

Shaping Overseas Medical Career Aspirations among Malaysian Medical Students: An Integrated Career Construction Framework

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ABSTRACT

Medical students' plans for careers abroad are often framed as early indicators of physician migration and brain drain, but this framing can obscure an earlier developmental process in which students construct possible professional futures before entering the medical workforce. Recent Malaysian evidence, including national medical-student data and documented post-graduation movement to Singapore, makes this pre-entry stage increasingly consequential. This conceptual paper uses an integrative conceptual review and theoretical synthesis of recent Malaysian and international evidence to develop Overseas Medical Career Aspiration (OMCA) as a distinct career construct. OMCA is defined as a valued, future-oriented career aspiration in which students envision overseas training, professional development, or employment as part of their desired medical career; it does not itself imply perceived feasibility, a firm migration plan, preparation, actual mobility, or permanent brain drain. The framework proposes three deliberately bounded antecedents: perceived professional development opportunities abroad, perceived social recognition of overseas medical careers, and migration-supportive social networks. Career Construction Theory explains how students construct possible professional futures, Push-Pull Theory explains how perceived overseas opportunities and origin-destination conditions shape destination attractiveness, and Social Exchange Theory explains how anticipated social returns and supportive relationships influence career evaluation. The framework proposes that each antecedent is positively associated with OMCA. Its theoretical contribution is to reorganise established migration evidence around three pre-entry mechanisms, namely, developmental opportunity, symbolic career value, and relational enablement, while maintaining clear boundaries between aspiration and later stages of migration decision-making. The paper also outlines how OMCA and its antecedents can be operationalised and tested in future empirical research among Malaysian medical students.

Keywords: overseas medical career aspiration, medical students, professional development opportunities, social recognition, migration-supportive social networks

INTRODUCTION

The international mobility of doctors is a persistent concern for health systems because the loss of trained professionals can intensify workforce shortages and weaken the returns on national investments in medical education. Yet the foundations of future mobility are often established before a doctor formally enters the workforce. Medical students observe healthcare systems, compare postgraduate pathways, interact with peers and mentors, and gradually form expectations about where a desirable medical career might be built. Their overseas career orientation therefore matters not only as an educational issue but also as an early signal for workforce planning (McCulloch et al., 2024; Ser et al., 2025).

Recent Malaysian evidence makes this pre-entry stage particularly important. The Malaysian Medical Students' Career Intention (MMSCI) study of 859 students from 21 medical schools found that 27.1% planned to emigrate to practise medicine. Among those intending to emigrate, 24.9% planned to leave immediately after graduation and 75.1% after housemanship; Australia, the United Kingdom and Singapore were the most frequently identified destinations. At the same time, 80.7% expected to return to Malaysia after several years or after specialist training, showing that overseas orientation should not automatically be interpreted as permanent

workforce loss (Teng et al., 2024). The same national project has since shown that 85% of Malaysian medical students intend to specialise and that close to one-third would prefer to undertake specialist training overseas, while opportunities to enter specialist training, training quality and career-path clarity remain highly salient to their future plans (Ser et al., 2026).

The student-level evidence is increasingly mirrored by graduate mobility to Singapore. Media reporting in 2025 indicated that more than 60 of 160 Universiti Malaya (UM) medical graduates in the 2024 cohort and 30 of 150 Universiti Kebangsaan Malaysia (UKM) graduates in the 2023 cohort went to Singapore for housemanship (Ho & Ibrahim, 2025). More recently, a public-register linkage analysis reported that 314 of 1,162 UM medical graduates from 2018 to 2025, or 27.0%, held active Singapore Medical Council registration as of 30 June 2026 (Sabri, 2026). That analysis treated active registration as a surrogate marker rather than definitive proof of current residence or permanent migration and acknowledged the limitations of public-record linkage. Nevertheless, it indicates that the Singapore pathway is not merely hypothetical. It is also institutionally feasible: Singapore's current Medical Registration Act lists the medical qualifications of UM and UKM among recognised overseas qualifications, subject to prevailing registration requirements (Singapore Statutes Online, 2026). Together, these sources show a visible pathway from student aspiration to actual regional mobility, while also illustrating that national tracking of destination-specific graduate movement remains fragmented across surveys, media reports and professional registers.

