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ORIGINAL RESEARCH

# "I didn't feel safe enough or supported enough": experiences of International Medical Graduates in a Canadian Internal Medicine residency program

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## Abstract

**Background**: International Medical Graduates (IMGs) face significant challenges on their path to independent practice as physicians in Canada. Residency training is particularly challenging, yet perceived facilitators and barriers to success from the IMG perspective, remain relatively unexplored. So too is how IMGs perceive wellness and navigate this while training. This study aims to address these gaps and devise supportive strategies.

**Methods:** We used a mixed-methods convergent parallel design to explore the experiences of IMGs from two Internal Medicine residency programs in Alberta, Canada. Using a pragmatist lens, we collected and analyzed data through an online survey and semi-structured interviews. Quantitative data were analyzed by producing descriptive statistics, while we employed thematic analysis to our qualitative data. Key findings were synthesized by reviewing the convergence and divergence of quantitative and qualitative strands.

**Results:** Individual, program and systemic level factors impacted how IMGs experienced Canadian residency. Nonetheless, results converged around the key finding that IMGs remain stigmatized, partly by their intersectional identities. Stigmatization precedes residency and is perpetuated throughout. From a wellness perspective, physical and mental domains were impacted most. Most important in maintaining IMG wellness was social support and belonging. Our participants highlighted that quality improvement initiatives should be co-created with them, so practices are inclusive, supportive and tailored to IMG needs.

**Conclusions:** By cultivating space to surface the IMG experience, our study provides fresh insights into the multilayered challenges they face when completing Canadian residency. Our findings call on Canadian programs and institutions to co-create supports with IMGs that advance inclusion, belonging and wellness.

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# « Je ne me sentais pas suffisamment en sécurité ni suffisamment soutenu » : expériences de diplômés internationaux en médecine dans un programme canadien de formation en résidence en médecine interne


## Résumé

**Contexte :** Les diplômés internationaux en médecine (DIM) sont confrontés à des défis importants dans leur parcours vers l'exercice autonome de la médecine au Canada. La formation en résidence est particulièrement exigeante, mais les facteurs facilitants et les obstacles à la réussite, tels qu'ils sont perçus par les DIM, restent relativement peu étudiés. Il en va de même pour la manière dont les DIM perçoivent leur bien-être et gèrent celui-ci tout au long de leur formation. Cette étude vise à combler ces lacunes et à élaborer des stratégies de soutien.

**Méthodes :** Un devis à méthodes mixtes, selon un plan convergent parallèle, a permis d'explorer les expériences de DIM issus de deux programmes de résidence en médecine interne en Alberta, au Canada. Dans une perspective pragmatique, nous avons collecté et analysé des données à l'aide d'un questionnaire en ligne et d'entretiens semi-structurés. Les données quantitatives ont été analysées à l'aide de statistiques descriptives, tandis que nous avons recouru à une analyse thématique pour les données qualitatives. Les principaux résultats ont été synthétisés en examinant les convergences et les divergences entre les volets quantitatifs et qualitatifs.

**Résultats :** Des facteurs individuels, liés au programme et systémiques ont influencé la manière dont les DIM ont vécu leur formation en résidence au Canada. Néanmoins, les résultats ont convergé vers une conclusion clé : les DIM restent stigmatisés, en partie en raison de leurs identités intersectionnelles. La stigmatisation précède la résidence et se perpétue tout au long de celle-ci. Du point de vue du bien-être, ce sont les domaines physique et mental qui ont été les plus affectés. Les facteurs les plus importants pour préserver le bien-être des DIM étaient le soutien social et le sentiment d'appartenance. Nos participants ont souligné que les initiatives d'amélioration de la qualité devaient être élaborées conjointement avec eux, afin que les pratiques soient inclusives, solidaires et adaptées aux besoins des DIM.

**Conclusions :** En créant un espace permettant de mettre en lumière l'expérience des DIM, notre étude apporte un éclairage nouveau sur les défis complexes auxquels ils sont confrontés tout au long de leur formation en résidence au Canada. Nos résultats invitent les programmes et les institutions canadiens à cocréer avec les DIM des mesures de soutien favorisant l'inclusion, le sentiment d'appartenance et le bien-être.


## Introduction

In Canada, International Medical Graduates (IMGs) are defined as physicians who graduated from a medical school outside Canada or the United States. A heterogenous group, many IMGs are immigrants (I-IMGs) who may have practiced as physicians before relocating to Canada. Others are Canadians (C-IMGs), who studied medicine abroad before returning home to practice.

The path to independent practice as a physician in Canada is challenging for IMGs. Although various complex paths exist, completing Canadian residency is a key route. However, both the process of securing and completing residency as an IMG is difficult.[1-7] Applications are centralized through the Canadian Resident Matching Service (CaRMS) to IMG-dedicated positions. While match rates for IMGs have recently increased, the proportion of unmatched IMGs remains far greater than for Cana-

dian Medical Graduates (CMGs).[1] Additional considerations are that IMG-dedicated positions are limited in specialty scope, with most Canadian provinces mandating return of service (RoS). Legally binding, RoS ensures that, upon graduation, IMGs practice within an underserved community.[8] It is crucial to recognize the broader policy context in which these decisions have been made. In Canada, physician training at both undergraduate and postgraduate levels is largely publicly funded through federal and provincial investment. As a result, the education of CMGs is heavily subsidized by the public, and policy frameworks governing residency positions have historically prioritized domestically educated physicians. While this context helps explain why access to residency positions is structured differently for IMGs, it also contributes to ongoing tensions regarding equitable access to postgraduate training.

