Introduction

In June 2008, a performance audit of the Emergency Medical Services (EMS) produced 12 recommendations to the Department of Public Health and Human Services (Department) and three recommendations to the Board of Medical Examiners (BOME). In July 2009, the audit committee reported results to follow-up work to this audit.

2017 Audit Follow-up

Recommendation #1

We recommend the Department establish criteria for the basic life support with advanced life support endorsements license level in the Administrative Rules of Montana to clearly define the capabilities of emergency medical services units licensed to provide care at this level.

2009 Implementation Status - Being Implemented

The Department is having legal staff review proposed rule changes to Title 37, Chapter 104, of the Administrative Rules of Montana, which will clarify how basic life support (BLS) services are authorized to provide limited advanced life support (ALS) endorsements. The Department anticipates these changes will be made by the end of year.

2017 Implementation Status – Implemented; Enhancements Continuing

The Department updated rules related to "Authorization for limited ALS" in 37.104.101 and 37.104.109 ARM. Additionally, modifications to the electronic licensing database were implemented that enabled the levels of advanced life support an EMS service could provide to be printed on the service license. Lastly, programming was implemented in the database that enabled the service medical director to approve the endorsement level(s) each ECP was authorized to provide.

In 2017, the Department utilized grant funding to invest in a new data system with much greater functionality and reporting functions. The department is currently migrating EMS service user accounts to the new system. This new data system will the department to take advantage of enhanced functionality to track utilization of ALS personnel and services.

Recommendation #2

We recommend the Department:

A. Collect coverage area and staffing activity information of emergency medical services units during the licensing process.
B. Identify service availability issues.
C. Determine reasons for lack of advanced life support in areas and ways to improve advanced life support availability.
D. Work with governance entities and stakeholders to address service gaps and assure statewide delivery of emergency medical services.

A) 2009 Implementation Status - Being Implemented

Through a survey conducted by the section from fall 2008 through June 2009, 180 EMS units stated their service's coverage area, staffing activities, service availability, incident response times, and the reason for the lack of ALS services. The section will map this coverage data when it collects information from the remaining 73 units in September 2009. The Department hopes to distribute this map to stakeholders by the end of the year.

2017 Implementation Status –Implemented; Enhancements Continuing

Through the Department's EMS service licensing system, the location of EMS service areas is reportable by county and zip code. This information can be presented in GIS maps representing EMS services by type (non-transporting, ground and air) as well as by level of

licensure (BLS, ALS). The Department is currently migrating services to a new licensing data system which will be able to provide some enhancements and greater detail to current information.

B) 2009 Implementation Status - Being Implemented

The survey listed above also explains why units are having issues with service availability. The main concerns regard staffing for calls, especially having enough staff during the daytime. In addition, long transport times, especially with inter-facility transfers, have created staff availability issues.

2017 Implementation Status – Ongoing Implementation

Staffing of EMS services continues to be a troubling issue. In a 2015 sample survey of about 400 EMS providers, 64% stated they are having difficulty covering shifts. Work and family commitments still rate high as reasons for a lack of availability. While about a third of respondents state that future staffing seems stable, another third report that their staffing is unstable or extremely unstable.

Of the services reporting a stable workforce, success seems to be dependent upon a variety of characteristics – strong leadership, community support, supportive medical direction and adequate funding. Several communities have augmented volunteer staffing by funding one or two full-time staff.

Services who suffer staff shortages and other challenges seem to be lacking in any or all of these characteristics. The Department regularly provides technical assistance to services that have issues. Leadership education, offered in pre-conference workshop the last few years, have been popular.

C) 2009 Implementation Status - Being Implemented

The survey found the main reason for the lack of ALS services is because BLS services with an interest in becoming an ALS service or receiving ALS endorsements do not have the initial and ongoing time commitment necessary for training requirements. In addition, other barriers noted are a lack of a medical director, lack of medical director support and/or interest, and a lack of available trainers.

The complete survey results will be brought before the Emergency Care Committee (ECC), which is a newly formed EMS committee within the Department, and other stakeholders to determine if there are strategies which can be implemented to resolve these issues.

2017 Implementation Status – Ongoing Implementation

Lack of ALS services in rural areas continues to be a great challenge in Montana as well as nationally. Some communities have hired ALS staff, but retention of these highly trained providers is problematic. Salaries are not competitive with more urban services. A lack of calls in rural areas makes it difficult for an ALS provider to maintain competence and interest.

The Department has engaged stakeholders and providers in the potential development of community health EMS (community paramedicine) programs the last few years. Engaging ALS providers in preventative and primary care may keep them more active and interested and may provide a funding stream to help pay for them. Currently, statutory challenges prevent full implementation of CHEMS in Montana.

