OUR HONG KONG FOUNDATION
團結香港基金

Fit to Practise: Reviving the Role of Non-locally Trained Doctors to Strengthen Hong Kong's Workforce for a Better Tomorrow

—An Insider's Perspective into Optimising Doctor Supply and Uplifting the Patient Care Experience

May 2021

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Executive Summary

The World Health Organization (WHO) released a report entitled *Global Strategy on Human Resources for Health: Workforce 2030* in 2016 to guide health system planners and policymakers in the development of health systems globally. With reference to projections of best estimates presented in the report, 31 Organisation for Economic Co-operation and Development (OECD) countries are projected to face a shortfall against service requirements of 1.2 million physicians by 2030. With this perspective in mind, amidst this global shortage of doctors, it is of critical importance to assess how well Hong Kong is doing in leveraging non-locally trained doctors to supplement current and projected workforce shortages.

Hong Kong's health system continues to be challenged by a severe shortage of doctors, and it is only getting worse

- Hong Kong continues to fall behind global counterparts in its doctor-to-population ratio. As of 2020, Hong Kong's population of close to 7.5 million was served by 15,298 fully registered doctors, equating to having approximately 2.0 doctors for every 1,000 people in Hong Kong. Continuing to fare worse than comparable Asian jurisdictions, such as Singapore (2.5) and other well-developed regions in the world (OECD countries average at 3.5), Hong Kong will need an addition of approximately 3,500 to catch up to Singapore and 11,000 doctors to catch up to OECD countries.
- Hong Kong continues to deteriorate from levels it once achieved in the ratio of doctors to the elderly population (aged ≥65 years) and doctors to the chronic disease patient population. Hong Kong will now need an addition of thousands of doctors to bring the ratios back to what was achieved in 2000.
- Hong Kong continues to suffer from a severe shortage of doctors, and the shortage gap has further widened in the short- to medium- term as revealed in the Food and Health Bureau (FHB) *Healthcare Manpower Projection 2020*. The latest projections show a shortfall of 1,610 doctors by 2030 and 1,949 by 2040 assuming the maintenance of the 2017 standard of health service delivery. As Hong Kong moves away from this undesirable standard that is clearly inadequate to cater for increasing healthcare demands, the Hong Kong SAR Government (HKSARG; or referred to as the Government)'s projected shortfalls are clearly underestimates.

Hong Kong people are negatively impacted by the severe shortage of doctors

- People needing medical attention in Hong Kong are negatively impacted by an insufficient doctor supply. The waiting time for public healthcare services continues to increase across the board, from accident and emergency services to specialist out-patient clinic appointments and admission for inpatient hospital care, contributing to potential delay in diagnosis and treatment.
- Doctors in Hong Kong, particularly those working in the public sector, are negatively impacted by an insufficient doctor supply. The public healthcare sector is staffed with less than 50% of Hong Kong's doctor workforce despite currently handling a disproportionate volume of healthcare demands. Characterised by a subpar working environment with long working hours and limited patient interaction time, the public sector has a pertinent need for a boost in doctor supply. Of concern is the attrition of doctors in the Hospital Authority (HA) over the past five years, particularly among senior grade doctors with years of clinical experience. The injection of new locally trained doctors, coupled with other human resource measures, has been unable to fully offset the additional burden created by this ongoing attrition, resulting in the Government's estimated shortfall of at least 660 specialists and specialists-to-be in 2020.

Hong Kong has shown weak determination in narrowing down its widening doctor shortage gap

In the past decade, Hong Kong has attempted a multifaceted approach to narrow down its widening doctor shortage gap, including increasing local medical training places, adjusting policies related to admitting non-locally trained doctors into the system, and bettering retention measures to lower attrition rates in the public sector. However, mechanisms currently in place have had limited impact on narrowing Hong Kong's widening doctor shortage gap.

Hong Kong is not fully leveraging a non-locally trained doctor workforce

- Non-locally trained doctors used to make up a significant proportion of Hong Kong's doctor workforce. Following the abolishment of a pathway that allowed qualified non-locally trained doctors from recognised Commonwealth countries to attain Full Registration for practice in Hong Kong without taking a licensing examination in September 1996, Hong Kong experienced a drastic decrease in newly registered doctors. Notably, the proportion of newly registered doctors with non-local qualifications also fell drastically and has remained low ever since.
- Today, pathways for admitting non-locally trained doctors continue to exist, one for Full Registration and the other for Limited Registration. However, related policies are insufficient to boost the number of non-locally trained doctors serving in the system for reasons we highlight in upcoming sections.

Hong Kong must fully leverage on a non-locally trained doctor workforce to drastically increase the doctor supply

- The Government's recent effort in rekindling enthusiasm for leveraging a non-locally trained doctor workforce includes the announcement of a proposal on a new legislated pathway to admit non-locally trained doctors. This landmark proposal announced in February 2021 was very similar to the recommendations made in Our Hong Kong Foundation's (OHKF) 2019 advocacy report, *Health System Capacity Constraints – The Severe Shortage of Doctors in Hong Kong Public Hospitals* and stipulates that non-locally trained doctors who are Hong Kong permanent residents would be eligible to attain Full Registration in Hong Kong under specified conditions, that i) candidates must have graduated from recognised medical schools; ii) have specialist qualifications; and iii) worked in public healthcare institutions for a specified period. While this is a good step forward, the Government proposal should extend beyond the current conditions to allow for the entry of high quality doctors for Hong Kong to drastically increase its doctor supply.
- The Government has sent a clear signal for the need to leverage on a non-locally trained doctor workforce. However, direction must be complemented with dedication and coordination of all relevant parties. These parties should exercise respective powers to reach the common goal of ensuring a sufficient supply of doctors in Hong Kong to deliver quality healthcare services in a timely manner. Importantly, key hurdles that exist in our system as barriers to non-locally trained talent must be identified and overcome for Hong Kong to stand a chance at overcoming its longstanding doctor shortage crisis.

Our study

- Our study aims to better understand factors that facilitate or hinder qualified non-locally trained doctors to enter and continuously provide services in our system. More specifically, we interviewed non-locally trained doctors practising in Hong Kong to obtain: i) qualitative data from semi-structured interviews and ii) quantitative data from surveys. Our study also encompasses findings from a review of policies related to registration requirements and training opportunities of non-locally trained doctors in different jurisdictions.
- Quantitative and qualitative findings reveal that non-locally trained doctors are facing barriers to excel in Hong Kong at all qualification levels in their medical career. We put forward six key recommendations and 22 detailed suggestions on how these barriers could be overcome. Recommendations have important implications for health workforce planning in Hong Kong.

RECOMMENDATION 1 — Hong Kong must strengthen its governance and strategic vision in health workforce planning

Across the world, governments employ a range of levers that align with and facilitate the achievement of the strategic goal to ensure doctor supply sufficiency, often considering the role of non-locally trained doctors. Levers range from adjustment of visa arrangements in the United Kingdom (UK) to instilling flexibility with registration requirements (such as the list of acceptable primary qualifications) in Singapore. While there is no one-size-fits-all solution, the Hong Kong Government needs to enforce strategic oversight and streamlined coordination between relevant parties to capitalise on the contribution of non-locally trained doctors towards ensuring doctor supply sufficiency.

To achieve this, Hong Kong needs to accurately size its doctor shortage and implement replacement strategies effectively. Being a key employer of doctors in Hong Kong, the HA should publicly disclose attrition details of doctors, especially senior grade doctors, and how vacant positions are filled on a regular basis to make sure vacant positions could be replaced in a timely manner. The years of experience of outgoing and of the corresponding replacement doctors should also be disclosed regularly. In addition to spearheading and coordinating strategic plans for recruitment efforts that require streamlining synergy between relevant parties including the HA and the Hong Kong Academy of Medicine (HKAM; or referred to as the Academy), we recommend the Government to mandate additional headcount for the HA and Department of Health (DH) in accordance to projected doctor shortfalls as calculated in the FHB Healthcare Manpower Projection (2020) for the global recruitment of doctors with either local or non-local qualifications based on merit to relieve respective doctor shortages. Additional funding should be conditional on the successful fulfilment of these headcounts. In particular, the HA should target global recruitment efforts to fill posts across all ranks, from Resident Trainee to Associate Consultant and Consultant posts. Furthermore, to ensure that there is a sufficient supply of specialists in Hong Kong to meet population health demands, the HKAM should ensure that accreditation and recognition criteria for all non-local specialist qualifications are clearly disclosed to facilitate the process of hiring non-locally trained specialists to fill Hong Kong's doctor shortage gap.

RECOMMENDATION 2

Hong Kong can consider providing internship placements and a structured career path for non-locally trained doctors

Different jurisdictions have put in place policies that invite talent to serve in respective health systems as early on in their careers as possible. Of note, special measures are often in place to incentivise citizens to return after training abroad. For instance, both Singapore and the UK have clear pathways and career prospects for non-locally trained doctors without internship experience.

While internship experience is a core component of a medical career, internship placements are not guaranteed for all medical students, particularly non-local medical students. Medical graduates trained outside Hong Kong without internship experience would find it difficult to enter Hong Kong's health system to practise through the key pathways dedicated for the admission of non-locally trained doctors. To enhance the reception of medical graduates seeking to start their medical careers in Hong Kong and with reference to policies enforced in other jurisdictions like the UK, we recommend relaxing the current prerequisite for taking the Medical Council of Hong Kong (MCHK) Licensing Examination that requires the candidate to have completed a full-time internship. The requirement to complete a period of assessment in Hong Kong after passing the Licensing Examination should be maintained and completed under Provisional Registration. Furthermore, the period of assessment that effectively functions as a post-Examination internship is a redundant requirement for doctors who have already served in Hong Kong's health system for a period of time. Thus, to better utilise doctors' advanced skillsets, we recommend the period of assessment for doctors who have served under Limited Registration for more than one year and who have passed the Licensing Examination to be waived.

Additionally, with view of facilitating entry into our system under Limited Registration or through the Government's proposed pathway, and with reference to Singapore's provisional registration, we recommend the Government to mandate relevant medical institutions to create internship placements for completion under Provisional Registration. These positions should be offered to qualified non-locally trained medical graduates who have not been able to secure an internship placement in their place of training. A medical internship priority system could be in place to ensure positions are allocated to Hong Kong permanent residents only. After completion of an internship in Hong Kong, the Government can consider setting up a mechanism to allow these doctors to continue providing public service in the local health system. For example, the relevant authorities can collaborate with medical regulatory bodies outside Hong Kong to grant full registration at the place of medical training. This initiative will allow doctors to enter Hong Kong's system under Limited Registration or through the Government's proposed pathway with internship experience, which will meet the criterion for registration with a medical authority outside Hong Kong.

RECOMMENDATION 3 Hong Kong should strengthen its investment in specialist training

Continuing training is vital for a doctor's medical career development and progression. This is especially true for doctors who have already commenced specialist training outside Hong Kong but have chosen to offer their services in the local health system. Opportunities should be made available for these doctors to continue and complete their training in Hong Kong. Reference could be made to other jurisdictions, such as the UK, that offer multiple training opportunities.

The HA currently offers doctors with Full Registration a nine-year integrated contract devised with a view to facilitate specialist training. To ensure that continuing training opportunities are offered to non-locally trained doctors looking to establish a medical career in Hong Kong, we recommend the Government to provide additional funding and mandate the HA and the HKAM to facilitate continuing specialist training for non-locally trained doctors under Limited Registration. The HKAM and the HA should collaborate and consider offering integrated contracts to eligible doctors with a view to facilitate the completion of specialist training in Hong Kong. This initiative should not affect the opportunities to train local medical graduates since Resident Trainee posts have already been reserved and committed to them. At the same time, the Government should empower the Academy to mandate training quotas under the Academy Colleges to provide specialist training to non-locally trained doctors employed by the HA, particularly if their qualifications are attained from non-local specialist authorities that are deemed comparable to that of the Academy Colleges. The Academy should prioritise providing continuing specialist training to Hong Kong permanent residents. The Academy should mandate the Academy Colleges to specify entry requirements and compile a list of acceptable qualifications for retrospective accreditation. The information should be clearly organised, made publicly accessible and centralised by the Academy to enhance the ease of information accessibility for potential candidates.

RECOMMENDATION 4 Hong Kong must capitalise on and nurture valuable human capital

Non-locally trained specialists in Hong Kong face significant barriers in obtaining recognition of prior specialist training, potentially resulting in mismatched qualification level and occupational rank, restrictions on career prospects, and convoluted procedures to join Hong Kong's Specialist Register through attaining Certification for Specialist Registration (CSR). Reference should be made to comparable jurisdictions, such as Singapore and the UK, that adopt clear and transparent pathways for specialist recognition.

To resonate with Recommendation 1 and promote equal opportunities for locally and non-locally trained doctors, the HA should remove all barriers that potentially impede the career progression of non-locally trained doctors who should be considered for progression that is merit-based alongside their locally trained peers.

In fully capitalising on the experience and qualifications of doctors regardless of place of training, the Government should consider setting up an independent specialist accreditation body with international expert members that is solely responsible for the recognition and accreditation of specialist training and determination of qualifications for inclusion in Hong Kong's Specialist Register. This newly formed independent body should take reference to Singapore's Specialists Accreditation Board (SAB) which determines the qualifications, experience, and other considerations necessary for accreditation, as well as the training programmes recognised for registration as a specialist in Singapore. Alternatively, the Government can consider empowering the MCHK Education and Accreditation Committee (EAC) to take on this role and mirror the organisation, functions and responsibilities of the SAB in Singapore.

The Government's proposed pathway for the admission of non-locally trained doctors partially addresses the constraints faced by doctors under Limited Registration. It is important that the committee to be set up under the Government's proposal (for the purpose of establishing a mechanism to determine recognisable medical schools) remain independent, such that professional and objective decisions can be made. Also, to maximise our intake of qualified doctors trained outside Hong Kong, we recommend the Government to consider instilling flexibility into the three specified eligibility conditions (refer to page 4). Alternative mechanisms should be in place to capture and retain well-qualified doctors that fall outside set criteria. As an example, an appeal mechanism could be devised to review cases of ineligible well-qualified doctors already serving in our health system on an individual basis.

Alternative arrangements to lift restrictions imposed under Limited Registration should be considered to enhance doctor retention measures. As an example, the duration restriction of Limited Registration should be lifted for non-locally trained specialists employed by the HA or the DH who will continue their appointment with these public healthcare institutions. Relaxation of the venue restriction of Limited Registration should also be considered after doctors have served in the HA or DH for an extended period of time (e.g., 10 to 15 years). Both relaxations should be subject to desirable performance monitoring and assessment outcomes.

On a separate note, CSR applications undergo a thorough vetting process that involves all relevant authorities, including the Academy Colleges. Specialists that successfully attain CSR would have been certified by the Academy to have achieved a professional standard comparable to that for the award of Fellowship of the Academy, in accordance with Section 20K of the Medical Registration Ordinance (MRO) (Cap. 161). Given the comparable professional competencies, the Academy Fellows (nominated by the Academy Colleges) and specialists with CSR should thus have equivalent entitlement in their careers in Hong Kong. To achieve this, holders of CSR should be awarded Fellowship of the Academy.

RECOMMENDATION 5

Hong Kong should adopt the Electronic Portfolio of International Credentials to streamline examination application and medical registration procedures

Against the backdrop of the growing international mobility of doctors, streamlining the process of validating medical credentials gained from the place of training to the place of practice has been at the forefront of facilitating applications. Medical regulatory bodies internationally have incorporated technology to enhance the verification processes of non-locally trained doctors applying from abroad.

Various medical regulatory bodies such as the General Medical Council (GMC) in the UK and the Singapore Medical Council (SMC) have incorporated the Electronic Portfolio of International Credentials (EPIC) for the verification of credentials on a virtual integrated platform. With reference to these examples, we recommend relevant authorities in Hong Kong to consider the adoption of widely accepted and commonly used technology platforms, such as EPIC, to improve application processing times and enhance overall application experiences of doctors.

RECOMMENDATION 6

Hong Kong should conduct a review of the Medical Council of Hong Kong Licensing Examination to uphold fair assessment standards

Reference should be made to jurisdictions that enforce measures to ensure that the local licensing examination taken by non-locally trained doctors is a fair assessment of doctors' competency. For example, Australia and the UK are known to provide comprehensive revision material and achieve standardisation between examinations administered to locally- and non-locally trained doctors through calibration and/or provision of an identical examination.

In view of this, we recommend the MCHK to optimise the investment made towards administrating the Licensing Examination on a bi-annual basis. Sufficient examination and administrative support should be in place, including the need for the MCHK to uphold transparency of the scope examined in the Licensing Examination. This can be supplemented by the dissemination of comprehensive revision materials that include reference materials, full versions of past examination papers, and an exhaustive syllabus. Furthermore, to ensure a fair assessment of doctors' competency, the MCHK should lift potentially discouraging assessment practices, such as the negative marking mechanism. Another example is to allow candidates to retain passes for respective subjects in Part III of the Licensing Examination for the next two scheduled sittings instead of requiring a candidate who fails more than one out of four subjects in one sitting to re-sit all subjects. To further enforce fairness in examination standards, we recommend the MCHK to mandate regular benchmarking of the Licensing Examination to ensure content validity and fairness towards candidates. Consideration should also be given to setting up an independent examination authority staffed and governed with international medical experts to carry out standardised professional examinations for all doctors. To optimise the assessment of competencies and with reference to other jurisdictions like Australia, the MCHK should consider making available alternative assessment methods for doctors, such as options to engage in workplace-based assessment and alternative measurements to fulfil the medical English proficiency requirement in place of Part II of the Licensing Examination.

Conclusion

System-level changes to the mix and distribution of our health workforce, including building up and strengthening our primary care workforce and leveraging allied health professionals, remain key strategies in relieving the local doctor shortage crisis. Nonetheless, these changes will take time to enforce and take effect. Apart from waiting to realise the benefits of boosting local medical training places, Hong Kong needs to enhance efforts in fully leveraging a non-locally trained doctor workforce to increase its doctor supply in more immediate terms. It is only by taking bold steps that Hong Kong will be able to drastically boost its supply of doctors and give its people a chance at receiving timely access to healthcare services.

Summary of Recommendations

RECOMMENDATION 1. Hong Kong must strengthen its governance and strategic vision in health workforce planning

1.1 The Hospital Authority should publicly disclose attrition details of doctors, especially senior doctors, and how they are replaced on a regular basis to make sure vacant positions could be replaced in a timely manner. The years of experience of outgoing and of the corresponding replacement doctors should also be disclosed regularly.

1.2 The Government should coordinate plans, including streamlining synergy between relevant parties, for the recruitment of non-locally trained doctors and have in place a clear evaluation framework for recruitment outcomes.

1.3 The Government should mandate additional headcount for the Hospital Authority and the Department of Health in accordance to projected doctor shortfalls as calculated in the FHB Healthcare Manpower Projection (2020) and hold both accountable for effective utilisation of additional funding for the global recruitment of doctors.

1.4 The Government should hold the Hong Kong Academy of Medicine accountable for the enforcement of its statutory powers to organise, monitor, assess and accredit specialist training and qualifications. Accreditation and recognition criteria for all non-local specialist qualifications should be clearly disclosed.

RECOMMENDATION 2. Hong Kong can consider providing internship placements and a structured career path for non-locally trained doctors

2.1 Non-locally trained doctors who have not completed a period of full-time internship but have an acceptable primary medical qualification should be qualified to take the Medical Council of Hong Kong Licensing Examination.

2.2 The post-Examination period of assessment for doctors who have served under Limited Registration for more than one year and have passed the Licensing Examination should be waived.

2.3 The Government should mandate medical institutions to create internship placements offered to qualified non-locally trained medical graduates who are Hong Kong permanent residents unable to secure an internship placement in their place of training. After completion of an internship in Hong Kong, the Government can consider setting up a mechanism to allow these doctors to continue providing public service in the local health system.

RECOMMENDATION 3. Hong Kong should strengthen its investment in specialist training

3.1 The Government should provide additional funding and mandate the Hospital Authority and the Hong Kong Academy of Medicine to facilitate continuing specialist training for non-locally trained doctors under Limited Registration.

3.2 In consideration that the Hospital Authority offers doctors with Full Registration a nine-year integrated contract to facilitate specialist training, the Hong Kong Academy of Medicine and the Hospital Authority should collaborate and offer integrated service contracts to non-locally trained doctors for continuing specialist training without affecting training opportunities of local medical graduates.

3.3 The Government should empower the Hong Kong Academy of Medicine to mandate training quotas for the relevant Academy Colleges to provide specialist training for non-locally trained doctors employed by the Hospital Authority. Hong Kong permanent residents should be prioritised.

3.4 The list of recognised non-local specialist qualifications and other Academy College entry requirements should be clearly organised, made publicly accessible and centralised by the Hong Kong Academy of Medicine to enhance the ease of information accessibility for potential candidates.

RECOMMENDATION 4. Hong Kong must capitalise on and nurture valuable human capital

4.1 The Hospital Authority should remove all barriers that potentially impede the career progression of non-locally trained doctors who should be considered for progression that is merit-based alongside their locally trained peers.

4.2 The Government should ensure the independence of the committee that will determine a list of recognised medical schools under the Government's new proposal on the admission of non-locally trained doctors. An appeal mechanism should be devised to review the eligibility of experienced non-locally trained doctors who currently do not meet stipulated criteria to benefit from the proposal.

4.3 The Medical Council of Hong Kong should lift the duration restriction of Limited Registration for non-locally trained specialists employed by the Hospital Authority or the Department of Health who will continue their appointment with these public healthcare institutions. The venue restriction should also be relaxed for non-locally trained specialists under Limited Registration after they have served in the Hospital Authority or the Department of Health for an extended period of time. Both relaxations should be subject to desirable performance monitoring and assessment outcomes.

4.4 The Government should consider setting up an independent specialist accreditation body with international expert members that will solely be responsible for the recognition and accreditation of specialist training and determination of qualifications for inclusion in Hong Kong's Specialist Register. Alternatively, the Government can consider empowering the Education and Accreditation Committee under the Medical Council of Hong Kong to take on this role.

4.5 Fellows of the Hong Kong Academy of Medicine and specialists with Certification for Specialist Registration (CSR) (attained via the Academy) should have equivalent entitlement in their careers in Hong Kong. To achieve this, holders of CSR should be awarded Fellowship of the Academy.

RECOMMENDATION 5. Relevant authorities in Hong Kong including the Medical Council of Hong Kong should adopt the Electronic Portfolio of International Credentials to streamline examination application and medical registration procedures

RECOMMENDATION 6. Hong Kong should conduct a review of the Medical Council of Hong Kong Licensing Examination to uphold fair assessment standards

6.1 The Medical Council of Hong Kong should strategically invest in support measures for the Licensing Examination including the provision of comprehensive revision materials, an exhaustive syllabus and options to complete parts of the Examination outside Hong Kong or virtually.

6.2 The Medical Council of Hong Kong should abolish discouraging assessment practices of the Licensing Examination, such as negative marking mechanisms.

6.3 The Medical Council of Hong Kong should implement measures to ensure fairness in examination standards. This could involve regular calibration of the Licensing Examination with locally trained medical graduates and/or the setting up of an independent examination authority to administer a standard licensing examination for local and non-locally trained doctors.

6.4 The Medical Council of Hong Kong should make alternative assessment methods available for experienced doctors, such as workplace-based assessment.

6.5 The Medical Council of Hong Kong should consider alternative measures to fulfil the medical English proficiency requirement, such as the recognition of results from well-established English language testing systems like International English Language Testing System (IELTS) or consider graduates from medical schools with English as a medium of instruction to have met the requirement.

Context:
The Global Shortage of Doctors and the Case of Hong Kong

The Global Situation

There is a global shortage of doctors

Figure I.

In 2030, the **global** needs-based shortage against SDG index threshold will reach:

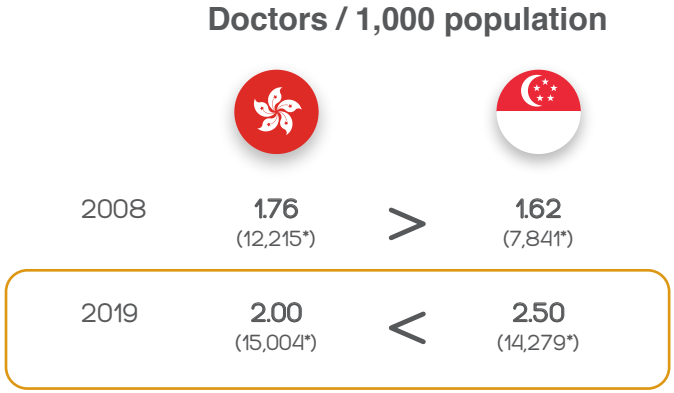
In 2030, **31 OECD countries** shortfall against services requirements will reach:

Source: World Health Organization, 2016
Image source: World Health Organization, 2016

In the context of growing professional mobility and market diversity, doctors have been pursuing better career opportunities across international frontiers for decades. A pattern of migratory movement among the profession of doctors has been observed from developing (i.e. Pakistan, India) to developed nations (i.e. United Kingdom (UK), United States (US), Australia) and even from developed (i.e. United Kingdom) to other developed jurisdictions (i.e. Hong Kong, Australia, Canada) (Zubaran, 2012; Mullan, 2005). While this phenomenon has been growing and evolving for many years, this migratory movement is also occurring against the backdrop of a global shortage of doctors. In 2016, a report by the World Health Organization (WHO) titled *Global Strategy on Human Resources for Health: Workforce 2030* projected healthcare workforce shortages over the coming decades (World Health Organization, 2016). With reference to the model presented in the report, 31 Organisation for Economic Co-operation and Development (OECD) countries are projected to face a **shortfall against service requirements of 1.2 million physicians by 2030**. Furthermore, projections suggest that the **global shortage against the Sustainable Development Goal (SDG) index threshold will reach 2.3 million physicians** at the same time.

Singapore has leapfrogged ahead of Hong Kong's doctor supply

Figure II.



- In 2008, the doctors per 1,000 population ratio in Singapore was **1.62**, **lower** than Hong Kong's **1.76**
- In 2019 Singapore reached a doctors per 1,000 population ratio of **2.50 surpassing** Hong Kong's **2.00**

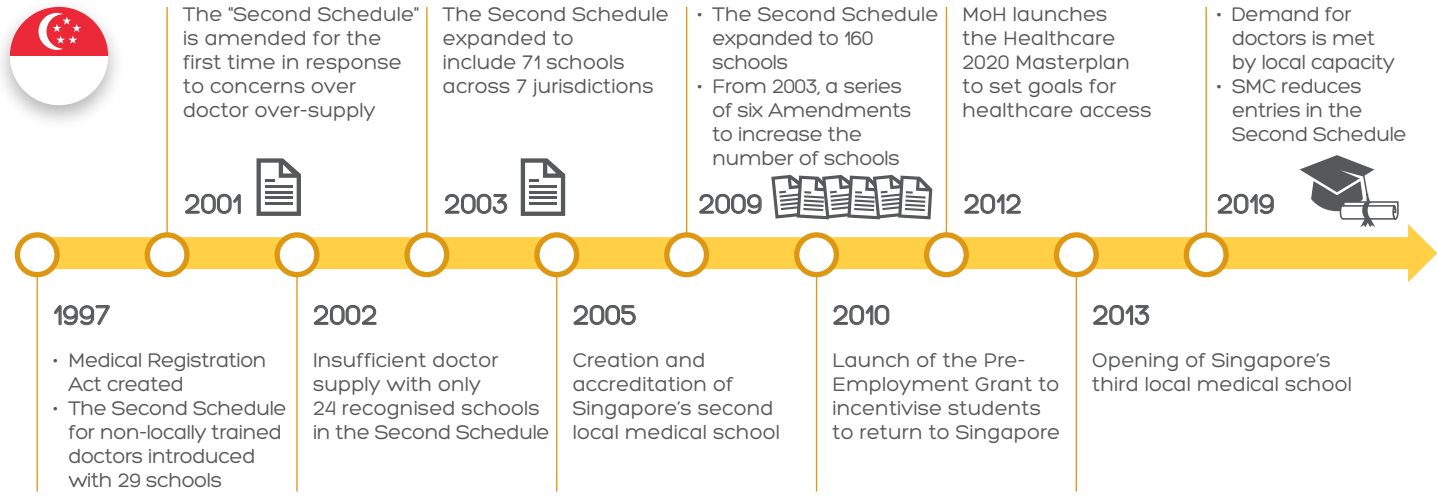
The number of doctors in Singapore grew by **82%** in about a decade.

Note: *Number of doctors
Sources: Census and Statistics Department, 2009a, 2021; Department of Statistics Singapore, 2021a, 2021b

Hong Kong is evidently not alone in facing a shortage of doctors. However, its recent measures have not brought about significant benefit against its shortfalls in doctor supply. This contrasts against other jurisdictions, such as Singapore, that have recently surpassed Hong Kong's doctor to 1,000 population ratio. In 2008, Singapore had fewer doctors per 1,000 population than Hong Kong (Census and Statistics Department, 2009a, 2021; Department of Statistics Singapore, 2021a, 2021b). However, Singapore subsequently **increased the total number of doctors by 82%**, leapfrogging ahead to surpass Hong Kong in about a decade; and by 2019, Singapore had 2.50 doctors per 1,000 population while Hong Kong only had 2.00 per 1,000 population (Census and Statistics Department, 2020a, 2021; Department of Statistics Singapore, 2021a, 2021b).

Singapore takes a multipronged approach to workforce planning

Figure III.

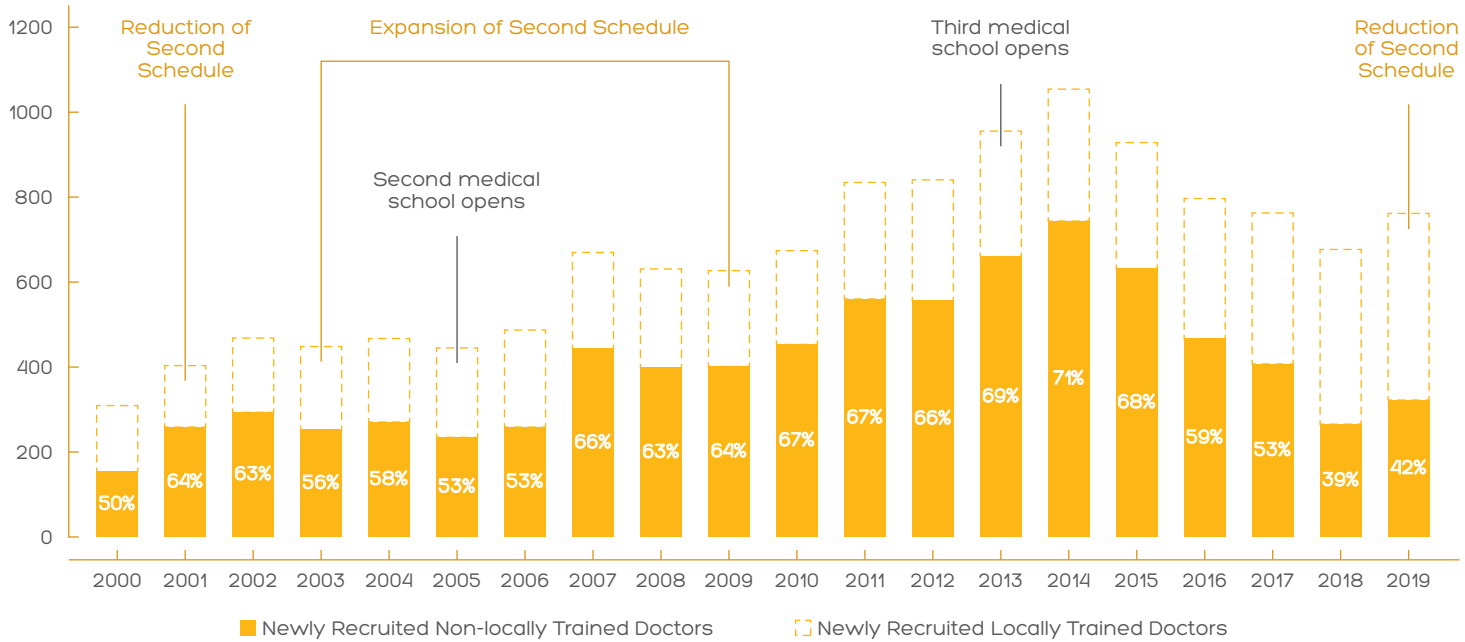


Sources: Legislative Council, 2019; SMC, 2003, 2021b; Singapore Parliament, 2018; Ministry of Health 2012, 2019

Singapore strategically adopted a multipronged approach and implemented a suite of measures to tackle its shortage of doctors. Among the various levers, the Second Schedule was introduced under the Medical Registration Act in 1997 to safeguard the quality and quantity of non-locally trained doctors practising in Singapore (SMC, 2021b). The Second Schedule lists non-local medical schools with registrable medical qualifications and is periodically reviewed with consideration to the changing healthcare needs of Singapore's population. The Second Schedule has undergone various shifts in the listed schools, with the latest reduction from 160 schools to 103 schools in 2019 (Ministry of Health, 2019). Meanwhile, Singapore has also been boosting its supply of locally trained doctors by opening its second and third medical schools in 2005 and 2013, respectively, and increasing annual medical school intakes. The impact of the latter is set to be realised from 2023 when the need for non-locally trained doctors is expected to stabilise (Ministry of Health, 2019). A comprehensive overview of the initiatives towards its doctor manpower planning by Singapore will be further discussed in *Challenge 1*.

