last amended 1993), the Washoe County Health District has jurisdiction over all public health matters in Reno, Sparks, and Washoe County through the policy-making Washoe County District Board of Health (DBOH). Through this authority, the DBOH established an exclusive ambulance franchise in August 1986 in Washoe County, excluding Gerlach and the North Lake Tahoe Fire Protection District. This Franchise was awarded to the Regional Emergency Medical Services Authority (REMSA) in May 1987. Through a regional process, the agreement was amended, restated and approved by the DBOH in May 2014. As part of the regional process, one recommendation for improvement of the delivery of patient care and outcomes and the delivery of emergency medical services, was the creation of a Regional Emergency Medical Oversight Program through an Inter Local Agreement (ILA).

The ILA was fully executed in August 2014, and is an agreement between five political jurisdictions; City of Sparks¹, City of Reno², Washoe County Board of County Commissioners³, District Board of Health⁴, and Truckee Meadows Board of Fire Commissioners⁵. The ILA establishes an Emergency Medical Services Advisory Board (EMS Advisory Board).

The EMS Advisory Board is comprised of the following members:

- a. City Manager, Reno
- b. City Manager, Sparks
- c. County Manager, Washoe County
- d. District Health Officer
- e. Emergency Room Physician (DBOH Appointment)

¹ Referred to as "SPARKS" within the ILA

² Referred to as "RENO" within the ILA

³ Referred to as "WASHOE" within the ILA

⁴ Referred to as "DISTRICT" within the ILA

⁵ Referred to as "FIRE" within the ILA

f. Hospital Continuous Quality Improvement (CQI) Representative (DBOH Appointment)

The purpose of the EMS Advisory Board is to review reports, evaluations and recommendations of the Regional Emergency Medical Services Oversight Program and to discuss issues related to regional emergency medical services. The function of the EMS Advisory Board is to thoroughly discuss changes within the regional EMS system prior to making recommendations to the respective Board(s), of the five signatories, and placing items on an agenda for possible approval and implementation.

Additionally, the EMS Advisory Board can make recommendations to the District Health Officer and/or the District Board of Health related to performance standards and attainment of those standards, medical protocols, communication, coordination, and other items of importance to a high performing Regional Emergency Medical Services System, and providing for concurrent review and approval by the Managers of the City of Reno, City of Sparks and Washoe County, striving to have a uniform system maintained for the region whenever possible.

The ILA also established the Regional Emergency Medical Services Oversight Program (Program). The purpose of the Program is to provide oversight of all emergency medical services provided by the EMS personnel within the signatory jurisdictions, as well as REMSA. Additionally, the Program is expected to achieve the duties outlined within the ILA. The program consists of a Program Manager, Program Coordinator and Statistician. The eight duties specifically detailed within the ILA are:

1. Monitor the response and performance of each agency providing Emergency Medical Services and provide recommendations to each agency for the maintenance, improvement, and long-range success of the Emergency Medical Services;
2. Coordinate and integrate provision of Medical Direction for RENO, SPARKS, WASHOE, FIRE and REMSA providing emergency medical services;
3. Recommend regional standards and protocols for RENO, SPARKS, WASHOE, FIRE and REMSA;
4. Measure performance, analysis of system characteristics, data and outcomes of the Emergency Medical Services and provide performance measurement and recommendations to RENO, SPARKS, WASHOE, FIRE and REMSA;
5. Collaborate with REMSA, RENO, SPARKS, WASHOE, FIRE and DISTRICT on analysis of EMS response data and formulation of recommendations for modifications or changes to the Regional Emergency Medical Response Map;

6. Identify sub-regions as may be requested by RENO, SPARKS, WASHOE, FIRE or the DISTRICT to be analyzed and evaluated for potential recommendations regarding EMS response services in order to optimize the performance of system resources;
7. Provide a written Annual Report on the State of Emergency Medical Services to RENO, SPARKS, WASHOE, FIRE and REMSA, covering the preceding fiscal year (July 1st to June 30th), containing measured performance in each agency including both ground and rotary wing air ambulance services provided by REMSA in Washoe County; the compliance with performance measures established by the District Emergency Medical Services Oversight Program in each agency, and audited financial statements and an annual compliance report by REMSA as required in the exclusive Emergency Medical Ambulance Service Franchise;
8. Maintain a Five-Year Strategic Plan to ensure the continuous improvement of Emergency Medical Services in the area of standardized equipment, procedures, technology training, and capital investments to ensure that proper future operations continue to perform, including Dispatching Systems, Automated Vehicle Locations Systems, Records Management Systems, Statistical Analysis, Regional Medical Supply and Equipment, and other matters related to strategic and ongoing Emergency Medical Services and approved by RENO, SPARKS, WASHOE and FIRE.