Although IMGs strengthen Canadian residency programs and the wider healthcare system, they face unique training challenges. Pervasive bias is particularly problematic. So too is the uncertainty regarding practice scope and location for the many IMGs with RoS. Furthermore, those practicing medicine prior to relocation must often change specialty to accommodate Canada's healthcare needs.[4-6] Much attention has been paid to IMGs performance difficulties during residency, including at national certification examinations where they have historically fared poorer.[7,9,10]

Performance difficulties are hard to remediate without understanding *how* and *why* they arise, and perceptions of these difficulties differ between IMGs and residency programs.[11] Research on predictors of IMG performance has largely focused on demographic variables which cannot be "remediated."[7,12,13]Additionally, research has seldom involved IMGs themselves in shaping our understand-ng. By cultivating space for IMGs to share their ex-eriences, this study explores the facilitators and barriers to success during Canadian residency, as well as how IMGs construct and navigate wellness during this period. In this study, consistent with the WISHES framework, wellness is understood as a holistic construct, encompassing mental, physical, occupational, social, and intellectual domains that intersect with the broader educational and healthcare systems in which residents train.[14] Exploring wellness is important because we know it can be impacted by performance difficulties and influenced by intersecting identities that many IMGs hold.[14] Hearing directly from IMGs is critical in advancing a more complete understanding of their residency experiences, enabling development of equitable interventions that will effectively support their success and wellness.

# Methods

## Study design

The theoretical stance of this study is pragmatism given it is a mixed-methods study. Pragmatism recognizes integrating quantitative and qualitative methods, bridging the gap between constructivist and structuralist orientations and utilizing the strengths of both types of data. Thus, the social phenomenon of completing Canadian residency as an IMG, can better be understood through the mixing of quantitative and qualitative data.[15] As was the case in our study, the findings were constructed from IMG's experiences during residency by the researchers.[16,17]

We employed a convergent parallel design. Surveys and semi-structured interviews were conducted concurrently, enabling collection of quantitative and qualitative data during the same study period. We initially analyzed quantitative and qualitative data separately, then compared, contrasted, and integrated them.

## Context and setting

This study is based in Alberta where residency is completed at the University of Alberta (UofA) or University of Calgary (UofC). Contextual details are provided in the supplementary materials. Notably, unlike most provinces, Alberta has no RoS. However, matching through CaRMS does not guarantee IMGs residency as they must first pass a 6–10-week externship (including 4-8 weeks of clinical assessment). This is not required of matching CMG counterparts.[18]

We purposively recruited IMGs who passed their externship and entered Internal Medicine residency at UofA or UofC between 2018 and 2022. Study advertisements were distributed to IMGs through their residency programs via email and newsletter.

The study was approved by the Conjoint Health Research Ethics Board (REB22-0967) at UofC.

## Data collection

Two primary sources of data were collected: a survey and semi-structured interviews. Both research instruments, in their exploration of wellness, were informed by the WISHES framework for resident wellness referenced above.[14]

***i. Survey.*** We developed an online survey *de novo* using the Qualtrics XM platform. Quantitative data were collected. The survey captured demographic information, factors perceived to facilitate or impede success, and residency-related wellness domains. Open-response questions allowed participants to further reflect on facilitators and barriers to success, wellness domains, and recommendations for improving the IMG experience.

The survey was developed collaboratively. SC brought lived experience as an IMG resident; GB provided medical education research experience and supported survey refinement; RK offered perspectives from postgraduate medical education and residency training; and AK informed survey design through expertise in mixed-methods research, health professions education, and health equity. The wellness domains included have been validated in previous research.[19,20]

***ii. Semi-structured interviews.*** Residency experiences, including facilitators and barriers to success, wellness domains, and improvement suggestions were further qualitatively explored through semi-structured interviews. The interview protocol was primarily guided by these areas of inquiry. informed the interview guide.[16] The lead author (SC) conducted all interviews via Zoom. Interviews were digitally recorded, transcribed verbatim and de-identified. Data collection was iterative, continuing until participants had sufficiently shared their perspectives.

Both research instruments (survey and interview guide) are provided in the supplementary material.

## Data Analysis

The quantitative data from the survey was analyzed using Microsoft Excel. We analyzed qualitative data from survey open-response questions and semi-structured interviews separately in NVivo (version 14). Following an initial phase of inductive coding of the interview data, the open-ended survey responses were combined with the interview data. Using an iterative comparative process, we applied Braun and Clark's six phases of thematic analysis: data familiarization, generation of initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the final report.[21] Team members independently coded the data in duplicate before engaging in reflexive discussions to compare codes, resolve discrepancies, and finalize themes. Themes were subsequently reviewed and refined through iterative team discussions until consensus was reached regarding their interpretation and representation within the dataset. Themes were iteratively refined and explored alongside the quantitative findings, which were analyzed separately and later integrated. The authors frequently met to discuss how findings from the quantitative and qualitative data complemented each other, converged, or diverged. This led to an integrated synthesis of key findings.

## Reflexivity and rigor

We attended to rigor throughout. For quantitative data, sources of bias and limitations were considered. For qualitative data, we considered credibility, transferability, dependability, and confirmability.[22] To capture a broad range of perspectives, when sampling, participant diversity was sought (e.g. I-IMGs and C-IMGs across two universities). During analysis, complementary and contrasting interpretations were explored to ensure pluralistic perspectives of both facilitators and barriers to residency as an IMG. We also quote participants' own words and phrases that were discovered during coding.

