

POSITION PAPER

NATIONAL ASSOCIATION OF EMS PHYSICIANS

MEDICAL DIRECTOR FOR AIR MEDICAL TRANSPORT PROGRAMS*

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INTRODUCTION

The National Association of EMS Physicians (NAEMSP) recognizes that the position of medical director of an air medical transport program is an integral part of the program. Therefore, guidelines for education, experience, and performance of the medical director are essential to ensure quality patient care and provide a safe, proficient, and cost-effective operation.

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DISCUSSION

It has been decades since the initial use of helicopters to evacuate wounded soldiers directly from the battlefield. During the Vietnam conflict, a system was employed that not only provided evacuation, but also provided the initiation of medical care to the wounded at the front line. These helicopter programs were supervised by the military medical corps with the assistance of flight surgeons, many of whom were members of the Aerospace Medical Association. Military models served as the basis for development of civilian medical evacuation programs.

Since the 1970s, air medical transport programs, and national organizations with interest in air transport, have increased in number. These organizations share the common goal of providing a safe, efficient, and well-organized system for delivering care to critically ill and injured persons. Furthermore, these groups were instrumental in implementing policies and procedures to attain these goals.

Air medical-related organizations include the Association of Air Medical Services, the National Flight Paramedics Association, the National Flight Nurses Association, the National Association of Air Medical Communication Specialists, the National Emergency Medical Services Pilots Association, the National Association of EMS Physicians, the Commission on Accreditation of Medical Transport Systems, and the Air Medical Physician Association. The Aerospace Medical Association remains active in advancing air medical issues, particularly for the military.

The roles, responsibilities, and qualifications for the medical director have been addressed partially by some of the above-mentioned organizations. All groups who have published on or discussed this issue have recognized the diversity of physicians in this position and have directed their guidelines at general attributes rather than at a specific specialty. Most recently, the Commission on Accreditation of Medical Transport Systems has published standards describing the qualifications and role of the medical director.

The program's mission statement must be considered when selecting criteria for a medical director. Most programs deal with a wide spectrum of patient care settings, from out-of-hospital trauma and medical emergencies to

interfacility transport of critical care patients. Furthermore, patient characteristics encompass myriad adult, pediatric, neonatal, and obstetric diagnoses. Clearly, with this diversity of disease process and acuity, the position of medical director must be filled by a physician with broad-based training and expertise.

Air medical and out-of-hospital care continues to evolve. Therefore, recommendations must allow for expected future growth and transition. In fact, the multiple pathways that have led to direction of an air medical transport program all have characteristic strengths and weaknesses. Primary care specialties such as medicine and surgery can provide a broad knowledge of acute illness and critical care, but these training programs tend to provide little or no orientation to aviation and aeromedical issues. Emergency medicine training programs provide a broad education with respect to acute management issues and often include exposure to air medical transport, but this experience is usually limited in duration (e.g., one-month rotation) and scope (e.g., helicopter transport vehicle only). As a subspecialty of preventive medicine, board certification in aerospace medicine provides excellent grounding in issues such as flight physiology but is not intended to train physicians in critical care issues. Until formal training programs are defined and available that provide all necessary qualities, the goal should be to ensure that medical directors possess the necessary information to safely oversee the programs. Prospective medical directors should first meet the guidelines for flight physicians (refer to the NAEMSP position statement "Flight Physician Training Program—Core Content," which follows on page 458 in this issue), with further guidelines for directorship outlined below.

GUIDELINES FOR MEDICAL DIRECTORS OF AIR MEDICAL TRANSPORT PROGRAMS

Education, Experience, and Licensure

1. Licensed to practice in the state where the program is based, and board certification in an area appropriate to the care as defined by the program's mission statement and mission profile
2. Familiarity with out-of-hospital and in-flight assessment and care, monitoring capabilities, and the limitations of the flight environment
3. Education, training, and/or experience in the program's scope of care (and age range) as defined by the mission statement and mission profile
4. Knowledge in both air and ground emergency medical services (EMS) services
5. Knowledge and understanding of local, state, and federal laws and protocols affecting EMS and interfacility patient transport
6. Current training or experience in advanced resuscitation and care for adult and neonatal/pediatric patients with both traumatic and nontraumatic diagnoses
7. Knowledge and understanding of the effects and stresses of altitude on the patient, crew, and equipment
8. Knowledge and understanding of infection control and Occupational Safety and Health Administration regulations, Commission on Accreditation of Medical Transport Systems standards, and (if hospital-based) Joint Commission on Accreditation of Healthcare Organizations regulations
9. Understanding of aircraft capa-

bilities, safety issues, weather minimums, and Federal Aviation Administration rules and regulations

10. Familiarity with communications and dispatch, including direct (online) medical oversight
11. Familiarity with international transport issues, including transport brokering and medical transport via the airlines
12. Understanding of relevant national and state-specific legislative issues
13. Familiarity with stress management
14. Knowledge of quality improvement theories and applications
15. Knowledge and understanding of business issues such as personnel management, budget planning, and financial management
16. Knowledge and understanding of disaster and mass-casualty planning
17. Knowledge of the impact of ethical and legal issues on air medical transport
18. Familiarity with the relevant medical organizations
19. Knowledge of adult education techniques

Administrative and Operational Duties

1. Assures high overall quality of patient care in conjunction with other health care professionals in the program
2. Develops and/or approves patient care guidelines
3. Develops and/or approves operational and safety protocols and procedures as well as crew configuration, including communications and dispatch
4. Participates in hiring of air medical and communications personnel

5. Participates in financial and reimbursement issues affecting the program
6. Responds to problems or issues affecting the program
7. Develops and/or adheres to a reporting structure and meets regularly with administration
8. Participates in all administrative decisions that impact patient care
9. Participates in quality-improvement and risk-management programs and in the Joint Commission on Accreditation of Healthcare Organizations process
10. Participates in short- and long-term planning
11. Participates in local and regional EMS and disaster planning, and is familiar with the program's post-incident plan for responding to a transport vehicular crash
12. Approves the selection of the biomedical equipment and medications that will be used by air medical personnel
13. Establishes liaisons and working relationships with referring, accepting, and medical-control physicians who will participate in the care rendered by the program, as well as fosters good relations with hospital medical staff; has ultimate responsibility for providing a high level of direct and indirect medical oversight for the transport team
14. Participates in the initial training and continuing education of all air medical personnel to ensure that they are currently certified and meet appropriate training and certification specific to air medical transport
15. Works collaboratively with chief flight nurse (or equivalent) and program administrator (or equivalent) on a procedure for the management of complaints
16. Participates in marketing, public relations, and educational activities for the program.
17. Establishes criteria for utilization of air medical services and review for appropriateness
18. Participates in aircraft selection and the design of the medical interior to ensure that the goals of the mission statement are met
19. Participates in the selection of the air operator and personnel to the extent that the air transport program can meet its mission statement
20. Considers participating in air medical research and/or organizations
21. Considers participating in the local, state, and federal legislative processes that affect the air medical care

SUMMARY

The NAEMSP recognizes the multifaceted and integral position of a medical director for an air medical transport program and the EMS community at large.

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