International evidence points to similar complexity. A national UK study found substantial interest in working abroad, while a realist evaluation demonstrated that such intentions emerge through combinations of context and mechanism rather than a single determinant (Ferreira et al., 2023; McCulloch et al., 2024). Studies in India, Italy, Türkiye and Iran likewise identify postgraduate training, career prospects, quality of life, working conditions, family considerations and wider institutional conditions as relevant to students' overseas plans (Aydin et al., 2026; Kansal et al., 2023; Martella et al., 2025; Parvizi et al., 2025). A recent scoping review of 33 studies confirms that the prevalence and determinants of medical-student migration are now well documented across multiple settings (Ser et al., 2025).

The remaining gap is therefore not an absence of research on medical-student migration. Rather, it is an explanatory and contextual gap. Existing Malaysian studies are strongest in documenting prevalence, preferred destinations and reported reasons for emigration, while McCulloch et al. (2024) provide an important process explanation in the United Kingdom. What remains insufficiently developed is a career-construction account of how Malaysian students, before substantial professional employment, come to imagine an overseas medical career as both desirable and attainable. In particular, the literature has not yet integrated perceived developmental opportunity, anticipated social value and migration-supportive relationships as distinct mechanisms within a career-aspiration framework. This gap is especially relevant where an established regional pathway, such as Malaysia-to-Singapore mobility, makes overseas career narratives concrete rather than purely aspirational.

This paper addresses that gap by conceptualising overseas medical career aspiration as an early career-construction outcome and by proposing three antecedents: perceived professional development opportunities abroad, perceived social recognition of overseas medical careers, and migration-supportive social networks. These constructs are not presented as the three strongest predictors of migration or as an exhaustive list of determinants. They are selected because they represent three conceptually distinct mechanisms that can operate before full professional entry: developmental opportunity, symbolic career value, and relational enablement. Career Construction Theory provides the primary interpretive anchor, while Push-Pull Theory and Social Exchange Theory serve as complementary lenses. The objective is to develop a coherent framework that can guide empirical research among Malaysian medical students and comparable populations.

CONCEPTUAL REVIEW APPROACH

This paper adopts an integrative conceptual review rather than a systematic review. The purpose is not to estimate the prevalence of migration intention or to exhaustively aggregate all reported determinants, but to build a theoretically coherent explanation of how an overseas medical career may become an attractive future among students. Priority is given to recent peer-reviewed empirical studies of medical students' career and

migration intentions, systematic and scoping reviews of health-worker migration, Malaysian studies, and foundational theoretical literature on career construction, migration, social exchange and social networks.

The conceptual development proceeds through four steps. First, recent Malaysian and international evidence is examined to distinguish what is already known about medical students' overseas intentions from what remains theoretically underexplained. Second, overseas medical career aspiration is separated from concrete migration intention, preparation, actual mobility and permanent brain drain. Third, three antecedents are selected as developmental, symbolic and relational mechanisms that can be evaluated before full professional entry. Fourth, these antecedents are integrated through Career Construction Theory, supported by Push-Pull Theory and Social Exchange Theory, and translated into propositions for future testing. Contemporary non-peer-reviewed sources, including public-register analysis, reputable news reporting and current Singapore registration legislation, are used only to establish the present Malaysian-Singapore mobility context; the conceptual propositions themselves rely primarily on peer-reviewed scholarship.

