SOUTH DAKOTA DEPARTMENT OF HEALTH


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# Rural EMS Healthcare Direction in South Dakota

*August 28, 2024*

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*This guide is designed for informational and educational purposes only and should not be considered as professional legal advice or a replacement for professional legal advice. Although we go to great lengths to make sure our information is accurate and useful, we recommend you consult a lawyer if you want professional assurance that our information, and your interpretation of it, is appropriate to your particular situation. Emergency Medical Services personal is inclusive of Emergency Medical Responder (EMR), Emergency Medical Technician (EMT), EMT-Intermediate/85, Advanced Emergency Medical Technician (AEMT), EMT-Intermediate/99, and Paramedic levels.*

# Introduction

With the ongoing consolidation and regionalization of healthcare in rural South Dakota, out-of-hospital Emergency Medical Services (EMS) have increasingly become a vital part of the rural healthcare system. **The Medical Director or Program Director is a vital component of the rural EMS system; oftentimes, serving in an administrative and leadership capacity.**

**However, rural EMS healthcare direction is rarely a primary occupation. Physicians/ Program Directors come to this role in a variety of ways.** You may be a physician or PA/NP who just moved to a small town, only to find yourself greeted by the local ambulance service director who informs you that a director is needed to sign EMS personnel renewal forms. You may be an established rural provider contemplating getting involved with your local EMS agency, but you are not quite sure what EMS is all about and are concerned about the demands and risks associated with this role. Or you may be a current rural EMS Medical Director/ Program Director who is interested in knowing more about this role and perhaps deepening your involvement with your local EMS agency.

**This brief guide is designed to introduce you to rural EMS healthcare direction and what the role involves and requires in South Dakota.** It is an introduction and provides a basic framework for understanding the role, its obligations, and responsibilities. It is not a complete textbook nor is it a course in EMS healthcare direction. For comprehensive Medical Director / Program Director education, you should refer to other more comprehensive resources and educational programs listed in this guide.

This guide will address the unique conditions and challenges of healthcare direction for rural and frontier EMS agencies in South Dakota and serve as an introduction to this important rural healthcare role.

# Section I: Medical Director / Program Director in South Dakota

## Overview of Medical Director / Program Director

Simply put, healthcare direction is the provider oversight, or clinical supervision, of licensed EMS personnel. This oversight includes:

- Direct involvement in education and training
- Credentialing EMS personnel for practice
- The development and maintenance of treatment guidelines
- Participating in quality assurance
- Serving as a liaison between EMS and other parts of the medical community
- Providing leadership in system and dispatch issues that impact patient care
- Coordinate online healthcare direction

Ultimately, the Medical Director / Program Director is a patient advocate.

Healthcare direction is usually distinguished between online and offline roles. The offline Medical Director / Program Director is considered the agency Director, and this guide focuses on that role. Online healthcare direction is the contemporaneous direction of EMS personnel by a physician or NP/PA either by phone, radio, or in person. Those providers providing online direction are important partners in the EMS system.

### HOW SOUTH DAKOTA DEFINES EMS MEDICAL SERVICES

**Emergency medical services "is healthcare provided to the patient at the scene, during transportation to a medical facility, between medical facilities, and upon entry at the medical facility."**
***South Dakota Codified Law 34-12-52 (2).***

## Educational Expectations for Medical Directors / Program Directors

While EMS was recognized in 2010 as an emergency medicine sub-specialty with formal year-long fellowship programs, most medical providers in rural communities are specialists in family medicine, surgery, or internal medicine with limited exposure to EMS during the formal training period. These providers usually need to obtain additional EMS-specific training to effectively function as an EMS Medical Director / Program Director.

Medical Directors / Program Directors need to have a basic understanding of the following:

- Scope of practice of individual providers
- EMS system design
- State EMS rules
- Quality assurance principles
- Treatment guideline development

- Dispatch and emergency medical dispatching principles
- Disaster and mass-casualty
- FEMA's National Incident Management System (NIMS) and the Incident Command System (ICS) training

**What is Scope of Practice?**

A set of skills defined in state law or rule and the treatment modalities for a given level of EMS provider.

**Educational Opportunities**

There are several options for Medical Director / Program Director education:

The most well-known and established course is The National EMS Medical Director's Course & Practicum® offered by the National Association of EMS Physicians (NAEMSP) at their annual national meeting.

There is also an excellent online Medical Director course available at www.medicaldirectoronline.org. This course contains entry-level Medical Director training and is provided specifically for rural Medical Directors / Program Directors. The course and site were developed by the Critical Illness and Trauma Foundation. An increasingly popular EMS Medical Directors conference is The EMS State of the Sciences Conference (also known as The Gathering of Eagles). This conference was started by large EMS system Medical Directors, but it continues to expand its offerings.

The American College of Emergency Physicians (ACEP) has an EMS Section that often provides education programs at ACEP's national and regional conferences.

*Many rural Medical Directors / Program Directors will find these above opportunities more geared for larger, more urban systems, though the basic principles of healthcare direction and treatment modalities are the same.*

**AN AUTHORITATIVE REFERENCE RESOURCE is sold by the National Association of EMS Physicians titled:**

- **Clinical Aspects of Prehospital Medicine – Vol. I**
- **Medical Oversight of EMS – Vol. II**
- **Evaluating Improving Quality in EMS – Vol. III**
- **Special Operations Medical Support – Vol. IV**

**These volumes are available at http://www.naemsp.org.**

## South Dakota Codified Law Regarding Healthcare Direction

South Dakota EMS Codified Law requires that all ambulance agencies have a Medical Director / Program Director that is responsible for guidelines development. Also, all licensed emergency medical services personnel may only function under the supervision of a physician / Program Director. The physician / Program Director is required to credential the provider and provide guidelines for patient care.

The Medical Director / Program Director should agree to provide the following:

- Ensure EMS personnel skills competency
- Determine skills and treatment modalities within South Dakota scope of practice
- Delegate authority for provider practice
- Restrict or revoke authority for provider practice

**How South Dakota Defines the EMS Professional**

"Attendants," ambulance personnel who have completed a course of instruction in emergency care approved by the Board of Medical and Osteopathic Examiners pursuant to SDCL 36-4B-7 and who are responsible for the rendering of direct patient care to the sick or injured.

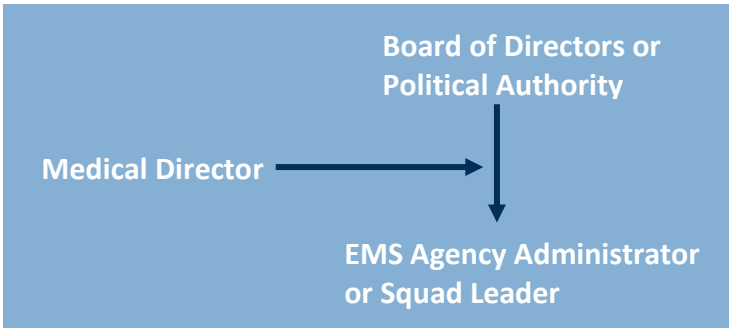
**The Medical Director's Authority Requirements**

- Credential EMS personnel
- Develop treatment guidelines
- Participate in the development of a quality assurance program
- Ensure EMS personnel skills competency

# Section II: Medical Director / Program Director and Agency

## Relationship with Agency

It is important for the Medical Director / Program Director to have a formal agreement in place with the EMS agency (ambulance service). This serves several purposes, including coverage for liability purposes, expectations, authority, and compensation.




