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From Hurdles to Hope: Addressing the Residency Match Challenges and Recommendations for International Medical Graduates

Sohail Rao, MD, MA, DPhil[1]

[1]President & Designated Institutional Official, Texas Institute for Graduate Medical Education, 1917 Ashland Street, Houston, TX 77008

[1]Corresponding Author Email: srao@tigme.org

ABSTRACT

International Medical Graduates (IMGs) represent a substantial and indispensable component of the United States healthcare workforce, comprising nearly 25% of practicing physicians nationwide. They are especially overrepresented in primary care and underserved specialties and geographic areas, including rural and inner-city communities that face persistent shortages of healthcare professionals. Despite their importance, IMGs encounter a disproportionately difficult path when seeking graduate medical education (GME) opportunities in the United States. The highly competitive nature of the residency match process is compounded by a variety of structural and institutional barriers that uniquely affect IMGs. These include restrictive immigration and visa policies, limited availability of U.S. clinical experience (USCE), a lack of accessible guidance and mentorship, and an often-unspoken bias among residency programs that favor U.S. medical graduates (USMGs). Furthermore, IMGs may face significant financial burdens, including the cost of licensing exams, application fees, travel for interviews, and securing visa sponsorship, all without any guarantee of placement. This narrative review aims to synthesize current evidence regarding the multifaceted challenges IMGs face during the residency application process and to evaluate the implications of these barriers on workforce diversity, equity, and healthcare delivery. In addition, the review highlights key solutions, including federal policy reforms to facilitate visa sponsorship, expansion of culturally competent mentorship networks, development of bridging programs for clinical preparedness, and transparent program selection criteria to mitigate institutional bias. Addressing these disparities is not only critical to advancing fairness and inclusion in medical training. Still, it is also a strategic imperative for bolstering the U.S. healthcare system in an era marked by growing physician shortages and increasing patient diversity. The findings of this review advocate for collaborative action by medical institutions, accrediting bodies, and policymakers to ensure that qualified IMGs are provided equitable opportunities to contribute to the nation's healthcare system.

KEYWORDS: *International Medical Graduates (IMGs), Graduate Medical Education, USMLE, Visa Barriers, Clinical Observerships, Mentorship, Healthcare Workforce, Underserved Areas, IMG Strategies, NRMP, Residency Application, Residency Match*

INTRODUCTION

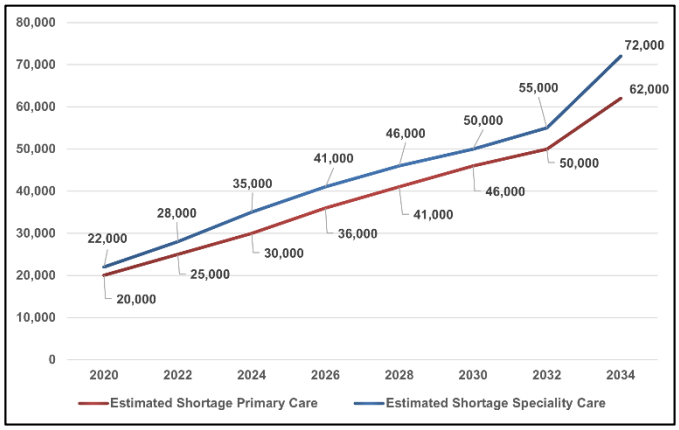
IMGs have historically played a vital role in the U.S. healthcare system, accounting for approximately one-quarter of the physician workforce and disproportionately serving in primary care, rural, and medically underserved areas (Boulet et al., 2019; Chen et al., 2019). Their presence has been

instrumental in addressing healthcare access disparities, especially in regions experiencing physician shortages. Despite their critical contributions, IMGs face significant structural and procedural barriers when pursuing GME in the United States.

Among the most challenging hurdles are immigration-related issues. Visa constraints, particularly those surrounding the J-1 and H-1B categories, limit flexibility in training and employment and often require a return to the home country upon completion, unless a waiver is secured (Edelman et al., 2021). Moreover, the USMLE, while a standardized benchmark, is a high-stakes process that can disadvantage IMGs unfamiliar with its format, emphasis, and language expectations.

Institutional biases further compound the challenge. Residency program directors may favor USMGs, citing concerns over communication skills, clinical training backgrounds, and perceived adaptability of IMGs to U.S. healthcare culture (Sarfaty et al., 2020). Additionally, a lack of formal mentorship networks, limited clinical observership opportunities, and fewer connections within academic circles hinder IMGs' ability to compete effectively in the National Resident Matching Program (NRMP).

Figure 1: Projected U.S. Physician Shortage by 2034.



