



# Emergency/Trauma/Transport Nursing Workforce Study

## Executive Summary

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Date: **May 20, 2019**

*photos courtesy of the Board of Certification for Emergency Nursing*

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The MedEvac Foundation International and its partners, the Board of Certification for Emergency Nursing (BCEN), the Society of Trauma Nurses (STN), the Air & Surface Transport Nurses Association (ASTNA), and the Emergency Nurses Association (ENA) partnered with the Human Resources Research Organization (HumRRO) to gather information on the current state of the emergency/trauma/transport nursing workforce as a whole and also gain a deeper understanding of the characteristics and issues facing nurses who specifically identify as either an emergency nurse, trauma nurse, or transport nurse. The study also explored expected changes to the field over the next 5 to 10 years.

The design of this study relied on three sources of data to answer the research questions: certification and membership records, existing survey data, and a custom survey. The sponsoring organizations provided their certification and membership rosters to develop a preliminary profile of the workforce. In addition, the study team analyzed a subset of the 2017 National Nursing Workforce Study (NNWS) dataset for respondents indicating a nursing specialty of emergency/trauma. The NNWS, which is sponsored by the National Council of State Boards of Nursing (NCSBN), is administered bi-annually to a stratified random sample of licensed nurses and can be used to infer characteristics of the population. Finally, we constructed and administered a custom survey of the emergency/trauma/transport nursing workforce to supplement the other two data sources and collect rich data on topics not covered by the other data sources. The custom survey was sent to a non-redundant list of the certification and membership rosters of the sponsoring organizations in January and February 2019. Of the 157,608 members of the emergency/trauma/transport nursing workforce who received the survey, 6,890 (4.4%) started and 4,196 (2.7%) completed the survey.

This study represents the first comprehensive analysis of the emergency/trauma/transport nursing workforce. As such, it provides some important insights about the workforce that the sponsoring organizations can use to ensure that emergency/trauma/transport nurses receive the support they need to succeed on the job today and that a sufficient pipeline of nurses is prepared to meet the demands of the future.

### Workforce Profile

Using NNWS data, we estimate that the emergency/trauma/transport nursing workforce includes 167,375 providers of direct patient care (i.e., Staff Nurse or Advance Practice Nurse). The largest proportions of the workforce are (a) under 40 years of age (43%), (b) female (78%), and (c) white/Caucasian (87%). The majority (74%) identified as emergency nurses, followed by transport (15%) and trauma (11%). The three specialties were demographically similar with the exception that transport nurses are more likely to be male than emergency or trauma nurses. Compared to the overall nursing workforce, emergency/trauma/transport nurses are more likely to be male and white/Caucasian but are similarly distributed by age.

### Workforce Qualifications

Almost all (99.7%) survey respondents are RNs and the majority (77.8%) hold a bachelor's degree in nursing or higher. Over 95% of emergency/trauma/transport nurses are U.S.-

educated. Trauma nurses are somewhat more likely to have a master's degree in nursing than emergency or transport nurses.

Emergency nurses obtained their nursing licenses more recently on average (15.3 years) than trauma (17.4 years) or transport (17.5 years) nurses, but also report the longest tenure within their specialty. Nurses in the emergency/trauma/transport nursing workforce have had numerous experiences in the field prior to joining this workforce. More than 50% of respondents have previously worked in an Emergency Department, while approximately 10% report previous military experience.

Certified Emergency Nurse (CEN) is the most common professional credential for all three specialties. The other credentials are generally aligned with a single specialty. For example, half of transport nurses hold the Certified Flight Registered Nurse (CFRN) designation and 43% of trauma nurses hold the Trauma Certified Registered Nurse (TCRN) designation.

Survey respondents indicated how competent they feel by rating the extent to which they (a) have all the knowledge/clinical expertise/skills needed to excel at their jobs, (b) feel prepared to handle all cases they may deal with on their next shifts, and (c) have access to all of the equipment they need to perform their job well. The majority of survey respondents report feeling prepared for their jobs, with the largest skills gaps reported for stress management and critical thinking. Generally, self-ratings are higher for feelings of preparedness than for access to equipment, especially for emergency nurses. Self-reported competence increases somewhat after early career (i.e., after 30 or more years of age), but largely does not change after that point. When asked what training they personally needed, the most common responses are training on specific types of equipment and leadership training. Current nurses perceive that new nurses are most lacking in critical thinking, decision making, and time management skills and have unrealistic job expectations, regardless of specialty.

## **Occupational Profile**

The majority of nurses (81.7%) serve in a direct patient care role (e.g., Staff Nurse, Emergency/Trauma/Transport Nurse, Advanced Practice Nurse). While 12-hour shifts are most common across the three specialties combined, work schedules vary between specialties. Trauma nurses are more likely to work 8-hour shifts, and transport nurses are more likely to work 24-hour shifts compared to the other specialties. Over half of the workforce believes their workload is about right, although emergency and trauma nurses were more likely to report workload that is too heavy. Emergency/trauma/transport nurses in direct patient care roles spend about 60% of their time providing direct patient care and about 25% of their time on documentation.

