

# Arizona Emergency Medical Systems, Inc.

## RED BOOK CHAPTER 2

### Framework for Medical Oversight Communications Guideline for On-Line Medical Direction

**Disclaimer:**

The AEMS Red Book is designed to be a resource document for use by Medical Direction Authorities responsible for the administrative, organizational and on-line medical direction of pre-hospital EMS personnel. It specifically recognized that variations from the guidelines contained within are not only acceptable, but also appropriate, depending on the individual circumstances of the involved areas and organizations.

By Statute and Rule, all advanced life support pre-hospital EMS personnel shall have administrative and online medical direction. These guidelines are not meant to act as a substitute, proxy or alternative to that medical direction. Any conflict between these guidelines and the individual EMS provider's medical direction shall default to the Administrative or On-Line medical direction.

This manual sets forth guidelines deemed by AEMS to be within the acceptable standard of medical care. It is specifically recognized that there are acceptable variations from these procedures and protocols, which may also satisfy the standard of care. This manual does NOT define, limit, expand or otherwise purport to establish the legal standard of care.

# FRAMEWORK FOR MEDICAL OVERSIGHT

*Procedure #9702*

*Approved by Board: November 2001*

*Developed by: Framework Committee*

*Complete Chapter Contents - Reviewed, Amended, and Approved by Board  
February 16, 2005*

## I. TERMINOLOGY

Because terminology is often confusing and contradictory, we define the following:

NOTE: Any terminology not herein further defined will be defined according to Arizona Department of Health Services/Bureau of Emergency Services (ADHS/BEMS) Administrative Rules and Regulations (AAC R9-25-101) and/or ARS §36-2201ff.

*Emergency receiving facility:* A designated medical institution that receives emergency patients on a 24-hour basis<sup>1</sup>. Also called "destination facility".

*Medical oversight:* A process of physician-directed quality management to ensure that patient contact, evaluation, care rendered and/or transport of prehospital and interfacility patients is medically appropriate and professionally accountable<sup>1,9</sup>. This operational framework consists of prospective, immediate (concurrent) and retrospective elements<sup>1</sup> in the form of written policies, procedures, and protocols<sup>11</sup>. Medical oversight includes all aspects of medical control and prehospital care system design, management, education, critiques and quality assurance<sup>1</sup>.

*Off-line medical direction:* Development and approval, by the base hospital medical director, of written treatment protocols that comply with ARS §36-2205, that authorize prehospital providers to render patient care without on-line medical direction.

*On-line medical direction:* Real-time guidance provided by medical direction authorities to prehospital providers by radio or telephone<sup>3,9</sup>. Includes direct communications and indirect communications as defined in Arizona Revised Statutes. Also called "on-line medical control"<sup>1,9</sup>, "direct medical control"<sup>1,11</sup> or "immediate medical control"<sup>9</sup>.

*Direct communications:* Information and medical direction from a physician conveyed by person-to-person, two-way radio, or telephone conversation.<sup>12</sup>

*Indirect communications:* Information and medical direction conveyed by an intermediary from within a certified ALS base hospital.<sup>12</sup>

*Medical direction authorities:* Medical personnel authorized by ADHS to render on-line medical direction to prehospital providers.<sup>12</sup>

*Administrative Medical Director:* A physician who has the overall responsibility for medical oversight and recertification for the base station, as well as recertification of assigned prehospital providers.

*Patch:* (1) Field to hospital contact which guides medical care, or plan of action, and/or communication that approves care already initiated.<sup>13</sup>; (2) The process of communicating with an administrative base station or receiving facility.

*Courtesy Notification:* Communication with an emergency receiving facility for information purposes only, after protocol-based medical direction has been initiated<sup>5,6</sup>. Must follow parameters as established in this framework. No on-line medical direction is needed<sup>5,6</sup>.