Given the projected shortfall of up to 124,000 physicians by 2034, particularly in primary care and rural medicine (AAMC, 2021), the inclusion of IMGs in residency training is not only a matter of fairness but also a strategic national necessity (Figure 1). Ensuring equitable access to GME for IMGs through policy reform, increased mentorship, and bias training within selection committees could significantly bolster the future U.S. healthcare workforce.

Empowering IMGs with targeted strategies, such as early preparation, strong USMLE scores, U.S. clinical and research experience, and effective mentorship, can significantly improve match success. These efforts, supported by evidence and expert consensus, help overcome systemic barriers to U.S. residency training (Boulet et al., 2019; Chen et al., 2020; Girotti et al., 2022; Salem et al., 2021; Sarfaty et al., 2020; Zare et al., 2020).

METHODOLOGY

This narrative review aimed to explore the systemic challenges faced by IMGs in securing residency placements in the United States, as well as potential solutions. A comprehensive literature search was conducted covering the period from 2010 to 2025. Databases queried included PubMed, Medline, and Google Scholar, alongside official reports and white papers from the Educational Commission for Foreign Medical Graduates (ECFMG), the NRMP, and the Accreditation Council for Graduate Medical Education (ACGME).

Keywords employed during the search included: “IMG residency match,” “visa barriers for IMGs,” “residency selection bias,” “international medical education,” “graduate medical education policy,” and “clinical observerships.” Boolean operators were used to refine search combinations (e.g., “IMGs AND match rates AND United States”).

Inclusion criteria encompassed peer-reviewed articles, policy briefs, and institutional reports discussing IMG match rates, systemic challenges,

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and proposed interventions. Only English-language publications were considered. Exclusion criteria included editorials without empirical evidence, opinion pieces lacking methodological clarity, and documents that did not focus on IMGs within the U.S. context.

A thematic analysis approach was used to identify recurring patterns across the literature. Themes were extracted regarding institutional barriers (e.g., program biases), regulatory hurdles (e.g., visa and licensing constraints), and structural limitations (e.g., lack of mentorship, inadequate clinical exposure). Each source was assessed for its relevance, recency, and contribution to understanding the IMG experience. Where possible, quantitative data were extracted to support qualitative observations. The synthesis aimed not only to document barriers but also to evaluate proposed solutions and policy recommendations.

RESULTS

Recommendations for Minimizing Disparity & Structural Barriers

Data from the 2023 NRMP reveal a persistent and significant disparity in match rates between IMGs and U.S. allopathic and osteopathic medical graduates (Figure 2). While 93.7% of U.S. MD seniors successfully matched into residency programs, only 58.1% of IMGs did so, a gap of over 35 percentage points (NRMP, 2023). This differential persists even though many IMGs possess clinical experience, advanced research credentials, and bilingual skills that are highly valuable in the U.S. healthcare system (Table 1).

Figure 2: Match Rate of U.S. Graduates vs. IMGs (2015 – 2023)

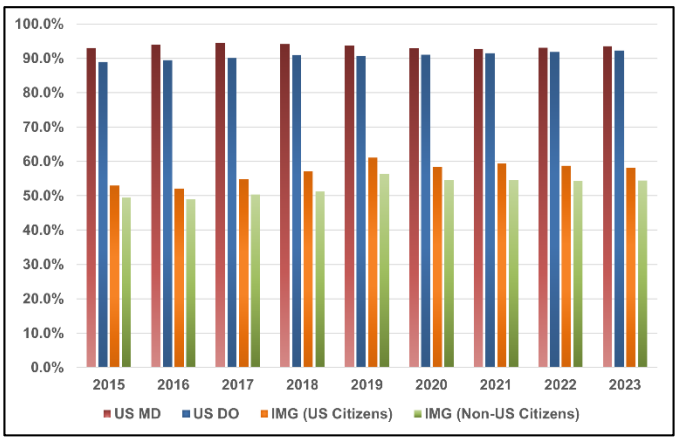

Table 1: Recommendations for Minimizing Disparity & Structural Barriers

Challenges Faced by IMGs	Proposed Solutions
Lower Match Rates Compared to US MD and DO Graduates	Enhance Match Opportunities Through Equitable Policies
Visa-related Restrictions (J-1 and H-1B)	Expand and Streamline Waiver Programs like CONRAD 30
Program Bias and Lack of Transparency	Mandate Transparency in Program Selection Policies
Limited Access to US Clinical Experience (USCE)	Establish Structured Observerships and Externship Programs
Insufficient Mentorship and Networking Opportunities	Develop Centralized Mentorship Platforms Led by Successful IMGs
Restricted Access to Research Opportunities	Offer Structured Research Internships for IMGs
High Financial Burden During Application Process	Provide Financial Assistance of Fee Waivers
Lack of Standardized Selection Criterion Across Programs	Encourage Programs to Publish IMG Match Rates and Criterion