Singapore's flexible approach has allowed it to continually meet its doctor supply targets

Figure IV. **New intake of non-locally trained doctors in Singapore**[1][2]



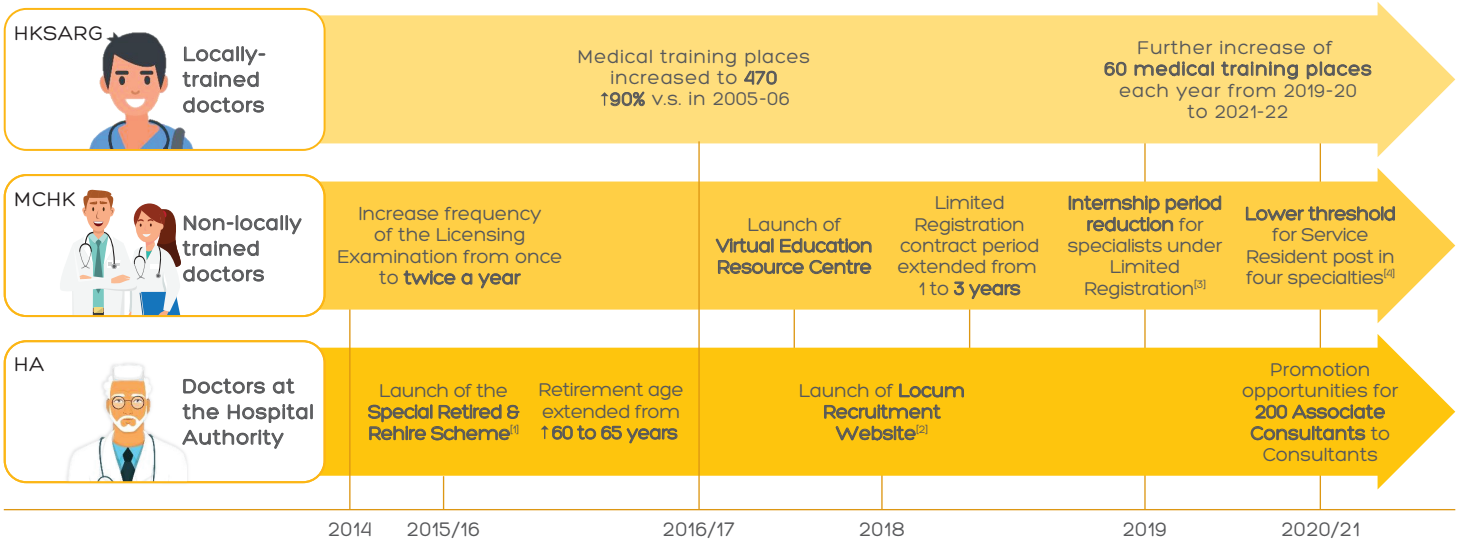
Notes: [1] Number of newly recruited non-locally trained doctors includes provisional, conditional, and temporary (only includes candidates recruited for service under supervision) registrations; excludes candidates converting between registration types.
[2] Data from 2000-2004 may include conversion candidates to conditional from provisional registration
Sources: SMC, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018a, 2019a

The flexibility instilled through adjustments to the Second Schedule for meeting the doctor supply targets is evidenced by the varying proportion of non-locally trained doctors over the past two decades (SMC, 2021b). According to analysis from the Singapore Medical Council's Annual Reports, non-locally trained doctors made up an average of 60% of annual new doctor registrations from 2000 to 2019 (SMC, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018a, 2019a).

The Case of Hong Kong

The steps that Hong Kong is taking to narrow down its widening doctor shortage gap

Figure V.



Notes: [1] As at 31st October 2019, 65 doctors were working under the SRRS.
[2] As at 30th April 2019, 14 and 19 locum doctors worked at the rank of non-specialist and specialist, respectively.
[3] Eligible candidates must have passed the MCHK Licensing Examination, hold a specialist qualification comparable to a Fellowship of the Academy Colleges, and have completed at least three years of full-time employment in the Hospital Authority, the Department of Health, the University of Hong Kong, or The Chinese University of Hong Kong.
[4] Candidates with pre-intermediate level of qualifications will be considered for the specialties of Emergency Medicine, Family Medicine, Internal Medicine and Paediatrics.
Sources: HKSARG, 2017, 2018a, 2019c, 2019d, 2019e, 2020b; LEIP, 2018e, 2019b, 2019c; Hospital Authority, 2020b

In the past decade, Hong Kong has attempted a multifaceted approach to increase its doctor supply, including **increasing local medical training places, adjusting policies related to admitting non-locally trained doctors into the system,** and **bettering retention measures to lower attrition rates in the public sector**. While there have been efforts to boost the supply of doctors in Hong Kong, these efforts have been scattered and unable to achieve a significant impact.

In a bid to increase the supply of doctors through medical training places, the Government increased the number of University Grants Committee funded medical training spaces by 90% from 250 in 2005/06 to 470 in 2016/17 (HKSARG, 2019e). The number of medical training places will be further increased by 60 each fiscal year from 2019/20 to 2021/22 (HKSARG, 2019e). These efforts are intended to alleviate Hong Kong's doctor shortage in the medium-to-long-term.

Various measures have been implemented as an effort to increase Hong Kong's doctor supply through the admission of non-locally trained doctors. For instance, the Medical Council of Hong Kong (MCHK) increased the frequency of the MCHK Licensing Examination from one to two sittings in 2014 to provide more opportunities for non-locally trained doctors to enter the local system. In 2018, the MCHK established the Virtual Education Resource Centre and accordingly set up a Licensing Examination Information Portal (LEIP) to improve the transparency of the Licensing Examination (LEIP, 2018e). In the same year, as an attempt to make the terms of working in Hong Kong more attractive, the validity and renewal period of Limited Registration was prolonged from a period not exceeding one year to a period not exceeding three years (HKSARG, 2019d). In 2019, the MCHK introduced flexible arrangements for the 12-month post-Licensing Examination period of assessment, such that non-locally trained doctors who have i) passed the MCHK Licensing Examination; ii) hold a specialist qualification comparable to a Fellowship of the Hong Kong Academy of Medicine (HKAM; or referred to as the Academy) Colleges; and iii) have completed at least three years of full-time employment in the Hospital Authority (HA), the Department of Health (DH), the University of Hong Kong (HKU), or The Chinese University of Hong Kong (CUHK) can have their period of assessment generally reduced to two days (LEIP, 2019b, 2019c). Furthermore, from 2020/21 onwards, candidates applying to the post of Service Resident at the Hospital Authority under Limited Registration with pre-intermediate level of qualifications will be considered for the specialties of Emergency Medicine, Family Medicine, Internal Medicine, and Paediatrics (Hospital Authority, 2020b).

Measures have been implemented to encourage the retention of doctors in the Hospital Authority. As an example, in 2015/16, the HA introduced the Special Retired and Rehire Scheme (SRRS) in a bid to rehire healthcare professionals, including doctors, nurses and allied health professionals upon retirement to retain experienced medical professionals for the purpose of training and knowledge transfer (HKSARG, 2019d). As of 31st October 2019, a total of 65 experienced doctors were working under the SRRS in various specialties at the HA (HKSARG, 2019d). Further efforts to retain talent in the HA include the introduction of a higher retirement age (increased to age 65) for new recruits employed from June 2015 onwards (HKSARG, 2017). Separately, to enhance the attractiveness of working in the HA, the Locum Recruitment Website was launched in 2018 to enhance the Locum Recruitment scheme, a scheme which hires part-time employees on a needs basis (HKSARG, 2018a). The website arrangement allows for more flexible working hours and locations where job posts are periodically updated (Hospital Authority, n.d.). As of 30th April 2019, the numbers of locum doctors hired as non-specialist and specialist were 14 and 19, respectively (HKSARG, 2019c).

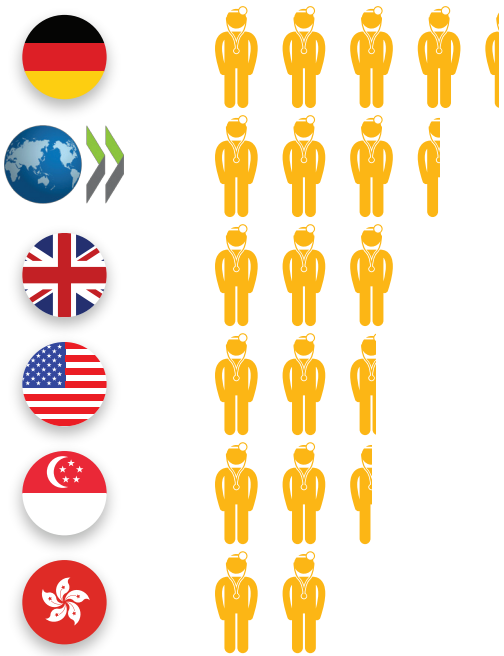
Furthermore, the *2020–21 Budget* by the Government of the Hong Kong Special Administrative Region (HKSARG; or referred to as the Government) introduced several proposed measures to support retention of staff at the HA, among which was the initiative to improve career prospects through consideration of creating opportunities for the promotion of around 200 Associate Consultants to Consultant posts within a period of five years (HKSARG, 2020b).

Hong Kong trails behind other developed jurisdictions in the number of doctors per 1,000 population...

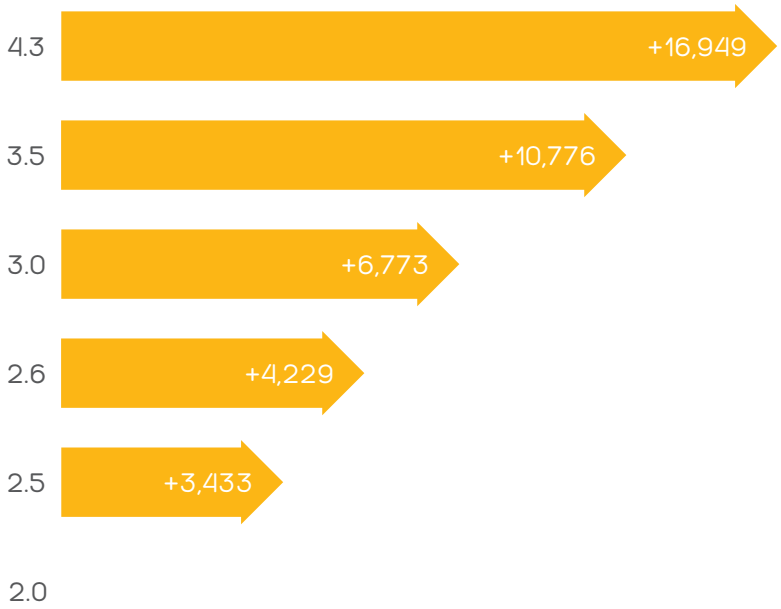
Figure VI.

Number of doctors per 1,000 population

(2020 or latest available data*)[1]



Number of doctors Hong Kong needs to catch up



Notes: *Germany (2018), UK (2019), US (2018), OECD average (2017-2019), Singapore (2019)

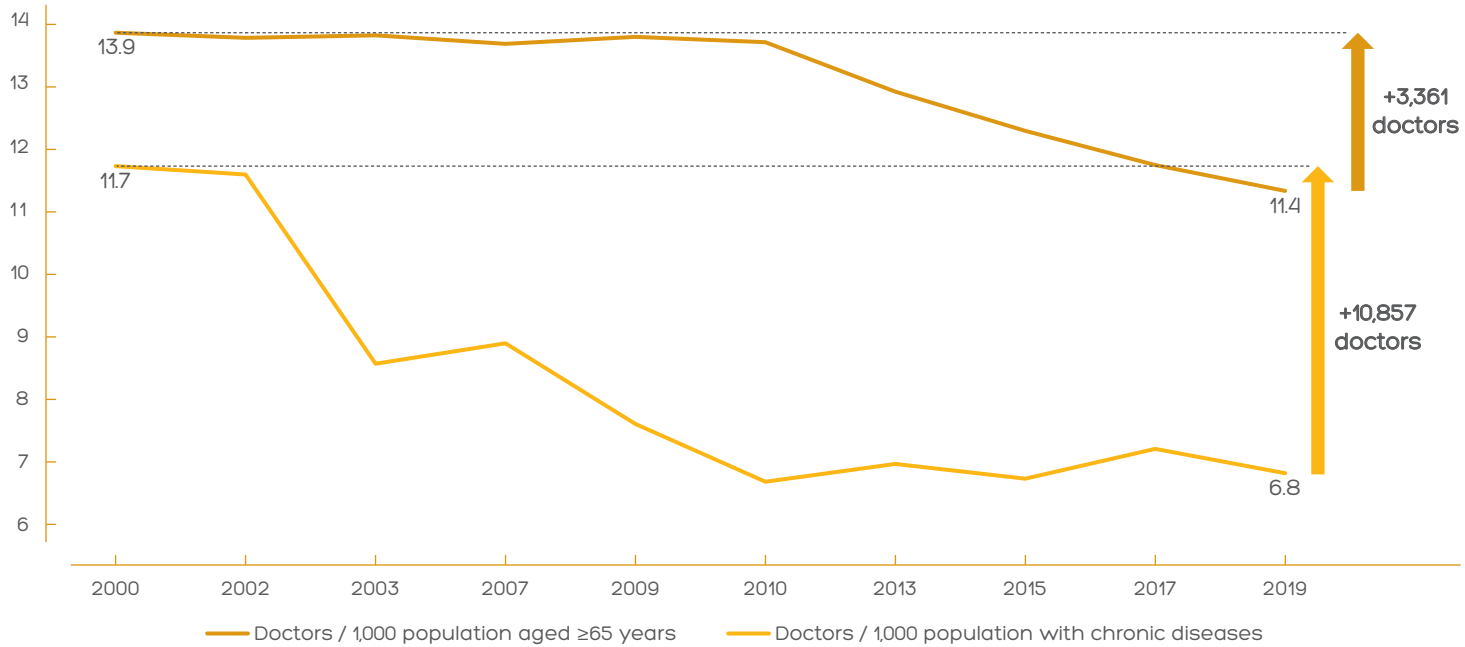
[1] Doctors in Germany, the UK and the US are based on the OECD definition of practising physicians, including interns and residents. This is likely an underestimate due to number of categories of doctors excluded such as physicians in research posts without direct patient contact, doctors licenced to practise but are economically inactive, and physicians working abroad. Doctors in Hong Kong include physicians with Full Registration on the Resident List and Non-resident List. Singapore doctors include physicians not in active practice and physicians working abroad.

Sources: OECD, 2021; Department of Statistics Singapore, 2021; Census and Statistics Department, 2021; Food and Health Bureau, 2021; Department of Statistics Singapore, 2021a, 2021b

Mechanisms currently in place have had limited impact on boosting Hong Kong's doctor supply. This conclusion is especially obvious when assessing the ratio of practising doctors to 1,000 population in various jurisdictions (OECD, 2021). The doctors per 1,000 population ratio in Hong Kong (2.0) fares worse than well-developed regions in the world (OECD countries average at 3.5) and other comparable Asian jurisdictions, such as Singapore (2.5) (Food and Health Bureau, 2021; Census and Statistics Department, 2021; Department of Statistics Singapore, 2021a, 2021b). Furthermore, while many jurisdictions have noted their own doctor shortages, including the United Kingdom, which has placed all physician categories under their Shortage Occupation List (SOL), Hong Kong would still need to hire a significant number of doctors to catch up to the current ratios observed in other jurisdictions. In particular, **Hong Kong would require an additional 10,776 doctors on top of its current doctor supply to attain the 3.5 doctors per 1,000 population average ratio within OECD countries.** Importantly, the shortfalls that Hong Kong faces relative to other jurisdictions may be understated, as the OECD's definition of practising physicians excludes doctors who are i) licenced to practise but are currently in research posts or other positions without direct contact with patients, ii) licenced but not economically active doctors, and iii) doctors currently working abroad (OECD, 2020).

...and Hong Kong has deteriorated from standards it once achieved

Figure VII. **Number of doctors per 1,000 population aged ≥65 and 1,000 population with chronic diseases**[1]



Note: [1] Figures in 2007 THS and before refer to respondents who reported diseases that required long-term follow up. Figures in 2009 THS and after refer to persons reported chronic health conditions as diagnosed by practitioners of Western medicine.
Sources: Census and Statistics Department, 2000, 2002, 2003, 2007, 2009b, 2010, 2013, 2015, 2017, 2019b, 2021

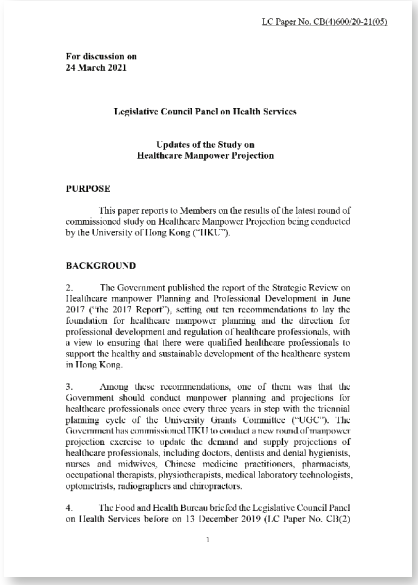
Worryingly, the doctor to 1,000 population ratio in Hong Kong has deteriorated from standards that it once achieved in regard to the elderly and chronic disease patient populations. The ratio of doctors per 1,000 population aged ≥65 years has decreased from 11.7 in 2000 to 6.8 in 2019, necessitating an increase of 10,857 doctors to catch up to the 2000 ratio (Census and Statistics Department, 2021). Furthermore, the ratio of doctors per 1,000 population with chronic diseases decreased from 13.9 in 2000 to 11.4 in 2019 (Census and Statistics Department, 2000, 2002, 2003, 2007, 2009b, 2010, 2013, 2015, 2017, 2019b). In other words, an addition of 3,361 doctors would be necessary to catch up to the 2000 ratio. These ratios offer insight into the extent of the workload placed upon Hong Kong's doctors, signifying that there are increasingly fewer doctors available to provide care.

Government: Shortfall of about 1000 doctors in 2020 - is this an underestimate?

Figure VIII. **Projected shortfall of doctors (Full-time Equivalent)**

Year	2020	2025	2030	2035	2040
5th percentile	560	764	967	991	1192
	(4.4%)	(5.6%)	(6.7%)	(6.5%)	(7.4%)
Best guestimate	1070	1345	1610	1700	1949
	(8.1%)	(9.4%)	(10.7%)	(10.6%)	(11.5%)
95th percentile	1555	1892	2200	2299	2583
	(11.3%)	(12.8%)	(14.0%)	(13.8%)	(14.7%)

There is a projected shortfall of **1,610** doctors by 2030 and **1,949** doctors by 2040.



LC Paper No. CB(4)600/20-21(05)

For discussion on
24 March 2021

Legislative Council Panel on Health Services

Updates of the Study on
Healthcare Manpower Projection

PURPOSE

This paper reports to Members on the results of the latest round of commissioned study on Healthcare Manpower Projection being conducted by the University of Hong Kong ("HKU").

BACKGROUND

2. The Government published the report of the Strategic Review on Healthcare manpower Planning and Professional Development in June 2017 ("the 2017 Report"), setting out ten recommendations to lay the foundation for healthcare manpower planning and the directions for professional development and regulation of healthcare professionals, with a view to ensuring that there were qualified healthcare professionals to support the healthy and sustainable development of the healthcare system in Hong Kong.

3. Among these recommendations, one of them was that the Government should conduct manpower planning and projections for healthcare professionals once every three years in step with the triennial planning cycle of the University Grants Committee ("UGC"). The Government has commissioned HKU to conduct a new round of manpower projection exercise to update the demand and supply projections of healthcare professionals, including doctors, dentists and dental hygienists, nurses and midwives, Chinese medicine practitioners, pharmacists, occupational therapists, physiotherapists, medical laboratory technologists, optometrists, radiographers and chiropractors.

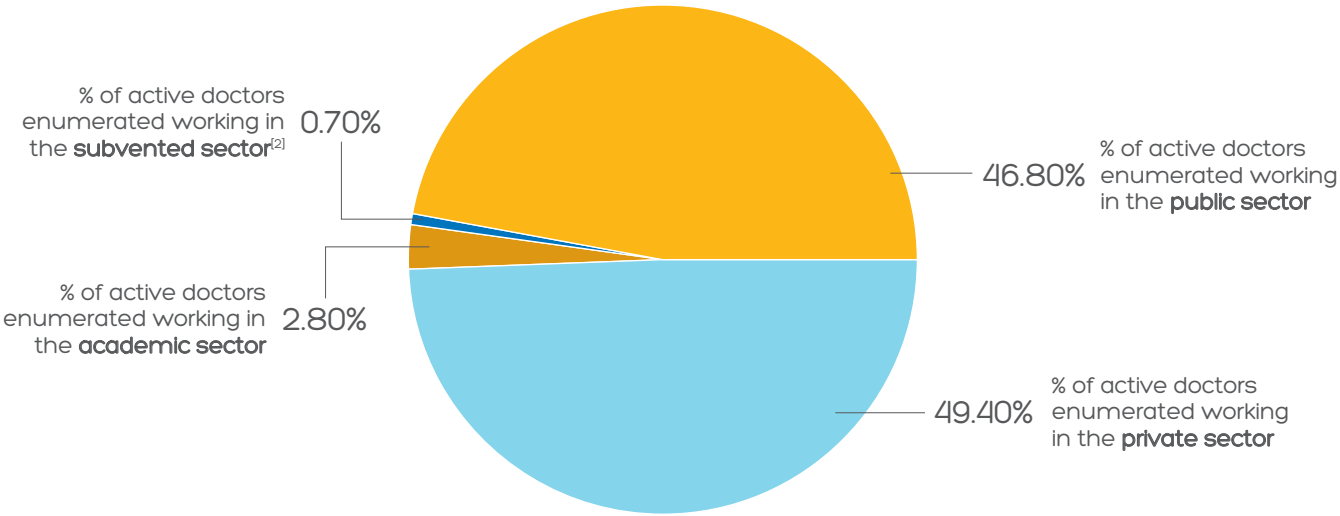
4. The Food and Health Bureau briefed the Legislative Council Panel on Health Services before on 13 December 2019 (LC Paper No. CB(2)

Source: Legislative Council, 2021c

Since Hong Kong's first comprehensive healthcare manpower review by the Food and Health Bureau (FHB) in 2017, projections in the latest *Healthcare Manpower Projection 2020* demonstrate that the local shortage of doctors persists and that the gap has further widened in the short- to medium- term (Legislative Council, 2021c). Specifically, using 2017 as the base year in a utilisation-based model that assumes a supply-demand equilibrium at model start, the projections provided a grim outlook that projects a shortfall of 1,610 doctors by 2030 and 1,949 doctors by 2040 per the best estimates within the parameters of the model. The projections are likely to be underestimates of the actual demand and attendant necessary supply, as the healthcare workforce had already been overstretched prior to 2017 and would therefore make 2017 an unsuitable base year. Although likely to be conservative estimates, these numbers still support the need for immediate action to drastically boost our doctor supply.

Less than half of our doctors work in the public sector...

Figure IX. **Distribution of active doctors by sector of employment in 2018**[1]



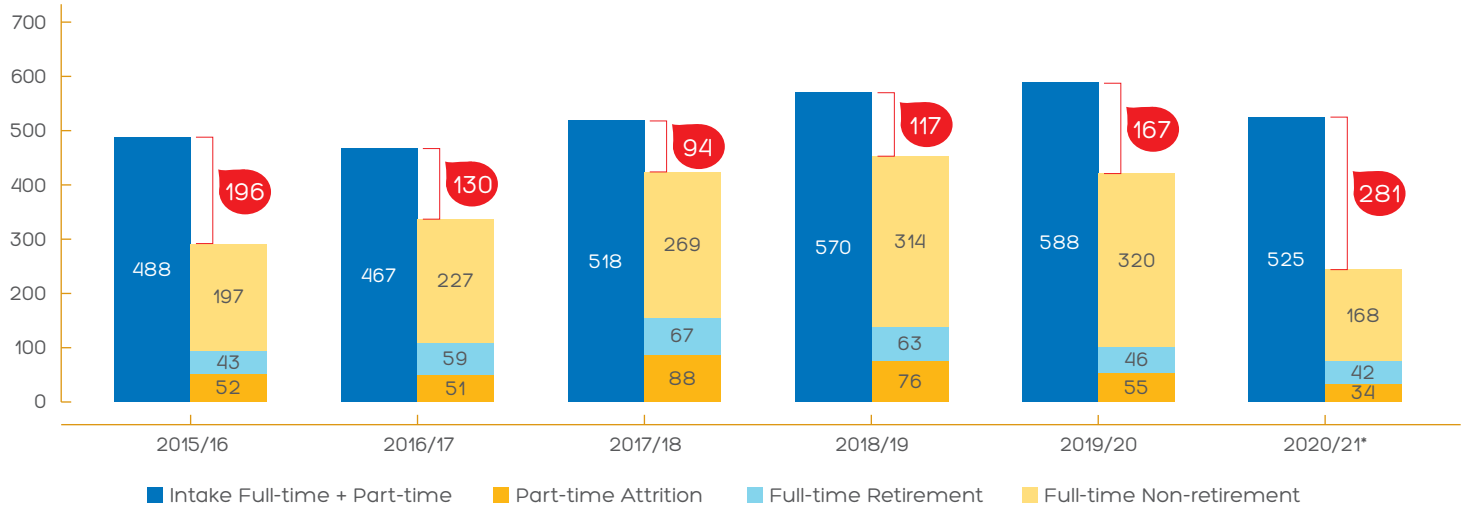
Notes: [1] Refers to doctors with Full Registration and on the Resident List as at the survey (2018 Health Manpower Survey) reference date 31 August 2018.
[2] Refers to organisations subsidised by the Government, such as Elderly Homes, Nursing homes, Exempted Clinics, Large Subvented Organisation, Medical Clinics, Nurseries / Child Care Centres, Rehabilitation Institutions, and Special Schools.
Source: Department of Health, 2018

The need is particularly pertinent in the public sector, as it handles a disproportionate volume of healthcare demands yet is **currently staffed with less than 50% of Hong Kong's doctor workforce**. According to the *2018 Health Manpower Survey*, by the Department of Health, 46.8% of active doctors work in the public sector including the Hospital Authority and the Government, and 49.4% of active doctors work in the private sector.[1] While 2.8% of active doctors work in the academic sector, the remaining 0.7% of active doctors work in the subvented sector (Department of Health, 2018).

[1] Percentages may not add up to 100% due to rounding.

...and many doctors are lost to attrition every year

Figure X. **Total intake[1] and attrition[2] of full time and part time doctors in public hospital clusters**



Notes: *Provisional figures up to 31 December 2020

[1] Intake refers to total number of permanent & contract staff (both full-time and part-time) including interns appointed as residents joining the Hospital Authority on headcount basis.

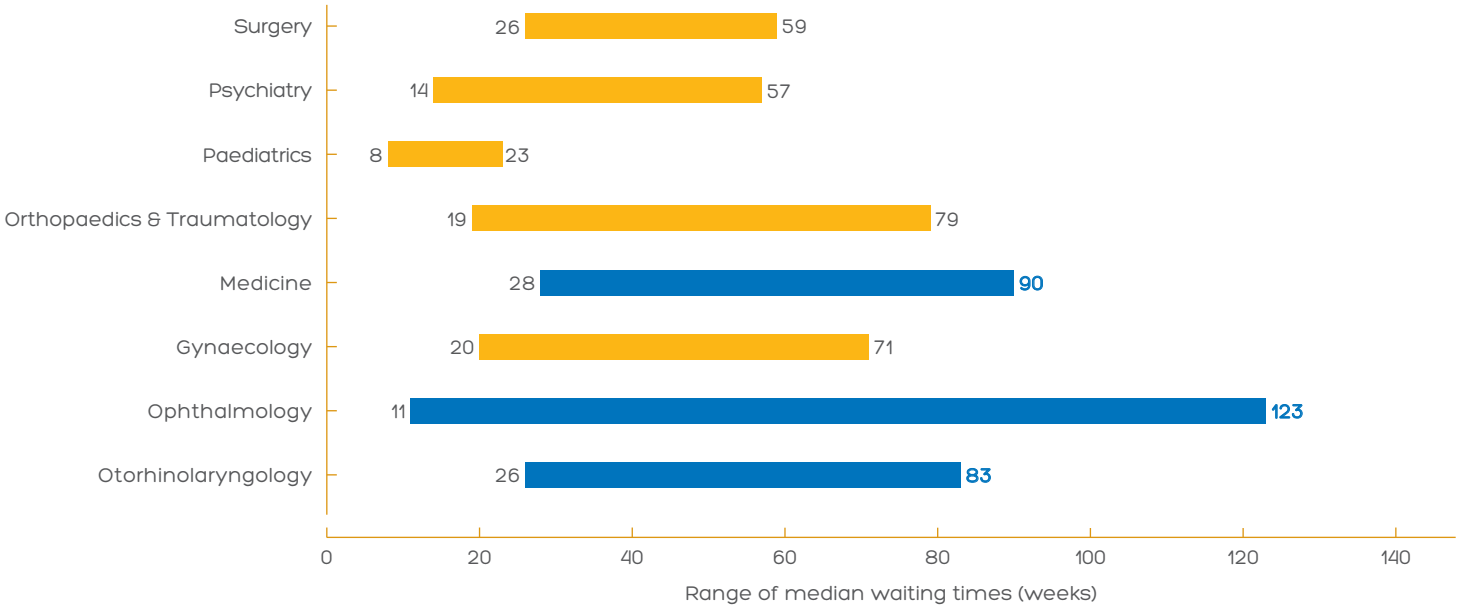
[2] Attrition includes all types of cessation of service, including retirement, from the Hospital Authority for permanent and contract staff on headcount basis. Doctors exclude interns and dental officers.

Sources: HKSARG, 2018b; Food and Health Bureau, 2018, 2021

Further worsening the crisis is the increase in attrition of public hospital doctors that is quickly catching up with the intake of doctors into public hospitals. Between 2015/16 and 2019/20, the yearly net increase ranged between 94 and 281 doctors, despite an annual intake of full-time and part-time doctors ranging from 467 to 588 doctors (HKSARG, 2018b, Food and Health Bureau, 2018). In 2018/19 and 2019/20, there was a net increase of 117 and 167 doctors, respectively. The provisional figures for 2020/21 reveal a net intake of 281 doctors as at end-2020 but has yet to account for possible attrition within 2021 (Food and Health Bureau, 2021). Nonetheless, the yearly net intake of doctors is unlikely to be sufficient to fill the projected shortfalls in the short-term.

System-level indicators show that patients are experiencing delayed care

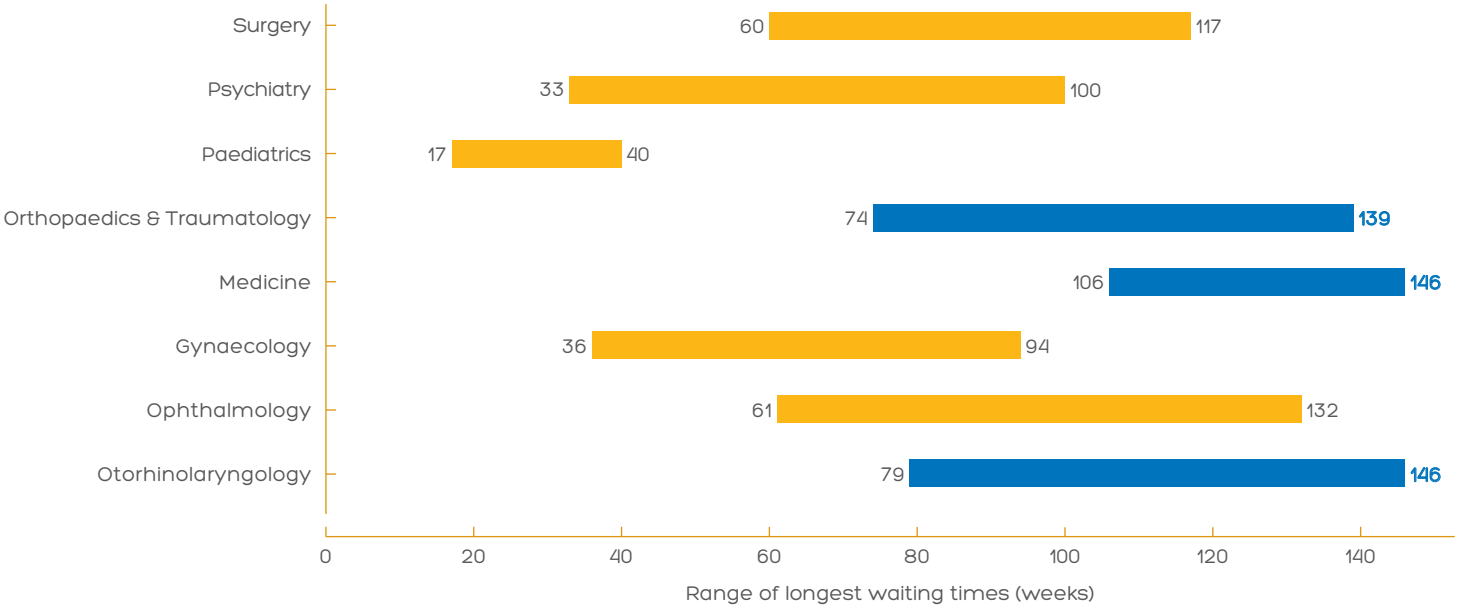
Figure XI. **Median waiting time for stable new cases across different clusters in the Hospital Authority (2020)**



Source: Hospital Authority, 2021f

The waiting time for public healthcare services continues to increase across the board, from Accident and Emergency (A & E), services to specialist out-patient clinics appointments and admission for inpatient hospital care, contributing to potential delay in diagnosis and treatment. For example, the median waiting time for a first appointment in the specialty of ophthalmology for stable new cases ranges from **11 weeks at minimum to 123 weeks at maximum** (Hospital Authority, 2021f). While not all specialties show such an extensive range of median waiting times, many specialties do have maximum waiting times of more than 70 to 90 weeks.