The Medical Director / Program Director is either an employee or contractor to the EMS agency. The decision is really one of personal and agency preference and tradition. An employee, will have clear delineation of responsibilities and authority within the organization. Employee status also makes liability and workers' compensation coverage available through the agency. As an independent contractor, the relationship and authority need to be spelled out in a Memorandum of Understanding (MOU) or job description (see pages 27-33). Contract Medical Directors / Program Directors also have greater flexibility to deduct business expenses for any expense incurred while providing healthcare direction. This can include uniforms, Medical Director / Program Director education, and travel expenses.

The Medical Director / Program Director needs to have a clear understanding of the organization of the EMS agency. If there is a Board of Directors or a political authority that funds or has statutory authority over the agency, then the relationship with this board or political body should be addressed. While agencies may have the Medical Director / Program Director report to the agency operational

administrator, there is a role for the Medical Director / Program Director to interact with the board or political authority. The Medical Director / Program Director needs to ensure policymakers understand patient care implications with regards to budgets and operations of the agency.

Developing a good working relationship with the agency administrator is very important in being effective. The Medical Director / Program Director and administrator need to have the same vision and commitment to quality care and speak with a unified voice. Frequent leadership meetings between the Medical Director / Program Director and agency leadership are very beneficial. These meetings allow for the opportunity to review agency performance, clinical care, and any concerns or issues that need to be addressed.

It is also important for the Medical Director / Program Director to develop a relationship with the individual EMS personnel within the agency. The Medical Director / Program Director needs to be able to convey his or her practice style and establish a culture by which patient care will be provided. To do this though, the Medical Director / Program Director must be more than "a signature."

There are many opportunities for the Medical Director / Program Director to interact with the agency, such as by attending training sessions, teaching at in-services and refreshers, and doing ride-along. In the end, to freely come forward with questions, concerns, and requests for guidance, EMS personnel need to feel comfortable with the Medical Director / Program Director.

Initial EMS education is based on National Standards through the National Highway Traffic Safety Administration. Remedial education promoting performance improvement, best practices, and emerging technology are all an essential part of Continuing Medical Education (CME). The Medical Director/Program Director is a leadership position. Leadership positions of any kind require a variety of skills that may include communication, policy development, effective decision-making, strategic thinking, change management, teamwork, and similar experience. It is advised by the South Dakota Department of Health that leadership development course content be part of this position. Please note that leadership development programs and curriculum can vary in format and content, and often include topics (similar to those listed above) that allow leaders to develop skills to help an organization overcome challenges.

**The MOU or Contract Should Clearly Include Expectations the Agency Has of the Medical Director / Program Director. This Should Include:**

- Authority and responsibility
- Expected attendance at agency meetings
- Frequency and process for chart review
- Guideline development
- QA activities
- Compensation for Medical Director / Program Director time and expertise; and define coverage for administrative liability and worker's compensation issues

## Liability Issues

Civil liability for Medical Directors / Program Directors is covered in South Dakota law and provides immunity for Medical Directors / Program Directors who supervise activities of an ambulance service.

**WORKMAN'S COMPENSATION**

**Workers' Compensation is also another area of coverage that should be addressed between the squad and Medical Director / Program Director If the Medical Director / Program Director is injured during EMS training or a ride-along, assurance that medical costs are covered is vital. If the squad policy does not provide coverage, the Medical Director may need to carry his own policy.**

One area of liability that Medical Directors / Program Directors fail to consider and is not covered by the immunity statute is that of civil liability for sexual harassment, errors, and omissions, wrongful termination, and general administrative liability. This comes into play, for example, if the Medical Director / Program Director must restrict a provider's scope of practice and this has an impact on the individual's employment with the agency. Coverage for this liability is usually covered through a Director and Officer's Umbrella Policy, which should be carried by the ambulance service.

Individual physician coverage is available for both medical and civil liability issues. These programs are customizable for individual situations and provides various levels of coverage for general liability, errors, and omissions, sexual harassment, and medical liability. It unfortunately has a minimum premium of $2,500, which can be quite expensive for low-volume agencies and as high as $4,000/year. These programs are available at www.NFP.com, www.EMSMDinsurance.com, or www.nowinsurance.com.

**Immunity From Liability of Supervising Physician /NP/PA – Exception**

No physician or NP/PA who supervises the functions of emergency medical services personnel licensed and authorized pursuant to this chapter, including advanced life support personnel, may be liable for any civil damages for any emergency medical services personnel, where the life of a patient is in immediate danger, unless the act or omission was the result of gross negligence or willful misconduct. South Dakota Codified Law 36-4B-24

## Reimbursement

Many Medical Directors / Program Directors do not receive compensation for their service to the EMS agency. This seems to be based upon tradition or agency and physician preference. If Medical Directors / Program Director wish to be reimbursed for their time and activities of medical supervision, the compensation should be clearly outlined in an MOU with expected duties and time commitment. The Medical Director should consider the financial status of the agency as well when considering compensation.

# Section III: Medical Director / Program Director and EMTs

## Credentialing – Not Just for Hospitals, Physicians and NP's / PA's

When new EMS personnel join the EMS agency, it is the responsibility of the Medical Director / Program Director to decide whether the licensed individual is ready and prepared to provide quality medical care. A process needs to be in place to ensure that the new EMS personnel can provide a high quality of medical care. Most agencies have an orientation program, but this can vary from an informal tour and a few ride-alongs to a standardized guidelines test and field internship program.

The familiar concept of physician credentialing can easily be transitioned to the EMS environment and utilized for EMS personnel. The credentialing process should include:

- Verification of state licensure
- Clear requirements for initial and continuing education
- A process for skills verification and maintenance
- Defined field internship objectives
- A testing of guidelines knowledge
- An orientation to the ambulance vehicle, equipment, and agency operations
- An orientation to dispatch and communications

The credentialing process should be clearly outlined in a checklist that the provider and agency administrator can complete and present to the Medical Director / program Director for review and evaluation (*see form on page 27*). The credentialing process is best completed with a final interview between the provider and the Medical Director / Program Director. This allows the Medical Director / Program Director an opportunity to meet new EMS personnel to the agency and be satisfied they are prepared to provide care. This final interview can include a review of guidelines and even an oral case exam.