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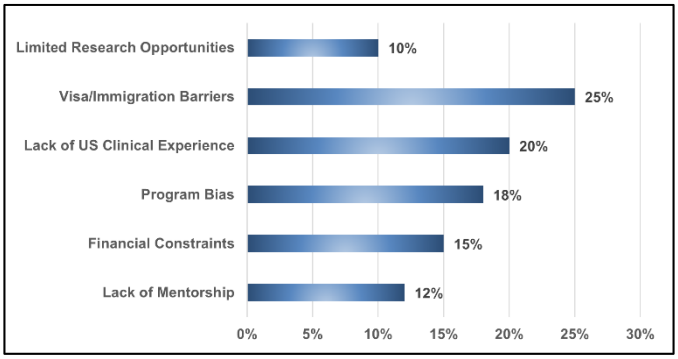
A significant structural barrier remains the requirement for J-1 or H-1B visas. These visas not only introduce bureaucratic delays but also discourage some programs from considering IMG applicants due to the perceived administrative burden and uncertainties surrounding immigration policy (Johnson et al., 2022). J-1 visa holders are further constrained by the "home residency requirement," which mandates a two-year return to the home country before reapplying for a U.S. visa unless a waiver is secured (ECFMG, 2023).

Moreover, many residency programs, particularly in competitive specialties, have either formal or informal policies that limit IMG applications. Some program directors cite concerns over educational equivalency, linguistic barriers, and cultural fit (Meyers & Brown, 2021). A study of residency selection criteria found that IMG applicants were less likely to receive interview invitations, even with comparable USMLE scores (Chen et al., 2020).

Figure 3: Primary Challenges Faced by IMGs



Access to U.S.-based mentorship and clinical experience is another key differentiator. IMGs often struggle to obtain hands-on observerships or externships in accredited teaching hospitals, which are essential for securing strong letters of recommendation and demonstrating familiarity with the U.S. healthcare system (Figure 3). Research participation, another vital criterion for residency selection, is also less accessible to many IMGs due to institutional gatekeeping and visa limitations (Salem et al., 2021). Taken together, these structural, institutional, and cultural barriers compound to disadvantage IMGs, reducing their competitiveness in the residency match process despite their qualifications and contributions to the healthcare workforce.

Recommendations for IMGs to Improve Their Match Success

Based on existing literature and expert consensus, several individualized recommendations are proposed to help IMGs improve their chances of matching into U.S. residency programs (Table 2). First and foremost, early strategic planning is crucial. IMGs should begin their preparation at least 18 to 24 months in advance, familiarizing themselves with NRMP timelines, identifying IMG-friendly programs, and ensuring all required documents are verified through the ECFMG (Girotti et al., 2022).

Excelling on the USMLE is another critical strategy. Given the emphasis placed on these scores in the initial screening process, IMGs should prioritize scoring highly on Step 1, Step 2 CK, and, where applicable, Step 3, to remain competitive among U.S. and international applicants (Chen et al., 2020). Securing USCE in the form of externships or sub-internships within ACGME-accredited hospitals is invaluable. Such experience not only demonstrates familiarity with the U.S. healthcare system but also enables IMGs to obtain letters of recommendation from U.S.-based faculty, which are essential for the application process (Salem et al., 2021).

In parallel, engagement in clinical or translational research projects, particularly those that yield publications or conference presentations, can substantially strengthen an applicant's profile while building professional networks and mentorship ties (Girotti et al., 2022).

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Table 2: Recommendations for IMGs to Improve Their Match Success

Recommendation	Description
Early Strategic Planning	Begin preparations 18–24 months in advance; understand NRMP timelines and ECFMG requirements.
Excel on USMLE Exams	Prioritize high scores on Step 1, Step 2 CK, and Step 3 to remain competitive.
Secure U.S. Clinical Experience (USCE)	Engage in externships or sub-internships in ACGME-accredited hospitals to gain familiarity with the U.S. system and obtain strong letters of recommendation.
Engage in Research Activities	Participate in U.S.-based research that leads to publications or presentations and builds mentorship ties.
Tailor the Personal Statement	Highlight clinical journey, cultural competencies, and alignment with the values of desired programs.
Leverage Mentorship and Peer Networks	Seek advice from IMG alumni and join support networks for strategic guidance.
Apply Broadly and Realistically	Use NRMP and FREIDA data to target IMG-friendly programs.
Demonstrate Commitment to Underserved Areas	Express dedication to working in Health Professional Shortage Areas to align with institutional missions.
Enhance Communication Skills	Practice clinical English and participate in mock interviews to improve interpersonal performance.
Maintain a Professional Online Presence	Use platforms like LinkedIn and ResearchGate to connect with mentors and program directors.