Reflexivity was also maintained throughout our study.[23] Researchers reflected on how their biases, beliefs and lived experiences influenced the research process. We also considered similarities and differences shared with participants.[23,24] At the time of study, SC, an I-IMG and biracial cisgender woman, was completing Internal Medicine at UoC. She thus brought her own lived experiences of resi-

dency. GB, a white cisgender woman and immigrant, was completing a master's degree, bringing her experience in non-clinical medical education administration and research. RK, a cisgender man and visible minority, shared awareness of systemic challenges while recognizing his differing experiences as a CMG independently practicing Internal Medicine. AK, a racialized cisgender woman contributed her research expertise in mixed methods, survey design and non-clinical medical education and health equity, grounded in lived experiences of discrimination.

# Results

Of 50 eligible participants, 29 responded to the survey (58% response rate) with the majority identifying as I-IMGs. Twelve interviews were completed with 11 I-IMGs and one C-IMG.

## Quantitative analysis

Key demographic survey data are summarized in Table 1. Percentages are reported to protect participant anonymity, given the sample size. Results indicate nearly all IMGs were older than 30 years when entering residency, with approximately one in five over 40. Although participants represented diverse racial identities, most were non-white. About 90% were married, and 85% had caregiving responsibilities. Upon entering residency, roughly three-quarters had graduated from medical school more than five years earlier, and a similar proportion had previously practiced medicine.

Table 1. *Demographic data summarized from survey*

| Demographic variable | % of participants |
|---|---|
| Residency location | |
| University 1 | 38 |
| University 2 | 62 |
| Immigrant status | |
| I-IMG | 93 |
| C-IMG | 7 |
| Age at entering residency | |
| <25 | 0 |
| 26–30 | 17 |
| 31-35 | 31 |
| 36-40 | 31 |
| >40 | 21 |
| Gender identity/ identities | |
| Female | 63 |
| Male | 33 |
| Prefer not to say | 4 |
| Other[1] | 0 |
| Racial identity | |
| Arab | 4 |
| Black | 11 |
| Latin American | 7 |
| South Asian[2] | 41 |
| West Asian[3] | 4 |
| White | 18 |
| Prefer not to say | 4 |
| Other[4] | 11 |
| Marital status | |
| Single | 4 |
| Married | 88 |
| Separated | 4 |
| Divorced | 4 |
| Other[5] | 0 |
| Caregiver status for a child/children under 18 years | |
| No | 15 |
| Yes: 1 child | 26 |
| Yes: 2-4 children | 59 |
| Yes: >4 children | 0 |
| Time from medical school graduation to entering Canadian residency | |
| <1 year | 10 |
| 1-5 years | 14 |
| >5 years | 76 |
| Practiced clinically prior to Canadian residency | |
| Yes | 72 |
| No | 28 |
| Practiced Internal Medicine prior to Canadian residency (if had previously practiced) | |
| Yes | 45 |
| No | 55 |

*[1] 'Other' gender identities participants may have individually selected included non-binary/ third gender, gender-fluid, agender, transgender, two-spirit and other. [2] South Asian included East Indian, Pakistani and Sri Lankan. [3] West Asian included Iranian and Afghan. [4] 'Other' racial identities participants may have individually selected included Chinese, First Nation, Inuk (Inuit), Japanese, Korean, Metis, Southeast Asian (Vietnamese, Cambodian, Thai, Filipino). [5]Other marital statuses participants may have individually selected included common law and widowed*

## Qualitative analysis

Four themes were generated from the open-ended survey questions and qualitative data collected from interviews.

***Theme 1: A tone set by the path to residency.*** Barriers encountered by IMGs during their path to residency set the tone for their subsequent residency experiences. The pathway to residency was consistently described as structurally different from that of CMGs, with additional eligibility requirements and policy restrictions shaping early perceptions of inequity and belonging. Particularly impactful barriers included eligibility criteria applied exclusively to IMGs, restrictions on practice scope, and RoS requirements.

> *The way we get to residency; the pathway looks a lot different for Canadian medical graduates as it looks for IMGs.* (Interviewee 6)

The externship in Alberta emerged as a particularly salient barrier. This additional assessment was described as prolonging the pathway to residency while signaling institutional mistrust of IMGs' prior medical training. For many, it undermined confidence prior to starting residency and reinforced distinctions between IMGs and CMGs.

> *Externship is just another high-stakes, stressful situation that ensures the new resident is going into the program somewhat burnt out, as opposed to their CMG colleagues.* (Questionnaire Respondent 4)

These early structural barriers carried forward into residency itself, shaping expectations and reinforcing a sense of entering training from a disadvantaged position.

> *You start off on a negative note, and you continue on a negative note...if you're already stepping in feeling like you're an underdog, it's quite stressful.* (Interviewee 11)

***Theme 2: Hindered by the "IMG" label.*** The "IMG" label persisted throughout residency and was closely associated with assumptions of inferiority relative to CMGs. The label shaped expectations of competence and contributed to heightened scrutiny, requiring IMGs to repeatedly demonstrate their knowledge and abilities.

> *They don't think (IMG) qualifications are par to a Canadian qualification. So, then that puts you in a different kind of loop where you're scrutinized more and asked more questions to tease apart … Why are they (CMGs) not getting asked? And maybe it's an assumption that they already know. But they might not know as well. And the assumption is that IMGs don't know. So, they feel they need to ask to see how much we actually know.* (Interviewee 5)

Labeling also occurred with other social identities, including race, language, age, gender, and caregiver status, compounding marginalization within the training environment. These dynamics extended beyond IMG-CMG comparisons, and at times, produced hierarchies among IMGs themselves, where individuals perceived as more culturally or linguistically aligned with Canadian norms experienced fewer barriers.