Figure XII. **Longest waiting time[1] for stable new cases across different clusters in the Hospital Authority (2020)**

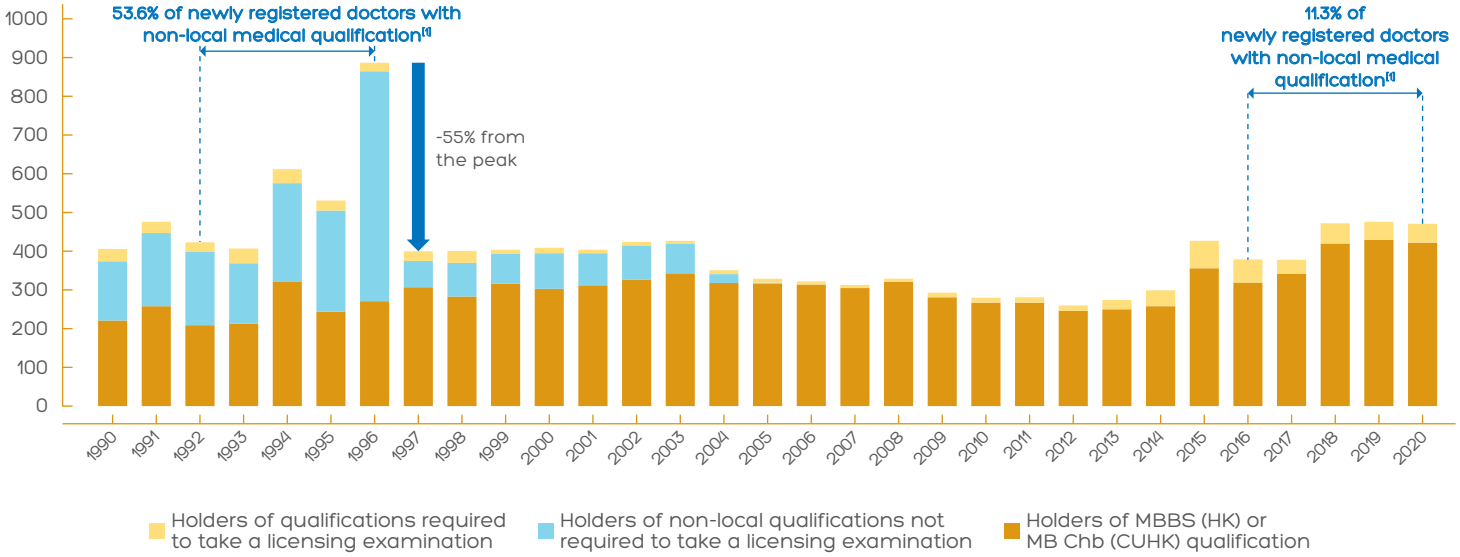


Note: [1] The longest (90th percentile) waiting time implies that appointments are earlier than the indicated time in 90% of the new case bookings.
Source: Hospital Authority, 2021f

Similarly, the longest waiting times for stable new cases suggest possible delays in the provision of necessary care. Within ophthalmology, the longest waiting time ranged from **61 weeks at minimum to 132 weeks at maximum** in 2020 (Hospital Authority, 2021f). In three specialties, the maximum longest waiting time surpassed the 132 weeks mark.

Hong Kong's injection of new doctors has declined over time

Figure XIII. **Qualifications of newly registered doctors in Hong Kong**

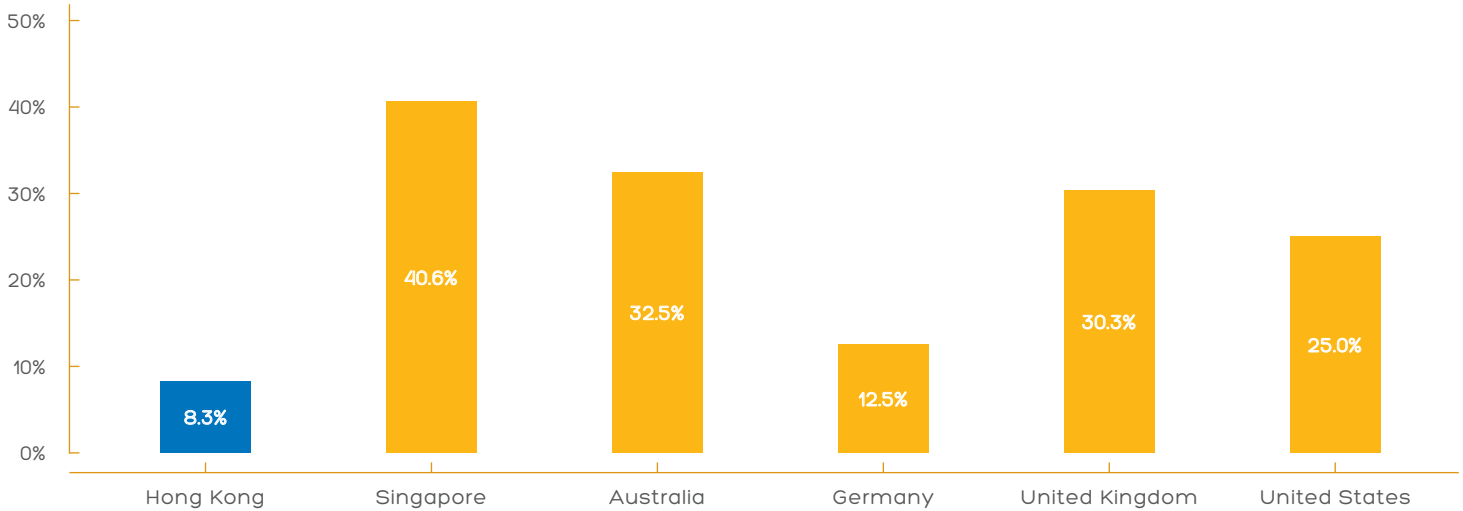


Note: [1] Average of (newly-registered doctors with non-local qualifications/total newly-registered doctors) over 5 years
Sources: Food and Health Bureau, 2017b, 2021

Hong Kong experienced a drastic decrease in newly registered doctors post-1997 after the abolishment of a pathway that allowed qualified non-locally trained doctors from recognised Commonwealth countries to attain Full Registration, without taking a licensing examination. Notably, the proportion of newly registered doctors with non-local qualifications also fell drastically. Once an important source of doctor supply and constituting 53.8% of newly registered doctors (average from 1992 to 1996), doctors with non-local qualifications only made up an average of 11.3% of newly registered doctors from 2016 to 2020 (Food and Health Bureau, 2017b, 2021).

Hong Kong's percentage of non-locally trained doctors is also low

Figure XIV. **Percentage share of non-locally trained doctors of total doctor supply (2020*)**

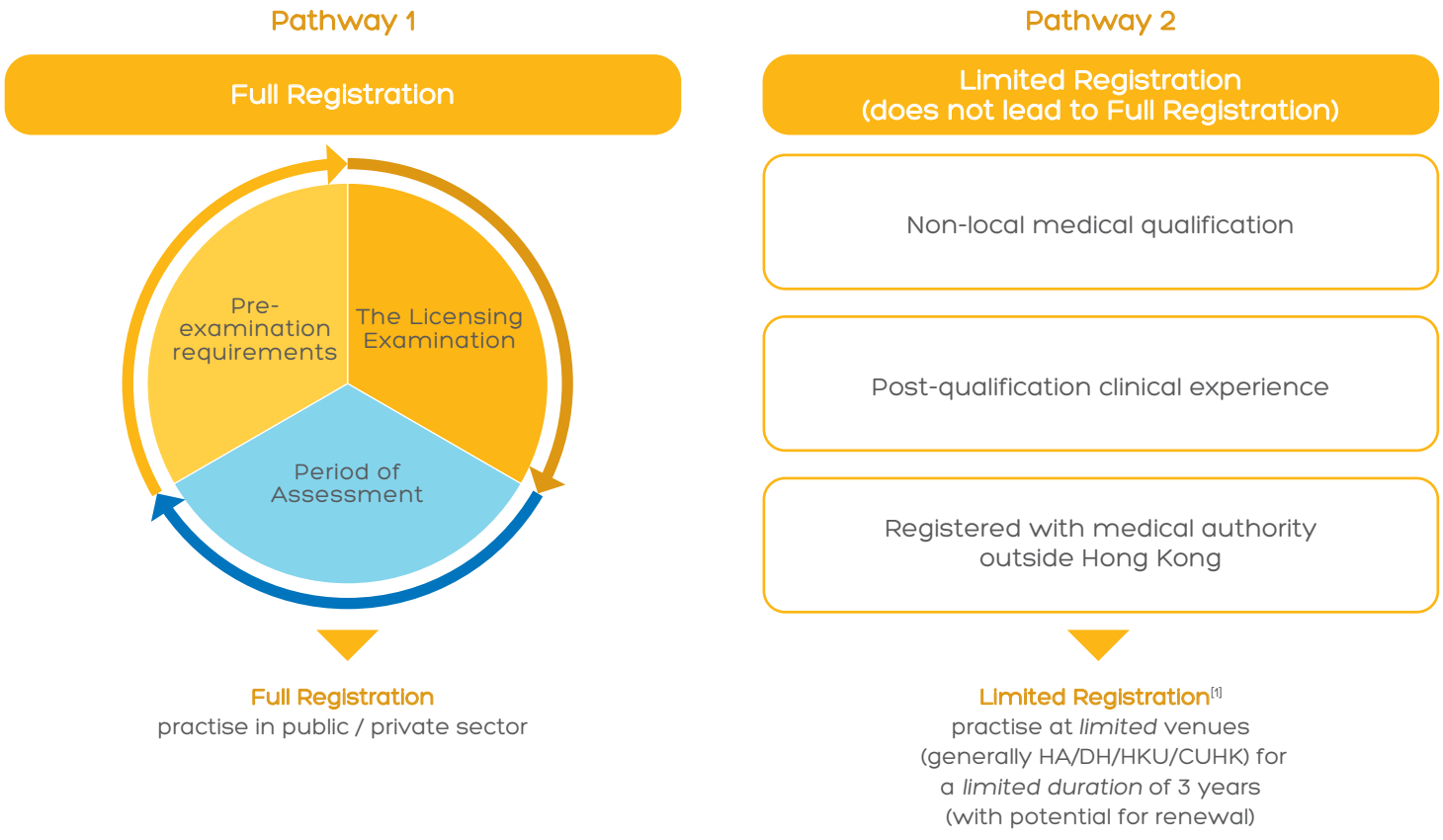


Note: *Singapore (2019), Australia (2018), Germany (2018), UK (2019), US (2016)
Sources: Secretariat of Medical Council of Hong Kong, 2021; Food and Health Bureau, 2021; SMC, 2019a; OECD, 2021

Non-locally trained doctors, which includes doctors with Full Registration or Limited Registration, make up less than 10% of Hong Kong's doctor workforce (8.3% in 2020) (Secretariat of the Medical Council of Hong Kong, 2021; Food and Health Bureau, 2021). This figure is far below the proportion of non-locally trained doctors in other well-developed jurisdictions such as Singapore (40.6%), Australia (32.5%), Germany (12.5%), the UK (30.3%) and the US (25.0%) (SMC, 2019a; OECD, 2021).

The two key pathways for non-locally trained doctors to enter Hong Kong's system

Figure XV.



Note: [1] Doctors with Limited Registration are required to pass the Licensing Examination and complete a period of assessment to be eligible for Full Registration.
Sources: MCHK, 2016c, 2018

Non-locally trained doctors can enter Hong Kong's system under Full or Limited Registration.

At present, two key pathways exist for the entry of non-locally trained doctors to practise in Hong Kong:

1. *Full Registration*: All incoming non-locally trained doctors are required to pass the three-part MCHK Licensing Examination and complete a specified period of assessment in an approved setting, effectively functions as a post-Examination internship that typically lasts for 12 months, to qualify for **Full Registration** (MCHK, 2016c). Physicians with Full Registration are entitled to practise without restrictions on setting or duration of registration; or

2. *Limited Registration*: Non-locally trained doctors with acceptable qualifications are eligible to apply for **Limited Registration**, which allows well-qualified doctors who have been selected for employment to practise at limited venues under approved promulgations published by the MCHK (generally at the Hospital Authority, Department of Health, or medical schools at the University of Hong Kong and The Chinese University of Hong Kong) for a limited duration of three years (with potential for renewal for another three years) (MCHK, 2018). Doctors entering the system via this pathway are not required to sit the MCHK Licensing Examination, but they also do not naturally progress to Full Registration.

Hong Kong needs to revive policies related to the intake of non-locally trained doctors

Figure XVI. **Percentage share of non-locally trained doctors of total doctor supply among selected jurisdictions (2020*)**

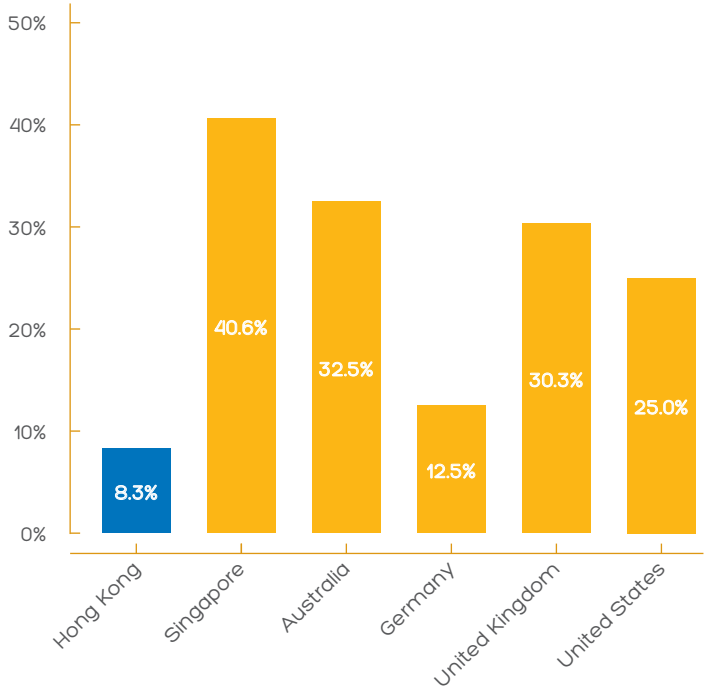


Figure XVII. **Percentage share of non-locally trained doctors of total doctor supply entering through a local licensing examination[1] (2020)**

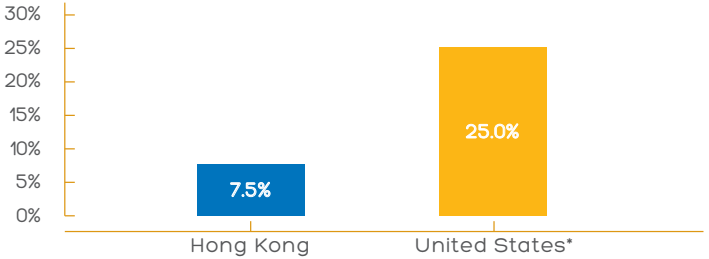
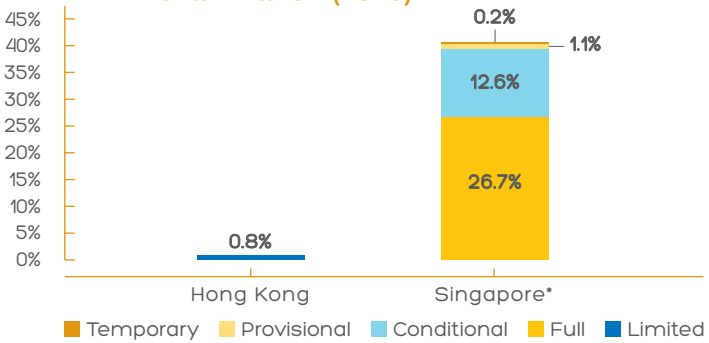


Figure XVIII. **Percentage share of non-locally trained doctors of total doctor supply entering without taking a local licensing examination (2020)**



Notes: *Singapore (2019), Australia (2018), Germany (2018), UK (2019), US (2016)
[1] International medical graduates must take the USMLE to practise in the United States and the Licensing Examination of the Medical Council of Hong Kong to gain full registration to practise in Hong Kong.
Sources: Food and Health Bureau, 2021; Secretariat of the Medical Council of Hong Kong, 2021; ECFMG, 2019; OECD, 2021; MCHK, 2021; SMC, 2019a

Non-locally trained doctors entering Hong Kong's system through the **Full Registration** pathway that necessitates a pass in the MCHK Licensing Examination made up approximately **7.5%** of Hong Kong's doctor workforce in 2020 (Secretariat of the Medical Council of Hong Kong, 2021; Food and Health Bureau, 2021). In comparison, non-locally trained doctors entering the United States' health system through taking the United States Medical Licensing Examination (USMLE) constitutes close to 25% of the doctor workforce (ECFMG, 2019; OECD, 2021).

Non-locally trained doctors entering Hong Kong's system through the **Limited Registration** pathway that does not require doctors to sit the MCHK Licensing Examination made up approximately **0.8%** of Hong Kong's doctor workforce in 2020 (Food and Health Bureau, 2021). In comparison, non-locally trained doctors entering the Singaporean health system, which does not have the requirement of taking a local licensing examination, constitute 40.6% of Singapore's doctor workforce in 2019 (SMC, 2019a).

The admission of non-locally trained doctors has been a part, albeit a small part, of Hong Kong's strategy to ensure doctor supply sufficiency. Admission pathways for non-locally trained doctors have been made available and related policies have been finetuned, yet these policies appear to be insufficiently bold to achieve its intended goal to relieve the doctor manpower shortage, particularly in the increasingly overstretched public sector. The public sector is notorious for heavy workloads and a subpar working environment characterised by long working hours and limited patient interaction time. Yet, these working conditions are unlikely to improve without a drastic boost in our doctor supply that is crucial for breaking this vicious cycle.

Hong Kong needs to drastically size up its doctor workforce to alleviate workload and importantly, to ensure that patients receive timely and high-quality care. While system-level changes to the mix and distribution of our healthcare workforce, that includes **building up a primary care workforce** and **leveraging allied health professionals**, are key strategies in relieving the local doctor shortage crisis, these changes will take time to enforce and take effect. In a bid to increase the doctor supply in more immediate terms, **Hong Kong needs to drastically enhance efforts in capitalising on a non-locally trained doctor workforce**.

The Government's recent step forward in leveraging the non-locally trained doctor workforce includes the announcement of a proposal on a new legislated pathway to admit non-locally trained doctors. While a good step forward, methods for how to go above and beyond such initiatives to fully capitalise on a non-locally trained doctor workforce must be explored. There is an urgent need to overcome key hurdles that make our health system unattractive to work in and improve the overall receptiveness of our system to real change for the greater good.

Research Methodology

Amidst the many challenges facing Hong Kong's health system, our longstanding doctor shortage crisis remains unresolved and continues to negatively impact the patient care experience. Since the release of the advocacy study titled *Health System Capacity Constraints – The Severe Shortage of Doctors in Hong Kong Public Hospitals* in 2019, Our Hong Kong Foundation (OHKF) has continued efforts in tackling the severe shortage of doctors. These efforts have taken the form of ongoing advocacy work and the initiation of a research study which taps into the views of non-locally trained doctors toward related policies.

While efforts have been made to increase the ease with which non-locally trained doctors can enter and excel within Hong Kong's health system, many doctors have noted insufficient efforts toward this goal. This study aims to better understand factors that facilitate or hinder non-locally trained doctors under Limited Registration to enter and continuously provide high-quality services. More specifically, the study incorporates: i) quantitative results from surveys; ii) qualitative results from a thematic analysis of semi-structured interviews; and iii) findings from a review of policies related to registration requirements and training opportunities of non-locally trained doctors in different jurisdictions.

Standardised Questionnaire

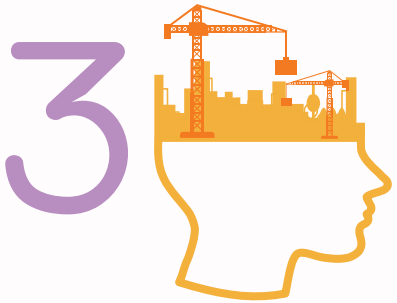
Semi-structured Interview

International Protocols

Fieldwork for this research study was conducted from **October 2019 through June 2020**. The sampling methodology invited physicians currently registered under Limited Registration with the MCHK. The study employed a convenience sampling strategy through the recruitment of clinically active participants employed by the Hospital Authority and the Department of Health (n=25 at the time of recruitment). All 12 (10 from the Hospital Authority, 2 from the Department of Health) participating doctors were requested to indicate their interest in participating in a 20-minute questionnaire and/or a semi-structured interview. Respondents' survey data and/or interview transcripts were later analysed through quantitative descriptive analysis and thematic coding to elucidate common areas of observation and concern. Primary research was conducted on international protocols for the entry, recognition, training, and accreditation of non-locally trained doctors that were compared against relevant policies in Hong Kong.

Inadequate strategic oversight

Internship as a barrier for entry



Limited specialist training

Stagnant career growth

Complex application logistics

Insufficient support for the Licensing Examination

Study findings are organised into **six key challenges**, alongside policy recommendations that are elaborated upon in the following sections. This will have important implications for healthcare workforce planning and support strategies for non-locally trained doctors in the public healthcare system.

Ethical review

Written or online consent was collected from participants prior to survey administration and each interview. Confidentiality was ensured by keeping the survey and interview discussions anonymous. All data was kept in a secure and locked area with access limited to designated researchers. All data will be destroyed three years after completion of the study. No identifiers will be kept throughout the study. This study was approved by the Human Research Ethics Committee at the University of Hong Kong (EA1908027).

Chapter

1

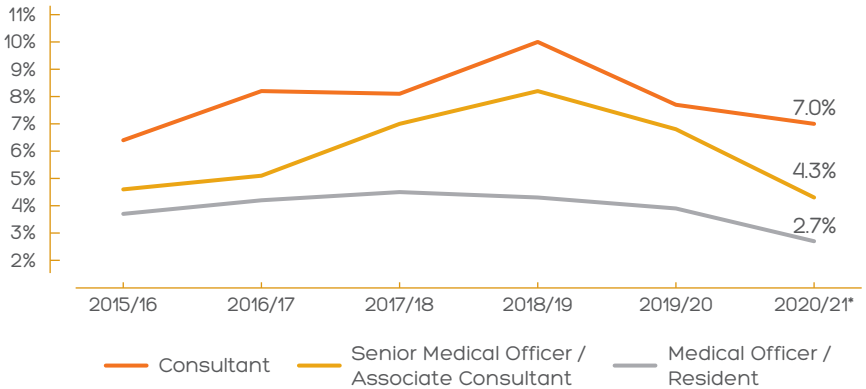
Strengthening Our Doctor Workforce through Enhancing Governance and Institutional Coordination

Challenge 1: Is there sufficient governance and coordination between relevant authorities to strengthen our doctor workforce?

The Hospital Authority needs to better utilise its resources to strengthen its doctor workforce

1.1 The Hospital Authority does not show optimal accountability towards filling vacancies

Figure 1.1 **Attrition rate of full-time public hospital doctors by rank**[1]



	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21*
Total Attrition	4.4%	5.1%	5.8%	6.4%	5.4%	3.9%

Notes: *Provisional figures up to 31 December 2020
[1] Full-time doctors only; Rolling Attrition Rate = Total no. of doctors who left the Hospital Authority in the past 12 months/Average strength in the past 12 months x 100%
Sources: Food and Health Bureau, 2018, 2020, 2021; Legislative Council, 2021c; HKSARG, 2021a

The Government-commissioned healthcare manpower review first published in 2017 and currently scheduled for release every three years provides a long-term overview of the overall doctor shortage situation in Hong Kong, and in the Hospital Authority (Legislative Council, 2021c). The latest projections announced in the *Healthcare Manpower Projection 2020* demonstrates the critical need to boost Hong Kong's doctor supply to combat an observed widening gap in the short- to medium- term.

If no drastic action is taken to increase the number of doctors in our workforce quickly, the local doctor shortage situation is likely to worsen, particularly in the public sector. The pressing nature of this crisis is exacerbated by the attrition rate of doctors in the Hospital Authority over the past few years, especially notable among senior grade doctors. As observed in 2020/21, the attrition rate was 7.0% among Consultants and 4.3% for Senior Medical Officer/Associate Consultant posts (Food and Health Bureau, 2018, 2020, 2021).

Over the past few years, there has been a trend of increasing attrition rates. As observed in 2018/19, the attrition rate was 10.0% among Consultants, 8.2% for Senior Medical Officer/Associate Consultant (Food and Health Bureau, 2020). While, there was an observed dip in the rates over the previous year, this decline may be temporary and potentially due to the impact of the Covid-19 pandemic.

Against this background, it is critical to review whether the Hospital Authority has **a specific plan towards replenishing vacant positions across all ranks which include Resident Trainee posts and senior posts requiring extensive clinical experience** (Food and Health Bureau, 2020; HKSARG, 2021a). The latter is of particular importance since senior doctors with significant clinical experience that leave positions of Associate Consultant and Consultant cannot simply be substituted by less experienced doctors. In other words, years of experience matter. Furthermore, it would be important to assess whether the Hospital Authority has a clear breakdown of the distribution of budgetary resources used to fill all vacant positions.

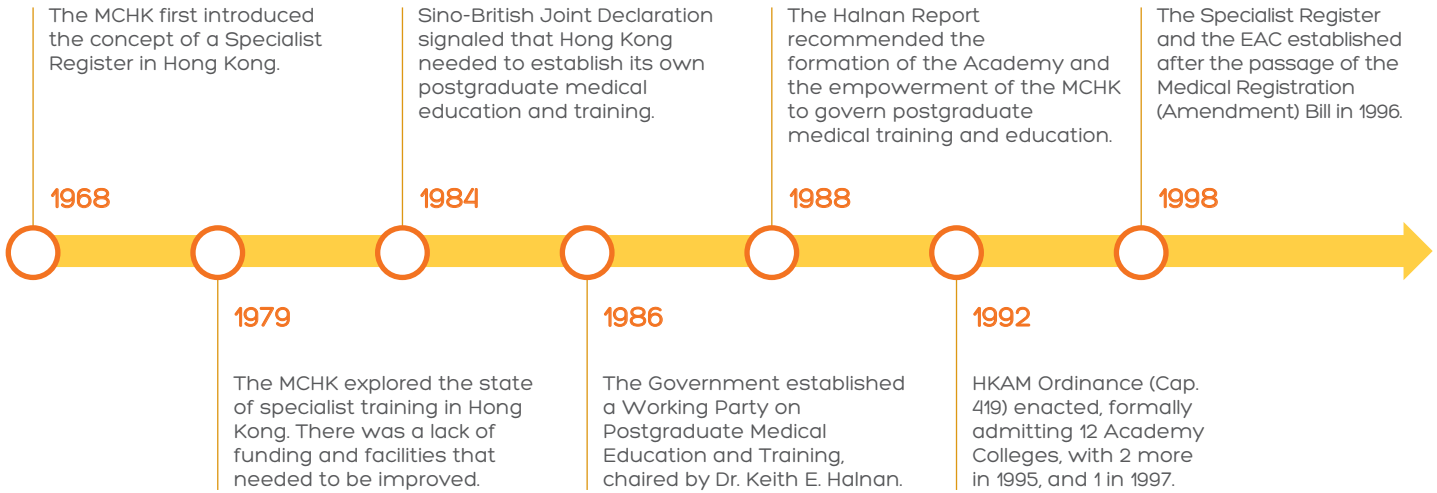
At present, the Hospital Authority does not regularly detail the specific measures adopted to replenish vacant positions nor the time required or taken to fill these vacancies. Moreover, in meeting Hong Kong's demand for doctors in the immediate term, the Hospital Authority has been allotted an additional Hong Kong Dollars (HKD) **15 million** and approximately **HKD 92 million** on top of its recurrent provisions in 2019/20 and 2020/21 respectively, for the recruitment and provision of specialty training for non-locally trained doctors under Limited Registration (Food and Health Bureau, 2020). However, as of 2020/21, the Hospital Authority had a total of just **30 non-locally trained doctors**[2] employed under Limited Registration. While recruitment is ongoing, the Hospital Authority has yet to disclose an estimated number of training places and a preliminary timetable for specialty training of these doctors (Food and Health Bureau, 2020). The hurdles faced by these doctors in attaining specialist training in Hong Kong and its implication on career prospects is further discussed in *Challenge 3*.

[2] Refers to the non-locally trained doctors employed under the Limited Registration Scheme

Hong Kong was once more receptive to the recognition of non-local specialist qualifications

1.2 A historical recap of specialist traning reveals present day restrictions

Figure 1.2



Note: Refer to Appendix 11 for Founding Timeline of Academy Colleges.
Sources: HKSARG, 1995, 2014, 2020a; Chan-Yeung, 2019; Ching, 2018; HKAM, n.d., 2003; CSHK, 2015; HKCFP, 2015, 2021; HKCR, 2021

As stipulated in the Medical Registration Ordinance (MRO) (Cap. 161), the Specialist Register of the Medical Council of Hong Kong was established in **1998**, after the **Medical Registration (Amendment) Bill was passed in 1996** (HKSARG, 2020a) (HKSARG, 1995). The Bill comprised of several changes to the Ordinance including the formal introduction of the Specialist Register in Hong Kong and empowerment of the MCHK through creation of several statutory committees.[3] Of note, the Education and Accreditation Committee (EAC) was set up to determine the names of specialists to be included in the Specialist Register. Any registered medical practitioner who wishes to add their name to the Specialist Register must have their qualifications vetted by the Academy, either by being a Fellow of the Academy or by being certified by the Academy to have qualifications comparable to that required of an Academy Fellow. Thereafter, recommendations are passed to the EAC and finally to the MCHK.

Prior to this, no formal postgraduate training was available for local medical graduates in Hong Kong (Ching, 2018). In the early days, local medical graduates received postgraduate training and attained specialist qualifications in overseas institutions, such as in the UK after passing qualification examinations of the Royal Colleges, or in other Commonwealth countries; this training led to specialist recognition and the right to serve as a specialist in Hong Kong (Chan-Yeung, 2019).

The push towards empowering Hong Kong to formalise its own postgraduate training and establish a specialist register can be traced back to **1968**, when the notion was first conceived by the MCHK (HKAM, n.d.). Over a decade later, the MCHK established a working party to examine the training required to become a specialist and concluded that a lack of funding and facilities in Hong Kong called for the "professional training of doctors intending to specialise be improved as a necessary step toward the setting up of a specialist register" (HKAM, 2003).

[3] The Bill introduced three statutory committees including EAC, the Health Committee, and the Ethics Committee

In **1984**, the signage of the Sino-British Joint Declaration ushered a new chapter for Hong Kong. It gave the professional medical community a push towards entrenching the authority of the professional body "in the hands of the profession well before 1997," through establishing Hong Kong's own criteria on licensing, specialist accreditation and examinations, including the recognition of non-local medical degrees (Ching, 2018, pp. 358, 361). Two years later, the Government established a Working Party on Postgraduate Medical Education and Training chaired by Dr. Keith E. Halnan (HKAM, n.d.). In **1988**, the Halnan Report was submitted to the Government, tabling two major recommendations, namely: i) the formation of the Hong Kong Academy of Medicine, to supervise and set its own postgraduate qualifications and conduct its own examinations; and ii) to amend the MRO (Cap. 161), which would expand the power of the MCHK to govern postgraduate medical education and training in Hong Kong (Ching, 2018, p. 361). The establishment of the Hong Kong Academy of Medicine Ordinance (Cap. 419) was introduced and enacted in the year **1992** (HKAM, n.d., HKSARG, 2014).

The Academy formally admitted **12** constituent **Academy Colleges in 1992**, which include:

- The Hong Kong College of Anaesthesiologists (HKCA)
- Hong Kong College of Community Medicine (HKCCM)
- The College of Dental Surgeons of Hong Kong (CDSHK)
- The Hong Kong College of Family Physicians (HKCFP)
- The Hong Kong College of Obstetricians and Gynaecologists (HKCOG)
- The Hong Kong College of Orthopaedic Surgeons (HKCOS)
- Hong Kong College of Paediatricians (HKCPaed)
- The Hong Kong College of Pathologists (HKCPath)
- Hong Kong College of Physicians (HKCP)
- The Hong Kong College of Psychiatrists (HKCPsych)
- Hong Kong College of Radiologists (HKCR)
- The College of Surgeons of Hong Kong (CSHK)

Thereafter, two Academy Colleges, the College of Ophthalmologists of Hong Kong (COHK), and The Hong Kong College of Otorhinolaryngologists (HKCORL), were admitted in **1995**, and one more Academy College, the Hong Kong College of Emergency Medicine (HKCEM), was admitted in **1997 (the founding timeline of the Academy Colleges can be found in Appendix 11 of this report)** (HKAM, n.d.).