CONCEPTUALISING OVERSEAS MEDICAL CAREER ASPIRATION

Overseas medical career aspiration (OMCA) is defined in this paper as a valued, future-oriented career aspiration in which a medical student envisions overseas training, professional development, or employment as part of a desired future medical career. OMCA therefore represents an aspirational preference and career-goal orientation. It does not measure perceived possibility or feasibility, immediate willingness to act, a firm migration plan, a fixed destination, a departure timetable, or concrete preparation. This gives OMCA a specific theoretical role: it captures the career content of an overseas future before the student crosses the threshold into migration commitment or action. This distinction is consistent with migration scholarship that separates aspirations from the capabilities and opportunities required to translate them into movement (de Haas, 2021).

This boundary is especially important for medical students because an overseas component may serve different career purposes. A student may aspire to specialist training abroad, a period of international clinical experience, research exposure or longer-term employment without having decided to leave Malaysia permanently. The MMSCI findings illustrate this distinction: most students who planned to emigrate also expected to return after specialist training or after several years abroad (Teng et al., 2024). Overseas aspiration may therefore coexist with future return, circular mobility or renewed domestic commitment. Equating all such orientations with permanent brain drain can overstate both the immediacy and the permanence of workforce loss.

A career-aspiration perspective is also developmentally appropriate for students. During medical school, individuals build professional identities, evaluate specialties, respond to educational experiences and formulate future goals. Career aspirations can change as students progress through training and encounter new information, stressors, mentors and role models (Picker-Roesch & Lang, 2024; Wang & Li, 2024). The future career is therefore not simply selected from a fixed list of options; it is constructed through an ongoing process of meaning-making that connects personal goals with perceived opportunities and constraints.

Recent research further suggests that students' overseas orientations are fluid rather than fixed. McCulloch et al. (2024) show that intentions to move abroad arise through different combinations of context and mechanism, while Aydin et al. (2026) report that preparatory behaviour does not always align neatly with stated intentions. These findings reinforce the need to distinguish an early aspirational orientation from a more deliberate migration intention or behavioural preparation. Table 1 clarifies the conceptual boundary of OMCA relative to adjacent mobility concepts.

Table 1: Conceptual distinction between overseas medical career aspiration and adjacent mobility concepts

Concept	Core meaning	What it does not necessarily imply
Overseas medical career aspiration (OMCA)	An envisioned and valued future in which some medical training, development or employment occurs abroad.	A firm decision, a fixed destination, concrete preparation or permanent departure.

Concept	Core meaning	What it does not necessarily imply
Migration intention	A more deliberate commitment or plan to move abroad for work or training.	That the move will occur or that the person will remain abroad permanently.
Migration preparation	Practical actions taken to make migration possible, such as applications, licensing or information-seeking.	That migration has been secured or completed.
Actual international mobility	Observed movement across national borders for training or employment.	Permanent loss from the country of origin.
Permanent brain drain	Sustained loss of trained human capital from the origin workforce through long-term or permanent emigration.	All temporary, circular or return-oriented international mobility.

For future empirical work, OMCA should be operationalised as the degree to which an overseas component is valued and incorporated into a student's desired medical future, rather than as readiness to migrate. Illustrative indicators could ask whether students would like overseas training or work to form part of their future medical career, whether they regard an overseas medical pathway as an attractive professional future, and whether they can envision themselves pursuing part of their medical career in another country. Such wording is illustrative rather than a validated scale. Items should avoid applications, fixed timing, perceived feasibility, or completed plans because these would shift measurement toward migration intention, preparation, or capability. Content validation and subsequent psychometric testing would be required before any OMCA measure could be treated as established.

The distinction matters because Malaysia now displays evidence at several points along this continuum: student aspiration and intention are documented nationally, while recent graduate flows and Singapore registration records indicate that some aspirations are translated into mobility. The conceptual task is therefore to explain how overseas careers become meaningful before that transition occurs, rather than to assume that all students who express interest are already committed migrants. Table 2 summarises selected recent peer-reviewed evidence that informs the framework and shows the progression from prevalence and determinants toward process-oriented explanations.

