Air medical transport aircraft, sometimes referred to as "ambulances" are of 2 types: rotor wing or helicopter and fixed-wing or jet/airplane. Helicopters provide on-scene responses for brief hospital-tohospital transports, whereas fixed-wing aircraft provide longer transports across country and between airports.⁴ Helicopter air ambulances make up the majority, approximately 74%, of all air ambulances. Although many may assume helicopters are most frequently used for on-the-scene response to motor

KEY POINTS

- There are no evidence-based standards for the most effective orientation process of air medical personnel.
- The Dorothy Ebersbach Academic Center for Flight Nursing prepares air medical personnel for unstructured environments, organizes disaster-response training, and conducts research to build evidence for safe practice.
- Nurse leaders should be aware of the need to standardized air medical transport training in order to ensure provider safety and improve patient care outcomes.

"golden hour" after injury occurs, can significantly improve the chance for survival and recovery.³ Air ambulance helicopters, with their ability to descend vertically at the scene of an accident and quickly shuttle to landing areas at or near hospitals, can significantly reduce patient transport time.³ vehicle accidents, the majority of transports are interfacility in nature, transferring from a rural hospital to a higher trauma-level hospital.⁴ Air Methods, the largest air ambulance provider, reported that in June 2016, approximately 70% of their flights were interfacility and 30% were responses at the scene.⁴

INCIDENCE

to train advanced practice nurses in a simulated environment to enhance their ability to develop a plan of care for transferring critically ill patients from unstructured environments to definitive care.¹

The Dorothy Ebersbach Academic Center for Flight Nursing (DEACFN) at the FPB School of Nursing at Case Western Reserve University in Cleveland, Ohio was founded in 2002 and is part of the Master of Science in Nursing Adult-Gerontology Acute Care Nurse Practitioner (AG-ACNP) program. The DEACFN prepares advanced practice nursing students to deliver quality safe patient care in unstructured environments, organizes interprofessional disasterresponse drills during its annual summer camp, and conducts research to build evidence-based practice with the air medical transport industry.¹⁵

In 2014, faculty at FPB's DEACFN collaborated with industry leaders to design a full-scale Sikorsky S76 helicopter simulator that allows flight faculty to select any 2 flight coordinates in the world, customizing a flight appropriate for their learners. The system created by Redbird Flight Simulations enables faculty to select the time of day with realistic weather patterns, turbulence, and phases of flight. The goal of the DEACFN is to prepare interdisciplinary air medical transport teams in collaborative practice, research, and leadership utilizing highly structured experiential learning activities with measurable outcomes.¹⁵ The center has trained nearly 600 experienced national air medical crewmembers over the past 2 years with plans to expand training to the interdisciplinary team including flight physicians, paramedics, and fire-rescue personnel. Preliminary data suggest that training at the DEACFN has improved competency of new and experienced crewmembers through shortened orientation, lower rates of accidents and near misses, as well as improved quality and safe patient care practices during medical transport in civilian environments.

NATIONAL TRAINING EXAMPLE

In 2016, the DEACFN hosted their 15th annual flight camp dedicated to trauma and critical care transport to meet the learning needs of 29 graduate critical care nurses from Puerto Rico.¹⁶ Graduate nurses were prebriefed on safety protocols prior to participating in various transfers and in-flight patient scenarios. Faculty observed and evaluated the graduate nurses' ability to manage the dynamic needs of the patient while providing prompts with the aid of 2 interior-mounted cameras and aviation headsets. Video recording the inflight simulations enhanced faculty's ability to review and debrief scenarios with the graduate nurses while reinforcing Environment. January 2018. https://cdn.ymaws.com/www. astna.org/resource/collection/4392B20B-D0DB-4E76-95 9C-6989214920E9/ASTNA_Safety_Position_Paper_2018_ FINAL.pdf. Accessed August 10, 2019.

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