> *I haven't experienced it myself, but I noticed quite a bit of inner discrimination/racism towards other colleagues, IMGs, the way you look, the way you speak, the way you sound, which fortunately I don't have a lot of those things. I kind of blend in.* (Interviewee 5)

Repeated exposure to these assumptions shaped self-perception, with several IMGs describing internalized doubts about their abilities and place within residency.

> *It was hard; my confidence and self-esteem were constantly challenged by the environment. I felt that my English is poor, my thought process is slow, my knowledge is limited, and I am not an interesting person to talk to.* (Questionnaire Respondent 20)

***Theme 3: Value ascribed to wellness and resilience.*** The holistic framework of wellness that informed the interview guide resonated with IMGs. However, the framework was viewed as incomplete as it did not recognize caregiver responsibilities, financial pressures and cultural nor religious influences that shape IMG experiences. Strong social networks, encompassing family, friends and the broader IMG community were described as central sources of support that sustained wellness during residency.

Although residency negatively affected wellness, particularly physical, mental, and social domains, many of these challenges were viewed as common to both IMGs and CMGs.

> *The challenges and the tiredness and exhaustion, it's not only for international graduates, even the Canadian graduates are having the same experience.* (Interviewee 2)

Resilience emerged as a defining characteristic of IMG success. This resilience was rooted in the cumulative challenges encountered before and during residency, including navigating immigration, adapting to new healthcare systems and repeatedly pursuing entry into Canadian training programs.

> *I think the resilience relates to being an IMG … that fight and that struggle just makes us all the more stronger.* (Interviewee 1)

Gratitude for the opportunity to complete residency also shaped experiences of work and professional identity. While this gratitude fostered perseverance and positivity, it could also constrain self-advocacy.

> *Being as an IMG … I didn't feel safe enough or supported enough to actually stand up and say, 'Hey, I need this or I'm not going to do this' … I always say yes, because I'm an IMG and I feel like I have to say yes … I feel like that's the expectation that you work so hard to get in. And some IMGs have been wanting this for five years. And they finally get here. And when they ask you to do something, you say 'yes.'* (Interviewee 5)

***Theme 4: Creating a better path forward.*** Several participant informed strategies to improve residency experiences for future IMGs were articulated. These recommendations focused on shifting cultural perceptions of IMGs, strengthening mentorship and academic support, expanding inclusive wellness initiatives and building IMG-led communities to support peer connection and advocacy.

Recognizing and highlighting the strengths IMGs bring, including prior clinical experience and diverse cultural perspectives, was identified as an important step toward strengthening confidence and belonging within residency programs.

> *Some positive words for (IMG) residents would be helpful to bring their confidence because they are coming from vast experience and they bring a lot of positives to the program, which we should acknowledge.* (Interviewee 7)

As IMGs described how inequitable distinctions between CMGs and IMGs often persisted after matching, participants suggested that residency programs more intentionally treat all residents as equal members of the training program once residency begins. This was viewed as essential to fostering fairness and inclusion.

Mentorship and faculty engagement attentive to IMG-specific challenges were identified as potential supports that could improve IMG experiences, particularly when mentors bring personal experiences navigating the IMG pathway. Participants also suggested that structured peer support networks among IMGs could provide valuable spaces for sharing experiences, navigating challenges and reducing isolation during training.

> *… having a support specific group already arranged for IMGs, where they can potentially join together and then discuss issues that everybody's having … will probably help a lot.* (Questionnaire Respondent 5)

Improving institutional responses to mistreatment was also identified as an opportunity for change. Accessible and psychologically safe mechanisms for reporting discrimination or mistreatment were viewed as necessary to ensure IMGs could raise concerns without fear of repercussions.

Wellness initiatives were another area identified for improvement. Many IMGs navigate significant caregiver responsibilities and family obligations alongside residency training. As a result, it was suggested that wellness initiatives designed for residents should better account for these practical constraints, offering more flexible and inclusive ap-roaches that better reflect IMG realities.

Finally, stronger IMG representation within institutional and policy decision making spaces was viewed as critical to advancing meaningful change. Greater representation at local, provincial and national levels was seen as necessary to ensure IMG

perspectives inform policies shaping their training and practice environments.

> *So, the policymakers, I'm not really sure if they know about the challenges that we are going through … making those policy changes has to come from voices that are raised by ourselves. Nobody's going to do that for us, right? So having a platform, a national one even better … also having a provincial IMG platform in each province who can advocate for their unique challenges.* (Interviewee 3)

## Integrated findings

Our quantitative and qualitative data strongly converged around five key findings:

1. From the outset, the residency pathway positions IMGs differently from CMGs
2. Stigma associated with the IMG label was influenced by the intersecting identities IMGs held
3. IMGs considered their intersectional identities and prior experiences as sources of both strengths and limitations during residency
4. Physical and mental wellness were most significantly impacted, though social connectedness and belonging were identified as essential to maintaining wellness
5. Quality improvement initiatives should be tailored to IMGs specific needs, inclusive of their input and grounded in a strengths-based approach.

Appendix A further details each of these key findings.

We further found that facilitators and barriers to success converged across systemic, program and individual levels, as detailed in Figure 1. Systemically, additional eligibility requirements and ingrained biases shaped IMGs access to residency. Program-level influences included the degree to which program culture, mentorship and reporting mechanisms supported IMGs. At the individual level, prior medical experience, resilience and social support acted as facilitators, while language and cultural differences presented ongoing challenges.