Table 2: Selected recent evidence on medical students' overseas career orientation

Study	Context / sample	Key finding
Teng et al. (2024)	Malaysia; 859 students from 21 medical schools	27.1% planned to emigrate; 80.7% of intending emigrants planned to return after several years or specialist training.
Ser et al. (2026)	Malaysia; MMSCI national sample	85% intended to specialise; close to one-third preferred specialist training overseas; training access and quality were highly salient.
McCulloch et al. (2024)	United Kingdom; realist evaluation	Moving-abroad intentions emerged from interacting contexts and mechanisms; domestic career certainty and support mattered.
Martella et al. (2025)	Italy; 307 medical students	More than half considered moving abroad; higher-quality training was a major attraction.
Ser et al. (2025)	Scoping review; 33 studies	Career progression, income, training quality, working culture and family repeatedly shaped migration intentions.

THEORETICAL FOUNDATION

Career Construction Theory as the primary interpretive anchor

Career Construction Theory provides the primary theoretical foundation because the focal outcome is a career aspiration among students rather than actual migration behaviour. Savickas (2005) conceptualises career development as a process through which individuals construct meaning, adapt to changing contexts and

organise experiences into coherent vocational stories. Contemporary reviews continue to emphasise the theory's relevance in uncertain and boundaryless career environments, where individuals actively interpret possible futures rather than simply match themselves to fixed occupations (Wang & Li, 2024).

The present framework does not attempt to operationalise the full architecture of Career Construction Theory, including all constructs associated with vocational personality, career adaptability and life themes. Instead, it uses the theory as an interpretive anchor for a narrower proposition: students construct vocational futures by assigning meaning to perceived opportunities, social evaluations and contextual resources. Applied to medical students, an overseas career becomes attractive when it can be integrated into an emerging narrative of professional growth, identity and future possibility.

This positioning also accommodates change. Overseas aspiration may strengthen, weaken or be redirected as students progress through clinical training, learn more about domestic specialist pathways, encounter different mentors, develop family commitments or receive credible overseas opportunities. Such fluidity is consistent with longitudinal and realist evidence that medical students' career ambitions evolve across training rather than remaining fixed from entry to graduation (McCulloch et al., 2024; Picker-Roesch & Lang, 2024).

Push-Pull Theory

Push-Pull Theory provides a complementary migration lens for understanding why overseas medical career pathways may become attractive to Malaysian medical students. Pull factors refer to perceived advantages associated with potential destination countries, whereas push factors reflect conditions in the country of origin that may encourage consideration of alternatives abroad. Contemporary migration scholarship emphasises that these influences should not be treated as isolated causes, but as interacting conditions that shape mobility considerations (Van Hear et al., 2018).

Within the present framework, perceived professional development opportunities abroad represent an important pull mechanism. Opportunities for specialist training, clearer career pathways, advanced clinical exposure and professional development may increase the attractiveness of an overseas medical career. The theory is therefore used to explain the perceived opportunity structure surrounding students' career aspirations rather than to suggest that migration results automatically from any single push or pull factor.

Social Exchange Theory

Social Exchange Theory provides a complementary explanation of how students evaluate the anticipated benefits and costs associated with alternative career pathways. The theory proposes that social relationships and decisions are influenced by expected exchanges involving not only material outcomes but also psychological, relational and social rewards (Ahmad et al., 2023).

In the present framework, the theory is particularly relevant to perceived social recognition and migration-supportive social networks. Anticipated prestige and recognition can represent valued non-financial returns from an overseas career, while supportive networks may reduce informational, emotional and practical costs associated with pursuing such a pathway. Social Exchange Theory therefore helps explain why an overseas medical career may become more attractive when its anticipated social benefits are greater and the perceived costs of pursuing it are reduced.

The three theories therefore perform complementary rather than competing roles. Career Construction Theory specifies the meaning-making mechanism through which students construct an envisioned professional future. Push-Pull Theory specifies the opportunity-structure mechanism through which overseas advantages and origin-country conditions make particular destinations more or less attractive. Social Exchange Theory specifies the evaluative mechanism through which anticipated social returns and relational resources affect the perceived value of an overseas pathway. Together, the theories explain how opportunity, meaning, and social exchange can contribute to OMCA without treating any single theory as a complete explanation of medical-student mobility.