## Guideline Development

One of the more basic but daunting tasks of medical / program direction is that of guidelines development. While EMS personnel are educated on standard treatments for specific conditions, it is with guidelines that patient care is delivered. For the Basic Life Support agencies, these guidelines can be simple, but they become increasingly more complex for Intermediate Life Support and even more so for Advanced Life Support agencies.

The South Dakota Trauma Program requires all agencies to develop a trauma transportation plan and treatment is consistent with the statewide guidelines for trauma. This plan must be submitted to the Department of Health. The Medical Director / Program Director should take an active role in development of this plan regarding destination choice and air medical utilization.

For BLS agencies, the use of the statewide guidelines is always the simplest and most effective practice. These guidelines have been developed and vetted for appropriate treatment practices. It also allows for standardized treatment across agencies and systems, yet the Medical Director/ Program Director is still responsible for reviewing and adopting these guidelines for the agency.

**Sample Cardiac Arrest Guidelines**

The goal in the cardiac arrest patient is rapid assessment, rapid intervention by establishing an adequate airway, ongoing CPR, application of an AED, and defibrillation. Transport should be started as soon as practical, and ALS intercept called for early. Treatment needs to be ongoing during all phases of transport. CPR and ventilation may need to be stopped to facilitate some phases of patient transport.

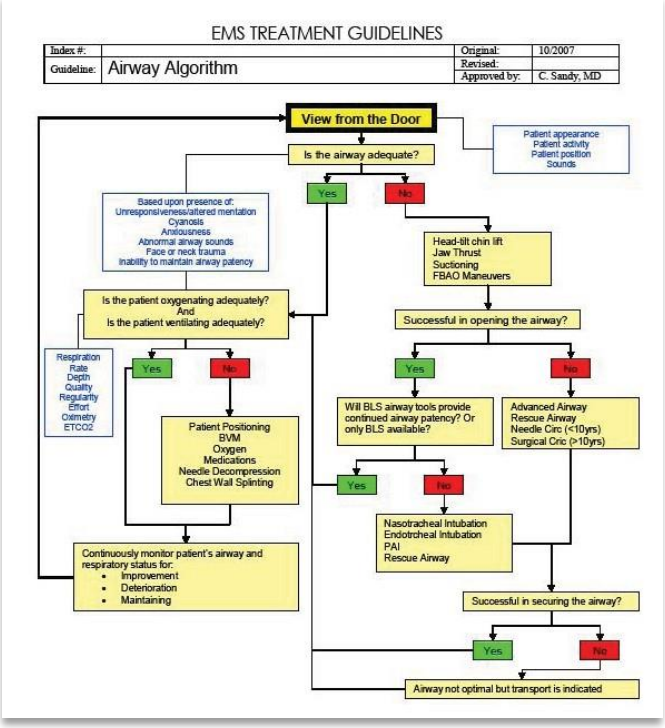
These interruptions should be minimized as much as possible by evaluating all phases of patient extrication and transport prior to carrying out the individual steps. Early notification of the receiving emergency department and medical control is necessary. Although individual treatments are listed individually in practical application, many steps are carried out simultaneously when they can be.

- **Baseline care standards.**
- **Establish that the patient is pulseless and breathless. Begin CPR.**
- **If cardiac arrest was unwitnessed or EMS arrival to the patient is estimated to be more than 5 minutes since the patient went into arrest, complete 2 minutes of CPR prior to defibrillation.**
    - During initial administration of CPR, the AED should be attached to the patient.
- **If cardiac arrest was witnessed and EMS arrival to the patient is estimated to be less than 5 minutes since the patient went into arrest, attach the AED to the patient and check rhythm prior to beginning CPR. Follow prompts given by AED.**
- **After the first and all subsequent defibrillations, immediately begin CPR for 2 minutes.**
    - CPR should not be delayed for rhythm or pulse checks unless signs of circulation have returned.
- **A maximum of 3 defibrillations may be delivered on scene prior to initiating transport.**
- **If the AED advises no shock, initiate transport with rhythm checks by the AED occurring approximately every 2 minutes.**
- **Manage airway per guidelines.**
- **Call for ALS intercept.**
- **Transport.**

## SAMPLE GUIDELINES

For ALS agencies, the Medical Director / Program Director will need to develop ALS guidelines with advanced treatment modalities and skill sets. In developing guidelines, consider the following:

1) **Flowchart and diagrams are easier to reference by crews while on scene or enroute to calls.**
2) **Guidelines should be reviewed at least every two years and updated as needed.**
3) **A process needs to be in place to update or change guidelines and distribute those changes to personnel.**
4) **Guidelines need to follow scope of practice.**
5) **New treatment therapies or modalities should be based upon accepted evidence-based research.**

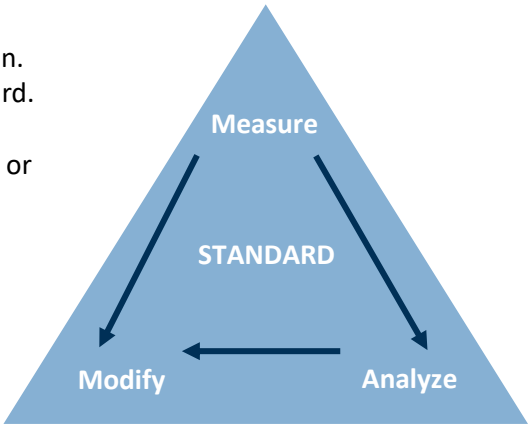



## Quality Management

Medical Directors / Program Directors have ultimate responsibility for the quality of care provided within the system, and a solid quality assurance program is the key. Too many times, though, quality management seems like a daunting task, especially when statistical powers and t-tests are thrown into the mix. Quality assurance programs, however, do not need to be complicated. The key Measure is to start small. This usually means looking at data from a retrospective view using patient care report data and only looking at one factor at a time.

Quality management follows a simple pattern:

1) STANDARD: Establish standard and provide education.
2) MEASURE: Measure performance against the standard.
3) ANALYZE: Analyze and evaluate results.
4) MODIFY: Make any necessary changes to operations or practice.
5) REMEASURE: Reevaluate the performance.




When establishing treatment and operation standards, the Medical Director / Program Director needs to ensure the standards are medically appropriate, realistic, and attainable.

Response time is determined as the interval between the time the patient's location, callback number, and patient problem type are known, and the time the ambulance crew arrives on scene. Response time

standards for suburban and rural areas can differ based on the needs and the configuration of each EMS system and as approved by the Medical Director / Program Director.