The ILA also outlines the duties of the signatories, which support the expectation that the strategic planning objectives will be achieved. Those duties are:

- a. Providing information, records, and data on Emergency Medical Services dispatch and response from their respective Public Safety Answering Points (PSAPs) and Fire Services, for review, study and evaluation by DISTRICT.
- b. Participating in working groups established by DISTRICT for coordination, review, evaluation, and continuous improvement of Emergency Medical Services.
- c. Participating in establishing and utilizing a Computer Aided Dispatch (CAD) - to - CAD two-way interface with REMSA, which provides for the instantaneous and simultaneous transmission of call-related information for unit status updates;
- d. Working cooperatively with DISTRICT to provide input to the development of the Five Year Strategic Plan and to ensure consistent two-way communication and coordination of the Emergency Medical Services System between RENO, SPARKS, WASHOE, FIRE, and REMSA in the future, as technologies, equipment, systems, and protocols evolve;

- e. Participating on the Regional Emergency Medical Services Advisory Board;
- f. Striving to implement recommendations of DISTRICT, or submitting those recommendations to their governing bodies for consideration and possible action, if determined necessary and appropriate by the respective managers; and
- g. Submitting recommendations regarding the Emergency Medical Services System to DISTRICT for implementation, or for consideration and possible action by the District Board of Health, if determined necessary and appropriate by the District Health Officer.

Strategic Plan Process, Objectives and Implementation

Washoe County has a two tiered system response to emergency medical calls. When an individual dials 9-1-1, the call routes through one of three Public Safety Answering Points (PSAPs): Reno, Sparks or Washoe County. Jurisdictional fire departments are dispatched to a medical call by PSAP personnel. If appropriate, the caller is then transferred to REMSA's communications center for Emergency Medical Dispatch (EMD). EMD allows REMSA dispatch to prioritize the caller's chief complaint, to dispatch appropriate resources, and provide pre-arrival instruction to the caller.

There are several agencies and organizations involved in the response to an emergency medical call. The EMS Advisory Board recognizes the need to provide optimal emergency care under the varied conditions throughout Washoe County. Therefore, the EMS Advisory Board strives to influence the coordination of all stakeholders, as it develops and sustains a system to ensure appropriate and adequate emergency medical services. With this in mind, the Five-Year EMS strategic plan was constructed.

To ensure the objectives of the entire region were considered, the EMS Working Group convened and participated in a SWOT analysis. The SWOT analysis looks at the strengths (internal), weaknesses (internal), opportunities (external), and threats (external) for the regional EMS system. Representatives from both dispatch and operations for the EMS agencies provided input and feedback on the development of the strategic plan. The EMS Oversight Program met frequently with the representatives to review the goals, objectives, and strategies, while discussing realistic timelines for implementation. These meetings were an integral part of the process to ensure the regional planning goals mirrored the jurisdictional strategic planning goals of the individual EMS agencies. This culminated in the development of a regional strategic plan for the EMS Advisory Board's consideration.

The Washoe County EMS strategic plan includes goals, objectives and strategies. The six goals of the strategic plan are broad statements, to identify future achievements of the Washoe County EMS system. Each goal includes objectives designed to measure progress towards the attainment of the goal. The strategies for each goal describe a major approach or method for attaining the objectives.

Additionally, the strategic plan outlines the method to achieve effective and efficient solutions to system-wide challenges. The strategic plan calls for maximum collaboration, to achieve the objectives and strategies within the five year planning period (2019-2023). Through continued collaboration, the strategic plan can be updated to capitalize on new opportunities or to mitigate threats to the system. This process will ensure key stakeholders remain involved in regional emergency medical services planning activities.

Goal #1

Enhance utilization of EMS resources by matching calls for service with appropriate resources through alternative protocols and transportation options by November 4, 2021.

Objective 1.1. Develop appropriate protocols to determine service level for low acuity EMS calls that receive an alternative response by July 1, 2019.

Strategy 1.1.1. Develop regional Standard Operating Procedures to address responses to low acuity calls by January 1, 2019.

Strategy 1.1.2. Determine data elements required for process verification by January 30, 2019.

Strategy 1.1.3. Presentation to the EMS Advisory Board about service levels for low acuity calls by February 7, 2019.

Strategy 1.1.4. Analyze, interpret and report data elements to EMS Advisory Board and partner agencies biannually, beginning July 1, 2019.