*Base Station:* Certified ALS base hospital as defined in Arizona Revised Statutes.<sup>12</sup> The base station provides logistical and supervisory support for prehospital providers assigned to it, including but not limited to the following: (a) medical oversight and on-line medical direction; (b) quality management and problem resolution; (c) training/continuing education<sup>6</sup>; (d) certification<sup>6</sup>. Also called "administrative base station"<sup>6</sup>

*Treatment protocols:*<sup>3,7,9</sup> Prehospital guidelines for utilizing treatments which are adopted pursuant to Arizona Revised Statutes (ARS §36-2205).<sup>12</sup> Written procedures providing prehospital providers with a standardized approach to commonly encountered patient problems, thus ensuring consistent care<sup>1</sup>. These procedures usually relate to the assessment, diagnosis, triage, treatment, transport and destination of patients<sup>1</sup>. They are based on national standards and the collective expertise of the local, regional and state medical direction authorities<sup>8</sup>. Several types exist: action (brief reference format, may be in algorithm form)<sup>3,4</sup>, teaching<sup>4</sup> (comprehensive)<sup>3</sup> and quality improvement<sup>4</sup>. See also "standing orders".

*Standing orders:* Written orders which authorize prehospital providers to render certain treatment modalities prior to initiation of direct communication with the ALS base hospital.<sup>12</sup> These orders are based on criteria established and approved by AEMS.

*Triage protocols:* Regionalized prehospital guidelines for the selection of an emergency receiving facility to which emergency patients are transported, based on criteria established and approved by AEMS.<sup>12</sup>

*Protocol-Based Medical Direction:* Detailed procedures, medications guidelines and triage guidelines for general and specific patients and disorders, established by medical oversight and approved by AEMS, for utilization by field units within well-defined parameters as detailed in this medical direction framework. Also known as “predetermined medical direction”.

*Protocol-based program:* A well-defined system of operation for medics utilizing protocol-based medical direction, reviewed by the *Patient Management Functional Group* for compliance with this framework and approved by AEMS. Also refers to the written documentation of the particular protocol-based program.

*Quality management (QM):* The concept of a continual cycle of evaluation and improvement<sup>1</sup>.

*Prehospital case reviews:* Continuing education conducted by the ALS base hospital under the direction of the base hospital medical director and ALS base hospital prehospital manager for the purpose of reviewing and evaluating prehospital provider and base hospital personnel performance.

*Communication Protocols:* Written guidelines that provide:

- a. The circumstances and patient conditions which require on-line medical direction;
- b. The circumstances and patient conditions which allow courtesy notification;
- c. The facility that will exercise on-line medical direction for a given emergency;
- d. Backup procedures for communications equipment failure or inability of on-line medical direction to respond.<sup>12</sup>

## II. ASSUMPTIONS

1. Historically, there is a continuum of medical direction:
  - a. Standing orders only; no on-line medical direction.
  - b. On-line medical direction by non-physicians.
  - c. On-line medical direction by non-physicians on critical calls.
  - d. On-line medical direction by physicians, after standing orders.
  - e. On-line medical direction by physicians on all calls.
2. Any of the types of medical direction or a combination thereof (including protocol-based medical direction) may be acceptable within the AEMS region, given the presence of local physician involvement and a system of quality management that is appropriate for the specific type of medical direction.
3. The type of medical direction utilized must be stipulated.

### III. COMMUNICATION

#### *CRITERIA: MANDATORY ON-LINE MEDICAL DIRECTION*

ALL EMERGENT OR CRITICAL PATIENTS PRESENTING TO AN EMERGENCY RECEIVING FACILITY REQUIRE PRIOR NOTIFICATION (UTILIZING DISPATCH, INCIDENT COMMAND, CAPTAIN OR AMBULANCE PERSONNEL).

PROTOCOLS SHALL SPECIFY WHICH PATIENT CONDITIONS SHALL REQUIRE ON-LINE MEDICAL DIRECTION, **and which patient conditions will not require on-line medical direction.** General recommendations are:

1. Additional treatment not covered by the protocol is required.
2. Field termination of codes.
3. Narcotics or controlled drugs are utilized.
4. Any time a provider is faced with a difficult or confusing situation where proper treatment or transport is unclear.
5. Triage question.

#### *CRITERIA: ALS RESPONSE*

PROPOSED PROTOCOLS SHALL SPECIFY WHICH PATIENT CONDITIONS MAY REQUIRE ALS RESPONSE.