**South Dakota Basic Life Support Patient Guidelines**

State-sanctioned EMT prehospital treatment guidelines can be found online at https://sdbmoe.gov/professions-emergency-medical-services/

**Recommendation Quality Assurance Program for All Ambulance Services**

Whether BLS or ALS, all ambulance services should have a basic quality assurance program that evaluates overall function and care provided by the agency. The goal of a quality assurance program is to develop a structure to ensure that the patients are being treated according to accepted medical standards and guidelines. The ambulance service manager plays an important part in the quality assurance program. If the Medical Director/ Program Director is unable to review each Patient Care Report (PCR), it falls on the manager to develop a system whereby each call is reviewed internally by an objective third party to ensure basic standards are met and referring certain PCRs to the Medical Director / Program Director. Some examples are:

1) At least two complete sets of vital signs are recorded on PCR.
2) Specific treatment guidelines were followed.
3) The PCR is complete including an accurate narrative.
4) The PCR is signed by the primary care provider.

PCRs for patients exhibiting the following signs, symptoms, or impressions must be forwarded to the Medical Director / Program Director for review:

- Cardiac Arrest
- Chest Pain
- Airway Compromise or Respiratory Arrest
- Major Trauma
- Stroke
- Unconscious or Unresponsive Patient
- Pediatric Patient
- Use of Restraints
- Any Deviation in Guidelines

For help starting a simple quality program, see the Rural Ambulance Service Quality Checklist on page 22.

**South Dakota – Required**

South Dakota Codified Law 34-11-11 requires Advance Life Support ambulance service develop a quality assurance program that addresses at a minimum:

- Personnel and patient safety
- Use of lights and sirens during patient transport
- Compliance with BLS and ALS guidelines
- 12 lead EKG placement for suspected STEMI
- Blood glucose check for a patient with a suspected stroke
- Documentation of at least one set of vitals per patient encounter
- Review of all sentinel events
- Compliance with STEMI, Stroke and Trauma alert Activations
- Medical or program director review and feedback for all:
    - Cardiac arrest resuscitations
    - Patients who receive Rapid Sequence Intubation
    - Rescue airway placements after a failed intubation; and
    - Pediatric patients with life threatening emergencies.

**Measuring Response Times**

It is having been a common practice in the past to report response times by using averages. This is an easy-to-understand methodology that calculates response times by adding all applicable response times together and then dividing the total number of minutes by the total number of responses to come up with an average. Unfortunately, measuring and reporting average response times is inadvisable because one-half of the patients may receive the required response time, while the bottom half do not. Given what has been learned about the need for an eight- minute response to maximize survivability from cardiac arrest, an average eight-minute response, by definition, means that one-half, or more, of the service's patients are not reached within that critical time.

Many rural areas may set longer response-time goals because of fewer requests for service and higher cost per transport. The use of averages in these areas can be a cause for even greater concern than in urban areas, as just one short response time can be used to offset several longer ones, with the result being resident or patient complaints about the inequity of the service.

## IN SOUTH DAKOTA, EMS RULES STATES:

**MANDATORY RESPONSE TIME: An ambulance service that operates a ground ambulance shall respond to ninety percent of all emergency calls received within fifteen minutes after receiving the call. The ambulance service must respond to any emergency call within a maximum of twenty minutes after receiving the call. "Respond to" means the ground ambulance is enroute to the location where emergency medical services have been requested (*Administrative Rule 44:05:02:17.*).**

**Fractile Response Time Measurement**

Rural services, like many high-performance emergency ambulance services, should use a different methodology to measure response times to ensure service equality to all patients: fractile distribution reported at the 90th percentile. This methodology places each response within the minute it is achieved and stacks the minutes in ascending order to establish a fractile response- time distribution. The point at which the fractile response time crosses the percentile measures the point of the service's response- time reliability — a predetermined response-time standard based on the service area's demographic and geographic factors, combined with a realistic funding level. In many urban settings, the time standard is set within eight minutes and is based on cardiac research. In suburban and rural settings, where call volume may be lower because the

## DEFINTION OF FRACTILE RESPONSE TIME

**The fractile time indicates that a predetermined response interval is being met for a defined percentage of events. The use of the 90% fractile (90% of the calls responded to within a certain response interval) should be considered.**

population is geographically scattered, 15 or 20 minutes may be used as the response-time requirement, depending on the financial resources available.

For example, setting a standard of a chute time (dispatch to response) of one minute may be appropriate for an agency whose crew stays in quarters, but for a volunteer agency whose personnel respond from home, it may be an impossible standard to meet. However, if the latter agency's chute times are consistently 10 minutes or more, then modification to the response procedure may be necessary.

**Suggestions for Quality Monitoring**

General

- **Fractile times:**
  - Call receipt to dispatch (activation)
  - Dispatch to response (chute)
  - Response to arrival at patient (response)
  - On-scene times
  - Total out-of-hospital times — call receipt to arrival at hospital
- **General Documentation**
  - Legibility and sensibility of written reports
  - Appropriateness of treatments per guidelines
  - All procedures in scope of practice
  - Time-critical diagnoses (STEMI, Stroke, Trauma) interventions and destination decisions
- **Training**
  - Infrequent skills practice and demonstration
  - Case presentations
  - Paramedic intercept scenarios

Medical

- Aspirin for cardiac chest pain
- Blood glucose for altered mental status
- Narcan for altered mental status
- 12-lead for syncope
- 12-lead for chest pain or angina equivalents

Trauma

- On-scene times
- Appropriate spinal immobilization utilization
- Air medical utilization
- Preservation of temperature
- Fluid resuscitation

Cardiac Arrest

- CPR density – amount of time a patient receives CPR
- Length of CPR interruptions
- Time to first shock
- Compliance with CPR intervals
- Rate of ventilation

## Chart Reviews

Most quality assurance programs include chart review as a component. While it is retrospective and not the gold standard of a prospective quality program, chart review can give you good insight into the quality of care provided.

It is also good practice to review all calls where the patient refused care or transport. There must be a signed an AMA form on record.

Each agency should have a single individual responsible for these chart reviews and provide the Medical Director / Program Director with the necessary charts for review.

When reviewing charts, one must remember to evaluate it from the EMT's or paramedic's point of view and educational level.

1. **Is the chart complete?**
2. **Is there an appropriate narrative that provides an adequate history of the events and treatment?**
3. **Were the appropriate guidelines followed based upon the chief complaint?**

Focusing on a specific question or intervention is also another productive method of chart review.

1. **Did the chest pain patient receive aspirin?**
2. **Was there documentation of c-spine immobilization for qualifying trauma patients?**

Providing feedback is always a challenge but should be viewed as part of the continuing educational process for the EMS personnel. This is especially important in low-volume agencies and with high- acuity calls. This feedback can be provided individually in person, during an agency in-service, or through ImageTrend. Feedback needs to be timely to maximize the educational benefit.

The Medical Director / Program Director should provide feedback to EMS personnel on all calls with critical patients and all calls where there was a patient death after EMS initiated care. The Medical Director / Program Director is viewed as the highest medical authority for EMS personnel and having verbal feedback from the Medical Director / Program Director is highly valued. Most EMS personnel want to know about the care they provided and how it might have or have not impacted the patient. They also find the Medical Director's / Program Director's feedback helpful in making meaning of emotionally traumatic calls.

