

## Pros and Cons: Global Adoption of Competency-Based Medical Education

**To the Editor:** Competency-based medical education (CBME) aims for trainees to develop clinical competencies for effective medical practice rather than focus on knowledge and skill acquisition. Its adoption has grown significantly since the 1970s and has had a global impact on medical education, albeit with varied implementation by country.<sup>1,2</sup>

CBME was first implemented in developed countries. In the United States, CBME was adopted widely in the early 2000s for residency programs after the Accreditation Council for Graduate Medical Education introduced competency-based education. In the United Kingdom, CBME was included in the General Medical Council's 2017 postgraduate medical education framework. CBME was implemented for basic and advanced training in Australia by the Royal Australasian College of Physicians in 2016 and is required for specialty training programs in most medical schools in Canada by the Royal College of Physicians and Surgeons. Holland, Denmark, and Switzerland use CBME in medical education in Europe.<sup>2</sup> Developing countries have also recognized the benefits of CBME and are implementing it, with India introducing CBME for undergraduate medical education in 2019 and South Africa, Ghana, and Kenya adopting it to address health care worker shortages. Although limited resources and infrastructure hinder its implementation in poorer countries, CBME is gaining popularity in underdeveloped nations.<sup>2,3</sup>

CBME offers several advantages, such as providing clear and specific learning outcomes for essential competencies in clinical practice and enabling personalized learning at one's own pace. CBME's focus on competency-based assessment provides accurate evaluation of a student's abilities.<sup>1</sup> However, CBME has some limitations, such as its complexity, lack of standardization, limited empirical evidence, and potential assessment biases. Addressing these challenges is crucial to maintain CBME's relevance and effectiveness in medical education.<sup>4</sup> Future directions for enhancing the effectiveness of CBME include (1)

incorporating advanced technology, like simulation-based training and digital learning tools; (2) emphasizing interprofessional education and collaboration; (3) developing outcome-based curricula that align with essential competencies for clinical practice; and (4) promoting internationalization to improve the recognition of medical qualifications across borders.<sup>4</sup>

CBME is an innovative approach to medical education, with significant implications for producing competent physicians who can provide high-quality care. Its potential to revolutionize medical education across the globe makes it a promising tool, despite limitations. As medical education evolves, it is essential to consider the benefits and limitations of CBME to ensure its effectiveness and relevance.

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### Challenges Faced by International Medical Students in the United States

**To the Editor:** The United States has always been a desirable destination for international students seeking higher

education, including medical degrees. However, for non-U.S. citizens or permanent residents, the path to becoming a physician in the United States is challenging. With only 43 out of 157 U.S. allopathic medical schools considering non-Canadian international candidates,<sup>1</sup> the competition for admission is fierce. The Association of American Medical Colleges reported that in the 2021–2022 application cycle to U.S. allopathic medical schools, only 1959 (3.7%) of the 55,188 total applicants were non-U.S. citizens or permanent residents. Of these 1959 applicants, only 314 were accepted, resulting in an acceptance rate of just 16.0% compared to 41.2% for all applicants.<sup>2</sup> Even once accepted, international medical students continue to face challenges upon matriculation.

One of the biggest challenges for international medical students is limited access to financial aid and scholarships. In the United States, the average cost of tuition and fees for students at private medical schools and out-of-state students at public medical schools was over \$60,000 in the 2022–2023 academic year.<sup>3</sup> This cost can be even more daunting for international students with limited financial aid and scholarship options. Although some medical schools offer financial assistance to international students, these opportunities are limited. The majority of international students need to secure private loans, which can be difficult if they lack a cosigner with U.S. citizenship.

While in medical school, international students often face a lack of mentorship and support for their unique needs.<sup>4</sup> Many struggle to find mentors and role models, making it challenging for them to adapt to a new culture, language, and education system. This process can be further challenged after completing medical school, as international medical graduates must apply for a J-1 or H-1B visa. This limits the number of residency programs they can apply to as only a limited number can sponsor their visa application.<sup>5</sup> Obtaining a visa for residency can be a complicated, time-consuming process with no guarantee of approval.

Despite these challenges, international medical students remain motivated and determined to succeed. They bring diverse perspectives and cultural experiences to the U.S. health care system, allowing them

to connect with patients from diverse backgrounds and provide effective and compassionate care. With the right support, international medical students can develop successful careers as physicians in the United States. It is essential to recognize their valuable contributions amid the challenges they face. By doing so, we can foster a more welcoming and inclusive health care system and improve the health and well-being of patients.

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## Expanding Medical Education Opportunities for Displaced Refugee Students

**To the Editor:** Every day, people around the world make the difficult

decision to leave their homes in search of safety and security. According to recent data from the United Nations High Commissioner for Refugees (UNHCR), the number of people forced to flee conflict, violence, human rights violations, and persecution has reached 35.4 million worldwide.<sup>1</sup> Within this population of displaced individuals forced to flee their home countries are many students, including medical trainees, whose studies were disrupted by conflict and who now hope to complete their education in their newly adopted homes.<sup>2,3</sup>

Displaced refugee students who aspire to pursue careers in medicine encounter unique challenges, ranging from having to redo premedical and medical coursework to facing financial constraints and unfamiliarity with the education system. Most refugees and asylum seekers arrive in the United States with few resources and often struggle to obtain educational records from their home countries. Furthermore, individuals who have applied for asylum but are still awaiting decisions on their statuses are not eligible for federal financial aid or loans, creating a significant financial barrier to accessing higher education.<sup>4</sup> The majority of U.S. medical schools require students to have permanent residency status for admission, which can take refugees more than 4 years to acquire due to processing delays.<sup>5</sup> Refugees and asylum seekers are often tasked with individually navigating these complexities, as only a few institutions offer explicit guidance tailored to their status.

To enhance access to medical education for refugee students, academic institutions must take proactive steps. These steps include implementing flexible admissions policies that consider the unique circumstances of displaced refugee students, such as pending immigration statuses or lack of formal educational records. Additionally, scholarships and institutional loan options should be established to mitigate financial barriers, along with considering in-state tuition eligibility at public universities. By

embracing these measures, universities can offer a more inclusive and supportive pathway for refugee students to pursue their aspirations in the medical field.

Refugees and asylum seekers bring with them extensive experience and knowledge and are eager to contribute to the U.S. health care system. By extending medical education opportunities to all individuals who aspire to pursue them, regardless of their background or circumstances, academic institutions can play a crucial role in creating a health care system that is more inclusive and equitable.

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