The following patient conditions may require ALS response:

1. ANY patient emergency that judgment suggests ALS evaluation is necessary to conform to accepted professional medical standards of EMS provider performance.
2. Cardiac or respiratory arrest.
3. Near-drowning.
4. Chest pain.
5. Difficulty breathing; signs/symptoms of respiratory distress.
6. Cardiac dysrhythmias.
7. Level I trauma. See Level I Trauma Triage Guidelines.
8. Hypotension, as evidenced by systolic blood pressure < 90 mmHg and/or other signs/symptoms of hypoperfusion.
9. Hypertension, as evidenced by diastolic blood pressure > 120 mmHg and/or other signs of circulatory compromise. Eclampsia or pre-eclampsia.
10. Level I burns. See Level I Burns Triage Guidelines.
11. Altered level of consciousness: history, current and/or resolved.
12. Stroke: suspected and/or obvious.
13. Overdose, accidental poisoning or toxic exposure: suspected or known.
14. Imminent or post childbirth. Spontaneous abortions. Complications relating to pregnancy or labor.

15. Excessive body temperatures with convulsions or delirium, including heat-related disorders.
16. Seizure: first-time or repeated.
17. Severe orthopedic emergencies, including hand emergencies.
18. Terminally-ill patients in distress.
19. Prehospital Health Care Directives (DNR). Requests to withhold or terminate resuscitation.
20. Combative or uncooperative patients. Patients physically restrained and/or request for restraints.
21. Suicidal patient: attempt or verbalization.
22. Minor under age 18, serious injury or illness (not necessarily Level I), whether or not parent or legal guardian is present. See Pediatric Triage Guidelines.

*FORMAT: COURTESY NOTIFICATION and PATCH*

PROTOCOLS SHALL GIVE GUIDELINES FOR FORMAT OF PATCHES UTILIZING ON-LINE MEDICAL DIRECTION AND COURTESY NOTIFICATION. A standardized format shall be encouraged.

*ADMINISTRATIVE BASE vs. RECEIVING FACILITY PATCH*

QUESTIONS REGARDING WHEN THE MEDIC WILL CONSULT WITH THE ADMINISTRATIVE BASE VS THE RECEIVING FACILITY SHALL BE DECIDED SUBREGIONALLY OR AGENCY-WIDE AS PER SPECIFIC PROTOCOL.

It will NOT be appropriate to patch with the receiving facility in the following situations:

1. Question regarding triage.
2. Refusals.
3. Receiving facility busy (revert to administrative base).
4. Hazmat incident (utilize specific protocols).

In addition, patches will revert to the administrative base station in the following circumstances:

1. Receiving facility refuses or relinquishes medical direction.
2. Field termination of codes.

## *OTHER*

Any regional ADHS Certified Base Hospital may accept a patch.

The facilities which may receive Courtesy Notifications shall be defined within each protocol.

An RN or above may accept a Courtesy Notification.

A medical direction authority (as defined by ADHS/BEMS) may accept a patch for on-line medical direction.

All patches and Courtesy Notifications shall be recorded.

## **IV. RESPONSIBILITY/ACCOUNTABILITY**

The physician directing or performing the patch is responsible for the orders given. The physician who approved the protocols is responsible for care rendered under a protocol-based program as long as the medics perform within that protocol.

## **V. TRIAGE**

All triage shall be based on and in compliance with current AEMS Triage Guidelines.

## **VI. MEDICATIONS and PROCEDURES**

**PROTOCOLS MUST NEVER EXCEED THE SCOPE OF PRACTICE DEFINED FOR PREHOSPITAL PROVIDERS BY THE STATUTES OF THE STATE OF ARIZONA.**

Although the protocol may operate entirely within the scope of practice of the medic, this does not give permission for that program to be all-encompassing. The above statement is only meant to allow for future changes in treatments.

Protocols shall list the specific medications and procedures which medics may administer/perform under that protocol program.

Controlled substances will require on-line medical direction.

## **VII. MEDICAL OVERSIGHT COMMITTEE**

Medical appropriateness will be determined by a multidisciplinary Patient Management Functional Group responsible to the AEMS Board of Governors. The Functional Group shall be tasked to hold such meetings as deemed necessary to fulfill its oversight responsibilities. The Functional Group shall give an activity report to the Board of Governors at such times as shall be deemed appropriate.

## VIII. CONTINUOUS QUALITY IMPROVEMENT

Continuous quality improvement is a critical component of any protocol-based program and must be in compliance with ADHS Regulations. Reference is made to AAC R9-25-206. (See Appendix A)

### *DOCUMENTATION*

Prehospital encounter forms must include the following information with regard to communication:

1. Type of communication (courtesy notification vs. on-line medical direction).
2. Recipient of communication (physician, EICN, RN, Nurse Intermediary, PA).
3. Facility receiving the communication.
4. Any changes which occurred as a result of the communication.
5. Identity of Administrative Base, if not agency-wide.