**Access to Online Ambulance Reporting System**

Utilization of the state ePCR program, known as ImageTrend Elite, can be a key resource and already has many built-in quality management tools. This Web-based program can provide data on:

1. Dispatch type
2. Clinical impression
3. Procedures performed
4. Destination
5. Response times

**THE MEDICAL DIRECTOR SHOULD REVIEW THE FOLLOWING CALLS:**

- **Cardiac arrest**
- **Chest pain**
- **Respiratory arrest or airway compromise**
- **Major trauma**
- **Stroke**
- **Unconscious**
- **Pediatric**
- **Use of restraints**
- **Any guidelines deviation**

The ImageTrend Elite system can be accessed at https://southdakota.imagetrendelite.com/Elite/Organizationsouthdakota/ from any Internet-enabled computer. For more information, contact **Lance Iversen** at the South Dakota EMS office at Lance.Iversen@state.sd.us.

## Clinical Errors

So, what do you do when there is a question raised regarding the quality of medical care an EMS personnel has provided or if a patient complains about the treatment they did or did not receive? This is always a difficult situation, especially if the provider in question is a volunteer. The last thing a Medical Director / Program Director wants to do is scared off these scarce providers, but he has a responsibility to ensure the quality of care provided is appropriate.

Most EMS personnel truly want to provide good care and are highly motivated to perform well. The run or call review process should take advantage of this and be looked at as an opportunity to learn and improve as opposed to a punitive action.

The initial step in addressing quality issues is to look at the root cause of the issue by considering the following questions:

- **Was it an atypical presentation that wasn't recognized?**
- **Often Occam's Razor comes into play, and providers should be reminded that "When you hear hoofbeats, think horses, not zebras.**
- **Is there a lack of education basis regarding this illness or condition?**
- **Is there a system-wide problem?**
- **What were the circumstances the faced in making decisions regarding care?**

Remember to put yourself in the position of the EMS personnel — upside-down, in the ditch, in the dark, in the snow — when making a judgment on the care.

Once the root cause has been identified, then an appropriate remediation or action can be addressed. This may include simply having a discussion with the EMS personnel, or it may include an extra refresher or education on the given topic. This plan should be followed-up with a formal monitoring program to ensure actual change in performance.

## Continuing Education

For EMS personnel to maintain licensure, they must meet renewal requirements. These requirements are described in the rule below.

In addition to the state-approved 20-hour refresher, other standardized training courses that can provide Continuing Medical Education (CME) include:

- **Basic Trauma Life Support (BTLS)**
- **Prehospital Trauma Life Support (PHTLS)**
- **Advanced Medical Life Support (AMLS)**
- **Pediatric Education for Prehospital Providers (PEPP)**
- **Advanced Burn Life Support (ABLS)**
- **Emergency Vehicle Operation Course (EVOC)**

Medical Directors / Program Directors should be actively involved in the continuing education process for EMS providers. This not only includes CME approval, but also includes teaching EMS providers on a routine basis. The continuing education topics should include the required topics and hours required during the two-year renewal cycle.

Content for each topic should include a general review of anatomy, pathology, and the applicable treatment guidelines. Use of the EMS textbook should be avoided as it contains entry-level content, and while it may be useful for the review, CME should raise the educational standard for EMS providers and address new and recent advancement in medical treatment. There are many online continuing education resources. However, these resources must be checked off and verified as being acceptable to the State and to the National Registry of EMTs or accredited by the Continuing Education Coordinating Board for Emergency Medical Services (CECBEMS), such as those found at https://www.centrelearn.com/. The two main trade magazines, *EMS World, and the Journal of Emergency Medical Services, also provide monthly CME articles.*

The use of simulation mannequins can be an important part of EMS personnel CME. Partnering with a training facility with a simulation program can help with skills maintenance, especially for high acuity and low volume calls.

Distance education has also become a useful tool for EMS personnel education. This can be used for both initial certification courses and CME. Partnering with an EMS personnel training center that has distance learning technology can be beneficial in rural areas where EMS personnel instructors may be scarce.

**Renewal of** EMS personnel licenses

EMS personnel *in South Dakota must renew every two years and meet South Dakota Board of Medical and Osteopathic Examiners renewal requirements. Some EMS agencies and individuals also choose to recertify with the National Registry of EMTs (NREMT).*

- EMR must complete 8 hours of continuing education every two years to maintain South Dakota certification. These hours include an 8-hour refresher course or equivalent and a current CPR Certification. NREMT requires that EMRs complete a total of 16 hours of continuing education every two years,
- EMTs must complete 20 hours of continuing education every two years to maintain South Dakota certification. These hours include a 20-hour refresher course or equivalent and a current CPR Certification. NREMT requires that EMTs complete a total of 40 hours of continuing education every two years.
- EMT-Intermediate/85 and AEMT must complete 50 hours of continuing education every two years to maintain South Dakota certification. These hours include 50 hours refresher course or equivalent and a current ACLS Certification. NREMT requires that paramedics complete a total of 50 hours of continuing education every two years.
- EMT-Intermediate/99 and Paramedics must complete 60 hours of continuing education every two years to maintain South Dakota certification. These hours include 60 hours refresher course or. NREMT requires that paramedics complete a total of 60 hours of continuing education every two years.

*See* https://sdbmoe.gov/professions-emergency-medical-services/ *for South Dakota renewal requirements or the www.NREMT.org for detailed descriptions of recertification requirements.*

## Run Reviews

Run reviews are an excellent form of both quality assurance and education. Run reviews are gatherings between the agency field staff and the Medical Director / Program Director solely for the purpose of reviewing actual calls together. These gatherings allow the Medical Director/ Program Director to reinforce important clinical issues pertaining to signs and symptoms and selected treatments.

Facilitating a run review includes:

- Run Selection – ensure patient with pertinent pathology or clinical condition
- Identify education/quality points for discussion
- Reinforce education/quality points through additional educational presentation

If possible, ask the crew involved to present the case and then discuss elements such as dispatch, response, initial presentation, treatment, and transport. Identify any issues or concerns, and always complement for excellent care provided. It is important to include any hospital follow-up and patient outcome as this allows the EMS personnel to view the call in the context of a complete medical encounter for the patient.

Calls that are good candidates for run reviews are:

- Trauma with significant injury
- STEMI
- Difficult AMA or refusals
- Combative patients

- Unusual medical or trauma conditions
- Complicated interfacility transfers
- Low-volume calls – pediatrics, childbirth

**Tips for Talking with** EMS personnel

- Set the stage by engaging in informal conversation to create a comfortable atmosphere.
- Take time to listen. Show genuine interest in the EMS personnel perspectives.
- Avoid medical jargon when possible and ensure EMS personnel understand the terminology you are using.
- Make sure your goal is improvement and not finding errors and punishment.

