

Industry voice



A case for air ambulance officers

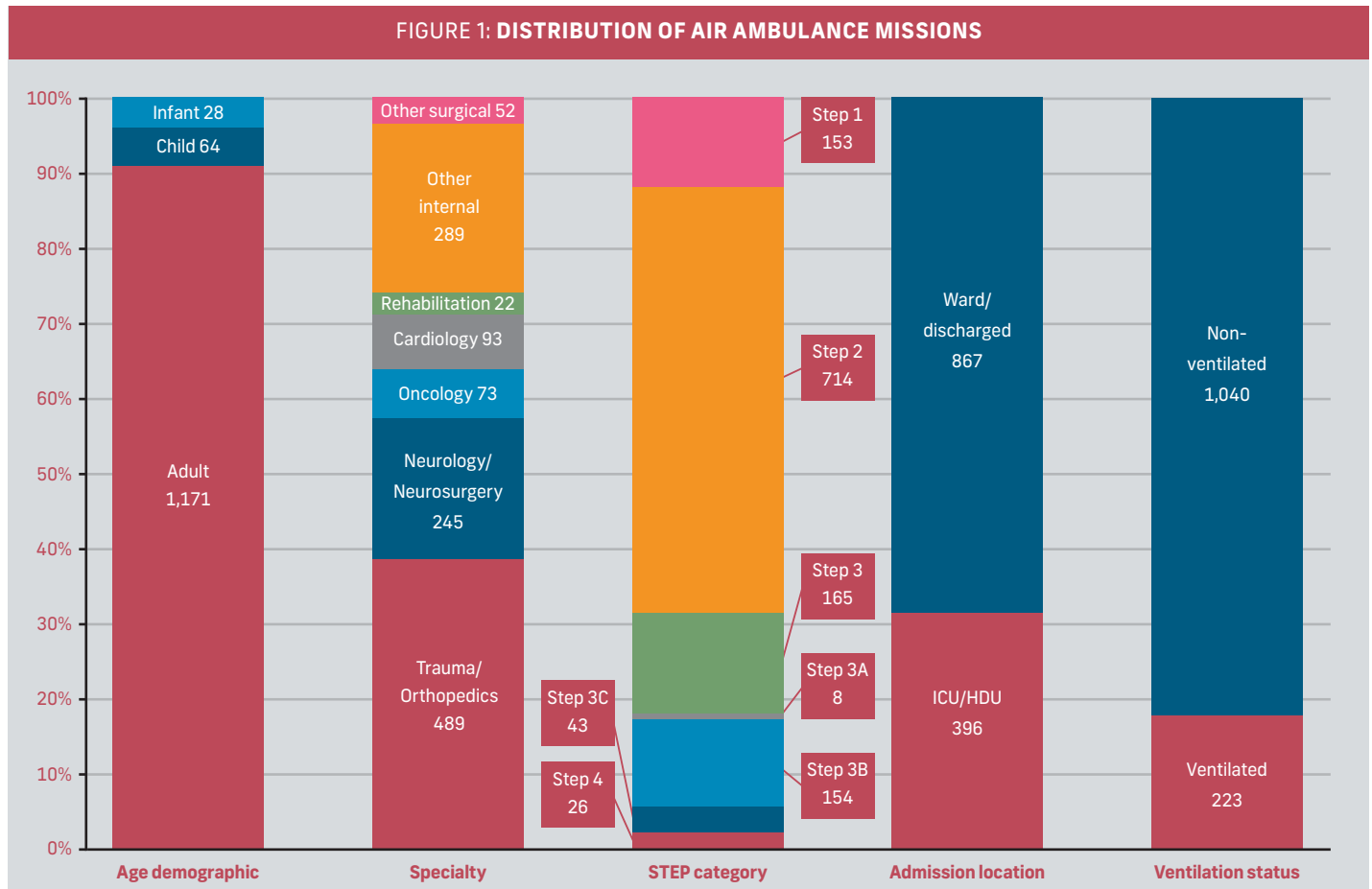
As medical staff shortages grow, **Dr István Lunczer**, Medical Director of TrustAir Aviation, asks if Hungary's ambulance officer qualification could provide a solution

At TrustAir Aviation we continuously try to provide answers to the newer and newer challenges of our time. After having issued the pioneering virtual

started to consider non-specialist doctors. As a result of this shortage, availability of fixed-wing ambulance aircraft decreases, especially during the touristic summer high season. Patient escort onboard commercial

STEP^I. At TrustAir Aviation we had a similar observation, as evidenced by analyzing more than 1,200 patients from our historical data (Fig 1), with 68% of our total number of patients belonging in STEP I or II.

FIGURE 1: DISTRIBUTION OF AIR AMBULANCE MISSIONS



reality (VR) based training tool EmergenSIM last year, in 2024 we will introduce a new system that is not available today in Europe. Having operated for nine years, we identified a continuously increasing problem in the European air ambulance market and decided to find a solution.

Europe is facing a serious HR crisis in the healthcare industry, affecting all kinds of healthcare workers (HCWs), including physicians. Well-trained specialists are hard to find. In our industry, a week-long absence from home is common, work-life balance is difficult to maintain. Private and public hospitals compete for specialists, pay more and more to attract or retain them, while the air ambulance industry could not afford similar wages. Such financial competition within the industry is simply not sustainable. Some operators have already

flights may serve as a workaround, but this option is also quite limited in terms of availability, flexibility, and patient eligibility (Lufthansa already started declining escorted patients back in 2022, low-cost carriers do not offer stretcher solutions at all, etc.). Recognizing these challenges, TrustAir Aviation has investigated benchmarks, the legal environment, and has decided to offer a solution to address these pressing issues.