At present day, some Academy Colleges, among which include The College of Surgeons of Hong Kong, The Hong Kong College of Family Physicians, and the specialties of Clinical Oncology and Clinical Radiology under the Hong Kong College of Radiologists, conduct conjoint examinations with institutions outside Hong Kong (HKCR, 2021; CSHK, 2015; HKCFP, 2015; HKCFP, 2021; CSHK, 2015).

However, since its formation, the Academy's adoption of policies related to the recognition of non-local medical qualifications have shown inconsistencies in recognition standards between the Academy Colleges. Using the conjoint examinations in The College of Surgeons of Hong Kong to illustrate this, an attainment of Fellowship requires passing the Joint Specialty Fellowship Examination conducted with the Royal College of Surgeons of Edinburgh (RCSEd) in all specialties[4]. Thus, trainees are awarded dual Fellowships including the Fellowship of the CSHK and the Fellowship of the RCSEd. Such an arrangement would entail that non-locally trained doctors who hold the qualification of Fellowship from the RCSEd should be eligible for an award of Fellowship from the CSHK. However, eligibility for receiving an award of Fellowship from the CSHK, and subsequent nomination for a Fellowship with the Academy, requires candidates to be fully registered with the MCHK meaning that RCSEd Fellows under Limited Registration and certified as a specialist in Hong Kong would not be eligible (CSHK, 2015).

The same observation could be made in the HKCR in which the Fellowship examinations are organised jointly with the Royal College of Radiologists of the UK for the specialties of Clinical Radiology and Clinical Oncology, yet, the attainment of a Fellowship with HKCR also requires Full Registration with the MCHK (HKCR, 2021). The HKCFP, on the other hand, accepts candidates with Limited or Full Registration for the eventual nomination of a Fellowship awarded by the Academy College (HKCFP, 2015).

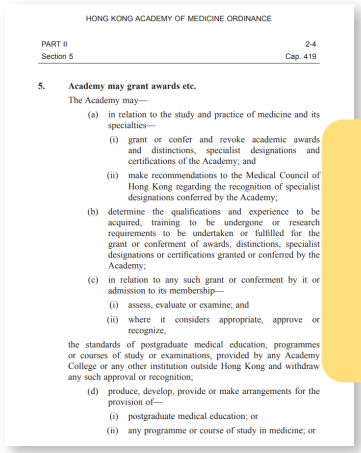
Practices of conducting conjoint examinations without fair recognition and accreditation are counterproductive to the goals of maintaining standards across jurisdictions and being on par with international specialist qualifications. This inflexibility has substantial implications on Hong Kong's non-receptiveness to non-local medical qualifications and places Hong Kong at a disadvantage in the international arena for building a friendly climate for the recruitment of top talent.

[4] Cardiothoracic Surgery, General Surgery, Neurosurgery, Paediatric Surgery, and Urology except Plastic Surgery

The Academy needs to step up to ensure that Hong Kong has a sufficient supply of specialist doctors

1.3 The Academy takes on a passive role in exercising its statutory power

Figure 1.3



HONG KONG ACADEMY OF MEDICINE ORDINANCE

PART II
Section 5

2-4
Cap. 419

5. Academy may grant awards etc.

The Academy may—

(a) in relation to the study and practice of medicine and its specialties—

(i) grant or confer and revoke academic awards and distinctions, specialist designations and certifications of the Academy; and

(ii) make recommendations to the Medical Council of Hong Kong regarding the recognition of specialist designations conferred by the Academy;

(b) determine the qualifications and experience to be acquired, training to be undergone or research requirements to be undertaken or fulfilled for the grant or conferment of awards, distinctions, specialist designations or certifications granted or conferred by the Academy;

(c) in relation to any such grant or conferment by it or admission to its membership—

(i) assess, evaluate or examine; and

(ii) where it considers appropriate, approve or recognize,

the standards of postgraduate medical education, programmes or courses of study or examinations, provided by any Academy College or any other institution outside Hong Kong and withdraw any such approval or recognition;

(d) produce, develop, provide or make arrangements for the provision of—

(i) postgraduate medical education; or

(ii) any programme or course of study in medicine; or

Hong Kong Academy of Medicine Ordinance Cap. 419

HKAM has the **statutory power** to organise , monitor, assess, and accredit all medical specialist training

Sources: HKSARG, 2014; Food and Health Bureau, 2017a

The Academy has been given a substantial foothold in the training and recognition of postgraduate medical education and training in Hong Kong. According to the Hong Kong Academy of Medicine Ordinance (Cap. 419) enacted in 1992, the Academy has the **statutory power to organise, monitor, assess, and accredit all medical specialist training** (HKSARG, 2014; Food and Health Bureau, 2017a). Perversely and contrary to the Government's active efforts in augmenting the role of non-locally trained doctors in Hong Kong, the Academy currently takes on a comparatively **passive role in the recruitment, training and ultimate retention of qualified non-locally trained doctors**. This is demonstrated in our analyses further elaborated in *Challenge 3* and *Challenge 4* that discuss in detail the barriers faced by non-locally trained doctors in joining Hong Kong's specialist workforce whether through continuing specialist training, retrospective accreditation and/or official recognition of non-local medical qualifications.

Manpower shortages result in an overstretched public healthcare system and overworked doctors...

Qualitative Codes—Thematic Analysis

> **Well, the population is certainly growing. And they're ageing, and we're not even at the peak yet. So, we are overworked all the time and the ratio between doctor and patient is very low in Hong Kong. And to be honest, the private service is very pricey. It's not affordable for the majority of people to be honest.**

Throughout the semi-structured interviews, many non-locally trained doctors expressed their frustration with the expectations placed on public sector doctors that may potentially explain the notable attrition rate of doctors in the Hospital Authority. Recollecting their personal experiences, doctors expressed that they are "overworked all the time and the ratio between doctor and patient is very low in Hong Kong". Nonetheless, doctors also expressed their understanding of the general public's tendency toward crowding in the public sector, noting that the "private service is very pricey". As such, the combination of growing population health needs and financial concerns from accessing the private sector has contributed to **overstretched and overworked public hospital doctors**.

...contributing to a high attrition rate of doctors in the public sector

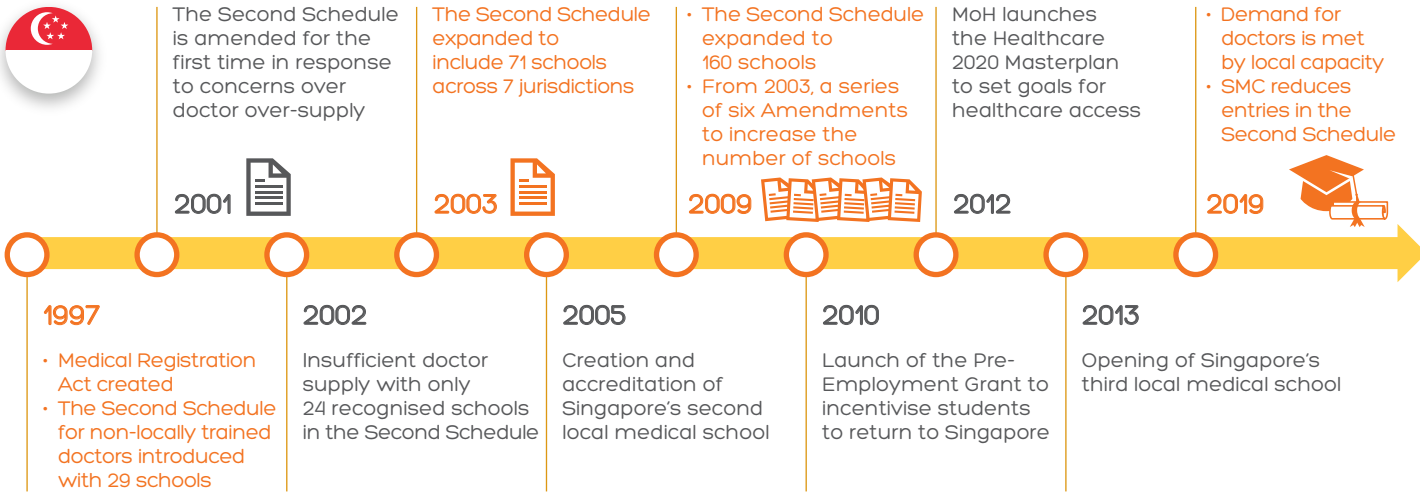
Qualitative Codes—Thematic Analysis

> **Yes, I think [non-locally trained doctors will] definitely help....[I feel that there is a lot of attrition from the public hospitals to private hospitals], ...I know that every year there were some doctors from [HKU] or CUHK, or [the Hospital Authority], they will come out and work in the private sector.**

When commenting on the noticeable attrition rate of doctors in public sector hospitals, interviewed doctors agree with the sentiment that there is significant attrition from the public to private sector. One respondent added that they were aware that "every year, there were some doctors from [HKU], or CUHK, or [the Hospital Authority], they will come out [of the public sector] and work in the private sector". In light of these considerations, doctors have agreed that leveraging non-locally trained doctors as a key lever to tackle Hong Kong's shortage of doctors, particularly in the public sector would "definitely help" in the more immediate term.

The Second Schedule is used in Singapore to realise doctor supply goals

Figure 1.4



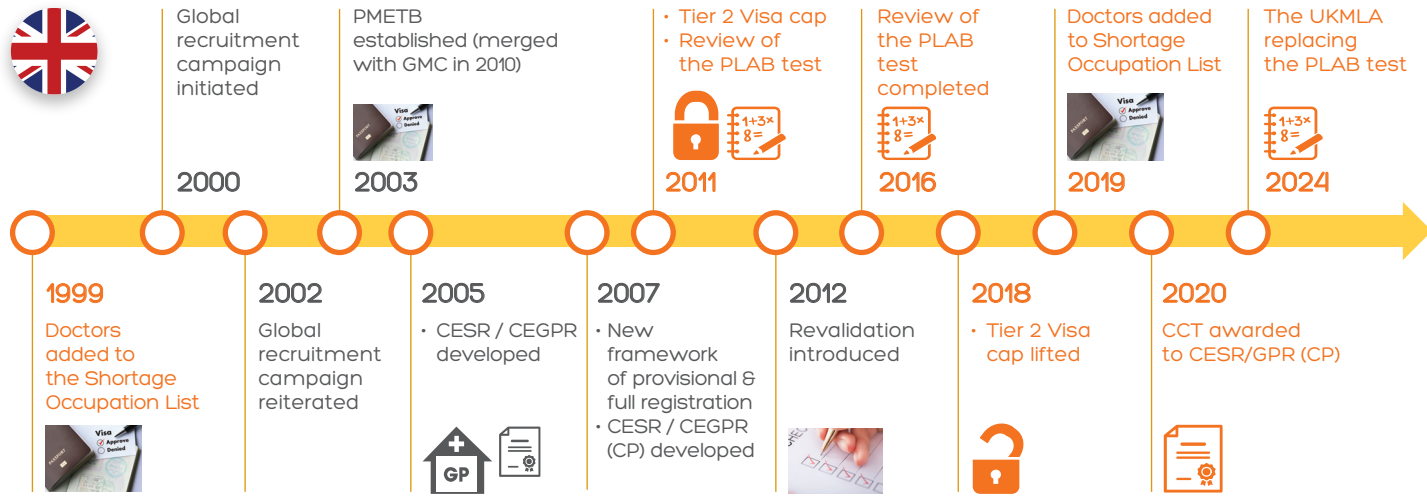
Sources: Legislative Council, 2019; SMC, 2003, 2021b; Singapore Parliament, 2018; Ministry of Health, 2012, 2019

As alluded to in the prior Context discussion, Singapore offers a unique perspective of how system-level changes can dramatically improve the outlook of a doctor shortage crisis through the admission of non-locally trained doctors. In particular, the Medical Registration Act enacted in 1997 was written with the provision of the Second Schedule to function as a control knob for meeting a doctor supply target through injection of non-locally trained doctors. At present, Singapore leverages on the Second Schedule as one of the key levers for strengthening its medical workforce. The Second Schedule was first amended in 2001 over concerns of over supply, reducing the number of listed schools from 29 to 24 by 2002 (Legislative Council, 2019). However, higher immigrant influx and increase of Singapore's population size led to calls in late 2002 for further expansions in the Second Schedule listing (SMC, 2003). These calls for amendments to the Second Schedule resulted in a significant increase to the number of recognised institutions to 71 schools across seven jurisdictions (Singapore Government, 2003). Between 2003 and 2009, a series of six amendments were made to continually boost the number of recognised medical schools, reaching 160 schools in 2009 (SMC, 2021b).

While Singapore encourages a significant number of non-locally trained doctors every year to supplement their workforce supply, the Singapore Government has continued to strengthen its locally-trained doctor workforce. To increase its local supply of doctors, Singapore opened its second and third medical school – the Duke-National University of Singapore Medical School opened in 2005, followed by the Nanyang Technological University Lee Kong Chian School of Medicine in 2013. In 2018, a total of roughly 500 local medical students were accepted to the three medical schools of Singapore, representing an increase from approximately 300 students in 2010 (Singapore Parliment, 2018). These investments are reflected in the *Healthcare 2020 Masterplan*, released in 2012, to strengthen the medical intake in Singapore, with an initial goal of increasing intake by 29% between 2012 and 2015 (Ministry of Health, 2012). As a result, the Ministry of Health (MoH) and the SMC moved to contract the Second Schedule in 2019, taking effect in 2020, in response to the total doctor intake scheduled to meet the healthcare demand in 2023, when the impact of the local schools' intake will be fully realised (Ministry of Health, 2019).

The Shortage Occupation List is used in the United Kingdom to incentivise the entry of non-locally trained doctors

Figure 1.5



Sources: NHS Employers, 2021; Blacklock, 2012; Buchan, 2007; Home Office, 2011, 2018; UK Government, 2021; BMA, 2019, 2020; GMC, 2012, 2013, 2016, 2021a, 2021f, 2021j; Brown, 2005; Watson, 2007; Amison & GMC, 2018

The General Medical Council (GMC) in the UK has also strengthened its doctor supply over the past two decades, leveraging on the Shortage Occupation List that officially records occupations that do not have enough resident workers to fill vacancies. The Migration Advisory Committee regularly reviews the list of occupations to be included or removed from the Shortage Occupation List (NHS Employers, 2021). In 1999, the UK Government released a list of shortages within specialties in the National Health Service (NHS) and added these professions to the SOL (Blacklock, Heneghan, Mant, & Ward, 2012). Subsequently, in 2000, the NHS and the UK's Department of Health centrally coordinated a global recruitment effort to fill the noted shortages and increase its doctor supply. To achieve this, the Department of Health created a number of entry routes for non-locally trained doctors to enter and join the NHS as Consultants (Buchan, McPake, Rae, & Mensah , 2007). This coordinated effort was established in the NHS Plan and published by the UK's Labour Government; the Plan was reiterated in 2002 to focus on increasing the number of Consultants and General Practitioners working in the NHS (Blacklock, Heneghan, Mant, & Ward, 2012).

In 2011, the UK Home Office, which is responsible for immigration-related matters, announced shifts in the Tier 2 category for entry of skilled workers, introducing limits on applications (Home Office, 2011). To combat the shortage of skilled doctors and nurses in 2018, the Home Office lifted the Tier 2 Visa caps for doctors and nurses as part of a long-term plan for the NHS (Home Office, 2018). Furthermore, all medical specialties were added to the SOL in 2019, thus allowing non-locally trained medical graduates to be considered on equal standing with local medical graduates for internship and specialty training positions (UK Government, 2021; BMA, 2019).

The UK also engaged in efforts to improve the registration system for doctors. The Postgraduate Medical Education and Training Board (PMETB) was established by the General and Specialist Medical Practice (Education, Training and Qualifications) Order 2003 to facilitate and unify frameworks for postgraduate medical education across the UK (Brown, 2005). Later, the PMETB merged with the GMC in 2010 and became fully operational as the GMC (GMC, 2021e). In 2007, the PMETB introduced a new registration framework comprising provisional and full registration, allowing non-locally trained doctors to apply directly to either registration type (Watson, 2007). In 2012, the GMC passed the GMC Licence to Practise and Revalidation Regulations, requiring all doctors to revalidate in a timely and regular manner in order to maintain their licence to practise (GMC, 2013).

The PMETB launched the Certificate of Eligibility for Specialist Registration (CESR) and Certificate of Eligibility for GP Registration (CEGPR) in 2005 for doctors who have completed specialist or general practice (GP) training, respectively, but not in a GMC-approved institution (GMC, 2012). In 2007, the GMC further introduced the **Certificate of Eligibility for Specialist Registration or General Practice Registration (Combined Programme) - CESR (CP)/CEGPR (CP)** to allow Combined Programme routes for doctors who have partially completed training abroad but wish to continue their training in the UK. Doctors may choose to enter the CESR (CP) path to enter the specialist register or the CEGPR (CP) path to enter the general practice register (GMC, 2021f). In 2020, the GMC revised its recognition standards for the Continuing Programme, awarding all non-local medical graduates who completed part of their training in a GMC-approved setting with a **Certificate of completion of training (CCT)** recognition (British Medical Association & Tonkin, 2020), thereby granting the same recognition and entitlement that local medical graduates would receive.

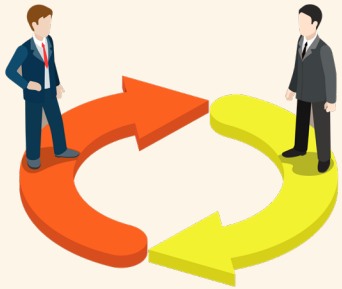
To practise medicine in the UK, non-locally trained doctors are generally required to pass both parts of the Professional and Linguistic Assessments Board (PLAB) test. The GMC began a review of the PLAB test, which was completed in 2016, resulting in revisions to increase the reliability of the clinical skills assessment, extend the scope, and change examination regulations, among other changes (GMC, 2016). In 2024, the GMC intends to replace the PLAB test with the United Kingdom Medical Licensing Assessment (UKMLA) and require all medical graduates, regardless of location of medical training, to complete the test before qualifying for full registration in the UK (GMC, 2021j).

Recommendations

Hong Kong must strengthen its governance and strategic vision in medical workforce planning

Across the world, governments employ a range of levers that align with and facilitate the achievement of the strategic goal to ensure doctor supply sufficiency, often considering the role of non-locally trained doctors. Levers range from adjustment of visa arrangements in the United Kingdom and instilling flexibility with registration requirements (such as list of acceptable primary qualifications) in Singapore. While there is no one-size-fits-all solution, Hong Kong would do well as a first step to have the Government enforce strategic oversight and streamlined coordination between relevant parties to capitalise on the contribution of non-locally trained doctors towards ensuring doctor supply sufficiency.

Recommendation 1.1



Publicly disclose recruitment strategy for departed doctors, especially senior doctors from the Hospital Authority and exercise operational mechanisms to combat slow rehiring

- The Hospital Authority should publicly and regularly **disclose attrition and replacement details of senior doctors, including years of experience**.
- **Operational mechanisms, such as resource re-allocation, should also be leveraged** to address slow rehiring for vacant positions.

To accurately size Hong Kong's doctor shortage, the Hospital Authority should publicly and regularly disclose attrition and replacement details for each departed doctor, especially senior doctors. The Hospital Authority should detail the specific mechanisms involved, for example, internal promotion, hiring of private sector doctors, or hiring of doctors from outside Hong Kong to ensure vacant positions are filled in a timely manner. The years of experience of outgoing and the corresponding replacement doctors should also be disclosed on a routine basis. Operational mechanisms should be leveraged so that consequences, such as resource re-allocation, take effect when vacant positions are not replaced in a timely manner.

Recommendation 1.2

Coordinate plans for recruitment of non-locally trained doctors and evaluate recruitment outcomes

- The Government should **coordinate recruitment plans** for doctors outside Hong Kong that necessitate the promotion of synergy between relevant parties including the Hospital Authority and the Hong Kong Academy of Medicine.
- The Government should detail **recruitment targets** and have in place a **clear evaluation framework** for recruitment outcomes.

To increase the overall headcount of our doctor workforce that would help shorten the waiting time for healthcare services in the public sector, the Government should continue to spearhead and coordinate strategic plans for encouraging the entry of doctors trained outside Hong Kong in the immediate terms. In addition to supporting ongoing in-person and online recruitment campaigns for non-locally trained doctors from outside Hong Kong, the Government should streamline and coordinate efforts of relevant parties including the Hospital Authority and the Hong Kong Academy of Medicine. The Government should ensure that specific recruitment targets are set and a clear evaluation framework for recruitment outcomes are in place.

Recommendation 1.3

Mandate additional headcount for public healthcare institutions

- The Government should **mandate additional headcount** for the Hospital Authority and the Department of Health and hold both **accountable for the effective utilisation of additional funding for the global recruitment of doctors.**
- The Hospital Authority should **target global recruitment efforts to fill posts across all ranks**, from Resident Trainee, to Associate Consultant, and Consultant.

The Government should mandate additional headcount for the Hospital Authority and the Department of Health and hold the authorities accountable for effectively utilising the additional funding for the global recruitment of doctors with either local or non-local qualifications, based on merit to relieve respective doctor shortages. The recruitment initiative can target global recruitment efforts to fill posts across all ranks, from Resident Trainee to Associate Consultant, and Consultant.

Recommendation 1.4

Demand accountability for enforcement of statutory powers related to specialist training and qualifications

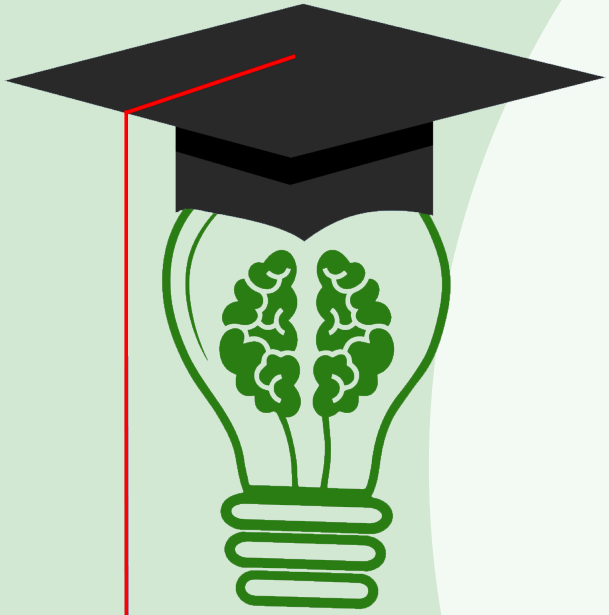
- The Government should hold **the Academy** accountable in **enforcing its statutory power to organise, monitor, assess and accredit** specialist training and qualifications.
- The Academy should ensure that all **Academy Colleges disclose accreditation and recognition criteria** in a centralised format, with **oversight to ensure alignment with workforce and population health demands**.

The Government should hold the Hong Kong Academy of Medicine accountable in enforcing its statutory power to organise, monitor, assess, and accredit all medical specialist training and qualifications. The Academy should ensure that all the Academy Colleges disclose accreditation and recognition criteria for non-local specialist qualifications to the Academy. This process should be centralised by the Academy, with strategic oversight to ensure alignment between specialist needs in Hong Kong's doctor workforce and population healthcare demands.

Chapter

2

Alleviating Internship Requirement Barriers for Doctors to Practise in Our Health System

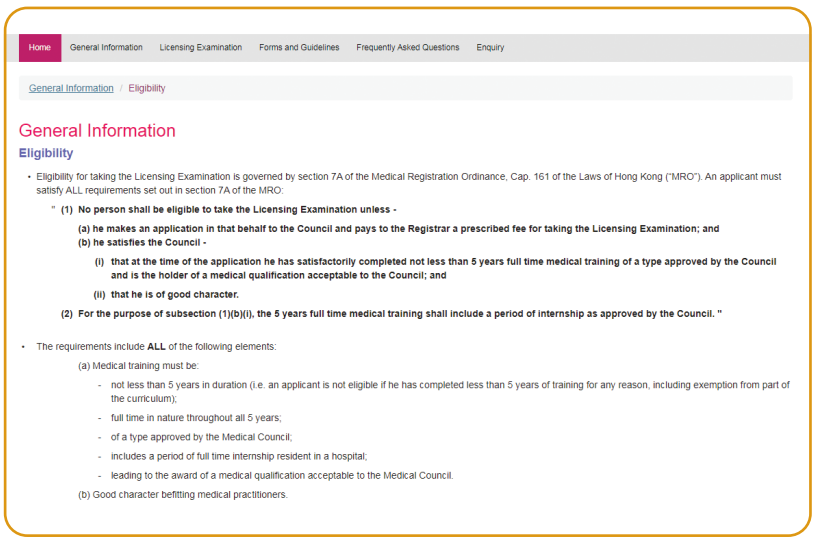


Challenge 2: Are internship requirements a barrier to excel in our health system?

Medical students without internship experience are ineligible to sit the Licensing Examination

2.1 Internship experience is a prerequisite to sit the Licensing Examination

Figure 2.1



Sources: LEIP, 2018c; Heffron & Socha-Dietrich, 2018; COAG Health Council, 2015

Eligibility to take the MCHK Licensing Examination considers the satisfaction of requirements that includes medical training which encompasses completion of a period of full-time internship (LEIP, 2018c). The internship prerequisite is a barrier for medical graduates who face difficulties in securing internship placements in places of training such as Ireland and Australia, where internship placements for non-local medical graduates are relatively scarce (Council of Australian Government's Health Council, 2015; Heffron, Socha-Dietrich, & OECD, 2018). Non-locally trained medical graduates unable to secure an internship placement are therefore not eligible to take the Licensing Examination.

Post-Examination internship can be redundant and prevents doctors from excelling at their clinical aptitude

2.2 Post-Examination internship for some doctors is a redundant requirement

Figure 2.2

THE LICENTIATE COMMITTEE
OF THE MEDICAL COUNCIL OF HONG KONG

Guidelines 3 -
Period of Assessment: Exemption, Reduction and Deferment

Preamble

1. A person who has passed the Licensing Examination and who wishes to be registered as a medical practitioner under section 14 of the Medical Registration Ordinance ("MRO") shall complete, to the satisfaction of the Council, such period of assessment as the Council may determine, not exceeding the prescribed period of 12 months stipulated in section 3 of the Medical Registration (Miscellaneous Provisions) Regulation (the "Regulation").

2. The following guidelines apply to any person who has passed the Licensing Examination and the latest date when he/she ought to have started undergoing the prescribed period of assessment will fall on or after 26 August 2019 ("Qualified Applicant").

Application

3. Qualified Applicant may apply for:-

   a. exemption from assessment of a specialty;
   b. reduction of the period of assessment for a specialty;
   c. reduction of the period of assessment generally; and
   d. deferment of assessment.

Guidelines for reduction of the period of assessment generally

13. Qualified Applicant may apply for reduction of the period of assessment stipulated in section 3 of the Medical Registration (Miscellaneous Provisions) Regulation to one to three days if:-

   (a) he/she has passed the Licensing Examination;

   (b) he/she holds a specialist qualification comparable to a Fellowship of the Colleges under the Hong Kong Academy of Medicine (College for Dental Surgeons of Hong Kong excepted); and

   (c) he/she has completed a period of full-time employment for three years or more as a medical practitioner by any of the institutes designated under Promulgation No.2 of Limited Registration.

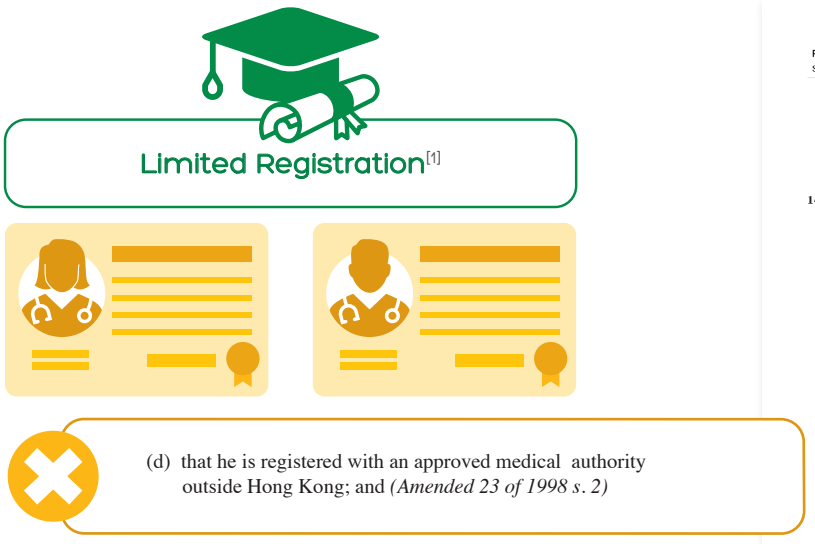
Source: LEIP, 2019a

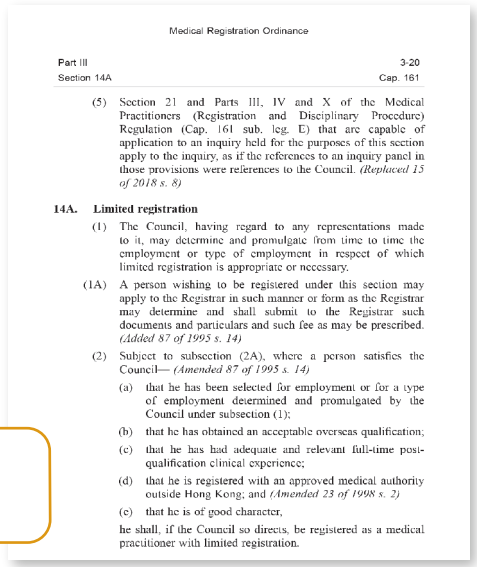
Non-locally trained doctors who successfully pass the Licensing Examination and wish to be fully registered must also complete a period of assessment not exceeding 12 months, which functions as a post-Examination internship (LEIP, 2019a). While this period of assessment may be essential for fresh medical graduates who have yet to acclimate to the local health system, this requirement becomes redundant for non-locally trained doctors who have worked under Limited Registration. Specifically, non-locally trained doctors under Limited Registration who pass the Licensing Examination, and have yet to attain specialist qualifications, are currently subject to complete a period of assessment (LEIP, 2019a). During this period, these well-qualified doctors are tasked with responsibilities that often fall far below their clinical aptitudes and undermine their potential contribution to our system. These doctors have already served our system in a clinical capacity and are well-versed with the local public healthcare sector. Thus, in this context, the period of assessment serves no practical purpose and puts Hong Kong at risk of losing out on well-qualified doctors.

Doctors without internship experience may not be able to register under Limited Registration

2.3 Internship experience is necessary for entry under Limited Registration

Figure 2.3





Medical Registration Ordinance

Part III 3-20
Section 14A Cap. 161

(5) Section 21 and Parts III, IV and X of the Medical Practitioners (Registration and Disciplinary Procedure) Regulation (Cap. 161 sub. leg. E) that are capable of application to an inquiry held for the purposes of this section apply to the inquiry, as if the references to an inquiry panel in those provisions were references to the Council. *(Replaced 15 of 2018 s. 8)*

14A. Limited registration

(1) The Council, having regard to any representations made to it, may determine and promulgate from time to time the employment or type of employment in respect of which limited registration is appropriate or necessary.

(1A) A person wishing to be registered under this section may apply to the Registrar in such manner or form as the Registrar may determine and shall submit to the Registrar such documents and particulars and such fee as may be prescribed. *(Added 87 of 1995 s. 14)*

(2) Subject to subsection (2A), where a person satisfies the Council— *(Amended 87 of 1995 s. 14)*

(a) that he has been selected for employment or for a type of employment determined and promulgated by the Council under subsection (1);

(b) that he has obtained an acceptable overseas qualification;

(c) that he has had adequate and relevant full-time post-qualification clinical experience;

(d) that he is registered with an approved medical authority outside Hong Kong; and *(Amended 23 of 1998 s. 2)*

(e) that he is of good character,

he shall, if the Council so directs, be registered as a medical practitioner with limited registration.

Note: [1] If a person does not satisfy the Medical Council that he / she fulfills the requirement at (b), (c) or (d) above but satisfies the Medical Council that he / she fulfills other requirements above, the Medical Council may grant him / her limited registration under s ect ion 14A(2A) of the Ordinance subject to additional restrictions and conditions regarding his practice as specified by the Medical Council.

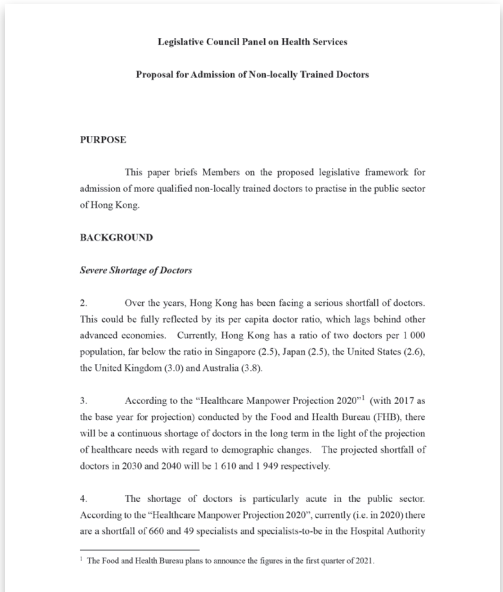
Sources: HKSARG, 2020a; MCHK, 2018

Non-locally trained doctors can enter Hong Kong's health system through the Limited Registration pathway. However, according to Section 14A of the Medical Registration Ordinance (Cap. 161), these doctors must be registered with an approved medical authority outside Hong Kong (HKSARG, 2020a). Therefore, medical graduates without internship experience and thus unable to register with a medical authority outside Hong Kong may be ineligible to enter our health system via the Limited Registration pathway (MCHK, 2018).