These levels interacted dynamically, with systemic inequities shaping program environments, which in turn influenced individual experiences. Building on participants recommendations, several quality improvement initiatives were identified to better support IMGs during residency (Figure 2). These initiatives are also framed across systemic, program and individual levels and are guided by three core principles:

1. Focussing on strengths-based approaches.
2. Co-developing supports with IMGs.
3. Tailored, IMG-specific supports that recognize the complexity of intersecting identities

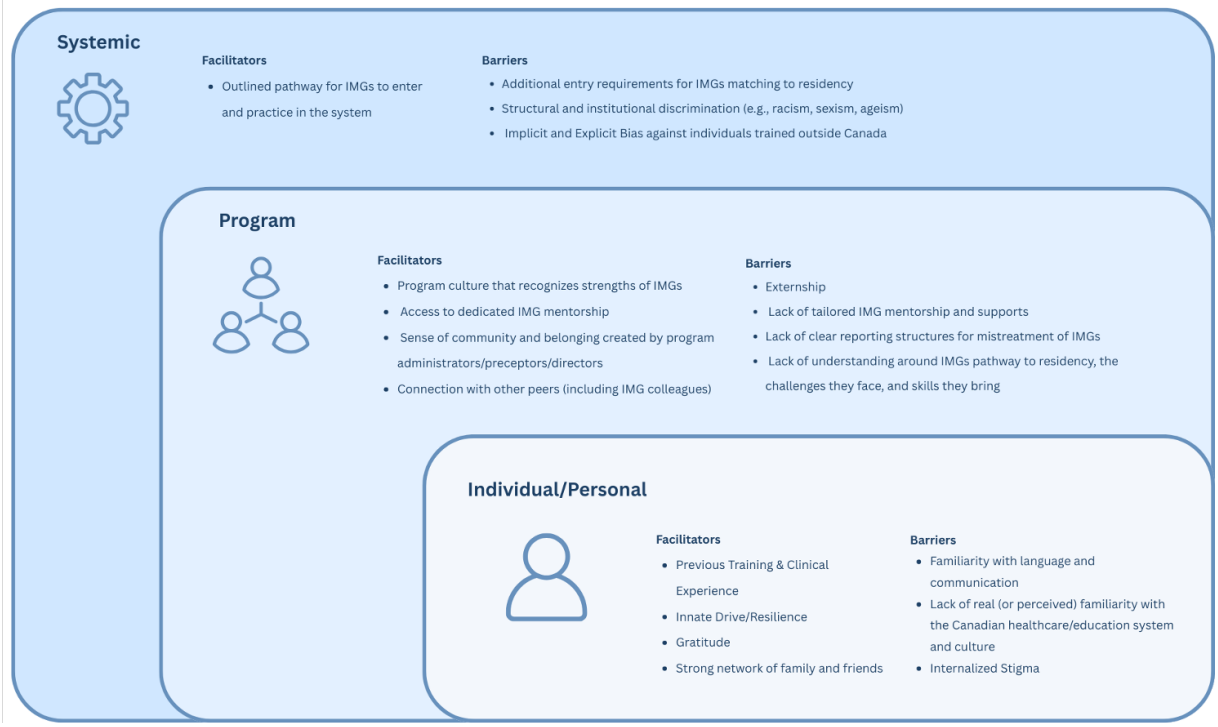



*Figure 1. Facilitators and barriers to success described by IMGs*

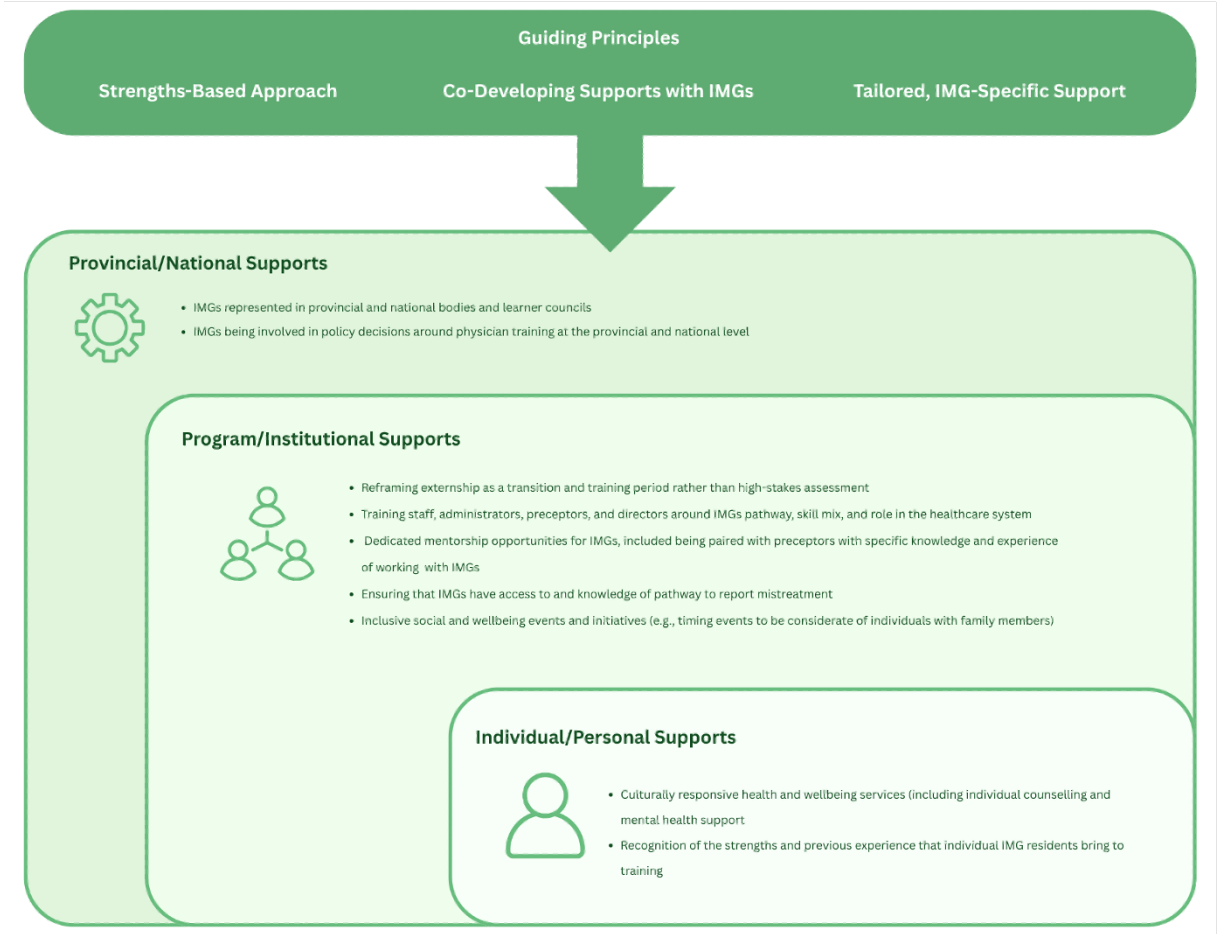



*Figure 2. Participant informed quality improvement initiatives to improve IMG support and wellness*

## Discussion

This study explored facilitators and barriers to success during Canadian residency, as well as how IMGs construct and navigate wellness. Negative experiences securing residency position had long lasting effects once IMGs entered residency, shaping their confidence, belonging and mindset. From the outset, CaRMS positions IMGs differently, distinctly separating them from CMGs.

Structural inequities within the CaRMS process are significant. Eligibility requirements only for IMGs include demonstrating language proficiency, passing the Medical Council of Canada Qualifying Exam Part 1, and completing the National Assessment Collaboration – Objective Structured Clinical Examination. Furthermore, access is constrained by provincial policies that limit opportunities for many IMGs. For example, Alberta requires proof of prior residence within the province, while Ontario, effective 2025, has attempted to stipulate that IMGs must have attended an accredited Ontario high school for two or more years to be eligible for IMG-dedicated positions. Even after meeting these eligibility requirements, IMGs face additional restrictions, including specialties to which they can apply, RoS obligations, and, in Alberta, the externship.[8] Collec--ively, these systemic barriers create inequitable ac--ess to residency, with long-term repercussions on IMGs' personal and professional trajectories. The highly competitive nature of CaRMS for IMGs further amplifies these inequities. For example, in 2023 only 35.5% of IMG applicants were successful.[1] Many participants described multiple application attempts prior to successfully matching. These experiences shaped their mindset, expectations, and overall approach to residency. However, these structural dynamics must also be understood within the broader policy context in which Canadian physician training occurs. Both undergraduate medical school and postgraduate residency training are substantially funded through public investment at federal and provincial levels. This public subsidy has historically informed policy arguments that residency training opportunities should prioritize CMGs who were domestically educated within this publicly supported system.