Objective 1.2. Develop standardized procedures for eligible patients to receive funded alternative transportation to obtain medical care at an alternative destination by November 4, 2021.

Strategy 1.2.1. Continue research on alternative transportation options utilized across the United States, by October 31, 2020.

Strategy 1.2.2. If applicable, develop processes to select eligible patients to receive funded alternative transport to facilities that accept patients who meet alternative destination criteria (e.g. urgent care, physician's office criteria), by August 31, 2021.

Strategy 1.2.3. If applicable, obtain approval by the EMS Advisory Board for standardized procedures for patients to receive funded alternative transportation to obtain medical care, by November 4, 2021.

Goal #2

Improve pre-hospital EMS performance through use of technology, collaborative training and monitoring national trends by February 1, 2023.

<p>Objective 2.1. Implement regional usage of Automatic Vehicle Locator (AVL) technology to dispatch closest available unit by February 2023.</p>	<p>Strategy 2.1.1. Verify and revise the regional assessment to update existing AVL capabilities equipment and recognize other potential factors for dispatching the closest EMS responder by June 30, 2020.</p> <p>Strategy 2.1.2. Approval to utilize AVL to dispatch the closest available unit to EMS calls by individual Councils/Boards and EMS Advisory Board, by December 31, 2021.</p> <p>Strategy 2.1.3. Develop regional dispatching process that will utilize AVL technology to dispatch the closest unit to EMS calls for service by June 30, 2022.</p> <p>Strategy 2.1.4. Provide a report to EMS Advisory Board on implementation of AVL dispatching by February 2023.</p>
<p>Objective 2.2. Increase depth of resources able to respond to EMS calls for service in Washoe County by December 31st annually.</p>	<p>Strategy 2.2.1. Identification of operational opportunities by Washoe County EMS agencies through a review of mutual aid agreements (MAA) and/or memorandum of understanding (MOU) that include EMS services for Washoe County annually.</p> <p>Strategy 2.2.2. Deliver EMS Oversight Program agency MAAs/MOUs with partner agencies as necessary by December 31, annually.</p> <p>Strategy 2.2.3. Provide an annual update to EMS Advisory Board on all MAA/MOU process changes, additional agreements and any recommendations by February 28 annually.</p>

Goal #2 (continued)

Improve pre-hospital EMS performance through use of technology, collaborative training, and monitoring national trends by February 1, 2023.

Objective 2.3. Monitor national trends and plan for response, specifically active assailant, by December 31, 2020.

Strategy 2.3.1. Identify regional workgroup and integrate to monitor and identify current national trends relating to active assailant response by February 28, 2020.

Strategy 2.3.2. Conduct assessment of regional response equipment (protective, medical and supportive) maintained by EMS and law enforcement agencies by March 31, 2020.

Strategy 2.3.3. Participate in regional response plan reviews and updates, as requested biennially, or after a national or international incident, beginning April 2020.

Goal #3

Improve communications between EMS partners through advances in communication technologies by June 30, 2023.

Objective 3.1.
Enhance radio communication systems within Washoe County by June 30, 2023.

Strategy 3.1.1. REMSA will maintain interoperability between UHF and 800 MHz through a gateway connection between REMSA and Washoe County Regional Communication System (WCRCS) during the P25 upgrade system roll out.

Strategy 3.1.2. Develop a comprehensive migration interoperability plan for WCRCS that outlines the enhancement of the radio communication system to include completion of upgrades, maintenance of REMSA gateway connection and identified equipment needs by December 31, 2019.

Strategy 3.1.3. REMSA and regional public safety partners will develop a plan to upgrade their systems, coordinating with contractor and WCRCS, by June 30, 2020.

Strategy 3.1.4. Agencies will purchase all necessary equipment and complete upgrade by June 30, 2023.

Objective 3.2.
Establish a CAD-to-CAD interface between the three PSAPs and REMSA dispatch center by December 2022.

Strategy 3.2.1. Provide updates to EMS Advisory Board quarterly, beginning April 7, 2016.

Strategy 3.2.2. As technology allows, City of Reno to implement configuration process regarding data exchange by December 2019.

Strategy 3.2.3. Dispatch centers begin work on policies, processes, procedures and training on CAD-to-CAD by October 2020.

Strategy 3.2.4. The additional PSAPs will implement CAD-to-CAD by December 2022.

Goal #4

Design an enhanced EMS response system through improved continuity of care by January 31, 2021.

Objective 4.1. Establish a regional process that continuously examines performance of the EMS system by August 2020.

Strategy 4.1.1. In accordance with the Pre-hospital Medical Advisory Committee (PMAC) approved CQI processes create a regional team, which would work to improve the system through examination of system performance by June 30, 2019.