Prehospital encounter forms shall be screened for at least the following: (A minimum of 5% of all forms or 25 forms/month is recommended [whichever is greater]. Additional information may be screened according to local needs.)

1. Protocol completeness: Was the information listed above included on the form?
2. Protocol error: Was there an error in execution of a protocol?
3. Protocol appropriateness: Was the correct protocol utilized?

### *DATA COLLECTION*

Agencies utilizing protocol-based programs shall collect as a minimum the following data. Report shall be made to the Patient Management Functional Group at the conclusion of the first six (6) months of operation under the protocol. A summary report from the Patient Management Functional Group may be requested at any time from any or all programs

1. Number and types of communication by prehospital providers.
  - a. Number of courtesy notifications.
  - b. Numbers of patches utilizing on-line medical direction.
  - c. Number and type of communications done with receiving facilities.
  - d. Number and type of communications done with Administrative Base.



2. General identification of problems encountered to include the following:
  - a. Investigation/resolution (Report system problems, not individual).
  - b. Method of tracking and trending to identify problem areas.
  - c. Reporting methods and algorithm.

The Patient Management Functional Group shall determine medical appropriateness of programs and specific treatment algorithms based on such criteria as scope of practice, local consensus of base station medical directors, regional guidelines and State standards and guidelines.

The reporting period may be extended by either the Patient Management Functional Group) or the agency. Mature programs (after the first six-month probationary period and satisfactory review by the Patient Management Functional Group) may be requested to submit a report periodically to the Patient Management Functional Group with requested items.

The Patient Management Functional Group will report data and system function to the Board of Governors as requested or at appropriate intervals.

## **IX. EDUCATIONAL COMPONENTS**

The educational requirements of a protocol-based program shall consist of several elements: initial orientation, implementation, comprehensive program review (including repeat training as needed) and ongoing quality management activities.

### *INITIAL ORIENTATION*

Using effective teaching methodologies, the proponents of a new protocol-based program shall review the concepts of medical control, including on-line medical direction, off-line medical direction, standing orders and agency guidelines. They shall also explain the rationale for a change in medical direction. Then the protocols and parameters of the program shall be introduced. A discussion shall be held of documentation requirements. Basic comprehension shall be verified and reinforced at this point utilizing such tools as scenario review, practice of patching including courtesy notification, and a written examination as deemed appropriate.

### *IMPLEMENTATION*

During the initial implementation phase, 100% of all calls shall be reviewed in a timely manner with attention to both tapes and patient encounter forms. Individual providers will be counseled to review their thought processes, provide positive feedback and correct any misconceptions.

Once a suitable threshold is attained, small group review sessions shall be held. A suitable threshold shall be determined by volume of patient contacts:

High volume--review after one week or after two or three shifts

Small volume--review after set amount of patients (e.g., 5-10)

An effort shall be made to meet in the provider's environment to encourage discussion in a relaxed atmosphere.

### *COMPREHENSIVE REVIEW*

A comprehensive review of the program shall be held, including any repeat of formal training (as described in I.) as necessary. This shall be held at three to six months after initial implementation to discuss any program changes, resolve any problems and review any common errors or misconceptions.

### *ONGOING CONTINUOUS QUALITY IMPROVEMENT ACTIVITIES*

Ongoing continuous quality improvement activities include but are not limited to the following:

1. Identification of agency and base station program coordinators including the lead contact person and the process for problem resolution.
2. Joint planning, coordination, and resolution of program issues.
3. Continuous quality management to include the review of at least 25 calls per month or 5% (whichever is greater).
4. Inclusion of protocols in Tape and Charts and other continuing education classes.

## **X. CHECKLIST FOR CANDIDATE PROGRAMS**

Utilization shall be made by the Patient Management Functional Group of the attached Checklist for Protocol-Based Programs in its review procedures.