The stigmatizing differential treatment of IMGs that begins during residency application, persists into residency, where it continues to shape experiences and serve as a barrier to success. Discrimination operates across systemic, program, and individual levels, with reinforcement by the medical inferiority bias." Often attached to IMGs, this bias is rooted in beliefs that international medical schools provide lower quality training than Canadian institutions. Inequitable treatment of IMGs ensues, perpetuating their marginalization.[6,25,26] Our participants described how these perceptions were reinforced through everyday interactions and institutional practices. As previously reported, they contribute to implicit and explicit bias from peers, faculty and the broader education and healthcare systems.[6,25,26] Bias manifests in several forms, including bullying, exclusion, stereotyping, mistrust, public humiliation and reduced recognition or support relative to non-IMG peers.[27] Cumulatively, these negative experiences foster internalized stigma, with IMGs in our study contributing to their inferiority narrative. Participants questioned their own value, which undermined their confidence and success.

The intersectional identities IMGs often hold further complicate this stigma and differential treatment. Many participants held multiple marginalized social positions, often identifying as immigrants, racialized individuals, caregivers, and older trainees. These intersecting identities render IMGs more visible and subject to closer scrutiny.[25] As one participant observed, being less visibly recognizable as an IMG helped them "blend in" (Interviewee 5), supporting prior evidence that certain identity characteristics can enable or disable exclusion.[27] We know racial and immigrant components of identity are particularly impactful. Racialized IMGs face workplace disparities, attributed to differences in language, communication, cultural norms, and prior medical education.[28] Immigrant status intensifies social isolation and segregation as IMGs navigate different cultural expectations pertaining to gender, authority, and interpersonal relationships.[6,27] Mitigating marginalization requires bidirectional cultural humility between IMGs and the systems in which they train. Yet, the onus remains on IMGs.[29] This inequitable burden, compounded by the need to re-conceptualize personal and professional identities, contributes to feelings of loss, devaluation and compromised wellness.[5,25,30]