Strategy 4.1.2. The regional team will determine goals and identify performance measures, utilizing individual agency metrics, to be used for the regional continuous quality improvement program by November 30, 2019.

Strategy 4.1.3. Acceptance by the EMS Advisory Board of the performance initiatives to be used during the review process by February 2020.

Strategy 4.1.4. Present information from the quarterly meeting to the appropriate entity, beginning August 2020.

Objective 4.2. Produce an annual report on EMS system performance that includes hospital outcome data by January 31, 2021.

Strategy 4.2.1. Collaborate with hospital partners on data available for submission to the EMS Oversight Program for cardiac, stroke and STEMI patients by February 7, 2020.

Strategy 4.2.2. Pilot the annual report with hospital outcome data with one regional hospital by April 2020.

Strategy 4.2.3. Draft for distribution an annual report with relevant regional hospital partner data included by June 30, 2020.

Strategy 4.2.4. Review annual report with ePCR implementation and determine enhancements available for hospital outcome data, by October 31, 2020.

Strategy 4.2.5. Draft for distribution an annual report with enhanced data included by January 31, 2021.

Goal #5

Identify recurrent callers through partnership with community programs by November 2021.

<p>Objective 5.1. Develop a process to identify and report the recurrent callers in the community by December 31, 2019.</p>	<p>Strategy 5.1.1. Research, understand and work within the confines of HIPAA limitations for data sharing amongst first-responder and healthcare agencies by July 31, 2019.</p> <p>Strategy 5.1.2. Identify the community partner(s) to report recurrent caller information for follow-up by July 31, 2019.</p> <p>Strategy 5.1.3. Develop the process and/or variables for defining and identifying recurrent callers that are misusing the system by December 31, 2019.</p>
<p>Objective 5.2. Participate in community workgroup to provide recurrent callers with other resources, reducing the impact to the EMS system, by November 30, 2021.</p>	<p>Strategy 5.2.1. Obtain information regarding social, health and other community services that are available for recurrent callers, by March 31, 2019.</p> <p>Strategy 5.2.2. Contribute to Countywide committee/workgroup to review possible recurrent callers that could be eligible for resources/options other than 911, by December 31, 2020.</p> <p>Strategy 5.2.3. Determine data elements required for committee/workgroup program verification by June 30, 2021.</p> <p>Strategy 5.2.4. Analyze impact annually and report to the EMS Advisory Board and regional partners, beginning November 2021.</p>

Goal #6

Continue collaborative models with regional EMS agencies, health organizations and public safety stakeholders.

<p>Objective 6.1. Coordinate and report on strategic planning objectives quarterly through June 2023.</p>	<p>Strategy 6.1.1. Maintain Gantt chart for the regional partners with the details of the goals by June 30, 2019.</p> <p>Strategy 6.1.2. Maintain structured feedback loops for the current initiatives of the strategic plan goals.</p> <p>Strategy 6.1.3. Provide progress reports to the EMS Advisory Board quarterly.</p>
<p>Objective 6.2. Promote the EMS Oversight Program through regional education of the strategic plan’s goals and initiatives through June 2023.</p>	<p>Strategy 6.2.1. Maintain current structure of reporting to the signatories of the Inter-Local Agreement and ambulance franchisee Board for updates on the status of the regional EMS system annually, beginning June 2019.</p>
<p>Objective 6.3. Create a new EMS strategic plan for 2023-2028 by February 2023.</p>	<p>Strategy 6.3.1. Conduct a SWOT analysis with regional partners to determine current strengths, weaknesses, opportunities and threats by February 2022.</p> <p>Strategy 6.3.2. Create a committee to meet monthly develop the strategic plan by February 28, 2022.</p> <p>Strategy 6.3.3. Present EMS strategic plan to the EMS Advisory Board by February 2023.</p>

Strategic Plan Evaluation and Update

In an effort to ensure the successful implementation of the strategies and objectives of the EMS Advisory Board strategic plan, the EMS Oversight Program will develop a Gantt chart. The chart will be distributed to the regional partners upon approval of the strategic plan by the District Board of Health. The chart will be reviewed semi-annually to ensure all projected timelines remain achievable. Progress on the strategic planning strategies and objectives will be included in the “Program and Performance Data Update” staff report at the EMS Advisory Board meeting.

In 2022, the stakeholders should conduct a SWOT analysis and develop a Washoe County EMS Strategic Plan for 2023-2028. Upon completion, the EMS Oversight Program will bring a new 5-year strategic plan to the EMS Advisory Board for review, input and approval.



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