Medical graduates without prior internship experience may not benefit from the Government's proposed pathway

2.4 Internship experience is necessary for the Government's proposed pathway

Figure 2.4



Legislative Council Panel on Health Services

Proposal for Admission of Non-locally Trained Doctors

PURPOSE

This paper briefs Members on the proposed legislative framework for admission of more qualified non-locally trained doctors to practise in the public sector of Hong Kong.

BACKGROUND

Severe Shortage of Doctors

2. Over the years, Hong Kong has been facing a serious shortfall of doctors. This could be fully reflected by its per capita doctor ratio, which lags behind other advanced economies. Currently, Hong Kong has a ratio of two doctors per 1 000 population, far below the ratio in Singapore (2.5), Japan (2.5), the United States (2.6), the United Kingdom (3.0) and Australia (3.8).

3. According to the "Healthcare Manpower Projection 2020"[1] (with 2017 as the base year for projection) conducted by the Food and Health Bureau (FHB), there will be a continuous shortage of doctors in the long term in the light of the projection of healthcare needs with regard to demographic changes. The projected shortfall of doctors in 2030 and 2040 will be 1 610 and 1 949 respectively.

4. The shortage of doctors is particularly acute in the public sector. According to the "Healthcare Manpower Projection 2020", currently (i.e. in 2020) there are a shortfall of 660 and 49 specialists and specialists-to-be in the Hospital Authority

[1] The Food and Health Bureau plans to announce the figures in the first quarter of 2021.

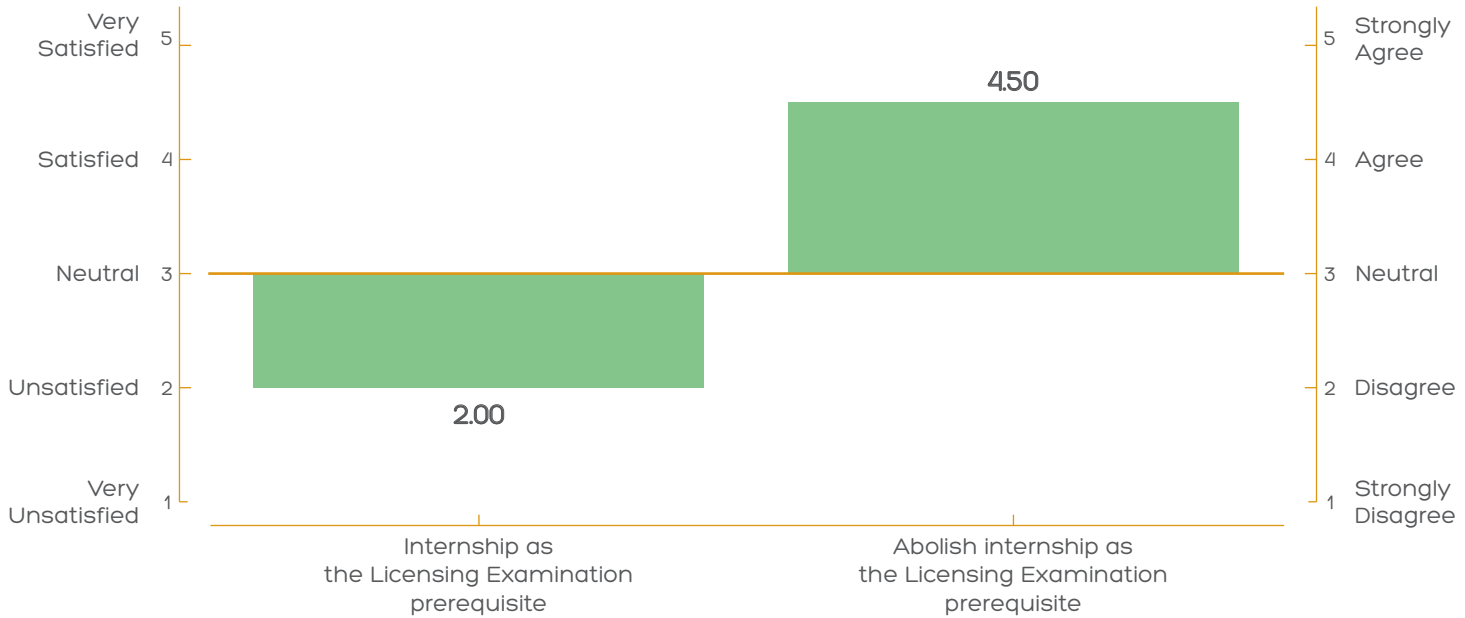
Source: Legislative Council, 2021b

It is imperative to provide non-locally trained medical graduates with exposure to the local health system earlier on in their careers. However, non-locally trained medical graduates without prior internship experience do not receive any help from the Government to bridge this career gap through local internship opportunities, even when the Hospital Authority is in dire need of additional manpower. Furthermore, the Government's proposed pathway for admission of non-locally trained doctors announced in early 2021 does not address this issue (Legislative Council, 2021b).

Internship as a prerequisite is perceived as an obstacle for taking the Licensing Examination

Survey Data Analysis

Figure 2.5



Study findings unveiled the general discontent towards the internship requirement for sitting the Licensing Examination. From a scale of 1 (Very Unsatisfied) to 5 (Very Satisfied), survey respondents scored an average of 2.00 (1.15) on internship as *the Licensing Examination prerequisite*, and from a scale of 1 (Strongly Disagree) to 5 (Strongly Agree), respondents scored an average of 4.50 (0.90) on *abolish internship as the Licensing Examination prerequisite*.

Recruitment should be open to medical graduates at early stages of their medical career...

Qualitative Codes—Thematic Analysis

> **[I]n Hospital Authority they shouldn't just hire people with intermediate qualifications…most of the doctors who want to come back here should be, like, at the beginning of their career, before they establish a career profile in another country. These people usually would be very motivated to come here...**

Moreover, in the semi-structured interviews, respondents explained that employment opportunities should not be limited to those with intermediate qualifications, adding that "most of the doctors who want to come [to Hong Kong] should be…at the beginning of their career".

...before doctors establish their medical career and network elsewhere

Qualitative Codes—Thematic Analysis

> **The problem is...I want to come back straightaway and receive the training that is recognised here. So, if I have gone through all that to complete a basic training or a higher training in Australia to become a specialist, why [would] I come back? I'm already part of the system.**

Respondents further explained that coming to Hong Kong "straightaway and [receiving] the training that is recognised here" would be better than having "[completed] basic training or higher training [elsewhere] to become a specialist", as they would have already become part of another health system. Thus, **opening opportunities to medical graduates at earlier stages of their medical career** would **allow them to establish their career and network in Hong Kong**.

Post-Examination internship is redundant for doctors who are already well-versed with our system

Qualitative Codes—Thematic Analysis

> **For me, they've imported me as a Limited Registration [doctor]…They didn't give me any specific orientation but allowed me to work in Hospital Authority…after I worked a year and a half in the public hospital, why do I have to go back and do internship now?**

Furthermore, respondents also shared their views on the post-Examination internship requirement from the perspective of well-qualified doctors. As one respondent shared, "I worked a year and half in the public hospital, why do I have to go back and do internship now?"

Post-Examination internship undermines doctors' potential contribution to our system

Qualitative Codes—Thematic Analysis

> **To put me back to internship doesn't do me any good and it doesn't do Hong Kong any good because Hong Kong is losing out on the skills I can offer on a more senior level and I am wasting a year of my life at internship level... I think now if I was asked to do the internship, I would quit and leave Hong Kong, I don't think I would do it.**

Respondents also shared that the post-Examination internship undermines doctors' potential contribution to our system, adding that "Hong Kong is losing out on the skills I can offer on a more senior level". The respondent further expressed that if an internship requirement remains to receive Full Registration, "[they] would quit and leave Hong Kong". This illustrates the frustration of doctors to prove their clinical aptitudes at levels far below their clinical expertise.

Singapore has paved a clear path for non-local medical graduates without internship experience

Figure 2.6

Notes: [1] 2 years for Singapore Citizen and 4 years for Non-Singapore Citizen & Singapore Permanent Resident.
[2] New applicants who had not completed PGY1 in Singapore will be required to meet additional full registration requirements.
Sources: SMC, 2019b, 2019d, 2020a, 2021a

Hong Kong's internship requirement for entry into Hong Kong's health system places an undue burden on candidates without offering comparable assistance. Hong Kong should take reference to **Singapore** and the **United Kingdom** where **a clear path is built for non-locally trained doctors without prior internship experience.** Singapore provides internship opportunities for international medical graduates without internship experience through provisional registration that leads to conditional and eventually full registration. Singapore admits medical graduates with an approved primary medical qualification[5] (PMQ) from a university or medical school listed in the Second Schedule (a list of **103 institutions** that includes qualification from the University of Hong Kong and The Chinese University of Hong Kong) of the Medical Registration Act (Cap. 174) (SMC, 2019d). Candidates can apply for a period of internship under provisional registration for subsequent employment as a Postgraduate Year 1 trainee (PGY1) (SMC, 2019d, 2020a). These individuals complete a 12-month internship at an approved hospital in Singapore before obtaining a certificate of experience to become eligible for conditional registration (SMC, 2019b, 2021a). Conditional registration is a unique registration scheme built for international medical graduates to work in Singapore, wherein doctors are expected to complete a minimum period of supervised practice before becoming eligible for full registration (more details on **entry points into Singapore's health system** can be found in **Appendix 9** of this report).

[5] Referred to as basic medical qualification by the Singapore Medical Council

Singaporean medical students are incentivised to return at early stages of their medical careers

Figure 2.7

Benefits

Financial support
Grants will cover up to 60% of candidates' remaining years of tuition, capped at SD$50,000/year and $150,000 in total[1].

Conditions

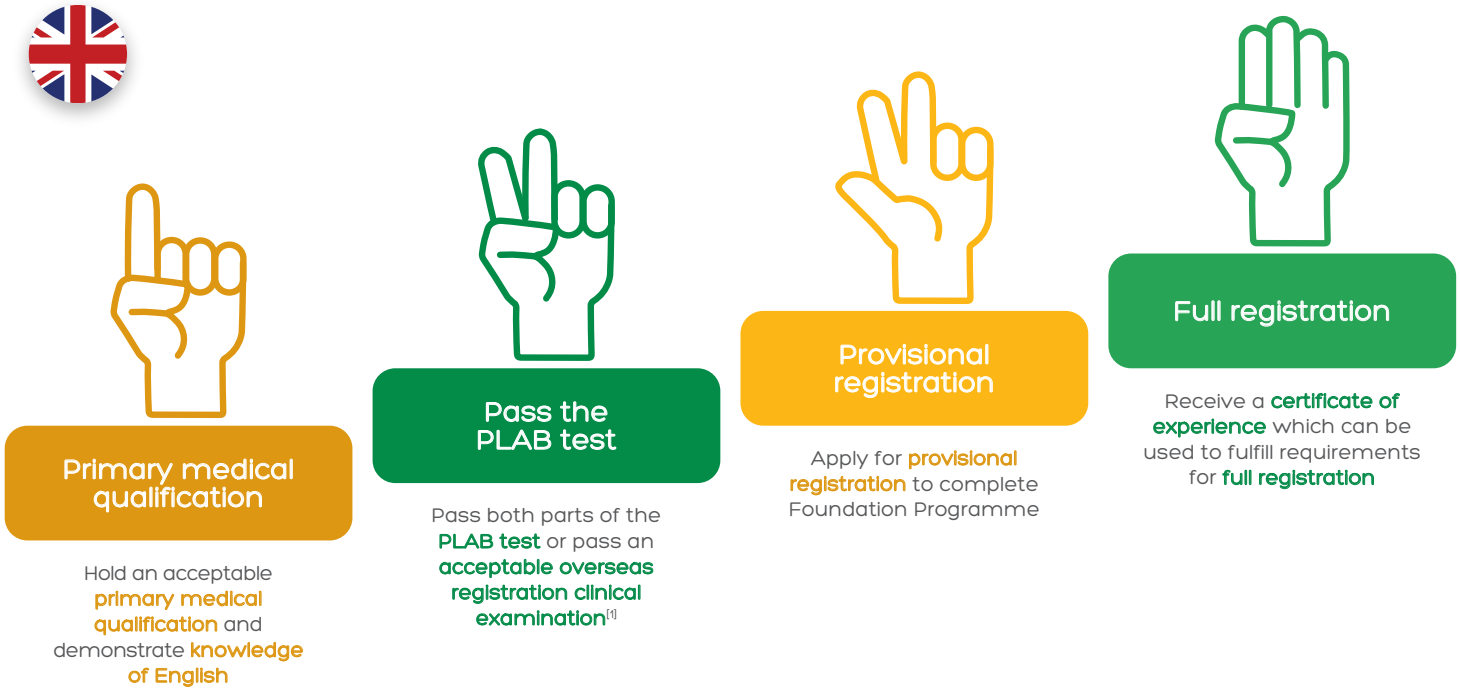
Work requirements
Applicants must work in the public healthcare sector in Singapore for at least 3 years (for 1 years' tuition grant), or 4 years (for 2-3 years' tuition grant).

Note: [1] Candidates are eligible for HKD 290,000 per year, or HKD 870,000 in total (Conversion rate SD 1 = HKD 5.8).
Sources: Ministry of Health Singapore, 2018; Singapore General Hospital, 2021

Reference can also be made to Singapore's 2010 **Pre-Employment Grant (PEG)** initiative, a noteworthy recruitment effort that encourages Singaporeans studying medicine abroad to return to Singapore after graduation. This grant subsidises medical training costs of students on the condition that they will serve in the public healthcare sector upon their return (Singapore Ministry of Health, 2018). The Grant offers subsidies up to 60% of students' yearly tuition, capped at Singaporean $50,000 per year (or HKD 290,000), for half of their medical education, up to a maximum of three years, or Singaporean $150,000 in total (or HKD 870,000) (Singapore Ministry of Health, 2018; Singapore General Hospital, 2021). The expected years of service depend on the amount of the grant but includes a 12-month internship placement.

The United Kingdom has paved a clear path for non-local medical graduates without internship experience

Figure 2.8



Note: [1] Have passed one of the following overseas registration examinations: the USMLE, the Medical Council of Canada Qualification Examination, or the Australia Medical Council Clinical Examination.
Sources: GMC, 2021b, 2021c, 2021g, 2021h, 2021k, 2021l

Similar to Singapore, the **United Kingdom** has created a pathway for medical graduates without prior internship experience to enter their health system. Doctors who wish to practise in the UK must hold an acceptable primary medical qualification, and pass both parts of the PLAB test or have passed an acceptable overseas registration clinical examination, such as that from the US, Canada, and Australia (GMC, 2021b, 2021h, 2021k, 2021l). Doctors who have completed all necessary steps are then eligible to apply for provisional registration, which will allow them to work in a Foundation Programme (F1) training post to gain a certificate of experience (GMC, 2021c). The certificate will allow doctors to apply for full registration (GMC, 2021g) (more details on **entry points into the United Kingdom's health system** can be found in **Appendix 10** of this report).

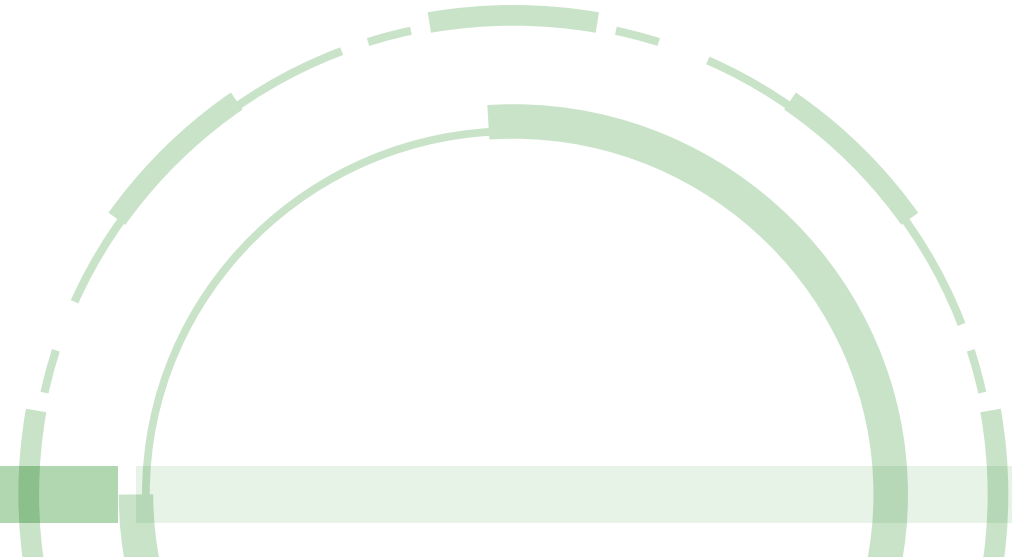
Hong Kong's internship requirements are barriers for entry compared to other jurisdictions

Figure 2.9 **Internship requirements for pursuing medical career in selected jurisdictions**

Internship is not a *prerequisite* for taking licensing examination	✗	✓	✓[1]	✓
Internship placement *available* for non-local medical graduates without internship experience	✗	✓	✓[2]	✓

Notes: [1] International medical graduates need to provide evidence of an offer or completion of a medical internship / a comparable experience.
[2] International medical graduates are strongly advised to complete an internship or comparable in respective jurisdiction of graduation before application for registration in Australia as priority for accredited medical internship placements in Australia is given to Australian graduates.
Sources: LEIP, 2018c; MCHK, 2016b; Match a Resident, 2021; Medical Board Aphra, 2020; AMC, 2018; USMLE, 2021; GMC, 2021b

In Hong Kong, non-locally trained doctors who wish to gain Full Registration are required to have an internship experience prior to sitting the Licensing Examination and are further required to complete a local internship after passing the Licensing Examination (LEIP, 2018c; MCHK, 2016b). None of the jurisdictions shown, namely the UK, Australia, and the US, require an internship as a prerequisite for taking the respective licensing examinations (Medical Board Ahpra, 2020; AMC, 2018; USMLE, 2021; GMC, 2021b). Furthermore, non-local medical graduates have the option to apply for internship placements in these three jurisdictions (Match A Resident, 2021).



Recommendations

Hong Kong can consider providing internship placements and a structured career path

In the global competition for well-qualified doctors, different jurisdictions have put in place policies that invite talent to serve in respective health systems as early on in their careers as possible. Of note, special measures are often put in place to encourage citizens to return after training abroad. For instance, both Singapore and the United Kingdom have clear pathways and career prospects in place for non-locally trained doctors without internship experience.

Recommendation 2.1

Modify requirement that positions internship experience as a prerequisite of the Licensing Examination

- Non-locally trained medical graduates should be eligible to sit the Licensing Examination with **an acceptable primary medical qualification**.
- **Internship requirement can be fulfilled** after passing the Licensing Examination **under Provisional Registration**.

The current prerequisite for taking the MCHK Licensing Examination that requires the candidate to have completed a full-time internship should be modified. With reference to policies enforced in other jurisdictions such as the United Kingdom, non-locally trained doctors who have not completed a period of full-time internship but have an acceptable primary medical qualification should be qualified to first take the Licensing Examination. The requirement to complete a period of assessment in Hong Kong after passing the Licensing Examination should be maintained.

Recommendation 2.2

Waive the period of assessment for doctors who have served under Limited Registration

- Doctors who have **served under Limited Registration for more than one yea**r should be eligible to have their **period of assessmen**t waived after passing the Licensing Examination.

The current period of assessment, which effectively functions as a post-Examination internship after passing the Licensing Examination, should be waived for doctors who have served under Limited Registration for more than one year and have acquired hands-on experience of working in Hong Kong's health system.

Recommendation 2.3

Mandate the provision of internship placements under Limited Registration and the Government's proposed pathway

- The Government should mandate relevant medical institutions to **provide internship placements** and create a **medical internship priority system** to ensure placements are allocated to only Hong Kong permanent residents.
- The MCHK should **grant Provisional Registration** for a period of at least 12 months to eligible medical graduates.
- Government can consider setting up a mechanism to allow these doctors to continue providing public service.

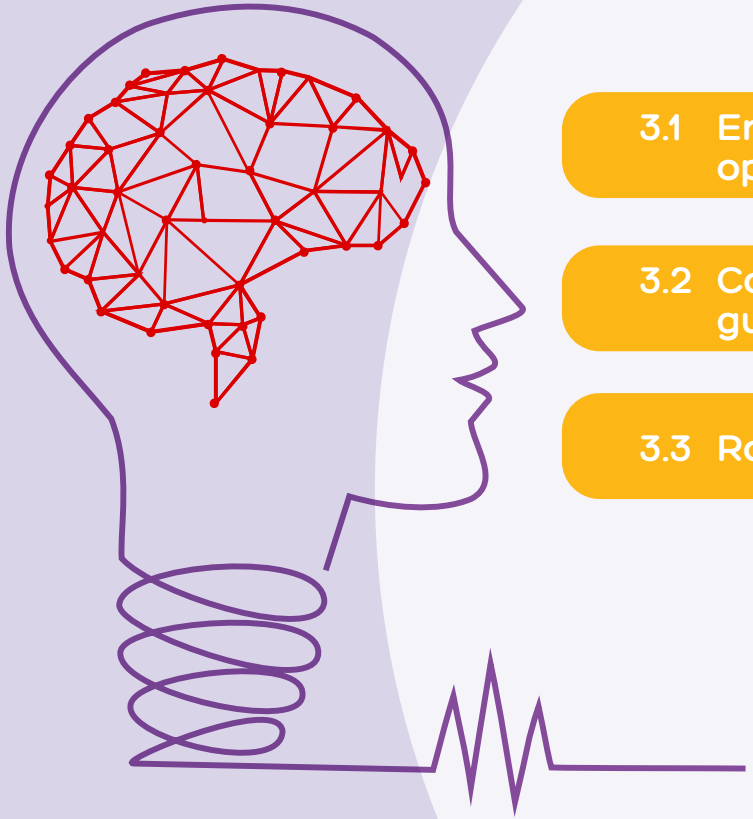
The Government should mandate relevant medical institutions to create internship placements to facilitate entry into our system under Limited Registration and the Government's proposed pathway that enables non-locally trained doctors to eventually progress to Full Registration. The placements should be opened to qualified non-locally trained medical graduates that have not been able to secure an internship placement in their place of training. This is comparable to Singapore's provisional registration, which is crucial in encouraging non-locally trained doctors without internship experience to start working in the public sector. A medical internship priority system can be in place to ensure that places are allocated to Hong Kong permanent residents only.

After completion of an internship in Hong Kong, the Government can consider setting up a mechanism to allow these doctors to continue providing service in the local public health system. For example, the relevant authorities can collaborate with non-local medical regulatory bodies to grant full registration at the place of training. This initiative will allow doctors to enter Hong Kong's system under Limited Registration or through the Government's proposed pathway and meet the relevant criterion.

Chapter

3

Facilitating Career Progression through Providing Specialist Training Opportunities



Challenge 3: Are specialist training opportunities available to allow for medical career development and progression?

Service Residents are employed based on intermediate qualifications but do not receive continuing specialist training...

3.1 Employment contracts do not offer opportunities for specialist training

Figure 3.1a

Service Resident Positions for Experienced Doctors without Full Registration - (REF. NO.: HO2004005)

Amended on 17.6.2020

(Anaesthesia/ Clinical Oncology / Emergency Medicine / Family Medicine / Intensive Care / Internal Medicine / Obstetrics & Gynaecology / Ophthalmology/ Orthopaedics & Traumatology / Otorhinolaryngology / Paediatrics / Pathology / Psychiatry / Radiology / Nuclear Medicine/ General Surgery / Cardiothoracic Surgery / Neurosurgery / Plastic Surgery)

The Hospital Authority (HA) invites applications from experienced doctors who are not fully registered with the Medical Council of Hong Kong (MCHK) and yet have acquired relevant postgraduate qualifications set out in the requirements below.

Job

To provide clinical and patient care related services.

Requirements

1. Attained a qualification comparable to the Intermediate (or Pre-Intermediate*) Examinations of constituent Colleges of the Hong Kong Academy of Medicine;
2. Possessed relevant clinical experience as post-internship registered medical practitioner and enrolled in specialist training programme recognized by constituent Colleges of the Hong Kong Academy of Medicine;
3. Proficiency in English; and
4. Proficiency in Cantonese (except for Anaesthesia, Pathology, and Radiology).

** For Emergency Medicine, Family Medicine, Internal Medicine and Paediatrics, applicants with pre-intermediate level qualifications would be considered.*

Note: *Applicants with a qualification comparable to the Intermediate Examinations of constituent Colleges of the Hong Kong Academy of Medicine scheme and pre-intermediate for Emergency Medicine, Family Medicine, Internal Medicine and Paediatrics.
Source: Hospital Authority, 2021c

The Hospital Authority employs non-locally trained doctors under Limited Registration on the basis of comparable qualifications to the Intermediate (or Pre-Intermediate)[6] Examination of the Academy Colleges (Hospital Authority, 2021c). However, these employment contracts do not offer corresponding opportunities for continuing specialist training by the Academy Colleges, stagnating a doctor's medical career development and progression.

[6] Since 2020/21, pre-intermediate level qualifications are considered for the specialties of Emergency Medicine, Family Medicine, Internal Medicine and Paediatrics

...while vacancies are reported to be available in the Resident Training Program that offers integrated contracts

Figure 3.1b

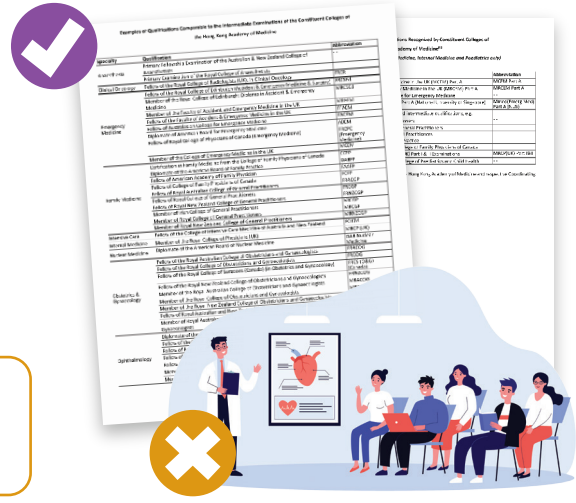
Sources: Hospital Authority, 2021d; HKSARG, 2019a, 2021a
Image sources: HKSARG, 2019; Hospital Authority, 2021

On the other hand, the Hospital Authority offers doctors with Full Registration a nine-year integrated contract devised with a view to facilitate specialist training from the respective Academy Colleges (Hospital Authority, 2021d). While the Hospital Authority continued its pledge in the Chief Executive's *2019 Policy Address* to provide all qualified local medical graduates with relevant specialist training, it has not been successful in filling vacancies for Resident Trainee posts in the past few years (HKSARG, 2019a, 2021a).

Comparable HKAM College qualifications are required for hiring but insufficient for training opportunities

3.2 Comparable specialist qualifications do not guarantee specialist training

Figure 3.2



The Hospital Authority invites applications from experienced doctors who are not fully registered with the Medical Council of Hong Kong (MCHK) and yet have acquired relevant postgraduate qualifications set out in the requirements below.

Job

To provide clinical and patient care related services.

Requirements

1. Attained a qualification comparable to the Intermediate (or Pre-Intermediate*) Examination of constituent Colleges of the Hong Kong Academy of Medicine;

Note: *Applicants with a qualification comparable to the Intermediate Examination of constituent Colleges of the Hong Kong Academy of Medicine and Pre-intermediate Examinations for Emergency Medicine, Family Medicine, Internal Medicine and Paediatrics.
Sources: Hospital Authority, 2020a; HKCOS, 2018; CSHK, 2015; HKCR, 2011

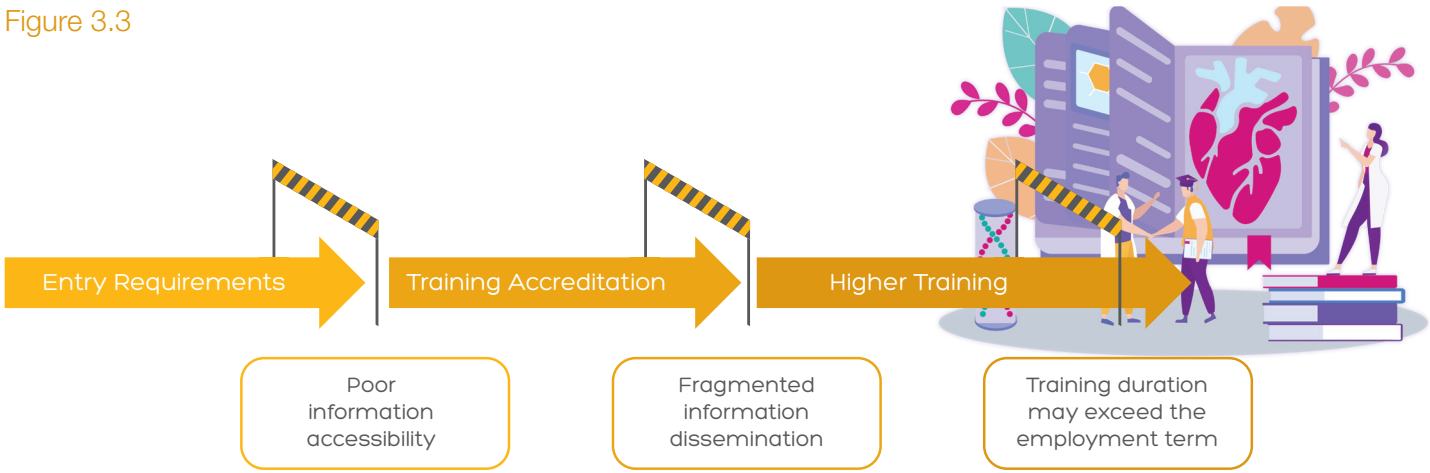
The Hospital Authority's hiring requirement is premised on a list of qualifications attained from non-local specialist authorities that are deemed comparable to the Academy Colleges (Hospital Authority, 2020a). However, doctors hired with consideration to this list that are working under Limited Registration may not be able to continue their specialist training in the respective Academy Colleges. In fact, some Academy Colleges[7] explicitly deny continuing specialist training to these qualified doctors under Limited Registration (HKCOS, 2018; CSHK, 2015; HKCR, 2011).

[7] The Hong Kong College of Orthopaedic Surgeons, The College of Surgeons of Hong Kong, and Hong Kong College of Radiologists

There is poor information accessibility and contractual arrangements are not designed to facilitate training

3.3 Roadblocks in accessing specialist training

Figure 3.3



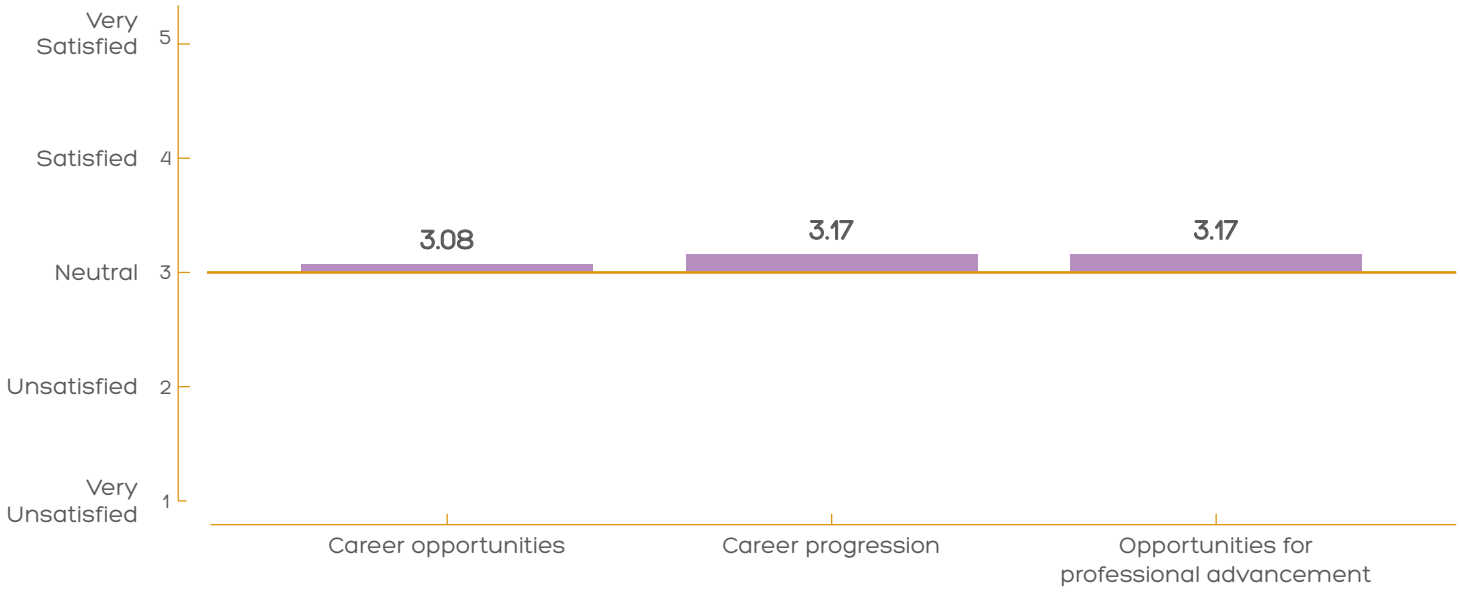
Sources: HKAM, 2021; Hospital Authority, 2021c

There are additional roadblocks for doctors under Limited Registration to receive continuing specialist training, such as: poor information accessibility related to entry requirements and recognition of non-local qualifications by the Academy Colleges; and mismatch of service contract length (currently three years under Limited Registration) and duration of higher specialist training (which may be longer than three years) (Hospital Authority, 2021c; HKAM, 2021).