### Online Healthcare Direction

When on an ambulance call and during providing patient care, it is important that EMS personnel have a mechanism of obtaining physician or NP/PA input and direction. Online medical supervision provides real-time instructions to EMS personnel by a physician or NP/PA either by phone, radio or in person.

EMS personnel may request online medical supervision for various issues, including treatment guidelines questions, unusual cases or circumstances, AMA cases, or to help determine destination and transport decisions.

This direction is typically provided by a physician in the receiving emergency department. The agency Medical Director / Program Director, however, may wish to provide online direction themselves or with a designee. If other providers are involved, the agency Medical Director / Program Director has responsibility to ensure that online medical control providers:

- **Understand the EMS provider's scope of practice**
- **Understand treatment guidelines specific to the agency requesting online healthcare direction**
- **Have a method to contact the agency Medical Director for questions or concerns**

Online Medical Directors should be included in the operation's quality assurance program as they will see first-hand patient care provided to the patients transported to their facilities. It is important to establish partnerships with the physicians at receiving hospitals, especially if the agency Medical Director does not work in the ER at that hospital.

## Section V: Putting it all Together

### Activities and Time Requirements

The Medical Director / Program Director's activity and time requirements will depend largely upon size of agency, number of calls and providers, whether BLS or ALS, and extent of involvement in daily operations. Most Medical Directors / Program Directors should have at least monthly EMS activity.

**DAILY**

- Call monitoring
- Online healthcare direction

**WEEKLY**

- Chart review and other QA activities

**MONTHLY**

- Education and training
- Run reviews

**ANNUAL**

- Skills review

**AS NEEDED**

- Hospital/medical staff coordination
- Remediation/complaints

A good method for becoming familiar with your agency's performance is to respond on calls with the crews and conduct routine electronic Patient Care Report chart reviews. This can either be achieved through a "ride-along" on the ambulance or by responding in an issued emergency Medical Director / Program Director vehicle.

While on scene, the Medical Director / Program Director can serve many roles.

- **The Medical Director / Program Director can serve as on-scene healthcare direction, providing advice regarding treatment and disposition to the EMS personnel.**
- **The Medical Director / Program Director can simply observe and use the opportunity to identify, in a prospective manner, any quality assurance issues.**
- **The Medical Director / Program Director can provide direct patient care and consultation if needed. This is especially helpful with patients who are resistant to needed treatments or transport.**

During a disaster or multiple casualty incident, the Medical Director / Program Director may be asked to respond to the scene and participate as part of the National Incident Management System (NIMS) incident command structure or even asked to respond to the Emergency Operations Center (EOC) and serve as the medical resource for the political authorities. If the Medical Director /Program Director responds to the scene, it is important that the physician or NP/PA be familiar with the incident command system.

This can be attained by completing the free online ICS 100, 200 and NIMS 700 classes found at http://training.fema.gov/is/nims.asp.

# Section V: Resources and References

## Medical Director Resources

**SOUTH DAKOTA DEPARTMENT OF HEALTH**
605.773.4031
http://ems.sd.gov

**South Dakota Board of Medical and Osteopathic Examiners**
**605-367-7781**
(sdbmoe.gov)

**NATIONAL ASSOCIATION OF EMS PHYSICIANS**
P.O. Box 19570
Lenexa, KS 66285
Office: 800.228.3677
Fax: 913.895.4652
www.naemsp.org

**ONLINE MEDICAL DIRECTOR COURSE**
www.medicaldirectoronline.org

**NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION OFFICE OF EMS**
1200 New Jersey Avenue S.E. Washington, DC 20590
Office: 202.366.5440
Fax: 202.366.7149
www.ems.gov

**AMERICAN COLLEGE OF EMERGENCY PHYSICIANS**
1125 Executive Circle
Irving, TX 75038-2522
Office: 800.798.1822
Fax: 972.580.2816

## EMS Medical Director / Program Director Job Description

**POSITION DESCRIPTION**

- The EMS Medical Director / Program Director is responsible for the overall training, supervision, and credentialing of all licensed EMS personnel functioning within the system.
- The EMS Medical Director / Program Director also develops and oversees the system quality assurance program and initiatives.
- This is a part-time position that is expected to take 10-20 hours per month to fulfill the goals and responsibilities of the position.

**REPORTS TO**

- EMS Agency Administrator/Governing Authority

**REQUIREMENTS**

- Maintain current South Dakota medical license.
- General knowledge of EMS with specific knowledge of licensure levels, scopes of practice, and EMS skills and procedures.
- Completion of formal Medical Director / Program Director Training Course (preferred).

**DUTIES**

- Development of credentialing process to ensure provider competency in education and skills.
- Develop and oversee quality assurance program, including state-required chart reviews and other initiatives pertinent to the agency.

- Participate in:
  - Chart review
  - Continuing education program
  - Disciplinary proceedings
- Development and adoption of patient treatment guidelines.
- Liaison with online medical control physicians and general medical community.
- Participate in regional and state EMS activities and initiatives, including advisory committees.

## Possible Quality Assurance Measures

***[Examples]***

**General**

- Fractile response times: Call to dispatch
  - Dispatch to response
  - Response to patient arrival
  - On-scene times
- Procedure Success rates

**Trauma**

- On-scene times
- Spinal immobilization
- Patient temperature upon arrival to ER

**Medical**

- Aspirin for cardiac chest pain
- Two sets of vital signs on PCR

**Cardiac Arrest**

- CPR density (percentage of time spent doing CPR during code)
- Ventilation rate
- Delays and interruptions in CPR
- Bystander CPR
- Public access AED use

## Rural Ambulance Service Quality Checklist

*This checklist is designed to be regularly completed after a specific measurement period determined by the ambulance service. The measurement period may be monthly, quarterly, semiannually, or annually. Use the checklist to start your quality program.*

Ambulance service _____

Measurement period dates: from _____ to _____

1) CONTINUOUSLY IN SERVICES

During the measurement period, the ambulance service was continuously available for service (did not go out of service because of staffing, vehicle, or other issues).

☐ Yes ☐ No

2) RESPONSE RELIABILITY

During the measurement period, the ambulance service responded to all requests for service (excluding requests that came when the ambulance service was unavailable because of being on another call).

☐ Yes ☐ No

3) RESPONSE TIMES

During the measurement period, the ambulance service has recorded, tracked, and met state response time requirements, including chute times (the time from first page to wheels rolling to the call) and response times to the emergency scene (the time from first page to arrival on the scene). (*See SD Rules 44:05:03:02.01 for mandatory response time*)

☐ Yes ☐ No

4) ON-SCENE TIMES

For the measurement period, the ambulance service has recorded and reviewed all on-scenes times (the time from arrival on the scene to departure to the hospital) for appropriateness to the specific situation and deemed them to be appropriate.

☐ Yes ☐ No

5) ALS INTERCEPTS

During the measurement period, an ALS intercept was initiated for all patients with chest pain or myocardial infarction symptoms, cardiac arrests, severe respiratory distress, respiratory arrest, or severe traumatic injury.

