



STAFFING OF CRITICAL CARE TRANSPORT SERVICES

STATEMENT OF PROBLEM

There are no nationally enforced minimum standards for the qualifications of health care providers transporting critically ill and injured patients.

SIGNIFICANCE

Specialty critical care transport (CCT) of critically ill or injured patients often utilizes programs serving large geographic areas, usually encompassing multiple counties and often covering multiple states. Policies and regulations may vary significantly from one political area to another. Critically ill patients require providers with highly sophisticated and specialized medical and transport knowledge to assure the provision of an adequate level of care. Medical care providers and public consumers utilizing critical care transport services, should be able to expect a nationally consistent level of care.

BACKGROUND

Ground emergency medical services (EMS) systems were developed in the late 1960's to provide pre-hospital care with an emphasis on providing initial stabilization of ill and injured patients in the field and during transport. The initial use of helicopter and fixed-wing transport of critically ill or injured patients can be traced primarily to the military experience during the Korean and Vietnam conflicts. Civilian use in the U.S. began in the late 1960's, and the first formal hospital-based helicopter transport service was initiated in October of 1972 at St. Anthony's Hospital in Denver, Colorado. The best estimate is that there are currently over 800 air medical helicopters in service in the United States. Critical care transport teams now use ground, helicopter, and fixed wing vehicles in a variety of combinations to provide both on-scene and interfacility services.

Education for health care providers involved in critical care transport varies widely: 110 hours for an Emergency Medical Technician (Basic), 1100 hours for an Emergency Medical Technician (Paramedic), two to four baccalaureate years for Registered Nurses, and postgraduate education for physicians. There is some content overlap between the various healthcare professions, notably in the stepwise progression of Emergency Medical Technician training and in the development of bridge programs for paramedic and nursing license exam eligibility. Emergency Medical Technician training is focused on out-of-hospital, short-term care. Nursing education focuses on in-hospital care of a longer duration.

The growing demand for highly sophisticated critical care transport services has, in part, resulted from the rapidly increasing technological complexity of medical care. Resource specialization is clearly associated with improved patient outcomes, and the most sophisticated and technologically advanced treatments are often only available at regional referral centers. There is, therefore, a need to transfer those patients requiring specialty care to the specialty care centers.



Patient care technology has progressed to the point that invasive monitors and assist devices such as mechanical ventilators, central venous catheters, arterial catheters, intra-aortic balloon pumps, and ventricular assist devices are now ubiquitous in the hospital critical care unit and in critical care transport. In addition to technological sophistication, an ever-increasing pharmacy characterizes emergency and critical care settings. The proper

use of such equipment, techniques, and medications depends on specialized training and a complex theoretical understanding of both normal and abnormal physiologic functioning. Interfacility transports represent the overwhelming majority of patient encounters at critical care transport agencies. Accordingly, the critical care transport services providing critical care have become a functional extension of hospital emergency and critical care services. A major advantage to the use of critical care transport services is the ability to provide care prior to and during transport at a level of sophistication available only in a referral center's emergency, specialty, and critical care units. In the hospital setting, physicians and nurses are the primary care providers for patients requiring the most advanced medical technology and care. Registered nurse care availability is associated with patient outcomes. The National Highway Traffic and Safety Administration and the Commission on the Accreditation of Medical Transport Services are multidisciplinary panels with consensus guidelines on standards for critical care transport. Both entities recommend that transport providers have specialty training in transport-specific topics, and both describe appropriately matching personnel to the transport team mission. For critical care and specialty care transport, both identify the need for medical expertise that is not included in traditional nursing or paramedic curricula.

ASSOCIATION POSITION

The Air & Surface Transport Nurses Association (ASTNA) believes that services providing critical care transport are functional extensions of hospital emergency departments, and specialty/critical care units. ASTNA further believes that staffing for these services minimally consist of at least one professional, registered nurse who has completed training specific to transport and posses extensive experience and expertise in caring for critically ill and injured patients. Finally, ASTNA believes that nurses employed by critical care transport services who respond to and transport patients from the scene of injury should have training in the unique aspects of prehospital care.

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