Sources:

- 1 Kuehl AE: Glossary In Kuehl AE, National Association of EMS Physicians Prehospital Systems and Medical Oversight, Second Edition. Mosby Lifeline, St. Louis, 1994, 477-488.
- 2 Roush WR, McDowell RM, Pons PT: Emergency medical services systems In Roush WR, Principles of EMS Systems, Second Edition. ACEP, Dallas, 1994, 11-24.
- 3 Roush WR: Medical accountability In Roush WR, Principles of EMS Systems, Second Edition. ACEP, Dallas, 1994, 227-244.
- 4 Polsky SS, Johnson JJ: Continuous quality improvement in EMS In Roush WR, Principles of EMS Systems, Second Edition. ACEP, Dallas, 1994, 291-312.
- 5 Preamble, PFD Medical Control Receiving Facility Trial, 7/6/94.
- 6 PFD Medical Direction Task Force Paramedic Survey, 1993
- 7 Vann, PW: Recommendations for a framework in on-line and off-line medical control, Draft June 26, 1996, 1-2.
- 8 Paris PM: Prehospital on-line medical command (OLMC). Unpublished.
- 9 Holroyd BR, Knopp R, Kallsen G: Medical control - Quality assurance in prehospital care. *JAMA* 1986;256:1027-1031.
- 10 Wuerz RC, Swope GE, Holliman CJ, Varquez-de Miguel G: On-line medical direction: A prospective study. *Prehosp and Disaster Med* 1995;10:174-177.
- 11 As quoted in Section Two, Medical oversight elements In Kuehl AE, National Association of EMS Physicians Prehospital Systems and Medical Oversight, Second Edition. Mosby Lifeline, St. Louis, 1994, 178-180.
- 12 ADHS/BEMS Rules and Regulations. Arizona Revised Statutes, Section 36.
- 13 ADHS/BEMS State Data Collection Committee, 1990 (w/ revision for term "consult").

## PROTOCOL-BASED PROGRAM CHECKLIST

*Approved by Board:* June 18, 1997

*Developed by:* Framework Committee

**NAME of PROGRAM:** \_\_\_\_\_

**APPROVED,**  
Patient Management Functional Group

### *BASIC INFORMATION*

\_\_\_\_\_ Letter of Intent.

\_\_\_\_\_ Administrative Medical Director.

Name: \_\_\_\_\_

\_\_\_\_\_ The type of medical direction utilized.

Type: \_\_\_\_\_

### *TRIAGE*

\_\_\_\_\_ All Triage Protocols are based on and in compliance with current AEMS Triage Guidelines.

### *COMMUNICATION*

\_\_\_\_\_ Protocols specify which circumstances and patient conditions shall require on-line medical direction.

\_\_\_\_\_ Protocols specify which circumstances and patient conditions allow courtesy notification.

\_\_\_\_\_ Protocols specify which patient conditions shall require ALS response.

\_\_\_\_\_ Protocols give guidelines for format of patches utilizing on-line medical direction and courtesy notification. A standardized format is followed.

\_\_\_\_\_ Protocols specify when the medic will consult with the administrative base vs the receiving facility.

\_\_\_\_\_ Protocols specify when it will NOT be appropriate to patch with the receiving facility.

- \_\_\_\_\_ Protocols in all cases require some method of receiving facility notification.
- \_\_\_\_\_ List of regional ADHS Certified Base Hospitals which may accept a patch from providers within the program.  
Attach list.
- \_\_\_\_\_ List of facilities which may receive a Courtesy Notification from providers within the program.  
Attach list.
- \_\_\_\_\_ Backup procedures are present in the event of communications equipment failure or inability of on-line medical direction to respond.
- \_\_\_\_\_ List of whom may accept a patch for on-line medical direction, by title only (MD, etc.):  
  
\_\_\_\_\_
- \_\_\_\_\_ List of whom may accept a Courtesy Notification, by title only (RN, etc.):  
  
\_\_\_\_\_

### *MEDICATIONS AND PROCEDURES*

- \_\_\_\_\_ List of specific medications and procedures which medics may administer/perform under the protocol program. Attach list.
- \_\_\_\_\_ Patches are screened to determine that all utilization of controlled substances involve on-line medical direction.
- \_\_\_\_\_ Protocols do not exceed the scope of practice defined for prehospital providers by the Statutes of the State of Arizona.
- \_\_\_\_\_ Program and its specific treatment algorithms are medically appropriate.

QUALITY MANAGEMENT

\_\_\_\_\_ All patches and Courtesy Notifications are recorded.

