National Board of Examinations - Journal of Medical Sciences
Volume 3, Issue 8, Pages 902–905, August 2025
DOI 10.61770/NBEJMS.2025.v03.i08.002

PERSPECTIVE ARTICLE

Critical Care Training in India vs USA: NBEMS Accounts for 81.89% of Indian Admissions

Lokesh Edara,[1] Nirupam Nadella[2,*] and Gayatri R. Chagamreddy[2]
[1]*Department of Internal Medicine, Western Michigan University, Kalamazoo, USA*
[2]*Department of General Medicine, Dr. D.Y. Patil Medical College Hospital and Research Centre, Dr. D.Y. Patil Vidyapeeth (Deemed to Be University), Pune, India*

Accepted: 30-July-2025 / Published Online: 4-August-2025

Keywords: Critical Care Medicine, NBEMS, Medical Education, India-USA Comparison, Workforce Capacity, Fellowship Training

Background

Over the past three decades, critical care in India has witnessed rapid and remarkable growth. There has been a significant increase in the number of intensive care units with adequately equipped beds, as well as the number of trained healthcare professionals [1]. This expansion followed a well-defined and pragmatic trajectory, ensuring that advancements occur according to a scientifically researched and well-designed framework [1].

In the recent past, a steep rise in medical tourism, particularly for elective and complex surgical procedures [2], has significantly increased the demand for comprehensive critical care and qualified specialists [3]. This need was further established during the COVID-19 pandemic, which brought widespread awareness of the vital role of intensive care units in modern healthcare [3].

In the United States, Critical Care Medicine is pursued either as a fellowship alone (usually 1–2 years) or in combination with pulmonary medicine (3 years) [4,5]. According to the Accreditation Council for Graduate Medical Education (ACGME), this dual pathway provides a steady pipeline of specialists who are trained to manage ICU patients comprehensively [4,5].

Between 2016 and 2021, U.S. critical care training programs grew by 22.7% (from 413 to 507), while the number of fellows increased by 23.8% (from 2,674 to 3,311) [6]. The majority of fellows (60% in 2020–2021) were enrolled in Pulmonary and Critical Care Medicine (PCCM) programs [6]. Of the 3,311 fellows in 2021, 65.8% were U.S. medical graduates, while 34.2% were international graduates [6].

*Corresponding Author: Nirupam Nadella
Email: nirupam.nadella@gmail.com

In the United States, fellowship programs related to critical care are offered across three main tracks. According to the latest data, standalone Critical Care Medicine programs admit 187 fellows annually [7]. The majority of trainees pursue combined pulmonary disease and Critical Care Medicine programs, accepting 781 fellows annually [7].

The United States, with a population of approximately 340 million, trains a total of 968 critical care fellows annually, 187 through standalone Critical Care Medicine programs and 781 through combined Pulmonary and Critical Care Medicine programs, as mentioned in Table 1 [7]. This translates to approximately 2.85 critical care fellowship admissions per million people per year, reflecting the country's emphasis on structured, advanced training to meet the growing demand for critical care services [7].

Table 1. Critical Care Fellowship in the USA

Critical Care	187
Pulmonary Critical Care	781
Total Adult Critical Care Positions	968

India, with a population of approximately 1.4 billion, currently has around 591 critical care training seats across various programs, equating to roughly 0.48 seats per million people. This data highlights the growing *need* for critical care training.

Of these, 101 seats are in DM Critical Care Medicine, 6 in DM Pulmonary Medicine & Critical Care, and 555 in DrNB Critical Care Medicine. Notably, 555 of the 673 seats, or 82.48% of the critical care seats, are produced under NBEMS programs, primarily in private critical care centers as mentioned in Table 2 [8,9]. This distribution highlights the significant role of NBEMS in critical care education in India.

Table 2. Critical Care Seats in India

DM Pulmonary Medicine & Critical Care	6
DM Critical Care Medicine	101
DrNB Critical Care Medicine (NBEMS)	555
Trauma Anaesthesia Critical Care Fellowship (NBEMS)	11
Total Adult Critical Care Seats	673

Discussion

The rapid growth of critical care in India over the past three decades reflects a significant transformation in healthcare infrastructure and specialist training [1]. While the expansion of ICU facilities and critical care beds is commendable, the cornerstone of this progress lies in the development of a trained critical care workforce capable of delivering high-quality care. The United States trains approximately 2.85 critical care fellows per million population annually; NBEMS, too, is constantly upscaling to bridge the gap between demand and supply [7-9].