Table 3: Theoretical integration of the proposed framework

Element	Primary theoretical role	Mechanism	Expected implication
Overseas medical career aspiration	Career Construction Theory	Future-oriented career meaning and possible professional self	Aspiration reflects an envisioned career direction, not yet actual migration.
Professional development opportunities abroad	Career Construction + Push-Pull	Perceived access to training, career progression, expertise and professional growth	Stronger perceived opportunity abroad makes an overseas career more attractive.
Social recognition	Career Construction + Social Exchange	Anticipated prestige, respect and symbolic career value	Greater expected recognition increases the social value of an overseas pathway.
Migration-supportive social networks	Social Exchange + migration-network evidence	Information, encouragement, mentoring and practical facilitation	Supportive networks reduce uncertainty and make overseas pathways appear more attainable.

CONCEPTUAL ANTECEDENTS AND PROPOSITION DEVELOPMENT

The framework intentionally focuses on three mechanisms rather than attempting to reproduce the full catalogue of migration determinants. Working conditions, remuneration, job security, safety, family obligations and individual characteristics remain important and are well documented in Malaysian and international studies (Ser et al., 2025; Teng et al., 2024). The purpose here is different: to examine how an overseas medical career can become constructed as a desirable future through developmental opportunity, symbolic value and relational enablement before students have substantial employment experience. Accordingly, each antecedent is expected to be positively associated with OMCA. Each subsection defines one antecedent, reviews the relevant evidence and explains its theoretical mechanism before stating the corresponding proposition.

Perceived professional development opportunities abroad

Perceived professional development opportunities abroad refer to students' beliefs that overseas healthcare systems may offer attractive opportunities for specialist training, structured career progression, clinical exposure, research, advanced technology and the development of professional expertise. The construct is perception-based. It does not assume that all destination countries objectively provide superior training; rather, it concerns how students compare possible overseas pathways with the opportunities they expect to encounter domestically. Importantly, this construct is narrower than overall destination attractiveness: it isolates perceived career-development affordances rather than broader attraction based on salary, lifestyle, safety, working conditions, or other destination features. Push-Pull Theory is therefore used as an explanatory lens for why these developmental opportunities may operate as a pull, not as a substitute for the construct itself.

This antecedent has the strongest direct empirical support in the proposed framework. Ser et al. (2025) identify career progression and training quality as recurrent influences across medical-student migration studies. In Malaysia, the MMSCI study shows that career pathway clarity and access to specialist training are salient career concerns (Teng et al., 2024). More recent analysis from the same national project found that 85% of students intend to specialise, close to one-third would prefer to pursue specialist training overseas, and opportunities to enter specialist training and the quality of specialist training were among the most important considerations in specialisation decisions (Ser et al., 2026). Evidence from India and Italy similarly shows that postgraduate training opportunities and perceived training quality shape interest in careers abroad (Kansal et al., 2023; Martella et al., 2025).

For students, these perceptions have both instrumental and identity-related meaning. Specialist training is a route to credentials and expertise, but it also helps define the kind of doctor the student hopes to become.

Career Construction Theory suggests that environments perceived to support a valued future professional self become more attractive, while Push-Pull Theory explains how such opportunities can function as destination pulls. The proposed relationship is therefore based on perceived developmental fit rather than the assumption that foreign systems are universally better.

Proposition 1: Perceived professional development opportunities abroad are positively associated with overseas medical career aspiration among Malaysian medical students.

Perceived social recognition of overseas medical careers

Perceived social recognition of overseas medical careers refers to the anticipated respect, prestige or symbolic value that students associate with medical training or professional experience abroad. The construct is deliberately restricted to social recognition rather than formal professional rewards. It concerns how an overseas medical pathway may be valued by family, peers, community members and the wider social environment, rather than awards, publications or leadership positions that belong more naturally to professional development.