Training and career advancement opportunities in Hong Kong are not to doctors' satisfaction

Survey Data Analysis

Figure 3.4



Survey findings reflected that doctors generally did not find the training or career opportunities in Hong Kong satisfactory, particularly concerning career progression and opportunities for professional development. On a scale of 1 (Very Unsatisfied) to 5 (Very Satisfied), survey respondents scored an average of 3.08 (0.90) on *career opportunities*, 3.17 (0.94) on *career progression*, and 3.17 (0.72) on *opportunities for professional advancement*.

Doctors want an integrated contract that provides employment as well as an opportunity to continue specialist training

Qualitative Codes—Thematic Analysis

> **At a training post...you will become an Associate Consultant...So, in order to attract more [non-local] doctors to come back to Hong Kong, you need to open up these [service] posts as training posts. Even though the contract says 'service post' the Colleges have to open it... [for] trainees.**

Concerning doctors' dissatisfaction with career progression and opportunities for professional advancement, respondents remarked on the limited posts offered in their contracts. In particular, doctors stated that it is critical to "open up these [service] posts as training posts" as a way to "attract more [non-local] doctors to come back to Hong Kong". These openings are crucial to doctors as they want **an integrated contract that not only provides employment but also an opportunity to continue specialist training.**

Accessing information related to specialist training requirements is a daunting process

Qualitative Codes—Thematic Analysis

> **The main problem is getting any useful information from the [Academy College] as to how I can use my previous training in the UK, what I need to do to get that recognised and become a member of the College. It took many, many months actually to get to the stage where I could submit my documents.**

Doctors further added that beyond accessing training posts, another concern was "getting any useful information from the [Academy College]" for the retrospective recognition of non-local medical qualifications. A respondent shared their ordeal and explained that the process of recognition took "many, many months to get to the stage where [they] could submit [their] documents". As such, access to information related to specialist training requirements is a daunting process, making the attainment of specialist training even more difficult in Hong Kong.

Training period may exceed contract duration in the absence of an integrated contract

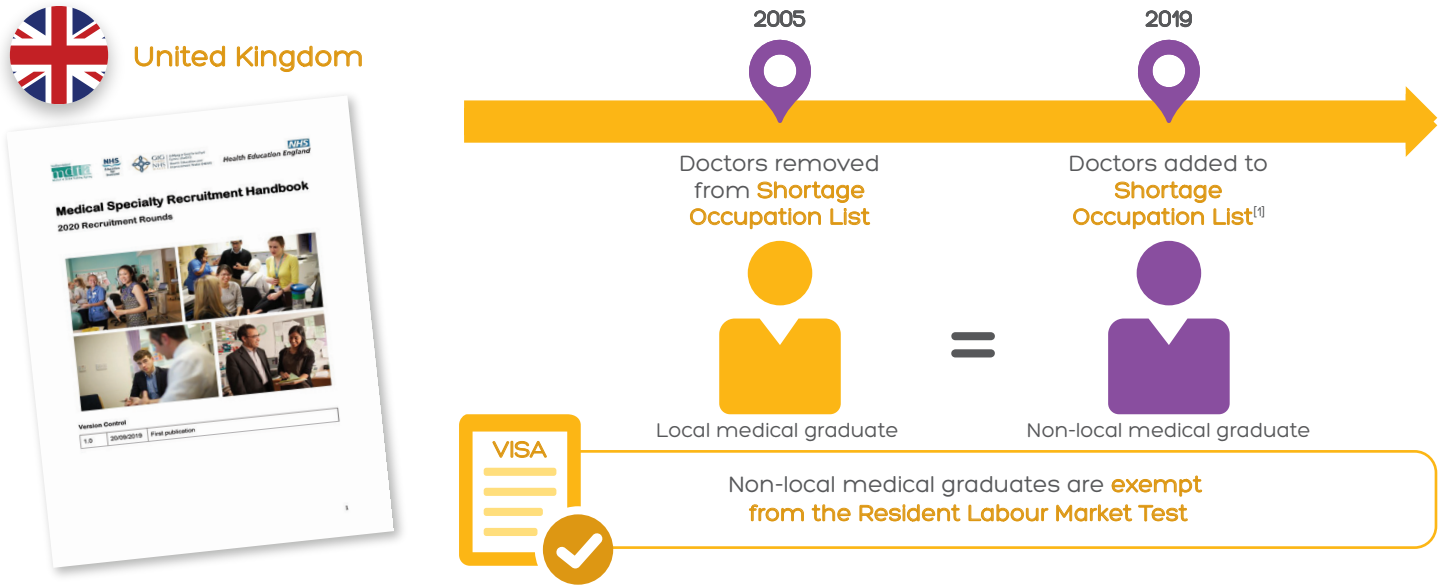
Qualitative Codes—Thematic Analysis

> **But I think by the time I complete my specialist training, then I'll go beyond the maximum time [on my contract], and so they might still need to ask me to do it again…**

Doctors who have successfully secured a specialist trainee position with the Academy Colleges also expressed uncertainty towards the renewal of their employment contract under Limited Registration to continue in parallel with their specialist training course. Respondents expressed their concern that "by the time [they] complete specialist training, then [they'll] go beyond the maximum time". The lack of an integrated contract therefore also results in uncertainty as the training period may exceed the three-year contract duration, which may hinder applications to specialist training.

Non-local medical graduates are considered alongside local graduates for specialist training opportunities in the United Kingdom

Figure 3.5



Note: [1] For all medical specialties, except Public Health Medicine.
Sources: UK Government, 2021; National Health Service, 2019
Image source: National Health Service, 2019

Hong Kong should take reference to other jurisdictions, such as the **United Kingdom**, that not only considers non-local medical graduates alongside local graduates for training opportunities but also offers multiple training pathways. As of October 2019, all physicians, with the exception of public health doctors, were added to the SOL, triggering their removal from the Resident Labour Market Test, a policy initiative designed to ensure that local workers have the opportunity to apply and be hired for positions before the positions are offered to migrants (UK Government, 2021). As a result, all international medical graduates seeking specialty training in the UK were no longer deemed a lower priority than local medical graduates and all training positions are given on the basis of merit (National Health Service, 2019).

Multiple training opportunities are available for non-local medical graduates in the United Kingdom

Figure 3.6

United Kingdom

We have discussed our position with a range of exte
Deaneries, the Royal Colleges and the BMA – and w
CCTs for those completing CESR(CP) programmes
issue CCTs on request to those doctors who were
following completion of a combined programme a
training requirements as set out in the Directive.
when we are ready to process such requests but
the same time.

Separately, we will consider the type of certifica
doctors who complete the combined programm
periods of training in the UK. We will be in a b
concluded our current work on CCT for CESR(
minimum requirement and have better clarity
will be in place after the transition period foll
Union has ended.

I hope this is helpful in setting out our appr
moving forward with our plans as quickly a
Director who is responsible of specialist ap
be happy to discuss in more detail if you

Yours sincerely

Charlie Massey

From the Chief Executive and Registrar

General Medical Council

17 March 2020

Dr Ramesh Mehta and Dr JS Bamrah
British Association of Physicians of Indian Origin
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Email: gmcpgmc-uk.org
Website: www.gmc-uk.org
Telephone: 0161 923 6602

Chair
Dame Clare Marx

Chief Executive and Registrar
Charlie Massey

Dear Ramesh and JS

Many thanks for your letter of 4 March 2020 about our intention to begin issuing a CCT to most doctors who are on the CESR(CP) pathway. It is good to know that BAPIO supports this plan, and I am pleased to hear about how this change will be received by doctors in the UK and overseas.

As matters currently stand, doctors who are on the CESR(CP) pathway are awarded a CESR at the end of their training. I am clear that an award of a CCT or a CESR certificate demonstrates that a doctor has met the same standard at the end of their training. Both certificates provide doctors with the same entitlement in UK law i.e. entry in the specialist register and eligibility for appointment to a substantive post as a consultant in the NHS. However, I appreciate that some doctors feel that a CESR certificate is not valued in the same way as a CCT and it is true that only doctors with a CCT can benefit from the automatic recognition of their qualifications in EEA countries – although, of course, this may very well change as we transition to new arrangements following the UK's departure from the European Union.

We have sought legal advice on the flexibility we have to award a CCT to those doctors who have completed training via the CESR(CP) pathway. That advice has confirmed that we can issue a CCT in these circumstances as long as the doctor's UK training has met the minimum training period in his or her specialty as set out in Annex 5.1.3 of the *European Directive on the Recognition of Professional Qualifications*. This will not be a problem for the vast majority of doctors on the CESR(CP) pathway since their UK training usually significantly exceeds these minimum requirements. In addition, these restrictions may no longer apply in the future following our exit from the European Union but they remain in place during the current transition phase.

Sponsorship Scheme

Training post by
GMC pre-approved sponsor

CCT

GMC-approved specialty training

CESR(CP)/CEGPR(CP)

Partially completed
GMC-approved specialty training

Sources: General Medical Council, 2021d, 2021f; National Health Service, 2021

Furthermore, in the UK, there are three main training pathways available to non-local medical graduates to enter and receive specialist training:

1. **Sponsorship:** The GMC has pre-approved a list of schemes offered by different sponsors that non-local doctors may apply to (GMC, 2021d). After receiving a certificate of sponsorship from the sponsoring body, the applicant can apply for full registration with the GMC. Under this pathway, an applicant is selected for postgraduate training in the UK by a GMC pre-approved sponsor.
2. **Certificate of completion of training:** International medical graduates may also receive local training in the UK to be registered as a General Practitioner or a Specialist. CCT is the pathway for those who entered a GMC-approved UK training programme from year 1 and completed a UK training programme in full (National Health Service, 2021).
3. **Certificate of Eligibility for Specialist Registration or General Practice Registration (Combined Programme):** In 2007, the UK introduced CESR (CP) and CEGPR (CP) to allow Combined Programme routes for doctors who have partially completed training abroad but wish to continue their training in the UK. Doctors may choose to enter the CESR (CP) path to enter the specialist register or the CEGPR (CP) path to enter the general practice register (GMC, 2021f).

Recommendations

Hong Kong should strengthen its investment in specialist training

Continuing training is vital for a doctor's medical career development and progression. Especially for those who have already commenced specialist training outside of Hong Kong but have chosen to offer their services in the local health system, opportunities should be made available for these doctors to continue and complete their training in Hong Kong. Such opportunities serve to make Hong Kong more attractive to non-locally trained doctors who will in turn contribute their expertise to the system. Reference could be made to other jurisdictions, such as the United Kingdom, that offer multiple training opportunities.

Recommendation 3.1

Invest in specialist training as an important lever to meet Hong Kong's healthcare demand

- The Government should mandate **the Hospital Authority and the Hong Kong Academy of Medicine** to facilitate **continuation of specialist training**.
- Additional funding from the Government should be reserved and committed to **extend training opportunities** to non-locally trained doctors under Limited Registration.

The *Healthcare Manpower Projection 2020* for specialist doctors to be launched tentatively during the third quarter of 2021 would serve as a useful guide for the number of doctors that need to be recruited by specialty. The Government should provide additional funding and mandate the Hospital Authority and Hong Kong Academy of Medicine to facilitate continuing specialist training for non-locally trained doctors under Limited Registration. This initiative should not affect the opportunities to train local medical graduates since Resident Trainee posts have already been reserved and committed to them.

Recommendation 3.2

Offer integrated contracts for continuing specialist training

- The **Hospital Authority and Hong Kong Academy of Medicine** should collaborate and offer **integrated contracts** to doctors intending to continue specialist a training.
- Integrated contracts should be created with a **view to facilitate completion of specialist training** and **attainment of specialist qualifications.**

The Hospital Authority and the Hong Kong Academy of Medicine should collaborate and consider offering integrated contracts to non-locally trained doctors with a view to facilitate the completion of specialist training and eventual attainment of specialist qualifications in Hong Kong.

Recommendation 3.3

Empower the Academy to mandate training quotas for relevant Academy Colleges

- The Academy should mandate the Academy Colleges to commit to provide training opportunities for non-locally trained doctors.
- The training positions can be offered on the condition that non-locally trained doctors have i) secured an **employment offer** from Hospital Authority and ii) are under **Limited Registration** with the MCHK.
- The **Academy** should prioritise providing **continuing specialist training** to qualified non-locally trained doctors with Hong Kong permanent residency.

The Government should empower the Hong Kong Academy of Medicine to mandate training quotas for the relevant Academy Colleges in accordance with the Academy of Medicine Ordinance (Cap. 419) (HKSARG, 2014). The Academy should commit to providing continuing specialist training for non-locally trained doctors, under the condition that they have: i) received an employment offer from the Hospital Authority, particularly if qualifications are attained from non-local specialist authorities that are deemed comparable to that of the respective Academy Colleges; and ii) are under Limited Registration with the MCHK. The Academy should prioritise providing continuing specialist training to non-locally trained doctors with Hong Kong permanent residency.

Recommendation 3.4

Centralise and make available clear entry requirements and accreditation processes for non-local qualifications

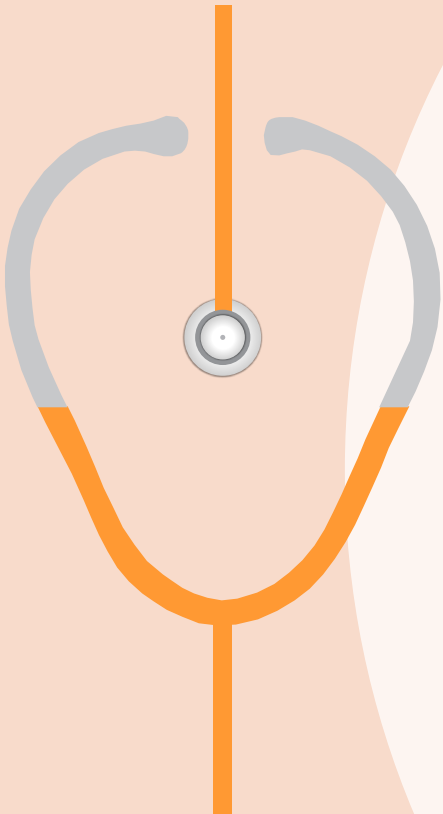
- The **Academy** should **mandate the Academy Colleges** to specify entry requirements and retrospective accreditation processes for non-local qualifications.
- The **acceptable non-local qualifications** should be specified within a qualifications list that is made **publicly accessible, clearly organised,** and **centrally disseminated by the Academy**.

The Academy should mandate the Academy Colleges to specify entry requirements and the non-local qualification list for retrospective accreditation. The acceptable non-local qualifications should be specified within a qualifications list that is clearly organised, made publicly accessible and centralised by the Academy to enhance the understanding for potential candidates.

Chapter

4

Empowering Seasoned Specialists to Achieve Their Full Potential in Our Health System



Challenge 4: Do seasoned specialists have opportunities for career enhancement and for reaching their full potential?

Non-local qualification of specialists under Limited Registration are devalued

4.1 Mismatch between qualification level and career opportunities

Figure 4.1

Note: [1] Specialists under Limited Registration may only be considered for an Associate Consultant post in ten specialties.
Sources: Hospital Authority, 2020a, 2021a, 2021c, 2021e

Specialists coming to work in Hong Kong understandably expect their expertise to be fully utilised as they contribute to our system to their full potential. Likewise, they would also expect their employer to hire them at an employment grade that corresponds to their skillset and qualification level. However, there appears to be a mismatch between specialists' qualification level and their employment grade offered by the Hospital Authority.

First, to be considered for a Service Resident position under Limited Registration, applicants must demonstrate that they have recognisable qualifications that are comparable to the Intermediate (or Pre-Intermediate)[8] Examination of the Academy Colleges (Hospital Authority, 2021e). In a list of "Examples of Qualifications Comparable to the Intermediate Examinations of the Constituent Colleges of the Hong Kong Academy of Medicine" used by the Hospital Authority in the hiring process of Service Residents, certain specialties list a non-local Fellow qualification as a comparable qualification to the Intermediate Examination of the Academy Colleges (Hospital Authority, 2020a). This **misalignment observed in the recognition of qualification level effectively devalues specialists' qualifications previously earned outside of Hong Kong**.

Second, no matter how experienced a specialist is, at present, specialists under Limited Registration are only eligible to apply for an Associate Consultant position under ten specialties in the HA[9] (Hospital Authority, 2021a). Furthermore, in contrast with specialists under Full Registration, specialists under Limited Registration are currently ineligible for a Consultant position in the HA (Hospital Authority, 2021c).

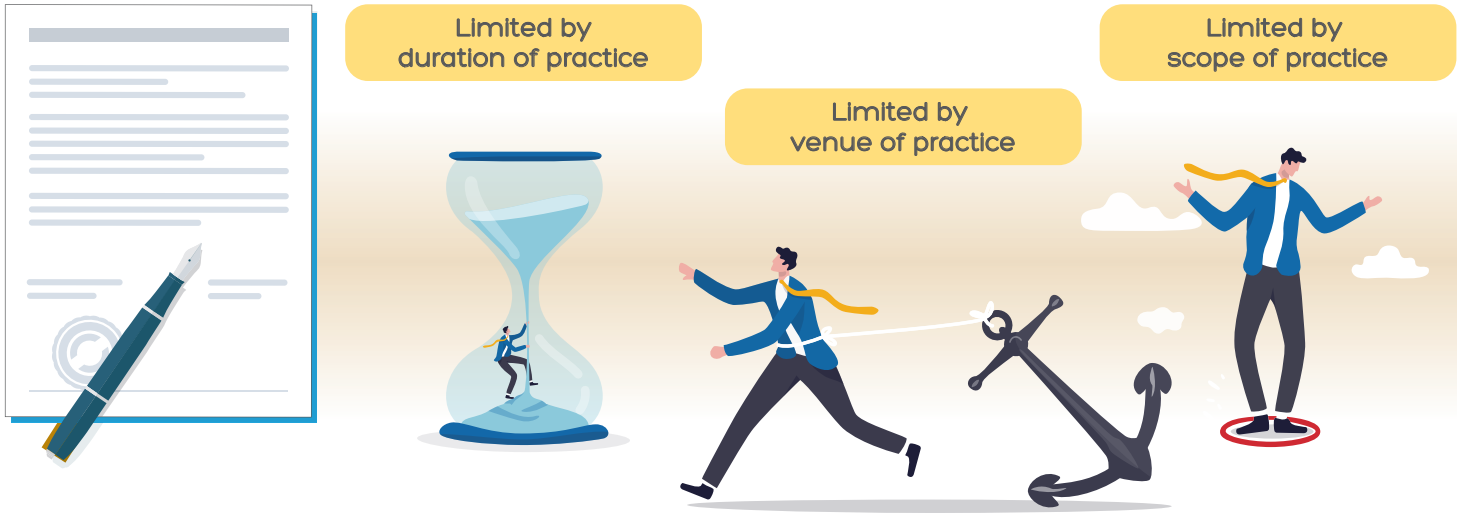
[8] Since 2020/21, pre-intermediate level qualifications are considered for the specialties of Emergency Medicine, Family Medicine, Internal Medicine and Paediatrics

[9] Anaesthesia, Anatomical Pathology, Obstetrics & Gynaecology, Ophthalmology, Otorhinolaryngology, Radiology, Nuclear Medicine, Cardiothoracic Surgery, Neurosurgery and Plastic Surgery

Limited Registration could stagnate specialists' medical career prospects

4.2 Restrictions imposed on specialists contribute to career uncertainties

Figure 4.2



Sources: Hospital Authority, 2021d, 2021e; Department of Health, 2021; MCHK, 2018

Non-locally trained specialists working under Limited Registration face several restrictions that could limit their career prospects. These include restrictions by practice scope, duration, and venue.

Firstly, scope of practice is determined by respective employers and employment terms are likely to restrict non-locally trained specialists to practise within their area of specialty. However, because of the observed mismatch between qualification level of specialists and career opportunities as discussed in *Challenge 4.1*, non-locally trained specialists working under Limited Registration may have to practise at a lower rank requiring service provision at a relatively generic capacity rather than enabling the full utilisation of their actual professional capabilities (Hospital Authority, 2021e). This **underutilisation of specialists' expertise not only undermines their capabilities but also means that Hong Kong is not fully capitalising on expertise that could improve care quality and patient care experiences.**

Second, since the maximum duration of Limited Registration is three years, employment terms offered by public healthcare institutions including the Hospital Authority and the Department of Health are also limited to three years subject to renewal considerations (Hospital Authority, 2021d, 2021e; Department of Health, 2021). This arrangement perceivably contributes to career uncertainties, particularly for non-locally trained doctors who have **uprooted their lives in their place of training to move to Hong Kong**.

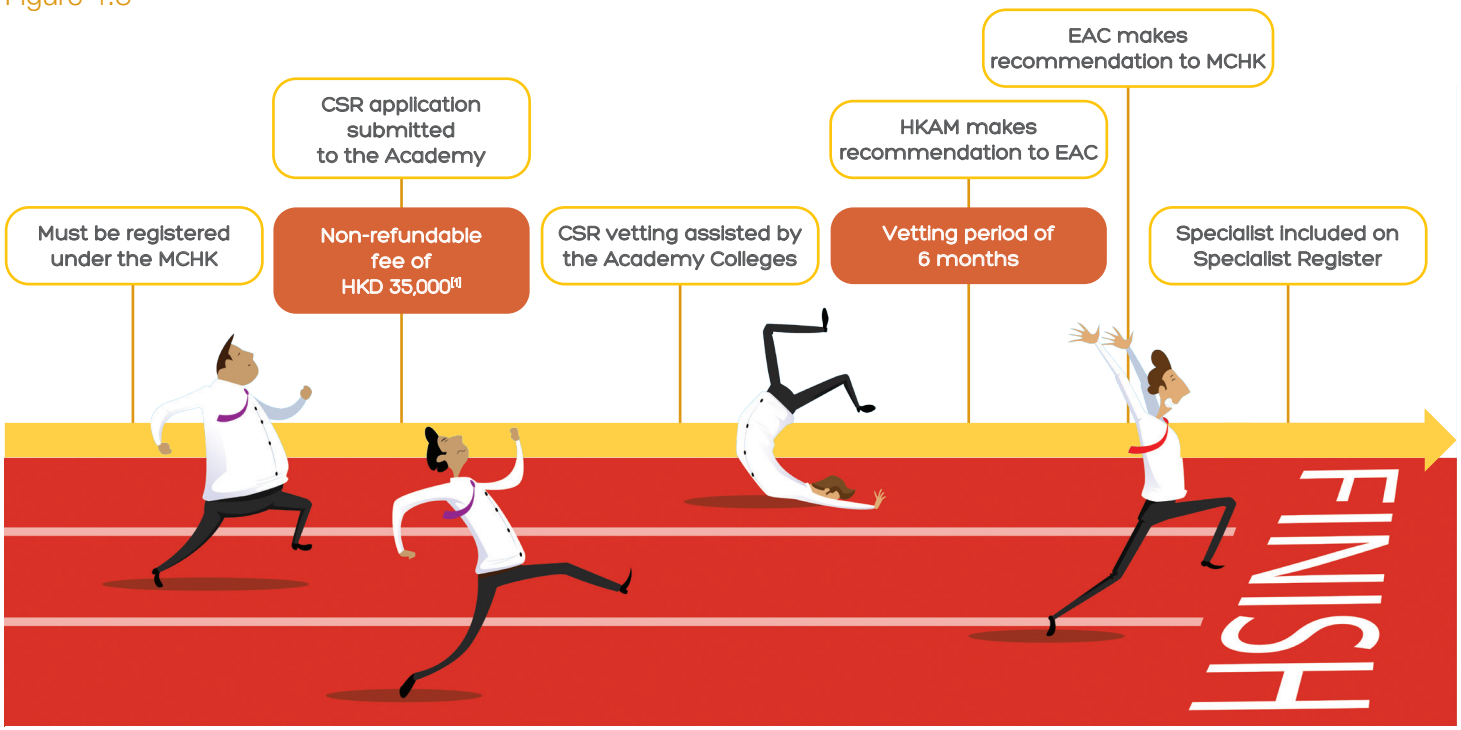
Third, non-locally trained doctors working under Limited Registration are restricted to practise in six specified settings (formally termed "Promulgations" listed in the Government Gazette)[10] (MCHK, 2018). Therefore, these doctors are required to complete their service term at the contracted venue, or otherwise submit a separate Limited Registration application should they wish to apply for a position elsewhere.

[10] Includes Promulgation No. 2 listed in the Government Gazette comprising the Hospital Authority, the Department of Health, and Faculty of Medicine at the University of Hong Kong and The Chinese University of Hong Kong

Being officially recognised on Hong Kong's Specialist Register is less than straightforward

4.3 Inclusion on Specialist Register via CSR path requires overcoming hurdles

Figure 4.3



Note: [1] Effective 1st January 2020
Sources: HKAM, 2012, 2018; HKSARG, 2020a; Hospital Authority, 2020a, 2021e

A medical practitioner who wants to have his/her name included on the Specialist Register but has not undertaken specialist training at the Academy Colleges has the option to apply to the Academy for Certification for Specialist Registration (CSR) (HKAM, 2012). The training and qualifications of applicants is vetted by the respective Academy Colleges to ensure comparability to that required of the Academy Fellows in corresponding specialties. However, various hurdles throughout the application process make it less than straightforward to successfully attain CSR.

Among the potential deterrents in the process, applicants are required to pay a non-refundable processing/vetting fee (currently set at HKD 35,000, revised in January each year) upon submission of an application to attain CSR (HKAM, 2012, 2018). Separately, during the certification process, the application vetting procedure by the Academy Colleges can last up to six months from the date of application and extend beyond this lengthy vetting period (HKAM, 2012). Thereafter, the recommendations are made to the Academy's Education Committee that will in turn present successful applications to the Academy's Council for endorsement (HKAM, 2012). The Academy will then make a recommendation to the MCHK Education and Accreditation Committee that will make corresponding recommendations to the MCHK Council for the decision to include the name of the registered medical practitioner on the Specialist Register (HKSARG, 2020a).

It should be noted that while the Academy plays a significant role in this convoluted specialist certification process, it is also responsible for specialist training in Hong Kong. This renders the Academy susceptible to criticism for an unclear division of roles and responsibilities compared with specialist training and accreditation procedures elsewhere, such as Singapore where separate authorities are mandated to take charge of specialist training and specialist accreditation, respectively. It is also worth noting that the application outcomes for the CSR is untransparent, compared with similar specialist recognition processes in other jurisdictions, such as the United Kingdom.

Furthermore, in vetting the comparability of applicants' professional standard, the Academy looks to being on a relevant specialist register at the place of training or practice as a potential indicator (HKAM, 2012). However, this indicator is clearly insufficient to the Academy which specifies that all aspects of an applicants' postgraduate training and experience will also be assessed. In other words, **being recognised as a specialist outside Hong Kong will not necessarily earn a specialist a place on Hong Kong's Specialist Register**, exemplifying another misalignment observed in recognition of non-local medical qualifications. In relation to this, misalignments between recognition of qualifications and service provision capacity of hired specialists could also be observed in some instances. As an example, while specialists are hired by the Hospital Authority to provide specialist services as stipulated in employment contracts, those working under Limited Registration and particularly those hired as service residents may not necessarily have had their specialist qualifications officially recognised by local authorities, including the Academy. This is despite the Academy being involved right from the start of the employment process and in making recommendations on the comparability of specialists' qualifications (Hospital Authority, 2020a, 2021e).

Non-locally trained specialists joining the Specialist Register through CSR face possible career setbacks

4.4 Even getting on the Specialist Register could present career disadvantages

Figure 4.4

Sources: HKSARG, 2020a; HKCEM, n.d.; HKCP, n.d.

Compared with specialists awarded a Fellowship of the Academy, non-locally trained specialists who enter the Specialist Register by attaining CSR may face career disadvantages. One notable example is that specialists registered through CSR are ineligible to be appointed as trainers of some of the Academy Colleges, which may impact their professional development and is also a gross underutilisation of valuable human capital (HKCEM, n.d.; HKCP, n.d.). Another example is the concern that despite attaining CSR, specialists under Limited Registration are still ineligible to apply for Consultant positions unless they are fully registered with the MCHK. These examples demonstrate differential treatment between the Academy Fellows and non-Academy Fellows (specialists with CSR) in career prospects, even though their qualifications are comparable and vetted by the same set of authorities, including the Academy as detailed under Section 20K of the Medical Registration Ordinance (Cap. 161) (HKSARG, 2020a).

Demotion in occupational rank experienced by specialists after relocation

Survey Data Analysis

Figure 4.5 **All survey participants**

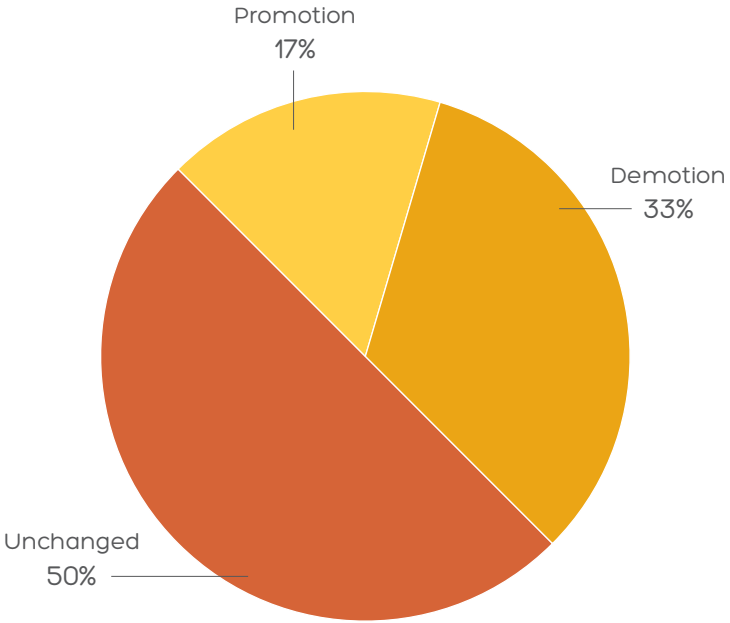
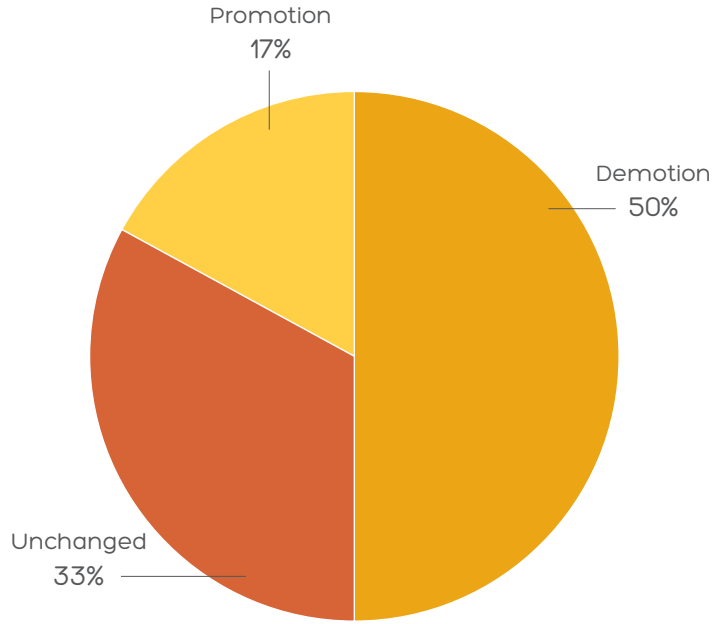


Figure 4.6 **Specialists only**



Among all non-locally trained doctors surveyed, 50% reported that their occupational rank remained unchanged, 17% experienced a promotion in rank, and **33% experienced a demotion**. In comparison, among respondents with specialist qualifications, 33% reported that their rank remained unchanged, 17% experienced a promotion, but **50% experienced a demotion in rank**. This lends support to the observed misalignment between qualification levels and employment grade among specialists discussed in *Challenge 4.1*.

Specialists' qualifications earned outside Hong Kong are devalued

Qualitative Codes—Thematic Analysis

> **They are already registered as specialist in Australia, so this is not an intermediate qualification, but the Hospital Authority treats it as intermediate qualification, which means they downgrade them. So, this is not acceptable, and people would not come for that reason...**

Respondents further elaborated on the difficulties faced in receiving equal recognition of non-local specialist qualifications in Hong Kong. Specialists remarked on the mismatch between qualifications obtained and employment grade in the Hospital Authority, stating that because they are "already registered as specialists in Australia, …[their qualification] is not an intermediate qualification, but the Hospital Authority treats it as [such]". Consequently, the Hospital Authority "downgrades" specialists, which may prevent specialists from "coming for that reason". Therefore, specialists practising under Limited Registration without recognition of their specialist qualifications will perceivably face a stagnant career path, **preventing them from exceling to their full potential** in their career with the Hospital Authority.