☐ Yes ☐ No

6) COMPLETENESS OF PATIENT CARE REPORTS

For the measurement period, all patient care reports have been reviewed by the ambulance service Quality Coordinator for completeness, including vital signs and accurate call times.

☐ Yes ☐ No

7) GUIDELINES COMPLIANCE

For the measurement period, all patient care reports have been reviewed by the service Quality Coordinator for appropriate care and guidelines compliance.

☐ Yes ☐ No

8) MAJOR CALLS ARE REVIEWED WITH MEDICAL DIRECTOR

For the measurement period, all patient care reports that involved cardiac arrest, traumatic arrest, severe respiratory distress or arrest, major trauma, and/or challenging clinical care management have been submitted to the Medical Director for review and feedback was received.

☐ Yes ☐ No

9) TRAUMA, CARDIAC AND STROKE CARE AND DESTINATIONS

For the measurement period, all patient care reports that involved major trauma, possible myocardial infarction, or possible stroke were evaluated for compliance with local policies, guidelines, and destinations.

☐ Yes ☐ No

10) CARDIAC ARRESTS

For the measurement period, all cardiac arrest calls were reviewed for appropriate care, response time, on-scene time, and transport time.

☐ Yes ☐ No

Date Completed _____

Signature of Quality Coordinator _____

## Skills Competency and Maintenance List

***[Example]***

*As part of initial and ongoing credentialing, the following skills will be reviewed on at least an annual basis. Skills will be picked randomly to include the following:*

1) SKILLS TO BE TESTED AT EMR/EMT LEVEL:

- Four (4) random skills to be chosen from the National Registry skills test:
  - Upper airway adjuncts and suction
  - Bag-valve mask
  - Bleeding control/shock management
  - AED
  - Immobilization — join
  - Immobilization — long bone
  - Immobilization — traction
  - Oxygen administration
  - Patient assessment — medical
  - Patient assessment — trauma
  - Spinal immobilization — seated
  - Spinal immobilization — supine
- For EMT, four (4) random skills to be chosen from the System skills test:
  - Monitor set-up
  - Radio, telephone, and patient transfer report
  - Ambulance compartment and jump bag inventory
  - Radio procedures
  - Run reports
  - GPS, air ambulance dispatch and landing zone
  - Mapping
  - Glucometer

2) SKILLS TO BE TESTED AT ADVANCED EMT LEVEL:

- Two (2) mandatory skills from the National Registry skills test:
  - Endotracheal intubation for the adult patient
  - IV therapy
- Two (2) random skills from the National Registry skills test:
  - As listed under EMT above
- Four (4) random skills from the System skills test:
  - As listed under EMT above

3) SKILLS TO BE TESTED AT PARAMEDIC LEVEL:

- Complete a mega-code test for the adult and pediatric patient.
- The Ultra-code will be scenario-based, and all skills and interventions must be accomplished on the manikin to national standards.
- Scenarios can be based on either the prehospital setting or the interfacility transport setting.

- Skills and medications that are used infrequently will be tested during these scenarios to ensure consistent proficiency levels for those areas.
- Each mega-code will contain four (4) scenario progressions.

## Suggested CME Topics

**Trauma**

Head trauma
Spinal trauma
Multi-system trauma
Trauma in elderly
Pelvic trauma

**Medical**

Chest pain/Acute Coronary Syndrome
Allergic reaction/anaphylaxis
Diabetic emergencies
Respiratory/asthma/COPD
Stroke

**Pediatrics**

Trauma
Fever and general pediatric illness
Apparent Life-Threatening Event (ALTE)
Respiratory/Croup/RSV

**OB**

Normal labor and delivery
Trauma in pregnancy

**General**

EMT Wellness
HIPAA
Infection control

**Sample Chart Review**

## Chart Review Form

Date: _____

Run # _____ Crew: _____

| Standard | Yes | No | Comment |
|---|---|---|---|
| 2 Sets of VS? | | | |
| Protocol Followed | | | |
| Narrative | | | |
| Signatures | | | |
| Call involves:<br>• Cardiac Arrest<br>• Chest Pain<br>• Respiratory Arrest or airway compromise<br>• Major Trauma<br>• Stroke<br>• Unconscious<br>• Pediatric<br>• Use of restraints<br>• Any protocol deviation | | | If yes, then refer to medical director for review. |

Medical Director Review:

_____

_____

_____

_____

## Sample Credentialing Process Form

### Credentialing Process Form

Provider_____ Agency _____

Level of Credentialing: EMR □ EMT □ Adv. EMT □ Paramedic □

State EMS Licensure_____Exp_____

CPR _____Exp_____

ACLS (paramedic)_____Exp_____

PALS (paramedic)_____Exp_____

(Please provide copies of above certification cards)

Date and Signature of Preceptor

Agency Orientation _____

Skills Verification _____

Field Training Program: _____

The above provider has successfully completed all requirements for credentialing in the _____ EMS Agency and is fully credentialed at the level of _____.

Provider understands and agrees to adhere to all requirements for continuous credentialing within the system. Failure to do so will result in loss of credentials and need for recompletion of the process.

_____ _____

Provider Date Medical Director Date

**INDEPENDENT CONTRACTOR AGREEMENT**

AGREEMENT made and entered this ___ day of _____, 20__ by and between _____, SD, a *political subdivision/ambulance service* of the state of South Dakota ("Service") and Dr. _____ (Contractor).

WHEREAS, the Service and Contractor desire to enter into an agreement for the provision of professional services to assist the _____ Ambulance Service (Service) as _____ Emergency Medical Services Medical Director (EMSMD), and;

WHEREAS, the Service is duly authorized and empowered to enter into such an agreement, and the _____ is duly authorized and empowered to enter into such an agreement on behalf of Service;

NOW THEREFORE, in consideration of the above recitals, the agreements, covenants, conditions and mutual promises herein set forth, it is hereby agreed as follows:

1. Services Provided. Service and Contractor agree that Contractor shall provide services as Medical Director as directed by the Ambulance Board/Political body. Service and Contractor agree that Contractor will have responsibility for both Online and Offline Medical Direction.

2. Duties of Contractor. The Contractor shall oversee all medical aspects of both rescue and dispatch in _____. EMSMD authority and responsibilities will include those established in the rules of the South Dakota EMS Office, including but not limited to:

- The EMSMD will hold responsibility and ultimate authority of medical oversight of both structure and operations, including both direct and indirect medical oversight.
- The EMSMD shall maintain liaison with other physicians including Medical Directors and local emergency department physicians, and attend regional and state meetings.
- The EMSMD is to interact with regional, state and local EMS authorities to ensure standards, needs and requirements are met and resource utilization is optimized.
- The EMSMD is to provide liaison with the state Dept. of Health and state EMS Advisory Committee.