\_\_\_\_\_ Ongoing quality management activities include review of a representative number of calls to determine QM criteria as set forth in the Framework.  
(Check one:)

- \_\_\_\_\_ 5% of all patches (whichever is greater)
- \_\_\_\_\_ 25 patches/ month

\_\_\_\_\_ Prehospital encounter forms include the information with regard to communication established in the Framework.

\_\_\_\_\_ Utilization is made of the established AEMS Region Peer Review Procedure with inclusion of the Patient Management Functional Group as an oversight body with regard to protocol program questions.

\_\_\_\_\_ Data is collected as established in the Framework.  
Monthly average:

<u>Facility type</u>	<u>CN</u>	<u>OLMD</u>
Receiving Facility	_____	_____
Administrative Base	_____	_____

\_\_\_\_\_ Method exists for investigation and resolution of system and individual problems.

\_\_\_\_\_ Method exists for tracking and trending to identify problem areas.

EDUCATIONAL REQUIREMENTS

\_\_\_\_\_ Plans for initial orientation and implementation reviewed.

\_\_\_\_\_ An educational process is identified which includes algorithms which are scenario-based.

\_\_\_\_\_ Prehospital case reviews/continuing education are conducted by the ALS base hospital(s) under the direction of the base hospital medical director(s) and ALS base hospital prehospital manager(s).

\_\_\_\_\_ Problems encountered are identified by general description. Attach list.

*REVIEW/APPROVALS*

\_\_\_\_\_ Reviewed and approved by the Patient Management Functional Group for compliance with the Framework for Medical Oversight.

Date: \_\_\_\_\_

Chairman: \_\_\_\_\_

\_\_\_\_\_ Approved by AEMS Board of Governors.

Date: \_\_\_\_\_

Chairman: \_\_\_\_\_

## APPENDIX A

### AAC R9-25-206

#### **R9-25-206. Base Hospital Authority and Responsibilities (Authorized by A.R.S. §§ 36-2202(A)(3) and (4), and 36-2204(5) and (6))**

##### A. A certified base hospital shall provide:

1. Administrative medical direction to emergency medical technicians who require medical direction;
2. On-line medical direction to emergency medical technicians who require medical direction;
3. Continuing education that meets the standards established in R9-25-510, R9-25-610, and R9-25-611. Prior Department approval is not required.

##### B. A certified base hospital may:

1. Provide advanced skills training and ALS and BLS refresher training if it meets the standards established in subsection (I).
2. Utilize nurse intermediaries according to the standards established in R9-25-210.

##### C. Supporting Service Agreement: The Base Hospital shall execute a written contract with an agency which employs emergency medical technicians in a prehospital setting. The contract shall:

1. Require the base hospital to provide both administrative and on-line medical direction to the prehospital emergency medical technicians who are employed by the agency.
2. Be reviewed and updated yearly. The base hospital shall maintain written verification that the yearly review and update was performed.
3. Contain an addendum or exhibit that lists the name of each emergency medical technician assigned to the base hospital.
4. Require the agency to verify that only emergency medical technicians with current certification are assigned to the base hospital.
5. Require the agency to notify the base hospital in writing within 30 days of any termination or transfer of an emergency medical technician, or of any addition of an emergency medical technician to the base hospital for medical direction. The notification shall include the name, certification expiration date of the emergency medical technician, and the effective date of employment, transfer, or termination.
6. Establish a procedure to replace disposable, medical, and pharmaceutical supplies for the contracted provider agency after patient care has been terminated by the agency.
7. Contain a provision that assures the disposal of contaminated waste meets federal and state requirements.
8. Contain a provision that adopts a conflict resolution procedure specific to the agency that:
  - a. Investigates and resolves patient, physician, prehospital manager, and nurse intermediary complaints about the agency, its procedures, and agency personnel; and,
  - b. Investigates and resolves agency complaints about the base hospital, its procedures, the medical director, emergency physicians, nurse intermediaries, prehospital manager, or other base hospital personnel.
9. Require the agency to have working communication equipment that allows base hospital medical direction communication with emergency medical technicians in the field.
10. Contain a provision that establishes:
  - a. Written procedures to withdraw or suspend medical direction;
  - b. Written medical direction requirements for the emergency medical technicians; and
  - c. Written procedure for notifying the employing agency and the emergency medical technician of the withdrawal or suspension of medical direction.