The Department is very active in providing traditional and innovative education opportunities for current and new ECP providers. Grant funds have been utilized to offer trauma and pediatric

courses at no cost in local communities. Education is support at EMS conferences throughout the year. A Helmsley Charitable Trust funded program for Mobile Simulation trucks is providing state of the art education to hospitals and EMS. The department is currently seeking grant funding to demonstrate delivery of education in rural areas through a dedicated web video system. Delivery of EMT courses, which is readily available to urban communities, can be broadcast with this system simultaneously to rural communities. This demonstration project would also explore the efficacy of using the system to support education and technical assistance for rural medical directors.

D) 2009 Implementation Status - Being Implemented
The complete survey results will be brought before the ECC and other stakeholders in December 2009 to determine if there are strategies which can be implemented to resolve service gaps and to improve the delivery of statewide emergency medical services.

2017 Implementation Status – Being Implemented
See recommendation #12 relative to the Emergency Care Council

Recommendation #3
We recommend the Department improve collection and analysis of emergency medical services incident response time data by:

A. Establishing and evaluating emergency medical services response time benchmarks in Montana for urban, rural, and super-rural areas as part of quality improvement efforts.
B. Revising ARM 37.104.212 to require emergency medical services providers to record and report "at patient" times.
C. Enforcing compliance with ARM 37.104.212.

A) 2009 Implementation Status - Not Implemented
An interview with Department personnel found they do not plan on implementing response time benchmarks in program rules. Personnel also stated that benchmarks are not a best practice being implemented in other states because of the possibility it could compromise EMT safety. However, they anticipate using the new Online Prehospital Information (OPHI) Licensing system to study response times for trends and anomalies (OPHI is discussed in detail in recommendation #7). They plan on addressing these findings with the ECC to initiate discussions regarding response times and benchmarks that urban, rural, and super-rural services should aim for. It is not clear whether the Department will officially establish response time benchmarks or how these would be used as part of quality improvement efforts.

2017 Implementation Status – Implemented
The department's EMS data systems collects numerous fields related to response (time of call, dispatch, enroute, on scene, at patient, etc.) and therefore can monitor different elements of a response for performance improvement and system issues.

B) 2009 Implementation Status - Being Implemented
The Department hopes to revise ARM 37.104.212 to define the minimum data set to be submitted to the Department, which includes making "at patient" time a mandatory, reportable data point. This rule change, which is in draft form, will not be a part of the proposed rule changes being reviewed by the Department' s legal staff as addressed in recommendation #1. The Department anticipates the changes to ARM 37.104.212 will be implemented by March 2010.

2017 Implementation Status – Implemented
In changes to rules relative to records and reports (ARM 37.101.212), quarterly reporting of minimum data is required of all ambulance services. Within the NEMSIS data standard, 'at patient'

time is an allowable entry in all patient care reports.

C) 2009 Implementation Status - Being Implemented
The proposed program rule discussed in part will mandate that all patient care record (PCR) data sent to the section must be uploaded electronically. This proposed rule is as follows:

ARM 37.101.212(2) Ambulance services and nontransporting units shall submit the data to the Department electronically in the National Emergency Medical Services Information System (NEMSIS) format. For EMS services directly using a reporting system provided by the Department, the data is considered submitted to the Department as soon as it has been entered or updated in the Department-provided system.

EMS units will be required to submit this data quarterly and enforcement will be part of EMS service licensure requirements.

2017 Implementation Status – Implemented
Quarterly data reporting has been required by ambulance services through rules adopted in 2010. The Department has been challenged achieving 100% compliance due to technical challenges with the software and with performance of the software on the state system. See recommendation #7 for additional information about the department's information system.

Recommendation #4
We recommend the Department of Public Health and Human Services and the Board of Medical Examiners jointly address inconsistencies in medical direction for emergency medical services by consolidating and clarifying statutory definitions.

2009 Implementation Status (DPHHS and BOME) - Implemented
The Department and BOME worked with the Children, Family, Health and Human Services Interim Committee to draft House Bill 93, which addressed provisions for medical direction, medical directors, and service directors. This bill was approved by the legislature and signed by the governor.

The Department is in the process of proposing changes to program rules referring to the requirements of offline and online medical directors and to the requirements for which types of services will require a medical director.

BOME has adopted a rule further defining the requirements and responsibilities of a medical director by identifying the required training for the medical director. This new rule **(ARM** 24.156.2732 - Medical Direction) gives a thorough position description for a unit's off-line medical director. This rule took effect in June 2009.

2017 Implementation Status - Implemented
The Department updated its rules so that definitions in both sets of rules are complimentary and consistent.

Recommendation # 5
We recommend the Board of Medical Examiners and the Department of Public Health and Human Services seek legislation to clarify statutory authority over emergency medical services complaints handling by:

A. Removing references to the Department's authority over complaints relating to patient care and individual performance.
B. Granting initial review of all complaints to the board to determine appropriate jurisdiction.