Structural inequities, institutional bias and intersecting social identities position IMGs differently within Canadian residency training. However,

many IMGs go on to establish highly successful careers as physicians in Canada. Participants highlighted that a deep sense of purpose associated with the opportunity to practice medicine in Canada facilitated their success during residency. So too did prior clinical experience and the diverse cultural perspectives they bring. The literature similarly demonstrates that IMGs selected by Canadian residency programs bring important strengths and diversity to the healthcare workforce. Many IMGs bring extensive prior clinical and non-clinical experience, as demonstrated through their strong medical knowledge, procedural skills, research, health policy, and administrative expertise. Many come from diverse cultural backgrounds, speaking multiple languages, which is an important asset in Canada's multicultural patient population.[9] Some IMGs have practiced in countries with political, social, and economic instability. They often have deep experience recognizing and managing health inequities. Furthermore, many IMGs complete RoS for 1-5 years upon residency completion. Placements are typically in rural communities where high physician demand and healthcare disparities have been identified. Thus, IMGs are crucial in reducing physician shortages and delivering healthcare to Canada's underserved communities.[4] In our study, resilience was identified as a defining characteristic of IMG success, shaped by the perseverance required to enter and complete residency. Resilience coexisted with deep gratitude for their positioning. However, while gratitude motivated IMG success, it also hindered it, in line with the "gratitude tax" as it can serve to silence IMGs even when confronted with discrimination or inequity.[26]

Much of the existing literature has focused on IMG performance. Little attention has been paid to how IMGs construct and navigate wellness during residency, a gap this study addresses. Holistically conceptualizing wellness resonated with participants. However, they emphasized the need to integrate familial, cultural, and religious influences to ensure inclusivity. Residency impacted physical and mental wellness most. Social support was a powerful protective factor. We know social support in and out of the workplace reduces barriers IMGs face and strengthens their wellness, confidence, and relationships. Support from colleagues, mentors and educators familiar with IMG needs, as well as from partners, friends and community networks, is vital.[28]

Historically, research on facilitating IMG success in residency has been framed through a deficit lens. Initiatives have focused on identifying "at-risk residents" and developing interventions including orientation activities, mentoring, psychosocial coun--elling and remedial support.[5-7,31] While valuable, these initiatives often assume weakness within the IMG population, rather than examining the inequitable structures and policies at play. Likewise, research predicting which IMGs will be successful during residency has emphasized demographic variables including age, gender, English fluency, and country of medical school training.[7,12,13] These factors are beyond IMGs control and risk reinforcing harmful assumptions that some IMGs are inherently less capable. Encouragingly, however, this narrative has recently shifted with calls for intercultural training of colleagues, provision of cultural guidance for IMGs, and celebration of cultural diversity.[27] This is needed because IMG success depends not only on individual adaptation but also on institutional responsibility to foster inclusion.

Participants were highly motivated to improve IMG residency experiences. They provided concrete recommendations to facilitate IMG success and wellness during residency, as summarized in Figure 2. Recommendations centered on improvement opportunities at provincial/national, program/institutional, and individual/personal levels. Participants emphasized that initiatives must shift away from deficit-based framing towards strength-based approaches, co-created with IMGs and tailored to their unique needs. Achieving this without further stigmatizing IMG residents requires careful attention. However, there is an overwhelming call to change cultural perceptions of IMGs. Broader cultural change is needed to improve IMG experiences, rather than focusing solely on remediating individual IMG residents, as has historically been the case. Attention to wellness is also needed, as it cannot be separated from the broader educational and healthcare environments that shape IMG success. Aligned with prior research, participants called for inclusive wellness strategies, responsive to their intersecting identities to ensure initiatives are safe, relevant, and culturally attuned, while avoiding the perpetuation of stigma, marginalization, and discrimination.[32]

Future research should explore the intersectional identities that shape IMG experiences to deepen un-

derstanding of barriers faced. It should also focus on the implementation and evaluation of structural, program and individual-level initiatives proposed in this study. How such initiatives influence IMG inclusion, success and wellness will determine their long-term impact and sustainability.

## Limitations

Our study has important limitations. Participant recruitment was limited to one province in Canada and specifically to Internal Medicine residency programs. Recruitment was through program-distributed email and newsletters, which may have limited participation from graduates who had lost access to university-affiliated accounts during the study period (2018-2022). Furthermore, while Alberta's mandated externship is a unique prerequisite to securing residency and likely shaped IMG experiences, we note each province has its own eligibility requirements that influence access and experience. Ontario's recent policy change is an important example.

Alberta has no RoS requirements, whereas in many other provinces such obligations mandate where IMGs will work, how long for, and in what capacity. This information often remains uncertain until late in residency and can create stress, which may impact wellness.[33] Many underserved communities where RoS positions are located are less ethnically diverse and may not meet IMGs sociocultural needs.[4,34] Thus, our findings may not be transferable to jurisdictions where these conditions differ.

C-IMGs were underrepresented in our study, precluding direct comparisons with I-IMGs. Evidence suggests these groups experience distinct pathways and challenges. Canadian-IMGs are more likely to match through CaRMS, potentially reflecting advantages including recency of graduation, opportunities for Canadian electives, familiarity with Canadian culture, and greater social capital or "insider knowledge."[3,35-37] In contrast, discrimination and structural barriers may more profoundly impact I-IMGs.[6] Future research should therefore explore the comparative experiences of C-IMGs and I-IMGs to better understand how policies, social positioning, and structural inequities uniquely shape their paths to and during residency.