##### D. The base hospital and the agency shall jointly develop and implement:

1. Written policies and procedures that all emergency medical technicians must follow. These policies and procedures shall include:
  - a. The form and content of required documentation for each emergency medical service incident;
  - b. The procedures that each category of emergency medical technician must follow in patient assessment;
  - c. Communication procedures for requesting, providing, and receiving medical direction;
  - d. A plan to provide patient outcome data to the agency with a supporting service agreement that protects confidentiality and considers budget constraints; and
  - e. A requirement for all prehospital medical personnel, operating under predetermined medical control and off-line medical control, to notify the receiving facility prior to arrival.



2. A written quality improvement plan that shall include:
  - a. At least 1 continuing quality improvement committee representative from each agency. One representative shall be from each level of certified emergency medical technicians for which the base hospital provides medical direction. The committee shall meet at least semi-annually, keep regular meeting minutes, evaluate complaints, develop continuing education courses, cooperatively work on quality management issues, and provide updates on prehospital issues which affect the base hospital or agencies with supporting service agreements with the base hospital.
  - b. A yearly requirement that the medical director, prehospital manager, physicians, nurses, all base hospital staff, and prehospital personnel complete a documented review of all new, modified, and deleted base hospital protocols or procedures.
  - c. Documented review by all medical direction authorities and prehospital personnel of all protocols and procedures which shall be done every 2 years in conjunction with the base hospital certification.
  - d. A system to review the following categories of prehospital patient encounters to assure that both prehospital and base hospital personnel followed established protocols and base hospital procedures:
    - i. Monthly random reviews of 5% of refusals to treat, to a maximum of 100 reviews per month;
    - ii. All code arrests;
    - iii. All "do not resuscitate" cases; and
    - iv. Monthly random reviews of 5% of advanced life support encounters, to a maximum of 1,000 reviews per year, with a minimum of 30 encounters reviewed per quarter.
  - e. A process and documentation procedure to develop a corrective action plan when review of cases indicates a lapse in following protocol or procedure.
3. A process for EMTs assigned to the base hospital to follow for submission of recertification applications to the base hospital prior to filing with the Department.
4. A written process for evaluating the prehospital activities of each EMT to assess the EMT's competency. The process shall require this evaluation to be completed prior to signing the application supporting recertification. The process shall also permit the base hospital medical director to elect to have the EMT-P or EMT-I pass an examination approved by the Department as a prerequisite to recertification if the medical director makes the request in writing submitted with the application. The process shall require the base hospital medical director to specify if the EMT-P or EMT-I recertification examination shall contain a written component, practical component, or both components.
- E. The base hospital shall establish an orientation program for the medical director, prehospital manager, nurse intermediaries, and base hospital physicians, that includes:
  1. Review of emergency medical service treatment and triage guidelines, policies, and procedures;
  2. Review of communication equipment available at the base hospital;
  3. Review of prehospital personnel levels of certification and treatment and patient care capabilities;
  4. Review of prehospital continuing quality improvement policies;
  5. Review of prehospital policy if concerns are identified or complaints are received about the base hospital;
  6. Review of Department rules, protocols governing prehospital treatment, and the drug box list;
  7. Review of the state and regional emergency medical service system; and,
  8. Review of the base hospital continuing education requirements for nurse intermediaries and base hospital physicians employed at or assigned to the base hospital.
- F. The base hospital shall:
  1. Assure that all emergency physicians who provide on-line medical direction to prehospital personnel meet the requirements established in R9-25-209;
  2. Assure that all newly appointed medical direction authorities complete the orientation program within 30 days of their appointment; and
  3. Assure that all medical direction authorities document and review all updated or modified protocols on a yearly basis.
- G. The base hospital shall provide the necessary communications equipment.
  1. The radio equipment shall be operational and compatible with the Department of Public Safety EMSCOM communications system or a local EMS communication system with a frequency and list of channels approved by the Department of Public Safety. The base hospital shall have communications equipment approved by the Department of Public Safety and be compatible with that of the prehospital emergency medical service agency.
  2. The equipment shall be operational at all times and be located in the emergency department permitting direct communication with emergency medical service personnel.
  3. The base hospital shall provide a dedicated telephone line to enable emergency prehospital care personnel to contact the base hospital directly.