Across nurses working full-time, the median salary is \$77,500, with the 25<sup>th</sup> and 75<sup>th</sup> percentiles being \$67,500 and \$97,500, respectively. For emergency nurses, the median salary is \$77,500, with the 25<sup>th</sup> and 75<sup>th</sup> percentiles being \$62,500 and \$96,250, respectively. For trauma nurses, the median salary is \$82,500 with the 25<sup>th</sup> and 75<sup>th</sup> percentiles being \$67,500 and \$102,500, respectively. For transport nurses, the median salary is \$82,500 with the 25<sup>th</sup> and 75<sup>th</sup> percentiles being \$72,500 and \$102,500, respectively.

Emergency/trauma/transport nurses report reasonably high levels of professional development support from their organizations. The most frequently cited professional resources that employers provide include on-site training and funding for advanced degree tuition, advanced

certifications, and continuing education. The most desired professional development resources include funding for professional organization membership fees and conferences.

## **Nurse Well-being**

Survey respondents indicated their levels of job satisfaction by rating the extent to which they (a) are satisfied with their job, (b) are satisfied with the kind of work they do, and (c) think about quitting. The majority of nurses report high levels of job satisfaction, but satisfaction is somewhat higher for transport nurses than emergency or trauma nurses

Survey respondents also rated the extent to which their organization (a) values their contributions, (b) considers their goals and values, (c) cares about their well-being, (d) cares about their opinions, and (e) takes pride in their accomplishments at work. Slightly less than half of survey respondents report feeling supported by their employers and perceptions of support are similar across specialties

Survey respondents rated their self-defined burnout, such as feeling work-related stress, exhaustion, fatigue, and reduced motivation. Most respondents indicate that they experience some symptoms of burnout, but few report being completely burned out. Access to counselors is the most common resource available for addressing burnout and “none” is the second most common response.

We also examined the relationships between the nurse well-being variables and competence. The results of these analyses support the importance of monitoring nurse well-being. Specifically, the results show:

- Significant positive relationships between job satisfaction and the self-reported competence questions measuring feelings of preparedness.
- Significant positive correlations between perceived organizational support and the self-reported competence questions measuring feelings of preparedness.
- Significant negative correlations between perceived organizational support and self-reported burnout symptoms.

## **Pipeline**

The majority of survey respondents expect a shortage or extreme shortage of nurses in the next 5 to 10 years, but this trend is less pronounced for transport nurses. While most report plans to continue in their current role for the next 5 to 10 years, the most common planned career changes are to obtain a specialty certification or become an APRN. More early-career nurses (under 30 years old) expect to leave the field of emergency nursing in the next one to four years than more experienced nurses (30 to 59 years old). This may erode the pipeline of experienced emergency/trauma/transport nurses. Supporting current nurses with changes to pay, workload, and other programs is perceived as more valuable to helping maintain and build the pipeline than publicity and outreach. Emergency and trauma nurses also rate improving nurse-to-patient ratios as important, while transport nurses did not.

## **Impact of the Emergency/Trauma/Transport Nursing Workforce**

The survey asked participants to provide examples of when they, or one of their colleagues, did something that had an important impact on human, medical, or operational outcomes. Survey

respondents provided nearly 2,000 examples. Common themes in these examples include that emergency/trauma/transport nurses:

- Assess, intervene, evaluate, and communicate critical medical information
- Prevent errors by catching overlooked medical issues
- Provide support to patients even after discharge
- Advocate for patients with physicians and management
- Provide counsel and support to patients and their families
- Identify and help victims of child abuse, domestic violence, elder abuse, and human trafficking
- Help patients with “bigger picture” issues
- Increase patient safety
- Identify the need for, and implement, new programs
- Increase the quality, speed, and effectiveness of operations.

### **Agenda for Future Research**

The results of this study suggested several avenues for future research. Specifically:

- The sponsors should consider conducting a follow-up survey in a regular (e.g., biannual) basis. This is especially true given the information about the pipeline.
- It may also be valuable to gather the perspective of other stakeholder groups about aspects of the population. Most notably, it would be valuable to understand the perspective of nursing schools and employers of emergency/trauma/transport nurses on the current state and pipeline of nurses.
- This study is one of the few to assess nurse well-being variables, such as perceived organizational support, burnout, and job satisfaction. Given the (a) predicted shortage of nurses and (b) seemingly lower levels of commitment from early-career nurses, it may be beneficial to survey organizations on what they are doing to provide more support to early-career nurses.