Direct evidence linking anticipated social recognition specifically to overseas medical career aspiration is less extensive than the evidence for professional development, and this is an important boundary of the proposition. Nevertheless, related research supports the relevance of symbolic career value. Prestige and social evaluation recur in medical career-choice research (Angeli et al., 2025; Yang et al., 2019). More directly, Showers (2023) found that educational prestige and inequalities within health-professions education in Ghana shaped migration aspirations among medical and nursing students, with international mobility imagined as a way to build human capital and broaden professional possibilities. This does not directly measure community recognition of an overseas medical career, but it demonstrates that prestige structures and the symbolic meaning of training environments can enter students' migration narratives.

In the Malaysian context, overseas qualifications or experience may be valued not only because of the skills acquired but also because of what those experiences symbolise to significant others. Career Construction Theory explains how socially embedded meanings become incorporated into a vocational narrative, while Social Exchange Theory suggests that anticipated recognition can function as a non-financial return. The proposition is therefore intentionally exploratory: it extends existing career-choice and migration evidence into a specific social-recognition mechanism that requires direct empirical testing.

Proposition 2: Perceived social recognition associated with overseas medical careers is positively associated with overseas medical career aspiration among Malaysian medical students.

Migration-supportive social networks

Migration-supportive social networks are interpersonal relationships that make an overseas medical career easier to imagine or pursue by providing information, encouragement, mentoring, contacts or practical assistance. They may include peers, alumni, family members, mentors and professional contacts, but only insofar as those relationships facilitate an overseas pathway. The construct is therefore narrower than general social support, network size, or the mere presence of overseas contacts: it concerns the migration-relevant content and function of relationships. This qualification is essential because social networks are not uniformly pro-migration; strong home ties may also discourage departure through family obligations, emotional attachment or the value of local belonging.

Migration research provides direct support for this enabling role. Manchin and Orazbayev (2018), using data from more than 150 countries, found that networks abroad were strongly associated with migration intentions, while close home networks could reduce out-migration. Medical-student research shows the same directional complexity. McCulloch et al. (2024) identify domestic career certainty and social support as potential retention mechanisms, and Ser et al. (2025) show that family repeatedly operates as a stay factor. Malaysian evidence similarly indicates that personal and family considerations can shape whether students contemplate careers abroad (Ohn Mar et al., 2024; Teng et al., 2024).

The present construct therefore focuses specifically on relationships that facilitate overseas career exploration. Such networks can reduce uncertainty about licensing, training, applications, accommodation and destination-country working culture, while also providing social proof that an overseas pathway is realistic. Within Social Exchange Theory, they reduce non-financial costs and provide relational resources; within Career Construction Theory, they expand the student's repertoire of possible career stories by making international pathways visible and attainable.

Proposition 3: Migration-supportive social networks are positively associated with overseas medical career aspiration among Malaysian medical students.

Proposed conceptual framework

Figure 1 presents the proposed framework. The figure intentionally displays only the three antecedent-outcome relationships because the theoretical mapping is already specified in Table 3. The framework does not imply statistical interaction among the antecedents, that they are the only influences on overseas aspiration, or that aspiration automatically progresses to migration. Rather, it identifies a focused set of developmental, symbolic and relational mechanisms for empirical examination within a broader career-construction process.