## Conclusion

This study cultivated a space to surface the IMG experience, revealing new insights into the multilayered challenges that shape their experiences during Canadian residency. Our findings reveal how structural, program, and individual-level inequities deeply embedded within the residency pathway, coupled with the persistent stigma of the "IMG" label, influence inclusion, belonging, wellness, and overall success. Despite these inequities, IMGs demonstrate resilience and a strong desire to improve the systems in which they train. Collectively, these insights highlight the need to shift cultural perceptions of IMGs and move beyond deficit-based approaches so supports can be co-created with IMGs that recognize their lived experiences, values, and strengths. We call on Canadian programs and institutions to take up this work to build a more equitable and inclusive residency education system for IMGs and the diverse communities they serve.

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# Appendix A. Summary of key findings from integrating quantitative and qualitative data

| Key Finding | Quantitative Data Insights | Qualitative Data Insights | Integrated Interpretation |
|---|---|---|---|
| From the outset, the residency pathway positions IMGs differently from CMGs | - | "[Externship] makes you feel almost not confident because you've gone through months of needing to have extra training where no Canadian Medical Graduate would ever have to do that." (Interviewee 6) | The increased eligibility requirements imposed on IMGs, including the mandated externship in Alberta, creates inequitable access to residency, as these conditions are not applied to CMGs. While the externship in Alberta operates at a program level, it reflects broader systemic inequities that signal differential treatment and perceived value of IMGs. The differential positioning of IMGs thus begins before residency but continues to shape their training experiences, influencing confidence, belonging and perceived worth. |
| Stigma associated with the IMG label was influenced by the intersecting identities IMGs held | Most survey respondents held one or more marginalized identities:<br>93% immigrants<br>85% racialized (i.e., 'non-white')<br>63% women<br>85% caregivers of one or more children<br>Most survey respondents were older at the start of residency, with prior clinical experience, and held caregiver commitments:<br>52% aged >36 years<br>72% had prior clinical experience<br>76% had >5-year gap in clinical practice before residency<br>85% were caregivers for ≥ 1 child | "I noticed quite a bit of inner discrimination/racism towards other colleagues, IMGs, the way you look, the way you speak, the way you sound, which fortunately I don't have a lot of those things. I kind of blend in." (Interviewee 5) | Demographic data highlighted the multiple intersecting marginalized identities that IMGs often hold. These identities, when combined with the "IMG" label, produced overlapping forms of bias and discrimination relating to age, gender, race, language and caregiver status. Participants described a hierarchy within IMG groups, where those with more visible markers of cultural diversity faced heightened scrutiny from peers, faculty and patients. The persistent stigma attached to the "IMG" label, underpinned by assumptions of inferior medical school training, reinforced perceptions of inequity. Collectively, these dynamics un--ermined confidence, compromised psychological safety and wellness, and emphasized perceptions of inferiority relative to CMGs. |
| IMGs considered their intersectional identities and prior experiences as sources of both strengths and limitations during residency | | "I think the resilience relates to being an IMG...that fight and that struggle just makes us all the more stronger...." (Interviewee 1)<br>"they are coming from vast experience, and they bring a lot of positives to the program." (Interviewee 7) | The intersecting identities of IMGs shaped positioning within residency programs. IMGs themselves identified select intersections of their identity, namely age, prior clinical experience, and caregiving commitments as sources of strength and limitation.<br>Many viewed their older age and cumulative lived and professional experience as assets that fostered resilience and supported their success in residency. However, within their |

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| | | | broader social and institutional contexts, these same qualities were often devalued. Older IMGs were perceived as less "trainable" and prior clinical expertise was discounted and overlooked.<br>Similarly, caregiving commitments held benefits, as family provided IMGs with support. These commitments however, heightened the demands of residency, contributing to fatigue and limiting opportunities for rest, professional development and en--agement in program activities.<br>Collectively, these intersections highlighted how IMGs identities could simultaneously empower and constrain their success and wellness in residency. |
| Physical and mental wellness were most significantly impacted, though social connectedness and belonging were identified as essential to maintaining wellness | Percentage of participants reporting residency impacted wellness domains:<br>76% physical wellness<br>72% mental wellness<br>57% social wellness<br>38% intellectual wellness<br>29% occupational wellness | ""I think that having a support specific group already arranged for IMGs, where they can potentially join together and then discuss issues that everybody's having, same similar issues, will probably help a lot."(Interviewee 8) | Residency had the greatest impact on physical and mental wellness, with participants describing the need to sacrifice these domains to meet program demands, a strain felt most profoundly by those with caregiver commitments.<br>IMGs emphasized that maintaining overall wellness during residency required access to social support, with many drawing strength from family connections. A greater sense of belonging within their programs would also help maintain their wellness. |
| Quality improvement initiatives should be tailored to IMGs specific needs, inclusive of their input, and grounded in a strengths-based approach | Percentage of participants reporting identifying individual, program or system-level factors influencing their ability to thrive or struggle during residency:<br>Thrive:<br>91% individual factors<br>50% program factors<br>32% system factors<br>Struggle:<br>77% individual factors<br>41% program factors<br>68% system factors | "Instead of people assessing you, or evaluating how good or how bad you are, use that time period to actually support and develop [the] IMG." (Interviewee 8).<br>"I don't think we are as well represented at the decision making on policymaking level." (Interviewee 3)<br>"Understand that IMGs come from different background and with different strength. Try to focus on strengths and not weakness." (Questionnaire Respondent 6) | Factors at individual, program and system levels were identified by IMGs as shaping their ability to thrive or struggle during residency. They advocated for multi-level quality improvement initiatives targeting these same levels. Overarching principles included co-developing IMG supports, adopting a strengths-based approach, and tailoring initiatives to IMGs diverse needs. Initiatives must also attend to wellness, shifting away from assumptions of individual coping towards inclusive, culturally responsive, structural supports. |