Tailoring the personal statement to highlight individual journeys, cultural competencies, and alignment with program values, particularly regarding underserved communities, can set IMGs apart. This strategy is even more effective when complemented by the use of formal and informal mentorship networks.

Connections with successful IMG alumni, professional organizations, and peer support groups can provide valuable insights and help applicants navigate the process (Boulet et al., 2019). Applying broadly and realistically is another practical approach. IMGs are advised to use data from sources like FREIDA and NRMP to identify programs with a history of accepting IMGs. In addition, demonstrating a commitment to working in medically underserved areas, particularly Health Professional Shortage Areas, can align an applicant with federal and institutional missions, improving the likelihood of a match and visa sponsorship (Zare et al., 2020).

Further, enhancing communication skills is essential. IMGs should actively work on improving clinical English, participating in mock interviews, and seeking constructive feedback on interpersonal interactions to alleviate concerns about communication barriers (Sarfaty et al., 2020).

Finally, maintaining a professional online presence through platforms like LinkedIn and ResearchGate can enhance visibility, demonstrate professionalism, and facilitate networking with potential mentors and program directors. By taking ownership of these strategic steps, IMGs can mitigate many systemic disadvantages and position themselves for successful integration into the U.S. residency system.

DISCUSSION

Addressing the barriers that prevent IMGs from securing residency positions in the U.S. requires a coordinated, multi-faceted approach that includes policy reforms, institutional practices, and educational improvements. These efforts are not merely remedial but are essential for meeting the workforce demands of the American healthcare system, especially in primary care and underserved communities.

One of the most immediate interventions involves expanding waiver pathways for J-1 and H-1B visa

holders. Programs such as the Conrad 30 Waiver allow IMGs to remain in the U.S. after residency if they agree to serve in Health Professional Shortage Areas (HPSAs). However, access to these programs is limited and varies significantly by state. Streamlining and expanding these waivers, while reducing administrative burdens, would both incentivize rural practice and retain highly trained physicians (Zare et al., 2020).

Another key area for reform is mentorship and professional development. IMGs often lack access to U.S.-based mentors who can guide them through the complex application and interview process. National or state-level centralized mentorship programs, particularly those led by IMG alumni or faculty, could close this gap (Girotti et al., 2022). Formalized mentorship structures are also associated with greater research productivity and higher interview yield.

In parallel, residency programs should adopt transparent and standardized selection criteria that explicitly state their stance on IMG applications. Program-level opacity around IMG eligibility perpetuates uncertainty and deters qualified applicants. Public reporting of IMG match rates by specialty and institution may also improve equity and accountability (Boulet et al., 2019).

Observerships and research fellowships remain among the most sought-after yet least accessible opportunities for IMGs. Academic institutions and health systems should establish structured externship and research internship programs, particularly in teaching hospitals, to provide IMGs with hands-on experience and facilitate networking with faculty (Salem et al., 2021).

At the national level, organizations such as the AAMC and ECFMG must actively work to counter implicit biases by disseminating data that highlights IMG performance and contributions to care delivery. Studies have shown that IMGs perform on par with or better than U.S. medical graduates in multiple metrics, including patient satisfaction and chronic disease management (Norcini et al., 2010). This evidence must be amplified to foster a more inclusive and evidence-based approach to selection.

Finally, federal advocacy is crucial. Immigration policy reform, increased funding for community-based GME slots, and the inclusion of IMG-relevant provisions in workforce legislation are all vital for long-term structural change. Given the projected shortfall of up to 124,000 physicians by 2034 (AAMC, 2021), integrating qualified IMGs into the training pipeline is not optional; it is essential.

To complement systemic reforms, it is essential to empower IMGs. with evidence-based strategies to increase their chances of successful matching. A comprehensive approach, including early planning, high performance on USMLE exams, U.S. clinical experience, targeted research involvement, and compelling personal statements, can significantly boost their competitiveness.

Furthermore, leveraging mentorship networks, applying strategically, committing to underserved populations, and refining communication skills are equally vital. A professional online presence also aids in networking and visibility. Collectively, these individualized efforts, supported by literature and expert consensus, can help IMGs overcome structural barriers and integrate more effectively into the U.S. residency pipeline (Boulet et al., 2019; Chen et al., 2020; Girotti et al., 2022; Salem et al., 2021; Sarfaty et al., 2020; Zare et al., 2020).

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