Pulmonary medicine and related specialties, including TB and chest diseases, constitute a larger training pool, reflecting the epidemiological burden of respiratory illnesses in India [8,9]. It is noteworthy that a distinctive feature of India's critical care training landscape is the dominant role played by the National Board of Examinations in Medical Sciences (NBEMS). Remarkably, approximately 81.89% (555 out of 673) of critical care training seats, primarily DrNB Critical Care Medicine seats, are administered under NBEMS programs, with many situated in private critical care centers [8,9]. This highlights the crucial contribution of NBEMS in addressing the need for specialist training in a country with vast geographic and population diversity. Unlike the United States, where critical care training is often embedded within academic university settings, India's reliance on NBEMS and private institutions reflects a pragmatic approach to rapidly scaling up specialist education outside traditional government-run programs.

India's experience during the COVID-19 pandemic demonstrated the value of partnerships between NBEMS and the private sector in rapidly increasing the number of medical specialists and resources. However, while this model holds promise, ensuring that people have easy access to quality care will also require strong oversight, consistent training standards, and increased government support.

Looking ahead, India's critical care training programs, primarily driven by the NBEMS, have made notable advancements in designing and building an expert medical workforce. Still, with the rising demand for intensive care across a country of 1.4 billion people, there's a clear need for upscaling the efforts. This means more government funding, stronger collaboration between the public and private sectors, and better infrastructure for education and training.

Conclusion

Learning from international models while customizing solutions to fit India's unique healthcare needs will be key. By doing so, we can strengthen the future of Critical Care Medicine and enhance outcomes for patients nationwide.

Conflicts of interest

The authors declare that they do not have conflict of interest.

Funding

No funding was received for conducting this study.

Competing Interests

The authors declare no competing financial or non-financial interests related to the work submitted for publication.

Author Contributions

NN: Conceptualization, data collection, comparative analysis, writing

original draft; LE: Literature review, data curation, writing, review & editing; GRC: Literature review, data collection, data curation, writing, review & editing. All authors have read and approved the final version of the manuscript and meet the criteria for authorship.

References

1. Srinivasan S. Critical Care in India: Progress Over Two Decades. ICU Management & Practice. 2021. Available from: https://healthmanagement.org/c/icu/issuearticle/critical-care-in-india-progress-over-two-decades
   Nadella N, Chagamreddy G, Kuppili S. Medical Tourism: Patients Without Borders. Glob J Med Stud. 2024; doi:10.25259/GJMS_3_2024
2. Arora R, Jain S, Pandey A. Critical Care Medicine Training in India: Need for a Paradigm Shift. Indian J Crit Care Med. 2023;27(7):482–4. Available from: https://pmc.ncbi.nlm.nih.gov/articles/PMC10291646/
3. Accreditation Council for Graduate Medical Education. ACGME Program Requirements for Graduate Medical Education in Pulmonary Disease and Critical Care Medicine. 2024. Available from: https://www.acgme.org/globalassets/pfassets/programrequirements/2024-prs/156_pulmonarydiseasecriticalcaremedicine_2024.pdf
4. Accreditation Council for Graduate Medical Education. ACGME Program Requirements for Graduate Medical Education in Critical Care Medicine. 2024. Available from: https://www.acgme.org/globalassets/pfassets/programrequirements/2024-prs/142_criticalcaremedicine_2024.pdf
5. Emanuel EJ, Gudbranson E, Lebowitz H, Hess J, Patel R, Dine CJ. US Graduate Medical Education and International Medical Graduates. JAMA Health Forum. 2023;4(7):e231729. Available from: https://pmc.ncbi.nlm.nih.gov/articles/PMC10400040/
6. Nadella N, Edara L. From Primary Care to Super Specialty: A Comparison of Workforce Expansion and Capacity Building in Internal Medicine in India and the United States. Cureus. 2025;17(1):e77221. doi:10.7759/cureus.77221
7. National Medical Commission. College and Course Search. Available from: https://www.nmc.org.in/information-desk/college-and-course-search/
8. National Board of Examinations in Medical Sciences. NBEMS Accredited Course and College Search. 2025. Available from: https://accr.natboard.edu.in/online_user/frontpage.php?v=4