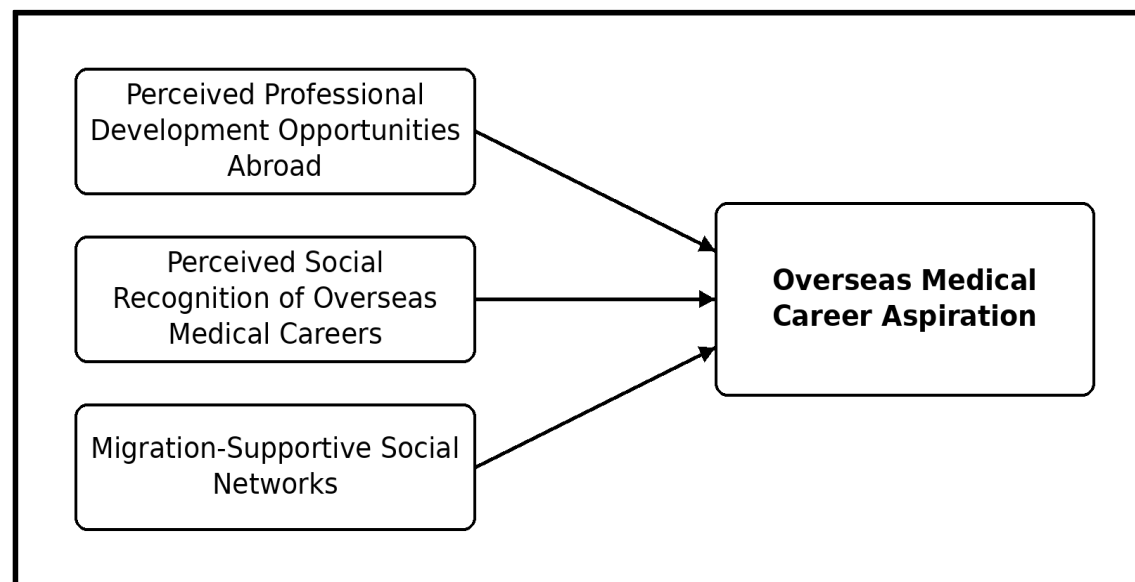


Figure 1: Proposed conceptual framework of overseas medical career aspiration among Malaysian medical students

CONCEPTUAL CONTRIBUTIONS AND PRACTICAL IMPLICATIONS

The first contribution is conceptual. The paper distinguishes OMCA from concrete migration intention, preparation, actual mobility and permanent brain drain. This distinction is important because Malaysian students may envision overseas specialist training or international experience without having committed to permanent emigration. The coexistence of substantial emigration intention, high anticipated return among intending migrants and realised graduate movement to Singapore shows why a more precise conceptual vocabulary is needed (Sabri, 2026; Teng et al., 2024).

The second contribution is theoretical. The framework does not claim that medical-student migration has previously been unexplained. Its contribution lies in assigning distinct explanatory roles to three complementary theories and reorganising established evidence around a career-construction outcome. Career Construction Theory explains how students give meaning to possible professional futures; Push-Pull Theory explains how perceived overseas opportunity structures make some pathways attractive; and Social Exchange Theory explains how anticipated social value and relational resources enter career evaluation. This integration differentiates three mechanisms: (1) developmental opportunity, (2) symbolic career value, and (3) relational enablement, while remaining compatible with process-oriented work such as McCulloch et al. (2024).

The third contribution is contextual. Malaysia presents a distinctive case because student intentions coexist with a geographically close and institutionally accessible Singapore pathway. Current Singapore registration rules recognise medical qualifications from UM and UKM, and recent graduate-level evidence indicates that some students translate overseas orientation into post-graduation mobility (Ho & Ibrahim, 2025; Sabri, 2026; Singapore Statutes Online, 2026). The framework therefore connects student career construction to a real regional opportunity structure rather than treating aspiration as an abstract attitude.

For medical schools, the framework implies that career guidance should extend beyond specialty selection to include transparent information about domestic postgraduate pathways, research opportunities, international collaborations and realistic comparisons of overseas training systems. Local mentors and alumni can also help students construct high-value domestic career narratives by making credible professional futures in Malaysia visible and navigable.

For the Ministry of Health and professional bodies, the framework does not imply that salary, working conditions or contractual arrangements are unimportant. Rather, it suggests that retention policy should also address developmental and relational signals that students receive before workforce entry. Career-path clarity, access to specialist development, recognition of professional achievement and strong domestic mentoring networks may influence whether students can imagine an attractive future within Malaysia. Where overseas training is temporary and return-oriented, policy should also support re-entry, recognition of overseas experience and structured international partnerships so that mobility can contribute to knowledge circulation rather than permanent disengagement.

LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

Several limitations should frame interpretation of the proposed model. First, this is an integrative conceptual review rather than a systematic review, so the framework is theoretically selective rather than exhaustive. Second, the three antecedents are deliberately bounded mechanisms and do not represent the full range of influences documented in migration research. Third, the evidence base is uneven across the three propositions: professional development and social networks have relatively direct migration-specific support, whereas the proposed social-recognition pathway draws partly on adjacent evidence concerning prestige, educational status and career choice and therefore requires especially careful empirical testing. Fourth, contemporary evidence on actual Malaysian graduate movement to Singapore remains fragmented; some of the most recent estimates rely on reputable media reporting and public-register linkage rather than a consolidated official longitudinal dataset. Finally, the framework uses Career Construction Theory as an interpretive anchor rather than testing its complete construct architecture.

Future quantitative research should develop or adapt measures that preserve the conceptual boundaries of the framework. OMCA items should capture an envisioned overseas career direction or preference without inadvertently measuring concrete migration plans, preparation or permanent emigration. Professional-development items should assess perceived access to training and career growth; social-recognition items should assess anticipated prestige or social value; and network items should assess facilitative information, encouragement and practical support. Content validation and pilot testing should be used to establish discriminant clarity before structural relationships are tested across students from multiple Malaysian medical schools.

Future empirical models should also examine contextual moderators rather than assuming that the three proposed relationships are equally strong for all students. Year of study is theoretically relevant because clinical exposure and knowledge of career pathways increase across training; prior international educational or clinical exposure may make overseas career possibilities more concrete; socioeconomic background may shape access to mobility-related resources; and academic performance may affect eligibility for competitive training routes. These factors are best treated initially as boundary conditions or moderators of the core framework, rather than as additional antecedents, so that the deliberately focused conceptual architecture can be tested before it is expanded.

Longitudinal designs are especially important because career aspiration may evolve as students enter clinical training, complete housemanship, apply for specialist pathways or encounter new family and employment

circumstances. Following students into early career would allow researchers to examine whether OMCA develops into migration intention, preparation, actual mobility, return migration or renewed domestic commitment. Such work could also test whether Singapore functions differently from more distant destinations because of geographic proximity, recognised qualifications and established Malaysian professional networks.

Future qualitative work could examine how students narrate the meaning of an overseas medical career, whose recognition matters to them and which network relationships make particular destinations feel attainable. It would also be useful to study countervailing networks and domestic career narratives that strengthen commitment to Malaysia. Comparative research across public and private universities, pre-clinical and clinical years, socioeconomic groups and destination preferences could identify boundary conditions, while cross-national studies could determine which mechanisms are specific to Malaysia and which are more general features of medical students' career construction.

CONCLUSION

Overseas medical career aspiration among Malaysian medical students should not be treated simply as an early form of permanent brain drain. It is better understood as a future-oriented career construction process in which students compare possible professional selves across different opportunity structures. Malaysian evidence now spans both student intention and emerging graduate movement to Singapore, making the pre-entry stage increasingly important for workforce planning while also showing that mobility may be temporary, return-oriented or circular.

This paper proposes that three mechanisms deserve focused attention before full professional entry: perceived professional development opportunities abroad, perceived social recognition of overseas medical careers, and migration-supportive social networks. Career Construction Theory explains how these influences may become part of an envisioned professional future, while Push-Pull Theory and Social Exchange Theory clarify destination attractiveness, anticipated value and relational enablement. The framework does not seek to replace broader migration models or to rank all determinants. Its contribution is to provide a developmentally appropriate and theoretically bounded account of how an overseas medical career can become desirable and attainable for Malaysian medical students, thereby providing a platform for future empirical research on aspiration, mobility, return and retention.

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