PAs in Critical Care Medicine

Dawn Morton-Rias, Ed.D., PA-C, Kasey Puckett, MPH, Andrzej Kozikowski, PhD, Colette Jeffery, MA, Sheila Mauldin, MNN, and Joshua Goodman, PhD
National Commission on Certification of Physician Assistants

Background
- Over 6 million patients require treatment in intensive care units every year in the US.
- Since the start of the COVID-19 pandemic, critical care medicine providers have held an immense responsibility in providing care to critically ill patients.
- Staff from across the hospital have been deployed to work in critical care units.
- Health crises such as the COVID-19 pandemic, particularly during surging infection rates, have exponentially increased demand for acute, emergent, and intensive care.
- More research is needed in understanding the critical care medicine PA workforce demographic characteristics and practice patterns.

Objective & Method
- The study's objective was to:
  a. Describe the growth of PAs in psychiatry from 2016 to 2021.
  b. Explore key demographic and practice characteristics of PAs working in critical care medicine and compare to PAs practicing in all other specialties.
- Data were derived from National Commission on Certification of Physician Assistants (NCCPA) PA Professional Profile Survey.
- Analysis of the data consisted of descriptive statistics and bivariate analyses (Chi-square tests and Mann-Whitney U tests) conducted using SPSS.

Results

The proportion of PAs working in critical care medicine has grown from 1.3% in 2016 to 1.9% by the end of 2021. Of note, the absolute number of PAs working in psychiatry has increased by 66.9% between 2016 and 2021.

PAs in critical care medicine are younger than PAs practicing in all other specialties (mean age 37 vs. 41; p<0.001).

The PA critical care medicine workforce is composed of 66.1% females.

Age (p<0.001)

Gender (p<0.001)

Highest Degree Obtained (p<0.001)

Postgraduate Training (p<0.001)

PAs in critical care medicine are more likely to have a master’s degree vs. PAs in all other specialties (85.6% vs. 79.5%; p<0.001).

Yes

No

Postgraduate Training: 49.0% of PAs in critical care medicine have completed postgraduate training, compared to 34.9% of PAs in all other specialties (p<0.001).

Primary source of data: National Commission on Certification of Physician Assistants. Retrieved from https://www.nccpa.net/resources/nccpa-research/

Key Findings and Conclusion
- The number of PAs in critical care medicine has grown by 6.7% between 2016 and 2021.
- PAs in critical care medicine were significantly more likely to work in multiple clinical positions compared to PAs in all other specialties (19.8% vs. 11.2%; p<0.001).
- Despite PAs in critical care medicine vs. all other disciplines being more likely to report one or more burnout symptoms (37.9% vs. 30.5%; p<0.001), they were equally satisfied with their positions (86.5% vs. 85.2%; p=0.131).
- PAs in critical care medicine provided indispensable services, including diagnosing, treating, and managing patients with acute conditions, conducting physical examinations, and obtaining medical histories, ordering, performing, and interpreting lab tests and diagnostic studies, performing procedures, and providing care conditions.
- PAs in all other disciplines were significantly more likely to participate in telemedicine compared to those in critical care medicine (34.0% vs. 9.7%; p<0.001).
- Knowing the characteristics of the PA critical care medicine workforce will contribute to quantifying their contribution to the overall critical care medicine workforce.