A) 2009 Implementation Status (DPHHS and BOME)- Implemented
The Department and BOME worked with the Children, Family, Health and Human Services Interim Committee to draft House Bill 93, which clarified the complaint collection process. The bill was approved and the Department is revising its policy in coordination with BOME. Section 50-6-203, MCA, was also changed to give the BOME the authority to adopt rules regarding the handling of complaints involving patient care provided by EMTs.
The Department has also created an internal complaints and investigations policy, which addresses the process Department personnel must follow when they receive a complaint.

B) 2009 Implementation Status (DPHHS and BOME) - Implemented
Under House Bill 93, the BOME now has the authority to create a screening panel that will initially receive all EMS complaints (§50-6-104(2)(a), MCA). The bill amended §50-6-323, MCA, so the Department can now only receive and investigate complaints relating to the operation of any EMS unit, including complaints concerning patient care provided by an emergency medical service, after the complaint has been reviewed by the BOME's screening panel.

Recommendation # 6
We recommend the Department work with emergency medical services stakeholder groups to develop an objective, data-driven system evaluation and quality improvement oversight approach and, where necessary, seek statutory authority to implement these changes.

2009 Implementation Status - Being Implemented
The Department is in the process of implementing this recommendation through two processes: the recent creation of the ECC and the implementation of OPHI. The ECC will provide the Department with recommendations to improve the state' s emergency care system using the strategic plan the ECC is creating (this is discussed in detail in recommendation #9). The plan will also have system indicators and benchmarks (i.e., average response times, types of incidents, etc.), which will show the section where they are now and trends. Based on these indicators, the Department will be able to determine where to focus its efforts and to improve operations. The committee will also assist the Department in further prioritizing issues within the plan, developing goals, and establishing of strategies to meet these goals.

The Department is also in the process of proposing program rule revisions that will require EMS services to submit PCR data quarterly via OPHI.

2017 Implementation Status – Being Implemented
See recommendation #12 relative the Emergency Care Council

Recommendation #7
We recommend the Department take steps to complete and implement a comprehensive management information system.

2009 Implementation Status - Being Implemented
The Department has recently implemented OPHI within the section. This system allows service managers to update their licensing information at any time. The Department has real-time access to this information, which allows for better tracking of application changes, staffing, and other licensing information. Also, the electronic PCR system has been implemented and 24 EMS units are using it. Department personnel have drafted program rules changes in place that will make the uploading of 65 data points found in PCRs via OPHI mandatory.

The section also plans on making the following additions to OPHI over the next year:

i. implement the data-reporting module, which will provide ten reports and access to

individual reports with over 100 data elements in the database

ii. implement the billing module

iii. develop data import functionality, which will allow units that use other software to provide data to the section via OPHI

2017 Implementation Status – Ongoing Implementation

The Department implemented the HIRMS data system in 2009 and adopted rules requiring ambulance services to provide minimum data quarterly. However, due to historical problems with the software and the web platform it was on, the development of detailed benchmark and indicator reports was never fully realized.

To resolve this, the department procured grant funding and issued an RFP for a new data system in 2016. A new vendor was selected and migration of EMS services to this new system has been ongoing. This vendor has a statewide footprint in over 30 states and the software is up-to-date, user friendly and reliable. The department anticipates much less resistance to compliance to data rules due to complaints of system functionality and dependability.

The Department expects to finish migrating ambulance services to the new system by the end of 2017 and non-transporting services soon after in 2018.

Recommendation #8

We recommend the Board of Medical Examiners and the Department of Public Health and Human Services ensure emergency medical services information systems data is shared to improve analysis and reporting of emergency medical services system issues.

2009 Implementation Status (DPHHS) - Implemented

The Department and BOME entered into an inter-agency agreement March 2009 which will allow the Department to share the following information with BOME: EMS service names, names of medical directors, and the service rosters.

2009 **Implementation Status (BOME) - Implemented**

Under the agreement above, BOME will share the following data with the Department: the EMT's name, address, phone number, date of birth, Montana EMT license number, license level, current license status, original date of licensure, license expiration date, and contested case information.

2017 Implementation Status – Update

Due to the Department's implementation of a new EMS data system, this agreement was updated in 2017.

Recommendation #9

We recommend the Department develop and implement a strategic planning process to assist in development of the state's emergency medical services system and strengthen management activities.

2009 Implementation Status - Being Implemented

The ECC is working to develop an EMS strategic plan for the state that will align with the ten components found within the NHTSA's Model EMS System Plan. According to Department personnel, the plan will be completed by December 2009. Upon completion of the plan, the committee will continue to assist the Department in further prioritizing issues in the plan, developing goals and timelines, and following implementation of strategies to meet these goals.