Employment terms under Limited Registration lead to concerns over job security

Qualitative Codes—Thematic Analysis

> **...job security is main thing...The concern I have is that 3 years down the line, if this doesn't work out. Let's say HA will say, 'Well, I don't quite need you anymore.' I've got no options. I can't work anywhere else in Hong Kong...But for me, this is my only job, this is the only medical job I can do in Hong Kong...**

Doctors have expressed anxiety surrounding employment under Limited Registration, noting that "job security is the main thing". Specifically, doctors fear that upon the completion of their three-year contract, should the Hospital Authority decline to renew their contract and registration, they would not have any options, as "[they] cannot work anywhere else in Hong Kong [because] this is the only medical job [they] can do". As such, the restrictions on duration of practice (three years unless a renewal is granted) faced under Limited Registration leads to concerns over long-term job security and this is of particular concern for doctors who have effectively left life behind in their place of origin to move to Hong Kong.

Specialists provide specialist services yet may not receive official specialist registration in Hong Kong

Qualitative Codes—Thematic Analysis

> **... If I go back to [the] UK, that's my issue…they might say, 'Well, actually were you practicing as a specialist in Hong Kong at that time?' Then the answer is yes, but then can I provide proof? Then the answer is no.**

As with many medical practitioners, non-locally trained specialists working in the local system may at some point in their career need to provide proof of practice as a specialist in Hong Kong. However, doctors have expressed concerns over official recognition as a specialist, remarking that if they "go back to the United Kingdom, …the answer is yes [that they were practicing as a specialist in Hong Kong prior]", but if asked to provide proof, "then the answer is no". While employers such as the Hospital Authority recognise specialist qualifications and allow specialists to practise in their respective specialty, there is no official specialist recognition given to these non-locally trained specialists who may not have their name included on the MCHK Specialist Register.

The Academy Fellowship route to gain official specialist recognition in Hong Kong is filled with redundancies

Qualitative Codes—Thematic Analysis

> **I do have colleagues from, like, say, from America or, say, from the Netherlands. They already are specialists in their country and they just come here…but they still need to sit [the Academy Colleges] Exit Examination, they still need to go through the process of physician training before they [attain a] specialist status.**

As discussed in *Challenge 4.3*, being recognised as a specialist outside Hong Kong will not necessarily earn a specialist a place on Hong Kong's Specialist Register. Similarly, doctors who wish to be listed on the Specialist Register through attaining an Academy Fellowship have also expressed discontent with misalignments in recognition of qualifications. Doctors have noted that while some non-locally trained specialists from the United States or the Netherlands, for instance, "already are specialists in their country…they still need to sit [the Academy Colleges] Exit Examination …and go through the process of physician training before they attain a specialist status [in Hong Kong]". The Academy Fellowship route is thus filled with redundancies and may compel applicants to face challenges such as requiring retraining to gain specialist status.

Attaining specialist recognition through Certification for Specialist Registration is fraught with uncertainties

Qualitative Codes—Thematic Analysis

> **Because the other alternative, I understand you can actually pay for the HKD 20,000 or 30,000, give them all your documentation and see whether they recognise you as a specialist or not. But then the process is not very transparent. So it's difficult to know whether they would accept it or not.**

As discussed in *Challenge 4.3*, doctors who wish to join the Specialist Register through attaining the CSR may also experience difficulties. As an example, doctors explained that to use this route, they must pay a hefty amount of money and "give them all [the] documentation, and [then] see whether [the Academy will] recognise [them] as a specialist or not". However, despite completing so many steps, the "process is not very transparent, so it's difficult to know whether [the Academy] will accept [the application] or not", contributing to potential career uncertainties for specialists hoping to be officially recognised for their expertise.

Workplace bias can discourage candidates from applying for CSR

Qualitative Codes—Thematic Analysis

> **I have to say there are biases. If you don't have a Fellow of the Academy of Medicine in Hong Kong I don't think your bosses will look at you all seriously, strictly speaking.**

Non-locally trained specialists have expressed concerns regarding "biases" against specialists with CSR. A doctor remarked that if a specialist is not a Fellow of the Academy, they did not think that "bosses will look at [them] all seriously". Therefore, in addition to hurdles that need to be overcome in the CSR application process illustrated in *Challenge 4.3*, concerns related to biased treatment of non-Academy Fellows in the employment setting may deter candidates from applying for CSR.

Singapore has built a progressive pathway for doctors to attain specialist registration

Figure 4.7

Doctor under *conditional registration* → **Eligibility for *full registration***

- **Application to *Specialist Accreditation Board***
- **Application to *Singapore Medical Council***

1. Recognised jurisdictions

- Recognition of training can be considered for specialists trained in: the **United Kingdom**, the **United States**, **Australia**, **Canada**, and **Hong Kong**
- Must hold **specialist recognition in place of training**

2. Approved centres in European countries

- For specialists trained in **countries listed in European Directive 93/16/EEC** with schools in the Second Schedule
- Must have at least **two years of specialist experience** and **specialist recognition** in place of training

3. Other jurisdictions

- For specialists trained in **jurisdictions not listed**
- Must have **3 to 5 year of experience in public institutions** of adequate size in place of training
- Are regarded by peers in Singapore to be **internationally renowned** in specialty

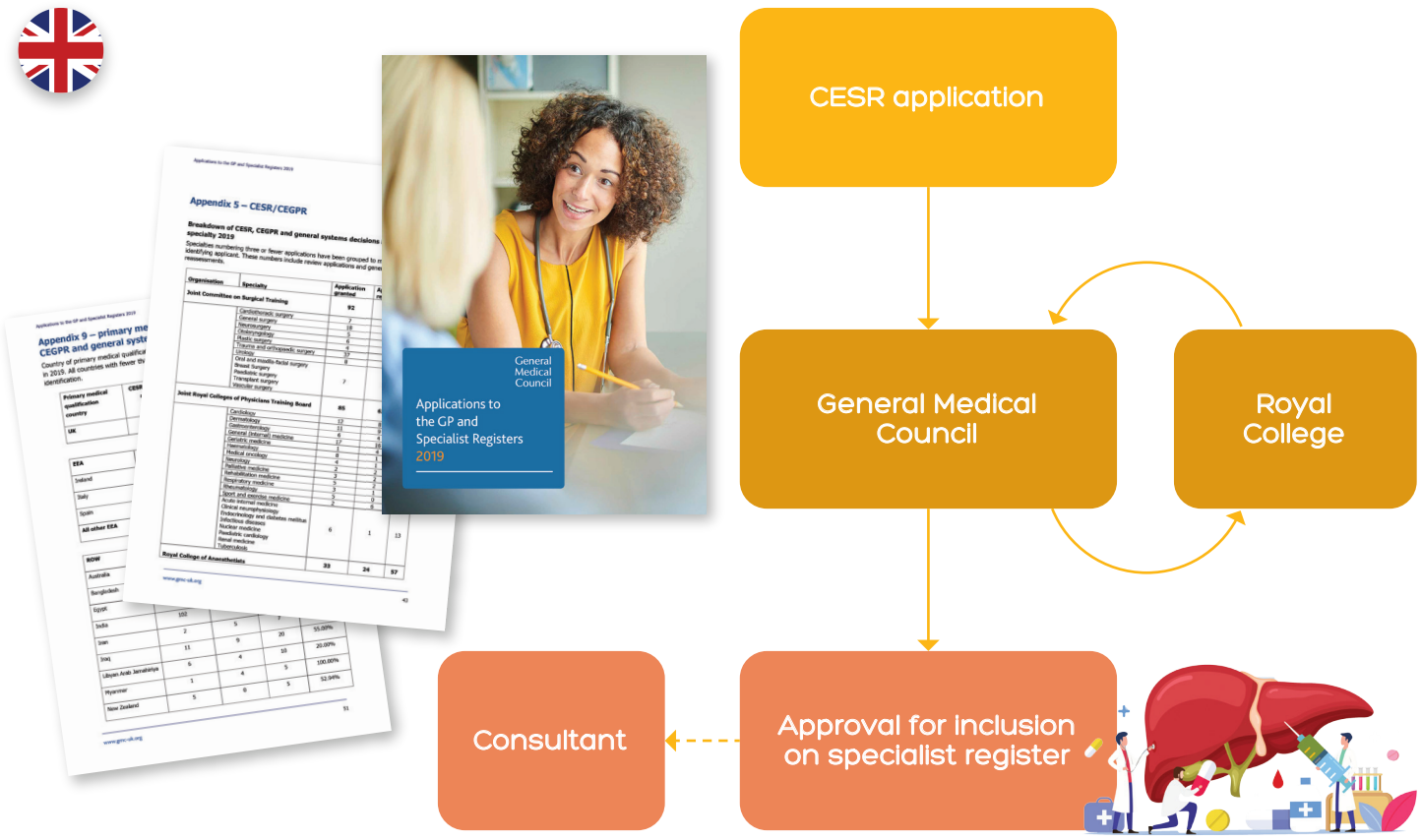
Sources: SMC, 2019c, 2019e, 2020b, 2021a

In Singapore, the Specialists Accreditation Board (SAB), a separate government agency, is responsible for the accreditation of all specialists, both locally and non-locally trained. There is a clear division of labour between the SAB and the Academy of Medicine, Singapore, the latter of which is solely responsible for specialist education and training (SMC, 2020b). As a result of the distinction in responsibilities and accountability, the SAB has clear recongition criteria and accredits specialists based on registration with their respective medical authorities.

Procedures and requirements for official specialist recognition are clearly set out in Singapore. To be eligible for Specialist Registration in Singapore, doctors must have undergone or be in the process of completing two years of supervised practice, after which they will be eligible for full registration (SMC, 2021a). To be added to the specialist register, doctors must concurrently submit applications to the SAB and to the SMC (SMC, 2019e). The subsequent requirements for a successful application to the specialist register is dependent on the place of training (SMC, 2019c). Specialists who have trained in the UK, the US, Australia, Canada, and Hong Kong are generally eligible for recognition if they hold specialist recognition in these places of training. Doctors who received their specialist training in countries listed in the European Directive 93/16/EEC, with schools listed in the latest Second Schedule, may gain specialist recognition if they have at least two years of specialist experience and specialist recognition in their place of training. Specialists who have trained in jurisdictions not specified may enter the specialist register if they have at least three to five years of experience in public institutions of “adequate size and standing” and are regarded by their peers in Singapore to be internationally renowned in their specialty (SMC, 2019c).

The UK offers a pathway for doctors to join the specialist register and become a Consultant

Figure 4.8 **CESR route to specialist register**



Sources: GMC, 2021i, 2021m
Image source: GMC, 2019

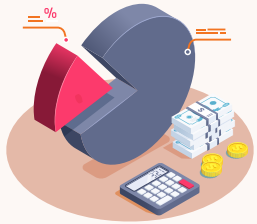
In the United Kingdom, non-locally trained specialists may apply to enter the specialist register through the CESR route, intended for doctors who completed most or all their specialist training outside of the UK (GMC, 2021i). Candidates submit their CESR applications to the GMC, which will review the applicant's qualifications before passing the application to the relevant Royal College for evaluation. The respective Royal College will submit their evaluation to the GMC for the final decision. Successful applications that lead to inclusion on the specialist register will allow the doctor to take up a Consultant post in the NHS (GMC, 2021i). Notably, in the UK, the GMC publicly discloses, on a routine basis, the applications received for specialist registration, including information such as the number of accepted and appealed applications further segregated by specialties (GMC, 2021m).

Recommendations

Hong Kong must capitalise on and nurture valuable human capital

Non-locally trained specialists face significant barriers in obtaining recognition of prior specialist training, resulting in mismatched qualification level and occupational rank, restrictions on career prospects, and convoluted procedures to join the Specialist Register through the CSR pathway. Reference should be made to comparable jurisdictions such as Singapore and the United Kingdom that adopt a clear and transparent pathway for specialist recognition.

Recommendation 4.1



Remove barriers for career progression in the Hospital Authority

- The Hospital Authority should make efforts to determine **career progression on a merit-basis** for all doctors. .

To resonate with *Recommendation 1*, the Hospital Authority should remove all barriers that potentially impede the career progression of non-locally trained doctors. Therefore, consideration for career progression for all doctors should be made on a merit-basis.

Recommendation 4.2

Ensure independence of the proposed committee under the Government's proposed pathway

- The Government should ensure the **independence of the proposed committee** delegated to determine the institution list. The proposed committee should comprise of **diverse stakeholders**.
- The Government should adopt an **appeal mechanism** and review the eligibility of experienced non-locally trained doctors who currently do not meet stipulated criteria to also benefit from the proposal.

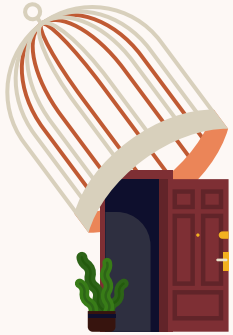
The Government's proposed pathway for the admission of non-locally trained doctors partially addresses the constraints faced by doctors under Limited Registration. The proposal achieves this by removing the roadblocks for non-locally trained specialists to progress from Limited to Full Registration under three conditions, namely that the doctor must i) be a Hong Kong permanent resident, ii) have worked in the public sector for at least five years; and iii) have graduated from an institution listed among recognised medical schools for primary medical qualifications, for which the list is tentatively speculated to include the top one hundred English-medium medical schools ranked globally. The list is proposed to be determined by a committee comprising of leaders of medical institutions and authorities appointed by the Government.

The Government should ensure the independence of the proposed committee in determining the list of recognised institutions through a professional and objective mechanism. The Committee should also comprise of well-qualified independent members from other professions, as well as at least one patient group representative, to ensure that decisions made by the Committee take into consideration the **overall societal benefits and views of other relevant stakeholders**.

The Government should also consider instilling flexibility into the three proposed conditions (refer to page 4) subject to health needs of Hong Kong's population. This is well exemplified by the flexible approach adopted by the Singapore Medical Council that periodically amends the list of non-local medical schools within the Second Schedule. The Second Schedule has been critical in achieving Singapore's doctor supply target; in parallel, changing the number of recognised medical schools on Hong Kong's prospective list could render the same benefit.

Furthermore, as an example, there are potentially other well qualified non-locally trained doctors that may not be captured, as they may not fulfil the proposed conditions simultaneously. For instance, experienced non-locally trained doctors who are not Hong Kong permanent residents, are ineligible to benefit from the Government's proposal. Therefore, the Government should consider having alternative mechanisms in place to capture and retain these well-qualified doctors that fall outside the set criteria. As an example, a number of these well-qualified doctors are already serving in our health system but do not meet these set criteria; therefore, **an appeal mechanism could be devised** to review the eligibility of such cases on an individual basis.

Recommendation 4.3



Adopt a flexible approach to lift Limited Registration restrictions

- The MCHK should review and lift the **duration restriction of Limited Registration** for non-locally trained specialists employed by the HA or DH on the condition that they continue their service at these institutions.
- The MCHK should review and lift the **venue restriction of Limited Registration** for non-locally trained specialists who have served the HA or DH for an extended period of time.

The Government's current proposal does not adequately lift the restrictions imposed under Limited Registration. Alternative arrangements to lift respective restrictions should be considered to enhance doctor retention measures. As an example, **the duration restriction of Limited Registration** (currently set at three years, pending renewal of registration) should be lifted for non-locally trained specialists employed by the Hospital Authority or the Department of Health. This flexibility should be conditional on their continued appointment with these public healthcare institutions and subject to desirable performance monitoring and assessment outcomes. In addition, consideration should be given to **the relaxation of the venue restriction for non-locally trained specialists under Limited Registration** after they have served in the Hospital Authority or the Department of Health for an extended period of time (e.g., 10 to 15 years), also subject to desirable performance monitoring and assessment outcomes.

Recommendation 4.4

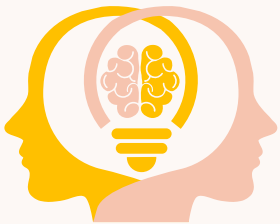
Set up an independent specialist accreditation body

- The Government should consider setting up an **independent specialist accreditation body with international expert members**.
- The body will determine the **recognition and accreditation of specialist training and qualifications** for inclusion into the Specialist Register.
- Alternatively, the Government can **empower the Education and Accreditation Committee** to become more **independent**.

The Government should consider **setting up an independent specialist accreditation body** that is solely responsible for the recognition and accreditation of specialist training and determination of inclusion of specialists on the Specialist Register. This newly formed independent body should take reference to Singapore's Specialists Accreditation Board which determines the qualifications, experience, and other considerations necessary for accreditation, as well as the training programmes recognised for registration as specialists. This body should encompass international expert members and also clearly list out the recognised specialist registrations of the non-local medical authorities, and **pledge to a transparent and streamlined process for applications** (with ideally no more than three months turnaround, as compared with the current six-month Certification for Specialist Registration vetting timeframe).

Alternatively, the Government can also consider empowering the Education and Accreditation Committee currently under the Medical Council of Hong Kong to mirror the organisation, functions and responsibilities of the SAB in Singapore. In this vein, the EAC should be independent of both the Medical Council of Hong Kong and Hong Kong Academy of Medicine. In addition, the Academy should publicly disclose on a routine basis information related to the applications received for Certification for Specialist Registration, including details such as the number of successful and unsuccessful applications further segregated by specialties.

Recommendation 4.5



Ensure equivalent entitlement between the Academy Fellows and specialists with CSR

- The Academy should **award successful candidates of the CSR with Fellowship of the Academy** to ensure fairness and alignment in entitlements between the Academy Fellows and CSR holders.

The Certification for Specialist Registration applications undergo a thorough vetting process that involves all relevant authorities, including the Academy Colleges. Specialists that successfully attain CSR would have been certified by the Academy to have achieved a professional standard comparable to that for the award of Fellowship of the Academy, in accordance with Section 20K of the Medical Registration Ordinance (Cap. 161). Furthermore, the Academy has absolute discretion over the designation of the Fellowship of the Academy, as stipulated in the Hong Kong Academy of Medicine Bylaw 2.4. Therefore, given the comparable professional competencies and to enhance fairness and promote alignment in entitlements between the Academy Fellows and successful CSR candidates, specialists with CSR should also be eligible to receive the Academy Fellowship.

Chapter

5

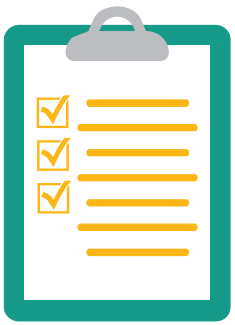
Optimising the Application Process for Entry into Our Health System

Logistical and technical complexities require excessive documentation

Challenge 5: Is the application process for entry into the system straightforward and efficient?

Verification process in Hong Kong requires excessive documentation through outdated channels

Figure 5.1



Limited Registration

- HKID or passport
- Certificate of medical qualification
- Registration certificate / licence for medical authority outside Hong Kong
- Certificate of post-qualification clinical experience
- Recent photographs
- Certification of Employment
- Character reference (x2)
- Certificate of good standing

Licensing Examination

- Certificate of medical qualification
- Official transcripts of studies
- Certificate of internship
- HKID or passport
- CV
- Registration certificate / licence
- Certificate of good standing

Full Registration

- Certificate of medical qualification
- Official transcripts of studies
- Certificate of experience (internship)
- HKID or passport
- CV
- Registration certificate / licence
- Certificate of good standing
- Character reference (x2)
- Recent photographs

Requires submission of all items from respective lists each time

Original documents + Photocopies verified by the **Licentiate Committee Secretariat / notarised** photocopies

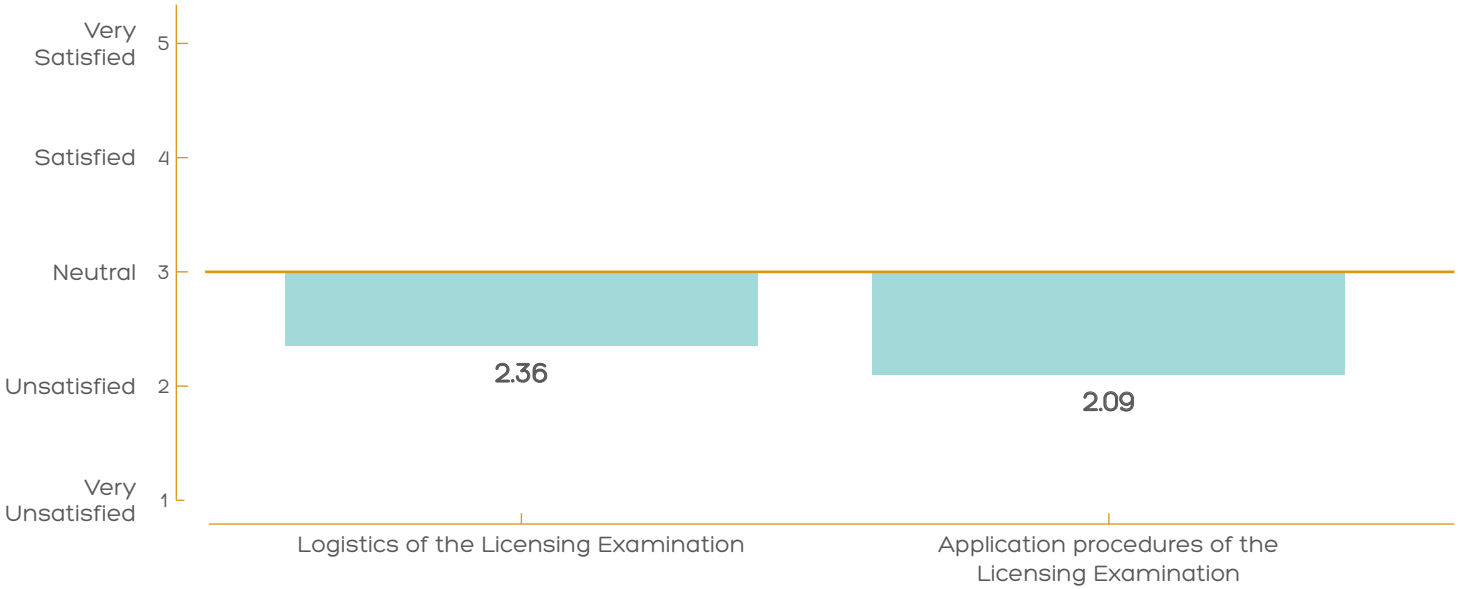
Sources: LEIP, 2020; MCHK, 2016a

The application process for entry into the local health system, including application to sit the MCHK Licensing Examination and registration with the MCHK are largely paper-based that require excessive physical documentation through outdated channels. Furthermore, the same process must be repeated with each application made using the same set of documents, including mandatory notarisation of documents for respective applications (LEIP, 2020; MCHK, 2016a). There is **an absence of an internationally recognised, independent digital medical credential verification system in Hong Kong.**

Logistics related to the Licensing Examination are not to doctors' satisfaction

Survey Data Analysis

Figure 5.2



The survey findings further revealed the frustration of respondents when making applications to the local health system. For example, respondents were **generally dissatisfied with the current mechanisms related to the Licensing Examination encompassing logistics and application procedures**. From a scale of 1 (Very Unsatisfied) to 5 (Very Satisfied), respondents scored on average 2.36 (1.12) on *logistics* and 2.09 (1.12) on *application procedures* of the Licensing Examination.

Outdated verification processes of non-local qualifications result in inefficiencies

Qualitative Codes—Thematic Analysis

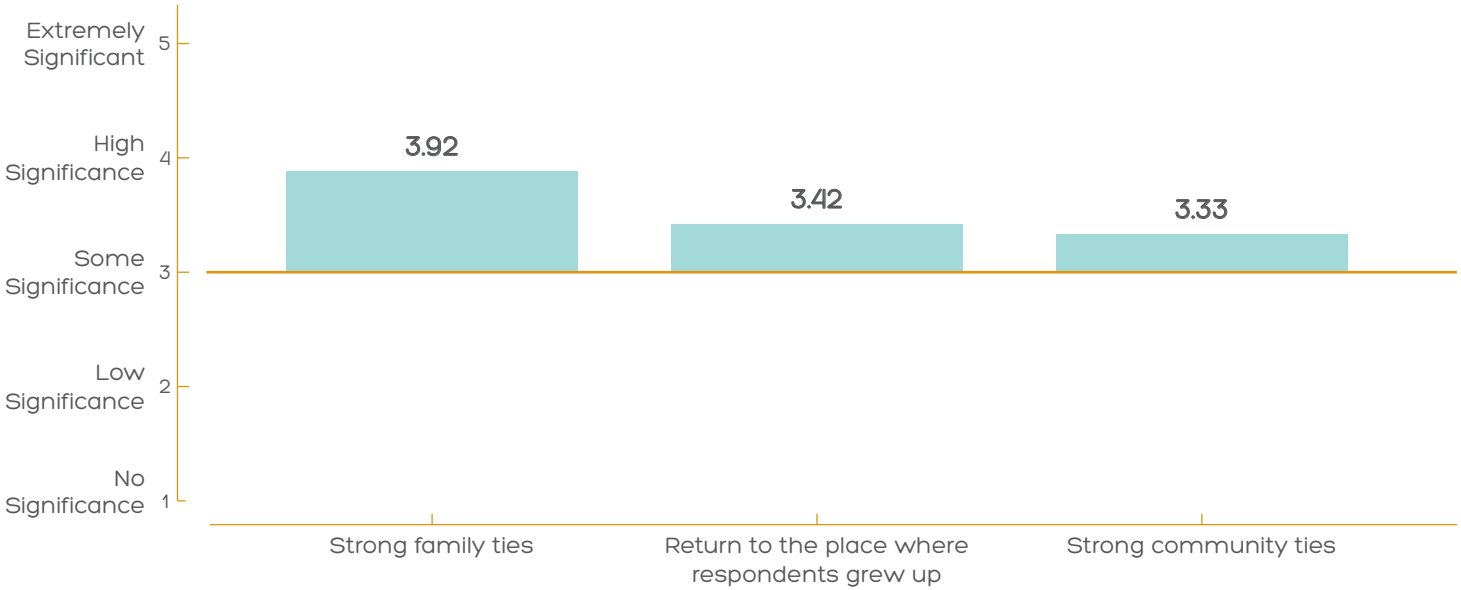
> **…this is just a very old-fashioned way of doing things and very counterproductive. Also, they need the university to have a stamp onto the form to say that you have studied here …in addition to the notarised copy of the transcript and your degree, which is quite duplicated, and it creates an unnecessary disturbance…it's just like a daunting experience for all people who apply.**

Moreover, in the semi-structured interviews, respondents described the application processes as "counterproductive" and "a daunting experience for all who apply". Study findings demonstrate that **Hong Kong currently employs outdated verification processes of non-local medical qualifications**, thereby contributing to inefficiencies for both candidates and employers.

Doctors place high significance on family, community, and social ties for relocating to Hong Kong

Survey Data Analysis

Figure 5.3



Despite the hurdles faced with logistical and administrative procedures, doctors who opt to return to Hong Kong are primarily driven by family and community ties. From a scale of 1 (No Significance) to 5 (Extremely Significant), respondents scored on average 3.92 (1.44) on *strong family ties*, 3.42 (1.44) on *return to a place where respondents grew up* and 3.33 (1.37) on *strong community ties* as key pull factors.

Doctors who opt to return to Hong Kong are primarily driven by familial ties

Qualitative Codes—Thematic Analysis

> **You know–in order to make people come back to Hong Kong and work here is not easy. This is–you know–I'll tell you one thing I put in our survey, if I didn't have family here I would not be here.**

Respondents in particular placed a high significance on family ties as their primary motivation to relocate to Hong Kong and therefore have expressed reluctance to return to Hong Kong otherwise. Respondents stated that "work here is not easy" and that "if [they] didn't have family here [they] would not be here". This testament illustrates the willingness of respondents to prioritise familial ties in the face of potential difficulties that may be encountered prior to or during relocation to Hong Kong.

The Electronic Portfolio of International Credentials is a primary-source verification system

Figure 5.4

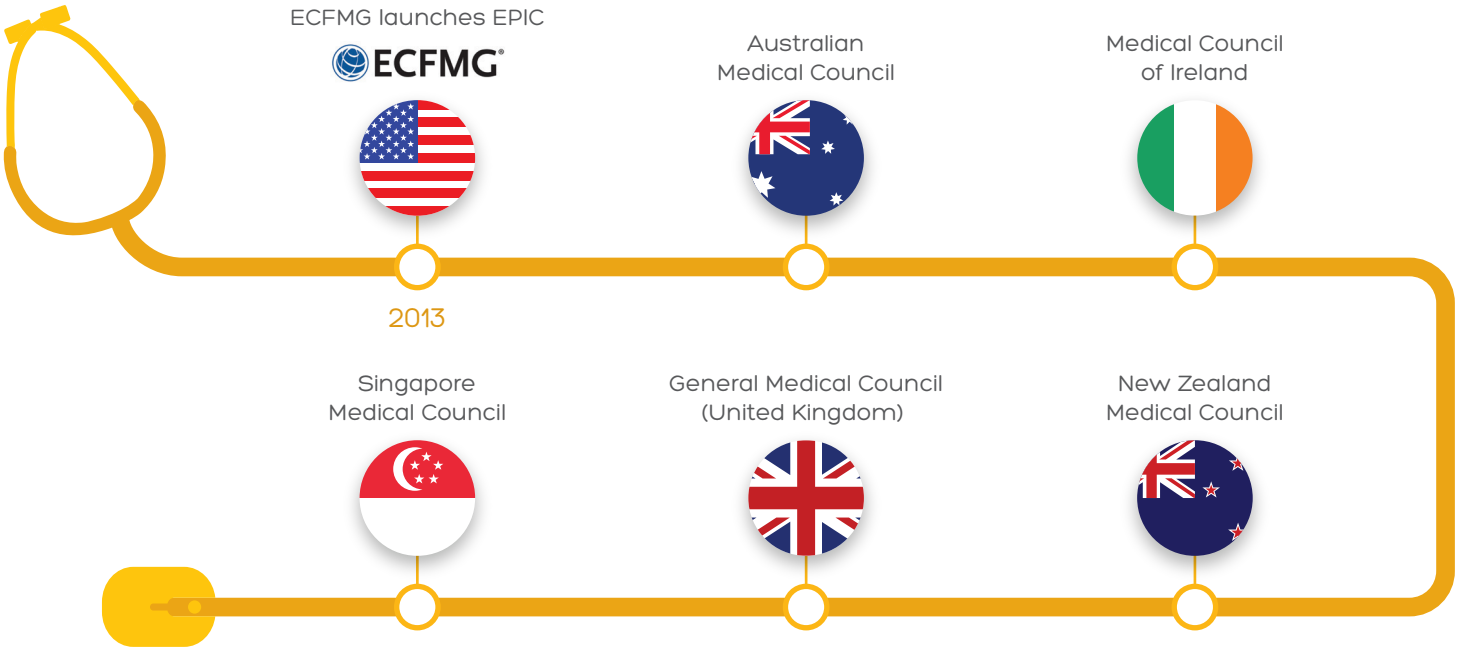
The Electronic Portfolio of International Credentials is a **secure web-based** platform for authenticating physician credentials that provides **rigorous primary source verification**.

Image reproduced from: ECFMG EPIC, 2021

Cumbersome logistical arrangements associated with the verification of documents could be off-putting to applicants, many of whom are abroad. Hong Kong has yet to adopt an internationally recognised digital medical credential verification system that could potentially increase the efficiency of application processes. Similar to other jurisdictions, Hong Kong should **harness information and communication technology opportunities to streamline registration procedures**. The Electronic Portfolio of International Credentials (EPIC) platform launched by the Educational Commission for Foreign Medical Graduates (ECFMG) in the United States, is a secure web-based platform which provides rigorous, paperless processing and record-keeping for primary-source verification that should be adopted.

Non-local medical authorities have already incorporated EPIC into their verification processes

Figure 5.5



Sources: ECFMG, 2020, 2021a, 2021b; AMC, 2020b; Medical Board Aphra, 2017; Amison & GMC, 2018

In 2013, ECFMG launched EPIC as a platform to the international medical community to evaluate the qualifications of international medical graduates. At present, 27 organisations worldwide have incorporated EPIC to verify credentials of international medical graduates for registration and qualification verification purposes (ECFMG, 2021a, 2021b). Notably, the Australian Medical Council (AMC), the General Medical Council (United Kingdom) and the Singapore Medical Council have already incorporated EPIC into their processes for verifying and registering non-locally trained doctors (ECFMG, 2020; AMC, 2020b; Medical Board Aphra, 2017; Amison & GMC, 2018).