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- The EMSMD will collaborate agency chief officers on a procedure for the management of complaints involving EMS and EMD.
- The EMSMD will direct the development of agency/department Standard Operating Guidelines (SOG) and policy development as it relates to the EMS and EMD
- The EMSMD may appoint supervising physicians for direct medical control and for indirect medical control in his /her absence.
- The EMSMD shall evaluate pre-arrival instructions rendered by the EMD personnel and maintain direct participation in the EMD system evaluation and continuous quality improvement process.
    - Direct Medical Oversight:
- Direct medical oversight is the contemporaneous medical consultation and direction provided by the on-duty emergency department physician at _____ Center by telephone or radio to EMS providers in the field. This consultation will be consistent with the System Operating Guidelines and scope of practice of the credentialed EMS personnel.
    - Indirect Medical Oversight:
- Indirect Medical Oversight is provided by the EMSMD who is responsible for the ultimate medical accountability and appropriateness of the system including overall system design, implementation and evaluation.
- Prospective:
    - The EMSMD will develop, review and approve EMS protocols or guidelines for all certified EMS providers in _____ with the option to amend or adjust to meet specific needs.
    - The EMSMD will advise individual agencies on continuing education for EMS providers to meet state and national requirements and guidelines and to meet identified quality goals.
- The EMSMD will review and approve before implementation, new and emerging technologies in ambulance and rescue equipment, supplies and operations.
- The EMSMD should be involved with local and regional EMS for disaster and mass casualty planning.
- The EMSMD should be involved in coordination of activities such as mutual aid, backcountry rescue, tactical and HAZMAT exposures.

- Retrospective:
    - The EMSMD will oversee a quality assurance program including evaluation of EMS personnel.
    - The EMSMD may provide individual consultation and written evaluation of each/any EMS provider at his/her discretion.
    - The EMSMD will provide counseling to specific EMS providers if inappropriate care is rendered. This is to be followed with targeted instruction and follow-up. The EMSMD may withhold or qualify credentials of any EMS provider as deemed necessary.
    - The EMSMD should be involved in disciplinary proceedings of EMS providers when patient care issues are involved.

3. Term of Agreement. The term of this agreement shall be for the period beginning on the effective date hereof and ending _____. However, either party may terminate this agreement without cause before the end of the term by providing thirty (30) days' written notice of such termination to the other party.

4. Compensation. Service agrees to pay Contractor as compensation _____ for general and specific assignments as determined by the Board.

5. Entire Agreement. This instrument constitutes and embodies the entire integrated agreement between the parties relative to utilizing Contractor's services as a Contractor. The parties agree that all prior and contemporaneous oral and written agreements between and among themselves and their agents and representatives relating to the Contractor services as an Contractor are merged into and superseded by this agreement.

6. Amendment. This agreement may be altered, amended, modified or revoked only by written instrument duly executed by the parties hereto.

7. Waiver. The failure of any party to insist upon strict performance of any of the obligations contained herein shall not be deemed a waiver of any rights or remedies that said party may have and shall not be deemed a waiver of any preceding or subsequent breach in the performance of any of the terms and provisions contained herein by the same or any other person. No covenant, term or condition or the breach thereof

shall be deemed waived, except by the written consent of the party against whom the waiver is claimed.

8. Assignment. Contractor may not assign, sub-contract or delegate his/her rights and duties hereunder to any person or entity without the prior written consent of the Service.

9. Authority of Board. Contractor understands and agrees that only the _____ Service is empowered to alter, amend, modify, revoke and permit waiver, assignment, sub-contract and delegation under this agreement on behalf of Service. Contractor shall not rely upon any representation, warranty or other statement by any other contractor or agent of Service, and any such reliance by Contractor shall be at Contractor's peril and shall not give rise to any claim or cause of action, in law or equity, against Service, its contractors or agents.

10. Representations. Contractor agrees and warrants that in entering into this agreement it has relied upon no representations, express or implied, of Service, its contractors or agents, or of the Board that are not expressly stated herein.

11. Successors and Assigns. Unless otherwise provided in this agreement, this agreement inures to the benefit of and will be binding upon the parties and their respective heirs, representatives, successors and permitted assigns.

12. Third-Party Beneficiary Rights. This agreement is not intended to create, nor shall it be in any way interpreted or construed to create, any third party beneficiary rights in any person not a party hereto unless otherwise expressly provided herein. It further is not intended to create any substantive or procedural right for an applicant not otherwise provided in code.

13. Construction. No presumptions shall exist in favor of or against any party to this Agreement as a result of the drafting and preparation of this agreement. The headings and captions of paragraphs of this agreement are for convenience only and shall not be deemed to be relevant in resolving any question of interpretation or construction of this agreement.

14. Severability. If any term or provision of this agreement shall to any extent be determined by a court of competent jurisdiction to be invalid or unenforceable, the

remainder of this agreement shall not be affected thereby, and each term and provision of this agreement shall be valid and be enforceable to the fullest extent permitted by law.

15. Governing Law and Venue. All disputes arising out of or related to the formation, interpretation, performance and enforcement of and under this agreement shall be governed by the laws of the state of Idaho. Contractor hereby consents to the jurisdiction and venue of the state courts of Idaho to resolve any and all such disputes with Service, and Contractor waives all defenses to such jurisdiction and venue including, but not limited to, any defense based upon inconvenient forum.

16. Service of Notices. Any notice hereunder may be served upon Service by certified mail to Service at _____, and any notice may be served upon Contractor by certified mail to _____ Service of a notice by certified mail shall be deemed complete upon the date of the postmark by certified mail. Either party may change the address for services of notice by written notice to the other party.

17. Hold Harmless Clause. _____ agrees to indemnify, defend and hold harmless Contractor from any and all claims, costs, liability, judgment, complaint, judicial review petition or cause of action filed against Contractor relating to a claim based upon acts or omissions of Contractor performed within the scope of her duties under this agreement, no matter what the basis of the claim, complaint or liability may be, including negligence but excluding the intentional and willful misconduct of Contractor. _____ retains the right to determine legal counsel to represent Contractor in any such claim, cost, liability, judgment, complaint, judicial review petition or cause of action filed against Contractor in her individual capacity, subject to the approval of Contractor, which approval shall not be unreasonably withheld. Contractor shall not be liable to Service for any activities of Contractor undertaken by Contractor pursuant to this agreement, no matter what the basis of the claim, complaint or liability (including contribution) may be, including negligence but excluding the intentional and willful misconduct of Contractor.

18. Workers' Compensation. While performing duties within the scope of the professional services, as set forth herein, Contractor shall be covered under Service's workers' compensation liability policy.

19. Attorney's Fees. If either party hereto brings an action or proceeding to enforce the terms of this Agreement or to declare rights hereunder, the prevailing party in any such proceeding, action or appeal thereof, shall be entitled to reasonable attorney fees.

EXECUTED and effective as of the day and year provided herein.

_____,

_____

By:

Attest: _____

CONTRACTOR:

_____