2017 Implementation Status – Ongoing Implementation

See recommendation #12

Recommendation #10

We recommend the Department revise the roles and responsibilities of staff within the Emergency Medical Services and Trauma Systems Section to better achieve its mission and meet national emergency medical services standards.

2009 Implementation Status - Being Implemented

Department personnel stated the section reorganized staffing and responsibilities to better align with the ten components found within the NHTSA's Model EMS System Plan. We found that although some responsibilities do align with the ten components, the responsibilities will not be finalized until the ECC completes the strategic plan. As mentioned in recommendation #9, this plan will not be complete until the end of the year. According to Department personnel, development of this plan will provide clarity to staff relative to their duties, their relationship to the mission of the organization, and their performance expectations.

2017 Implementation Status – Ongoing Implementation

The department continues to align staff duties with activities and priorities. For example, we've re-configured positions to focus on pediatric care and injury prevention – two essential issues with the emergency care system. The injury prevention position focuses on significant health issues including traffic crashes, falls, poisoning and now opioid overdoses. This last year, a data support position was repurposed to be an epidemiologist position providing higher functionality for data analysis and reporting.

Recommendation #11

We recommend the Department strengthen the management controls of regulatory activities at the Emergency Medical Services and Trauma System Section relating to:

A. Inspections
B. Vehicle permits
C. Complaint documentation
D. Emergency medical services unit licensure fees

A) 2009 Implementation Status - Implemented

The Department has developed and implemented a written, internal EMS service inspection and corrective actions policy to assure better management of the inspection process. According to Department personnel, the EMS Systems manager reviews and signs off inspection reports upon completion.

B) 2009 Implementation Status - Implemented

The Department has also created a new policy regarding vehicle permits. Along with permit stickers being applied to vehicles, the service managers can add vehicle and permit information to the electronic licensing system. Department personnel stated the recent ability of services to upload vehicle information online via OPHI has helped decrease the discrepancies in the number of vehicles found between the Department and the EMS services. They also stated the service managers have been updating the types of vehicles they have, as well as the location of each vehicle (some units may have vehicles in several locations to cover a bigger area). 1mplementation of these procedures will be monitored annually by the EMS Systems manager.

C) 2009 Implementation Status - Implemented

The section has developed an internal complaints and investigations policy to reflect the changes made to the complaint handling process in House Bill 93. The Department has stated that the section supervisor will internally monitor progress of complaint investigations, generally as a

standing agenda item during bi-weekly meetings with the EMS Systems Manager.

D) 2009 Implementation Status - Being Implemented

An analysis of actual costs for licensure and inspection activities was conducted in the fall of 2008. The Department will evaluate options for resolving the difference between the current license fee and actual costs associated with Department licensing personnel and overhead to determine if statutory changes are necessary. Likely options include assessing a cost-based fee to all services; applying a sliding scale, which is less for volunteer services and more for private services; or eliminating the fee all together. Each of these will be evaluated and the Department will decide on how to proceed before the 2011 Legislative Session.

2017 Implementation Status – Continued Evaluation

To date, the department has not chosen to request statutory changes to EMS service licensing fees. Due to increased regulatory workloads related to air medical and paid ground EMS services and ongoing data system costs, this will be evaluated again for the next legislative session. Any fee increases will have to be balanced with not being a burden to the volunteer EMS services.

Recommendation #12

We recommend the Department address emergency medical services system governance needs by forming an emergency medical services system governance entity to address components of the state's emergency medical services system through either:

A. Expanding the role and composition of the existing State Trauma Care Committee; OR

B. Establishing a separate emergency medical services advisory council.

A) 2009 Implementation Status - *NIA*

The Department decided to create a new EMS committee.

B) 2009 Implementation Status - Implemented

The Emergency Care Committee is a multidisciplinary, advisory group of stakeholders brought together to help the section undertake a number of activities to improve Montana' s emergency care system and achieve its mission. Examples of some goals in place for the ECC are to create a strategic plan, develop a comprehensive information management system, and improve workforce development and training.

In March 2009, 17 members were appointed for two-year terms by the director of the Department. Members include urban and rural service representatives, fire and police department personnel, a tribal representative, a medical director, a registered nurse, a legislator, etc. They met for the first time on May 2009 and will meet quarterly.

2017 Implementation Status – Continued Implementation

The Department created an Emergency Care Council and appoints members representing dispatch, law enforcement, fire, trauma committee, urban and rural EMS services, tribal EMS, medical directors, urban and rural nursing, hospitals, pediatric EMS and a citizen at large. Advisory to the department and meeting quarterly, the ECC has been helpful in creating ongoing iterations of a strategic plan and prioritization of strategies and activities from year to year.