4. All telephone and radio communication between the base hospital and prehospital emergency medical service personnel for the purpose of medical direction shall be recorded. The recording shall be kept for a minimum of 3 months. Should the medical director or prehospital manager identify a potential problem with the prehospital provider's reporting or if a review is required according to the Continuing Quality Improvement Plan, the base hospital shall keep the tape a minimum of 24 months from the date of the potential problem or required review. The tape may be destroyed if the base hospital makes a written report of the event. The base hospital shall maintain the written report for a minimum of 24 months from the date of the potential problem or required review.
  5. Requirements for the use of biotelemetry equipment may be established by the advanced life support base hospital medical director in the medical control plan for the base hospital.
- H. The base hospital shall establish the following communication procedures:
1. Provisions to notify a receiving facility of an incoming patient if notification has been made to the base hospital rather than the receiving facility.
  2. A written plan for alternative communications with field personnel in the event of disaster, communication equipment breakdown or repair, power outage, or malfunction.
- I. The base hospital shall provide education and training.
1. The base hospital shall provide 24 clock hours of continuing education per year that may be offered over a 9- to 12-month period.
  2. The courses shall follow the Department's requirements for continuing education for each level of EMT as described in Articles 5 and 6.
  3. The base hospital shall provide training for any new Department approved required treatment, protocol, or drug within 90 days of receiving notification from the Department that the training has been adopted in rule.
  4. The base hospital shall provide facilities, equipment, and audio-visual aids for the continuing education required by this rule.
  5. The base hospital shall include prehospital case reviews in the 24 clock hours of continuing education per year. Prehospital case reviews may be incorporated into didactic or clinical skills. The base hospital shall require the review to be prepared under the direction of the prehospital manager and medical director.
  6. The ALS Base Hospital may:
    - a. Provide advanced training that meets the following curriculum standards approved pursuant to A.R.S. § 36-2205 and published by the Department of Health Services, Emergency Medical Services, 1651 E. Morten Avenue, Suite 120, Phoenix, Arizona 85020, incorporated by reference and on file with the Department and the Office of the Secretary of State. This incorporation by reference contains no future editions or amendments:
      - i. Transcutaneous External Pacer (TEP) Procedure Training Curriculum, dated October 5, 1992; and
      - ii. Administration of Rectal Valium Procedure Training Curriculum, dated October 5, 1992; and
      - iii. Automatic Transport Ventilators Treatment Protocol and Training Curriculum, dated May 13, 1993; and
      - iv. Intraosseous Infusion (I.O.) Procedure Training Curriculum, dated July 1, 1992; and
      - v. Prehospital Blood Glucose Testing Procedure Training Curriculum, dated March 3, 1993.
    - b. Provide ALS refresher training that meets the requirements of the Arizona Advanced Life Support Refresher and Challenge Curricula, dated July 22, 1994, published by and available at the Department of Health Services, Emergency Medical Services, 1651 E. Morten Avenue, Suite 120, Phoenix, Arizona 85020, incorporated by reference and on file with the Department and the Office of the Secretary of State. This incorporation by reference contains no future editions or amendments. The ALS Base Hospital shall comply with all of R9-25-403, R9-25-404(B), R9-25-406(A), R9-25-407(C),(E),(K), and (L), and R9-25-410.
    - c. Provide BLS refresher training that meets the requirements of the Arizona Basic EMT Refresher Curriculum, dated July 22, 1994, published by and available at the Department of Health Services, Emergency Medical Services, 1651 East Morten Avenue, Suite 120, Phoenix, Arizona 85020, incorporated by reference and on file with the Department and the Office of the Secretary of State. This incorporation by reference contains no future editions or amendments. The ALS Base Hospital shall comply with all of R9-25-303, R9-25-304(B), R9-25-305, R9-25-307(B), (D), (H), (I), and (J), and R9-25-310.
- J. Drug Control. The base hospital shall:
1. Establish a written drug box security plan and documentation system; and
  2. Develop a written narcotic wastage plan.

#### **Historical Note**

Adopted effective October 15, 1996 (Supp. 96-4). Amended effective November 30, 1998; filed in the Office of the Secretary of State November 24, 1998, under an exemption from the provisions of the Administrative Procedure Act pursuant to A.R.S. § 36-2205(C) (Supp. 98-4).