THE STEP SYSTEM

Research from Dr Marcus Tursch et al indicates that 53% of their 353 patients flown in a fixed-wing ambulance aircraft were a priori categorized by the preassessment team as STEP I or STEP II according to their staging system, Stratification of Air Medical Transport by Expression of Symptoms in Patients, or

The researchers also found that the STEP system is a reliable predictor for the required mode and configuration of an air ambulance mission, with only an insignificant number of patients needing to be placed into a different category by the flight medical crew. It is also an interesting and very important finding from this study that intensified therapy or unexpected intervention (those being defined as “any change in the treatment regimen of the referring hospital, any new medications, or other nonscheduled interventions during the transport”) did not occur in any of the patients belonging to the STEP I or STEP II categories. (N.B.: “Light sedation during takeoff and landing, antiemetic medication, pain management with non-opiate drugs, nutrition, and maintenance fluids were not defined as unexpected interventions or intensified therapy.”) ▶



THE AIR AMBULANCE OFFICER

Hungary’s healthcare system traditionally employs highly trained and qualified personnel in both pre-hospital and, more recently, in-hospital settings. These professionals possess a wide range of competencies historically associated only with physicians, including advanced life support (ALS) interventions, rapid sequence intubation (RSI), sedation, administration of intravenous drugs, setting up mechanical ventilation, and caring for ICU patients. This unique model in Hungary is exemplified by the term ‘mentőtiszt’ (translated literally as ‘ambulance officer’), which is not widely known elsewhere, although similar pre-hospital systems with this type of HCWs are emerging in certain German-speaking regions. Notably, there is a legal requirement in Hungary for the outcomes of their college-level education, as stipulated by the 18/2016 (VIII 5) Decree of the Ministry of Human Resources, a requirement reflected in excerpts from an actual diploma shown in Figs 2 and 3, and the course subjects in Fig 4.

International benchmarks demonstrate the feasibility of programs operating without flight doctors, as seen in countries such as the USA and Canada. It is widely recognized and accepted there by every insurance and assistance company.

As TrustAir Aviation is a licensed healthcare provider rather than a charter company without any medical license subcontracting medical service, we have an in-house medical department with a competent and experienced medical director, deputy director, etc. We have developed the fundamentals of the new system. It is evident that Hungarian ambulance officers possess sufficient education and competence to safely undertake the majority of missions under their own responsibility. Therefore, we firmly believe that they will have a valuable role in the international fixed-wing air ambulance environment, offering a highly available alternative to flight physicians for the transport of selected patient groups.

This new system is expected to be launched by the beginning of the high season 2024. Some of our partners have already greeted our initiative, yet it is important to know that it will be introduced as a facultative alternative only, with no obligation towards anyone. There will be careful selection of

patients to identify the eligible ones, and the new unit will be dispatched only if all medical criteria are met and our client agrees and chooses this option. ■

I. M Tursch, AM Kvam, M Meyer, A Veldman, M Diefenbach. Stratification of Patients in Long-Distance, International, Fixed-Wing Aircraft. Air Medical Journal 2013;32(3):164–169.

FIGURE 2: EXCERPT FROM MEDICAL DIPLOMA

3. INFORMATION ON THE LEVEL OF THE QUALIFICATION

3.1. Level of qualification, EQF Level BA/BSc 6	3.2. Official length of program 8 semesters
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FIGURE 3: EXCERPT FROM MEDICAL DIPLOMA

5. INFORMATION ON THE FUNCTION OF THE QUALIFICATION

- 5.1. Access to further study
The college degree entitles to access to university training, complementary university training and postgraduate specialist training.
- 5.2. Professional status (if applicable)
The person who takes his/her degree in the ambulance officer training programme of a health college can be employed as an ambulance officer by rescue organisations, private persons and health institutions performing rescue activities. He/she has the right to do certain medical interventions in a professional and safe way; to ensure the airways with and without any instruments; to do resuscitation with and without any instruments; to relieve bleeding with and without any instruments, to dress wounds, to do immobilization, to use emergency medical equipments; to give infusion and drugs used in the emergency medical care; to do gastric lavage; to perform a delivery in the prehospital setting; to diagnose and treat psychosis/mental disorder; to take steps in urgent health-care; to catheterize; to declare death.

FEOR: 2226 (Hungarian identification code for professions).

FIGURE 4: COLLEGE MEDICAL COURSE SUBJECTS

Subject	Weekly lessons per semester	Requirement
Clinical oriented anatomy	5/5/0	Term grade
Dietetics II	5/5/0	Term grade
Internal medicine IV	0/16/0	Lecturer's signature
Pharmacology III	10/0/0	Exam
Transcultural nursing	5/0/0	Report
Internal medicine VI	15/16/0	Exam
Internal medicine VII	0/16/0	Lecturer's signature
Minor clinical studies I	15/0/0	Exam
Pedagogy III	0/10/0	Term grade
Rescue technique II	10/20/0	Term grade
Theoretical psychology III	10/0/0	Exam
Theoretical psychology IV	10/0/0	Exam
Health development II	5/10/0	Exam
Oxiology and emergency patient care III	15/39/0	Exam
Oxiology and emergency patient care IV	0/24/0	Lecturer's signature
Psychiatry III	10/8/0	Exam
Psychiatry IV	0/16/0	Lecturer's signature
Rescue technique III	5/10/0	Term grade
Surgery III	10/16/0	Exam
Traumatology I	15/16/0	Exam
Applied psychology I	10/0/0	Exam
Intensive patient care	10/16/0	Exam
Neurology III	10/16/0	Exam
Oxiology and emergency patient care V	20/57/0	Exam
Rescue technique IV	5/10/0	Term grade
Traumatology II	10/16/0	Exam
Complex field practice	0/200/0	Lecturer's signature
Oxiology		Comprehensive exam