EPIC can streamline application procedures through electronic in place of paper-based verification

Figure 5.6

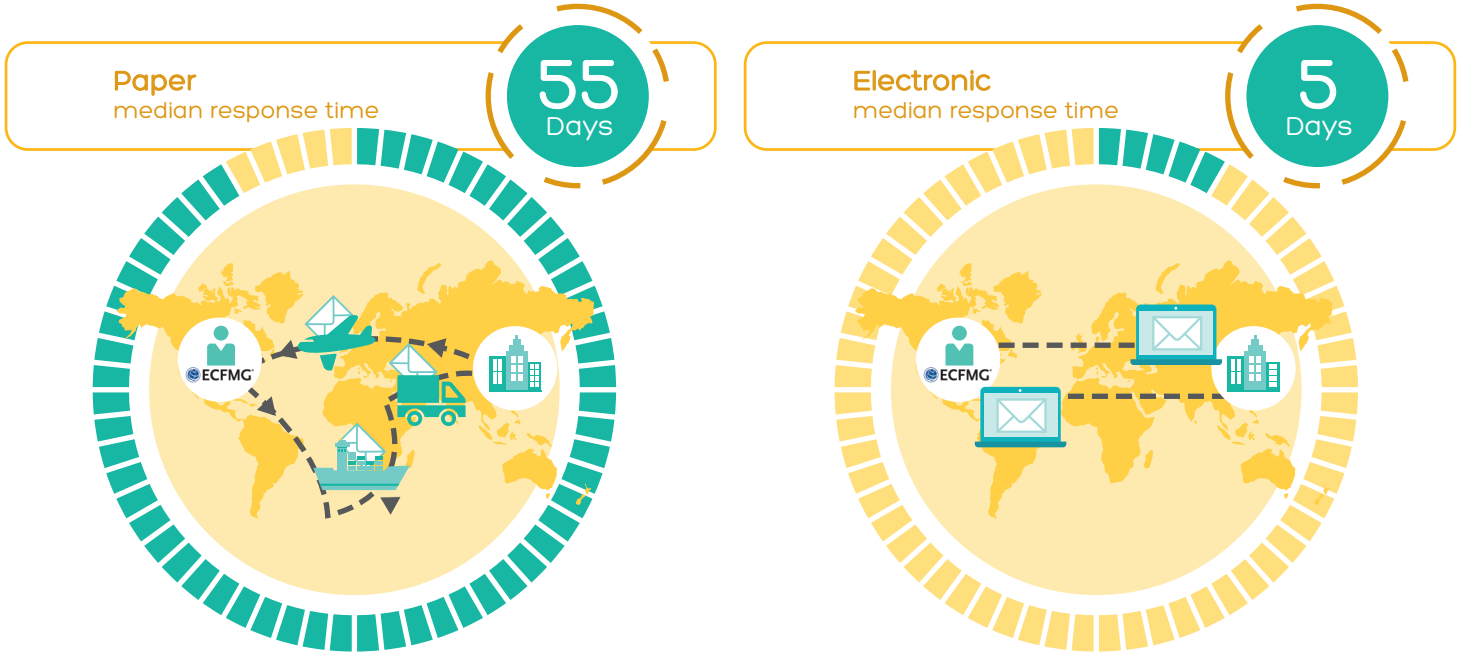


Image reproduced from: ECFMG, 2016

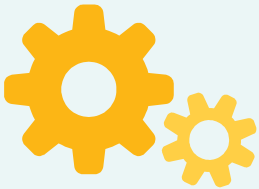
The time savings associated with use of electronic verification of credentials compared to paper-based verification is dramatic. The comparison shows that the median response times by EPIC for verification requests from medical schools can be substantially reduced from **55 days to just five days** (ECFMG, 2016).

Recommendation

Hong Kong should streamline application and verification processes

Throughout a medical career, doctors will be called upon to demonstrate that they are qualified to take on certain posts and assume certain responsibilities. To do this, doctors will have to establish the authenticity of their credentials accumulated from the completion of their medical education to the continuous medical training throughout their career. Medical regulatory bodies outside of Hong Kong turn to technology to enhance the efficiency for the verification of credentials. This is particularly important for non-locally trained doctors who are very often applying from abroad.

Recommendation 5



Adopt EPIC to streamline examination application and medical registration procedures

Hong Kong's relevant bodies should utilise the commonly accepted technology platform **to optimise the efficiency of verification processes.**

Various medical regulatory bodies including the Australian Medical Council, the General Medical Council (United Kingdom) and the Singapore Medical Council have incorporated the Electronic Portfolio of International Credentials for the verification of credentials on a virtual integrated platform where doctors can build their professional portfolios for their medical careers abroad. In the 21st century, Hong Kong needs to **harness information and communication technology opportunities to streamline examination application and medical registration procedures**. Relevant authorities should consider adoption of widely accepted and commonly used technology platforms, such as EPIC, to improve application processing times and enhance overall application experiences.

Chapter

6

Enhancing the Licensing Examination Measures to Uphold Fair Assessment Standards

6.1 Inadequate measures to support examination preparation

6.2 Unfair passing mechanisms and lack of standardisation of content examined

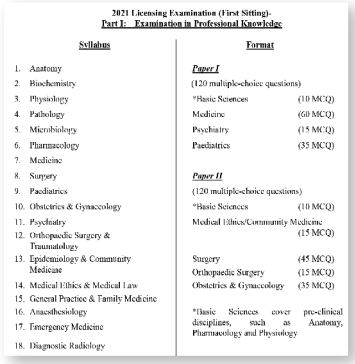
6.3 Mismatch of content examined and clinical aptitude

Challenge 6: Is sufficient support available to ensure that the Licensing Examination is a fair assessment?

Inadequate support provided to facilitate preparation for assessment

6.1 Inadequate measures to support examination preparation

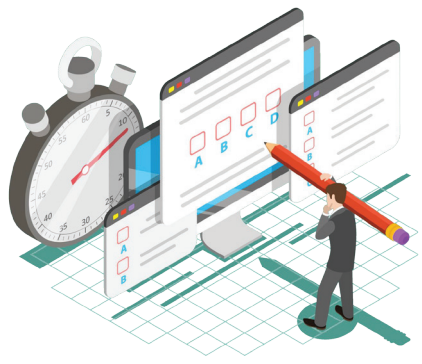
Figure 6.1



2021 Licensing Examination (First Sitting)-
Part I: Examination in Professional Knowledge

Syllabus	Format	
1. Anatomy	***Paper I***	
2. Biochemistry	(120 multiple-choice questions)	
3. Physiology	*Basic Sciences	(10 MCQ)
4. Pathology	Medicine	(60 MCQ)
5. Microbiology	Psychiatry	(15 MCQ)
6. Pharmacology	Paediatrics	(35 MCQ)
7. Medicine		
8. Surgery	***Paper II***	
9. Paediatrics	(120 multiple-choice questions)	
10. Obstetrics & Gynaecology	*Basic Sciences	(10 MCQ)
11. Psychiatry	Medical Ethics/Community Medicine	(15 MCQ)
12. Orthopaedic Surgery & Traumatology		
13. Epidemiology & Community Medicine	Surgery	(45 MCQ)
14. Medical Ethics & Medical Law	Orthopaedic Surgery	(15 MCQ)
15. General Practice & Family Medicine	Obstetrics & Gynaecology	(35 MCQ)
16. Anaesthesiology		
17. Emergency Medicine	*Basic Sciences cover pre-clinical disciplines, such as Anatomy, Pharmacology and Physiology	
18. Diagnostic Radiology		

- Lack of comprehensive revision materials
- Lack of transparency on examination coverage
- Absence of examination venues outside Hong Kong and virtual platforms



Sources: LEIP, 2018a, 2021a, 2021b, 2021c

In 2018, the MCHK Licensing Examination Information Portal was jointly developed by The University of Hong Kong and The Chinese University of Hong Kong. While the portal aims to provide useful information related to the Licensing Examination and clearly states that it is not intended for tutoring purposes, it fails to provide sufficient material to facilitate candidates' preparation for the Licensing Examination (LEIP, 2021a, 2021c). For example, while the portal has made available sample examination questions alongside topics to be examined and listed suggested readings, the comprehensiveness of these resources stand in stark contrast with the support provided to candidates in other jurisdictions that also offer a licensing examination for non-local medical graduates (LEIP, 2021b).

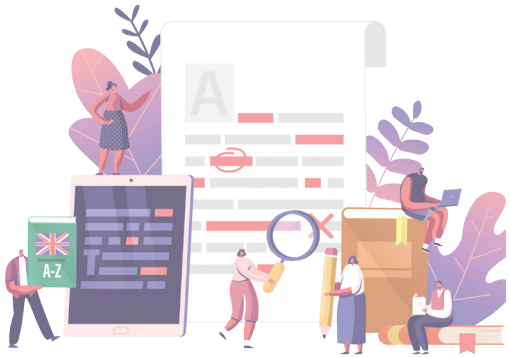
At present, Hong Kong also does not offer the provision of examination centres outside Hong Kong nor the option to complete at least parts of the Licensing Examination via a virtual platform, limiting the support available to enhance flexibility and convenience for candidates. Furthermore, some of the administrative measures of the Licensing Examination are unpragmatic, such as the short advance notice given to candidates to sit Part III (Clinical Examination) of the Licensing Examination (LEIP, 2018a).

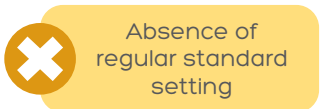
Passing mechanisms and standard setting of the Licensing Examination need to be reviewed

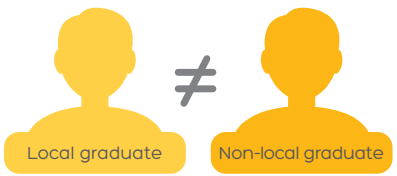
6.2 Unfair passing mechanisms and lack of standardisation of content examined

Figure 6.2

I	Part I Examination in Professional Knowledge	A pass can be retained for five attempts in Part III for five years	Must re-take otherwise
II	Part II Proficiency Test in Medical English	A pass can be retained for five attempts in Part III for five years	Must re-take otherwise
III	Part III Clinical Examination	A pass confers a Licence[1]	A pass in three of the four subjects can be retained for a further attempt Must re-take otherwise







Note: [1] Candidate will be eligible for Full Registration after successful completion of a period of assessment pending candidate's level of qualification and work experience in Hong Kong.
Sources: LEIP, 2018b, 2018d, 2018f

In 2020, the MCHK announced the removal of negative marking practices for Part I (Examination of Professional Knowledge) of the Licensing Examination. However, this marking practice continues to be in place for Part II (Proficiency Test in Medical English) of the Licensing Examination which deducts one mark for each incorrect answer (LEIP, 2018f). In addition, the passing mechanism adopted in Part III is redundant in requiring a candidate who **fails more than one out of four subjects in one sitting to re-sit all subjects** (LEIP, 2018b, 2018d). Furthermore, the Licensing Examination does **not offer regular and transparent standard setting of examination questions**. This process is crucial to ensure that the passing standard for the examination remains at the level required of a graduating medical student in Hong Kong.

The Licensing Examination content is beyond the scope of clinical practice for experienced doctors

6.3 Mismatch of content examined and clinical aptitude

Figure 6.3

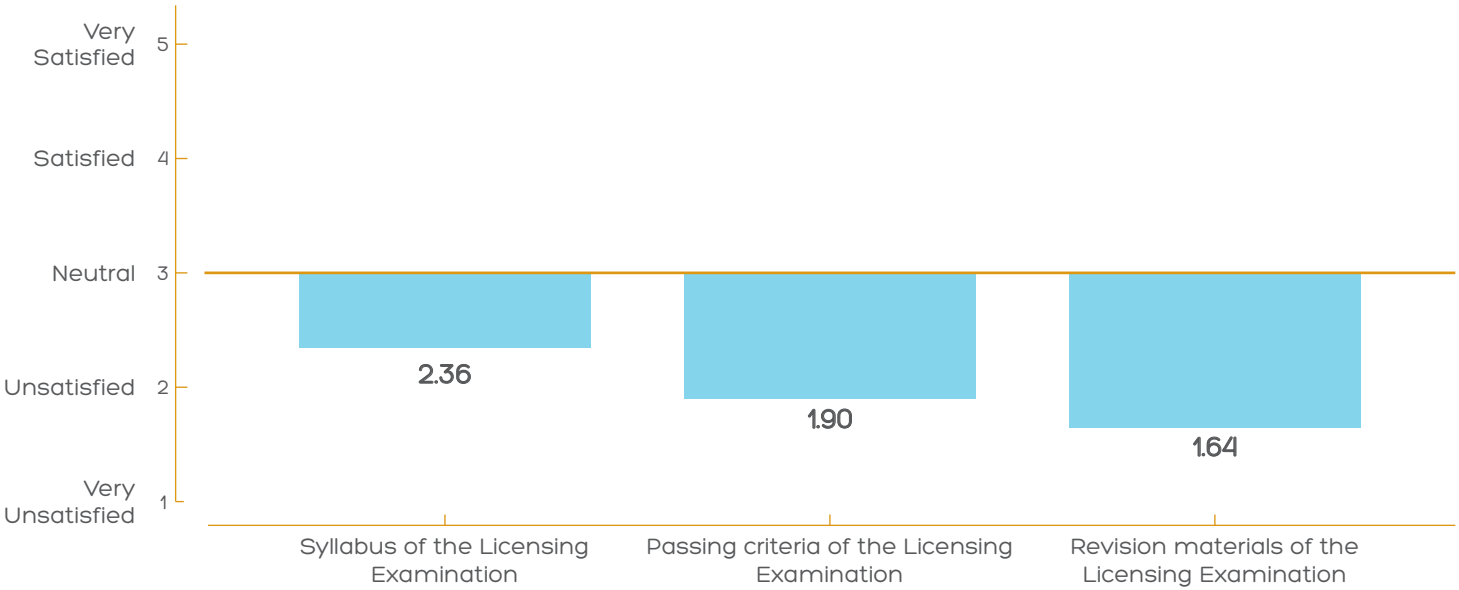
Source: LEIP, 2018a

The applicability of the Licensing Examination for assessing candidates with postgraduate level of training or qualifications is questionable. At present, the examined scope compels doctors to prepare and demonstrate their clinical aptitude far below the postgraduate level and outside of their current scope of clinical practice. As an example, candidates are examined on knowledge in basic science that is usually taught and examined early in the pre-clinical years of medical training (LEIP, 2018a).

Procedures and support measures related to the Licensing Examination are not to doctors' satisfaction

Survey Data Analysis

Figure 6.4



The survey results revealed that respondents were generally dissatisfied with the current mechanisms related to the *syllabus, passing criteria* and *revision materials* of the Licensing Examination. To illustrate, from a scale of 1 (Very Unsatisfied) to 5 (Very Satisfied), respondents scored an average of 2.36 (1.03) on *syllabus*, 1.90 (0.99) on *passing criteria*, and 1.64 (0.81) on *revision materials* of the Licensing Examination.

Inadequate transparency of the depth of knowledge assessed hinders examination preparation

Qualitative Codes—Thematic Analysis

> **I'm not sure what they claim. I don't know... I might not be informed, but I don't know of a specific level they're trying to attain. I don't think they made a clear indication that they're attaining a medical school level or a specialist.**

In the follow-up interviews, respondents elaborated on their dissatisfaction with the Licensing Examination. First, respondents expressed that "[they didn't] know of a specific level [the MCHK was] trying to attain". This results from the inadequate transparency of the depth of knowledge assessed, which ultimately hinders examination preparation.

From inadequate revision materials to lack of examination venues outside of Hong Kong, support measures are barely sufficient

Qualitative Codes—Thematic Analysis

> **They also didn't provide any ideas on what materials you should use to study from. These kinds of things are important. [Study guides] are quite country-specific…If you end up choosing one [study strategy], maybe the completely wrong [strategy], you may end up wasting a lot of time …the other thing is, you have to come to Hong Kong to do the exam.**

Second, respondents indicated that they were not provided with references to specific study materials to prepare from. One respondent indicated that they were not "provided any ideas on what materials …to study from" and that because study guides are "quite country-specific," the "wrong [strategy] may end up [wasting] a lot of time." This confusion can be further compounded by doctors having to "come to Hong Kong to do the [Licensing Examination]". Evidently, **from inadequate revision materials to no examination venues outside Hong Kong, support measures are barely sufficient to prepare doctors for the Licensing Examination.**

Marking practices of the Licensing Examination are perceived as untransparent and unfair

Qualitative Codes—Thematic Analysis

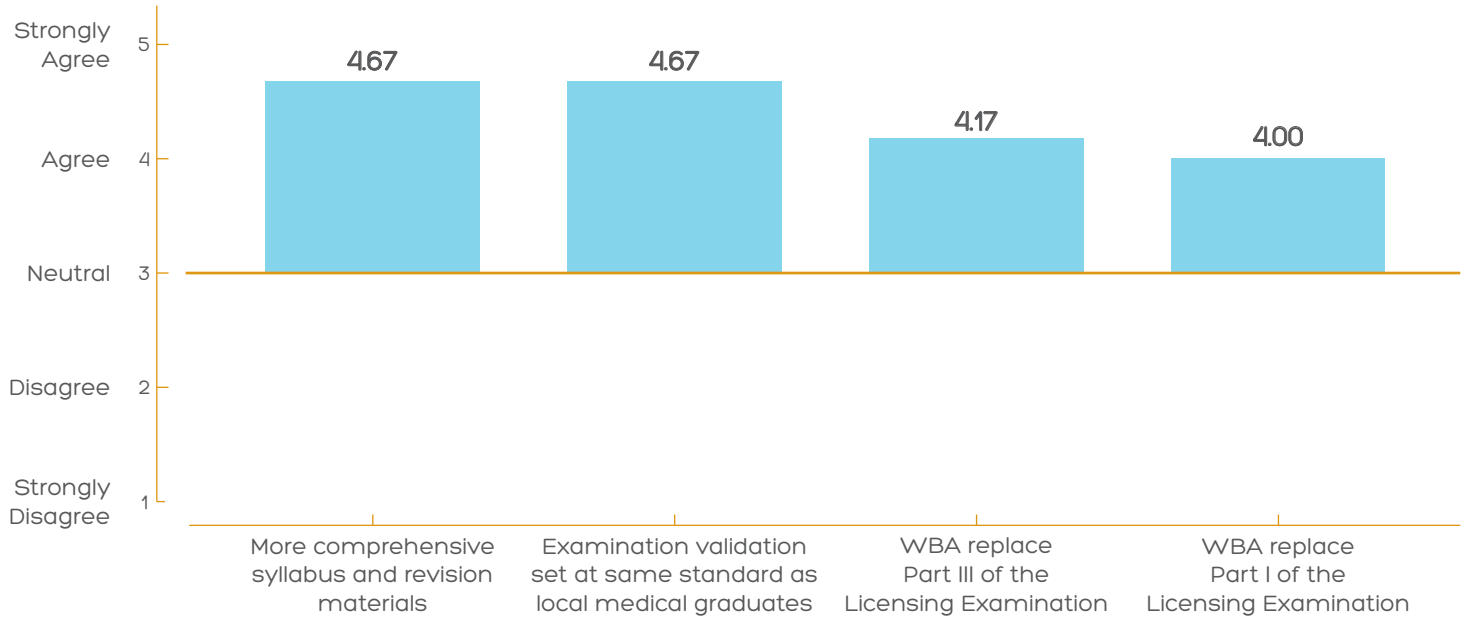
> …for the clinical examination the marking criteria, the passing criteria are not open… So, this is something that makes candidates unsure on how they should perform to pass the examination… You have to pass 4 examinations to pass 1 examination. It's different because if you fail part of the examination they say, 'You failed the examination.'

Third, respondents expressed discontent at the passing criteria. One respondent elaborated that because the "marking criteria, the passing criteria are not open… candidates [are] unsure of how they should perform to pass the [Examination]." Furthermore, the passing criteria for the Licensing Examination creates the perception that "you have to pass four [Examinations] to pass one [Examination]…[hence] if you fail part of the [Examination], [MCHK says,] 'you failed the [Examination].'" Consequently, the **marking practices of the Licensing Examination are perceived as untransparent and unfair to doctors.**

Potential enhancements to the Licensing Examination should be considered

Survey Data Analysis

Figure 6.5



The survey results on potential enhancements to the Licensing Examination, including *more comprehensive review material and syllabus, examination validation with standard setting, workplace-based assessment (WBA) replacing Part III, and WBA replacing Part I* of the Licensing Examination were met with positive reception. From a scale of 1 (Strongly Disagree) to 5 (Strongly Agree), respondents scored an average of 4.67 (0.65) on *more comprehensive syllabus,* 4.67 (0.65) *on examination validation with same standard set as local medical graduates*, 4.17 (1.03) on *WBA replacing Part III*, and 4.00 (0.95) on *WBA replacing Part I* of the Licensing Examination.

Mismatch between clinical aptitude and content covered in the Licensing Examination

Qualitative Codes—Thematic Analysis

> **Because first of all, for the professional knowledge exam in Part 1—the MCQ papers consist of all the specialties, information that we need to know before we take this exam. And you know I have graduated for more than 10 years. It will be quite difficult for me to study all the materials again.**

As for the applicability of the Licensing Examination, respondents noted that within the confines of the current examination, the "Multiple-Choice Question (MCQ) papers consist of all the specialties" for Part I. One respondent expressed concern that it would be "quite difficult for [them] to study all the materials again" given that they had graduated from medical school over 10 years ago. This experience is not an isolated case, with significant mismatch between the clinical aptitude of doctors and the content covered in the Licensing Examination.

Australia's efforts to strive for fairness in examination

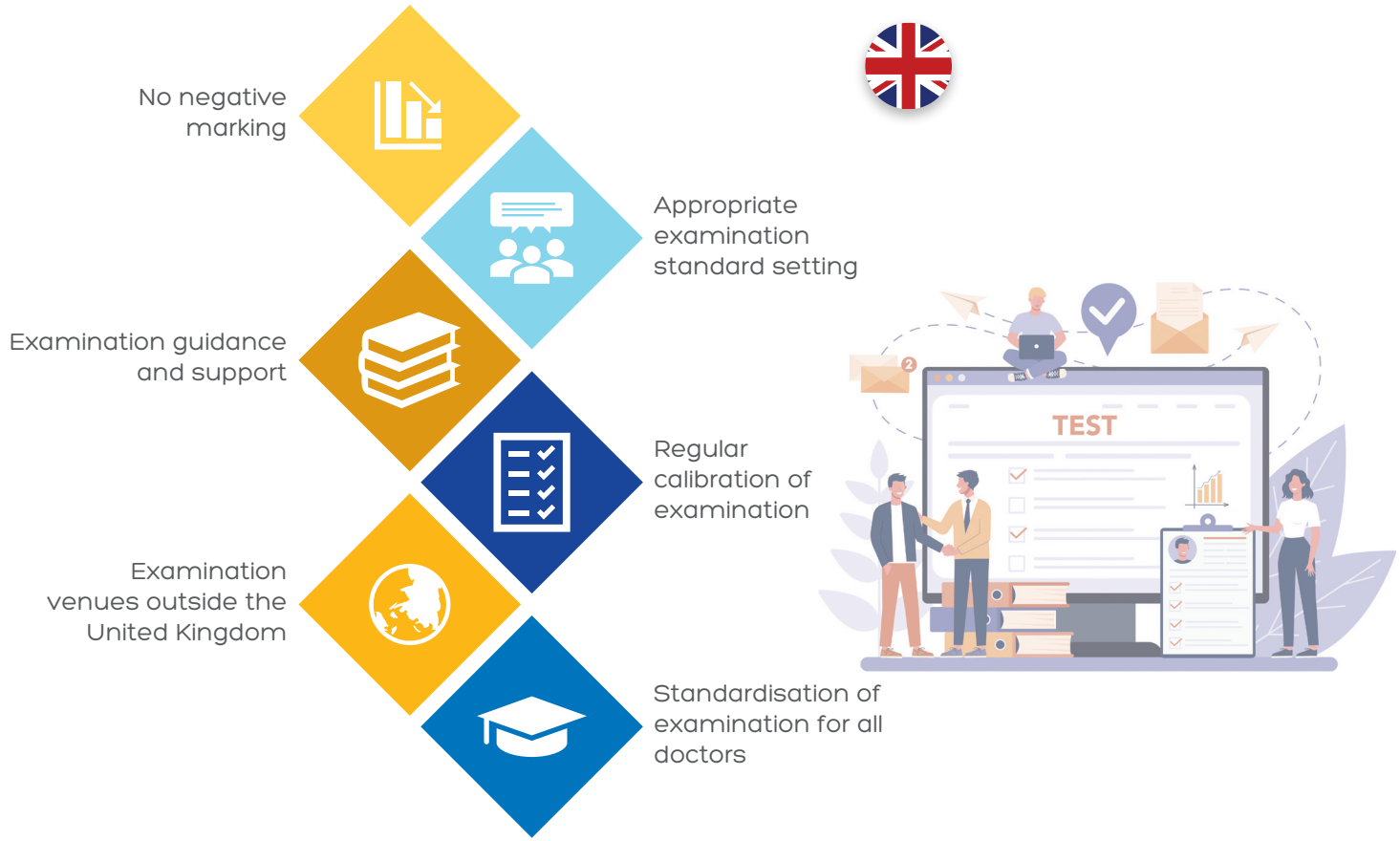
Figure 6.6

Sources: AMC, 2019, 2020a, 2021a, 2021b; Pearson VUE, 2021

Moving forward, Hong Kong must take note of the way other jurisdictions provide ample support towards the administration and provision of their respective licensing examinations. Reference can be made to Australia's efforts to promote fairness in assessing non-locally trained doctors through the two tests–the AMC Computer Adaptive Test (CAT) MCQ Examination and the AMC Clinical Examination. Among these efforts are the straightforward marking mechanism that does not utilise negative marking, provision of abundant guidance material available online, and year-round testing opportunities that are available in 30 cities across 25 countries (Pearson VUE, 2021; AMC, 2020a). Doctors seeking examination preparation material may access the MCQ Trial Examination which allows them to take sample tests and receive feedback on performance, and access a virtual store to gather comprehensive material, including examination books and recommended reading materials (AMC, 2021a, 2021b). The AMC also conducts calibration exercises with local students to ensure equal grading standards and sets the examination at an appropriate level relative to local medical school graduates. In particular, the AMC CAT MCQ is set at the level required of an Australian medical school graduate (AMC, 2019).

The United Kingdom has in place support measures to allow for fairness in examination

Figure 6.7



Sources: GMC, 2016, 2021o, 2021n, 2021p

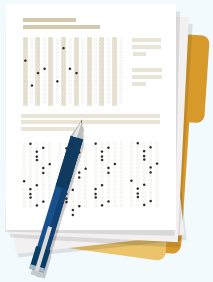
Similarly, the United Kingdom also offers comprehensive support measures to ensure fairness of the PLAB test for non-local medical graduates. These efforts include straightforward marking mechanisms, availability of examination venues outside the UK with four examinations scheduled per year, comprehensive examination guidance (GMC, 2021p). As of 2021, there are 23 listed cities across 14 countries where candidates can complete the PLAB Part 1 test (GMC, 2021o). Doctors taking the test will also have access to a virtual reality application with sample clinical assessment procedures and interactive, online self-assessment tools (GMC, 2021n). The GMC also routinely reviews the PLAB test, with the standard for the examination set at the level of entry to the second year of the Foundation Programme (F2). The PLAB test is routinely re-calibrated and assessed for relevance and fairness for potential candidates (GMC, 2016). In a landmark initiative, the UKMLA was introduced to replace the PLAB test, taking effect in 2024, with the requirement that all medical graduates, irrespective of medical training location, would need to pass the same examination prior to full registration (GMC, 2021j).

Recommendations

Hong Kong should conduct a review of the Licensing Examination to uphold fair assessment standards

Reference should be taken to jurisdictions that enforce measures to ensure that respective licensing examination taken by non-locally trained doctors is a fair assessment of doctors' competency. As demonstrated, Australia and the United Kingdom provide comprehensive revision material and achieve standardisation between examinations administered to locally- and non-locally trained doctors through calibration and/or provision of an identical examination.

Recommendation 6.1

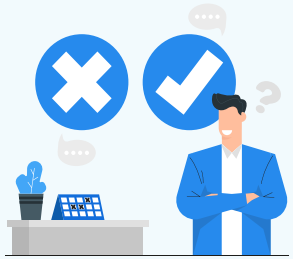


Increase transparency and strategically invest in support measures for the examination

- Disseminate **comprehensive revision materials** including reference past papers and an **exhaustive syllabus**.
- Offer option to complete Part I and Part II of the Licensing Examination at **venues outside Hong Kong** and/or on a **virtual platform**.

The MCHK should uphold transparency of the scope examined in the Licensing Examination. This can be supplemented by the dissemination of comprehensive revision materials that include reference materials, full versions of past papers, and an exhaustive syllabus. Moreover, the investment made towards administrating the Licensing Examination on a bi-annual basis should encompass sufficient support and administrative measures. This should include providing potential candidates with the option of taking Part I (Examination in Professional Knowledge) and Part II (Proficiency Test in Medical English) of the Licensing Examination at venues outside of Hong Kong and/or administrating the Licensing Examination on a virtual platform.

Recommendation 6.2



Abolish negative marking and discouraging passing practices

- The MCHK should **lift the negative marking mechanism** for Part II of the Licensing Examination.
- The MCHK should allow candidates to **retain passes for respective subjects in Part III** of the Licensing Examination for the next two scheduled sittings.

The MCHK should lift the negative marking mechanism for Part II (Proficiency Test in Medical English) of the Licensing Examination. As for Part III (Clinical Examination) of the Licensing Examination, the MCHK should consider allowing candidates to retain all passes for respective subjects for the next two scheduled sittings.

Recommendation 6.3

Implement measures to ensure fairness in examination standards

- The MCHK should mandate **regular calibration** with locally trained medical graduates.
- Alternatively, the MCHK should set up an **independent examination authority to administer standardised examinations** for all doctors, both locally and non-locally trained.

The MCHK should mandate regular benchmarking of the Licensing Examination to ensure content validity and fairness towards candidates. This can be achieved by randomly appointing locally trained medical graduates to sit the same examination on a regular basis. Alternatively, an independent examination authority should be set up, staffed and governed with international medical experts, to carry out standardised professional examinations for all doctors, locally- or non-locally trained alike.

Recommendation 6.4

Make alternative assessment methods for experienced doctors

- Experienced doctors with **full or partial specialist training** should be offered **alternative assessment methods to the Licensing Examination**.
- A **workplace-based assessment** should serve as a substitute for Part I and Part III of the Licensing Examination.

The MCHK should provide more experienced doctors who have completed full or partial specialist training with alternative assessment methods. For example, doctors with many years of clinical experience should be offered a workplace-based assessment as a substitute for Part I (Examination in Professional Knowledge) and Part III (Clinical Examination) of the Licensing Examination.

Recommendation 6.5

Recognise alternative measures to fulfil medical English proficiency requirement

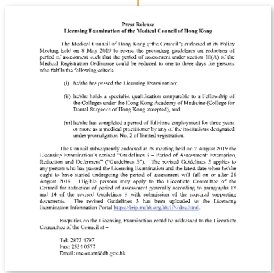
- The MCHK should recognise well-established **English language testing systems**.
- The MCHK should also consider recognition of graduates from medical schools with **English as a medium of instruction**.

The MCHK should consider recognition of alternative measurements to fulfil the medical English proficiency requirement instead of administering Part II (Proficiency Test in Medical English) as a standalone language examination. This could include recognition of well-established English language testing systems such as an acceptable International English Language Testing System (IELTS) score or graduation from a medical school that uses English as a medium of instruction.

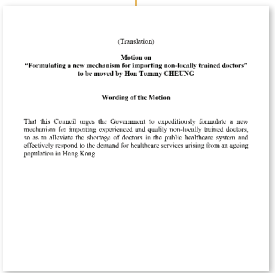
Ongoing discussion in the public arena on the admission of non-locally trained doctors

Appendix 1.

2019 10 Apr — 8 May — 16 Oct — 2020 18 Nov


Press Release
Licensing Examination of the Medical Council of Hong Kong


The Hong Kong Special Administrative Region
of the People's Republic of China
The Chief Executive's 2019 Policy Address
16 October 2019


(Translation)
Motion on
"Formulating a new mechanism for importing non-locally trained doctors"
to be moved by Hon Tommy CHEUNG
Wording of the Motion

Our Hong Kong Foundation

Launch of advocacy report on Hong Kong's critical shortage of doctors and the **necessity to augment the role of non locally trained doctors**

The Medical Council of Hong Kong

Introduction of **internship exemption arrangement** for non-locally trained specialist doctors

Cross-party Support

Cross-party discussion and consensus on need to **tackle barriers for importing non-locally trained doctors**

2019 Policy Address

Exploration of the feasibility to provide **specialist training** for non-locally trained doctors

Legislative Council

Debate motion on "Formulating a new mechanism for importing non locally trained doctors"

Sources: OHKF, 2019; LEIP, 2019b, 2019c; HKSARG, 2019b; Legislative Council, 2021a
Image sources: Our Hong Kong Foundation, 2019; HKSARG, 2019; MCHK, 2019; Yung Chi Wai Derek / Shutterstock.com; Legislative Council, 2020

Since the launch of Our Hong Kong Foundation's advocacy study titled *Health System Capacity Constraints – The Severe Shortage of Doctors in Hong Kong Public Hospitals* in 2019 that highlighted the urgency for tackling Hong Kong's shortage of doctors exacerbated by increasing healthcare demands of our rapidly ageing population (Our Hong Kong Foundation, 2019), discussion in the public arena on the admission of non-locally trained doctors has been ongoing.

A catalyst of policy initiatives and advocacy efforts have been introduced by various interest groups and professional bodies across sectors and political parties on the urgent need to tackle barriers for admitting non-locally trained doctors into Hong Kong.

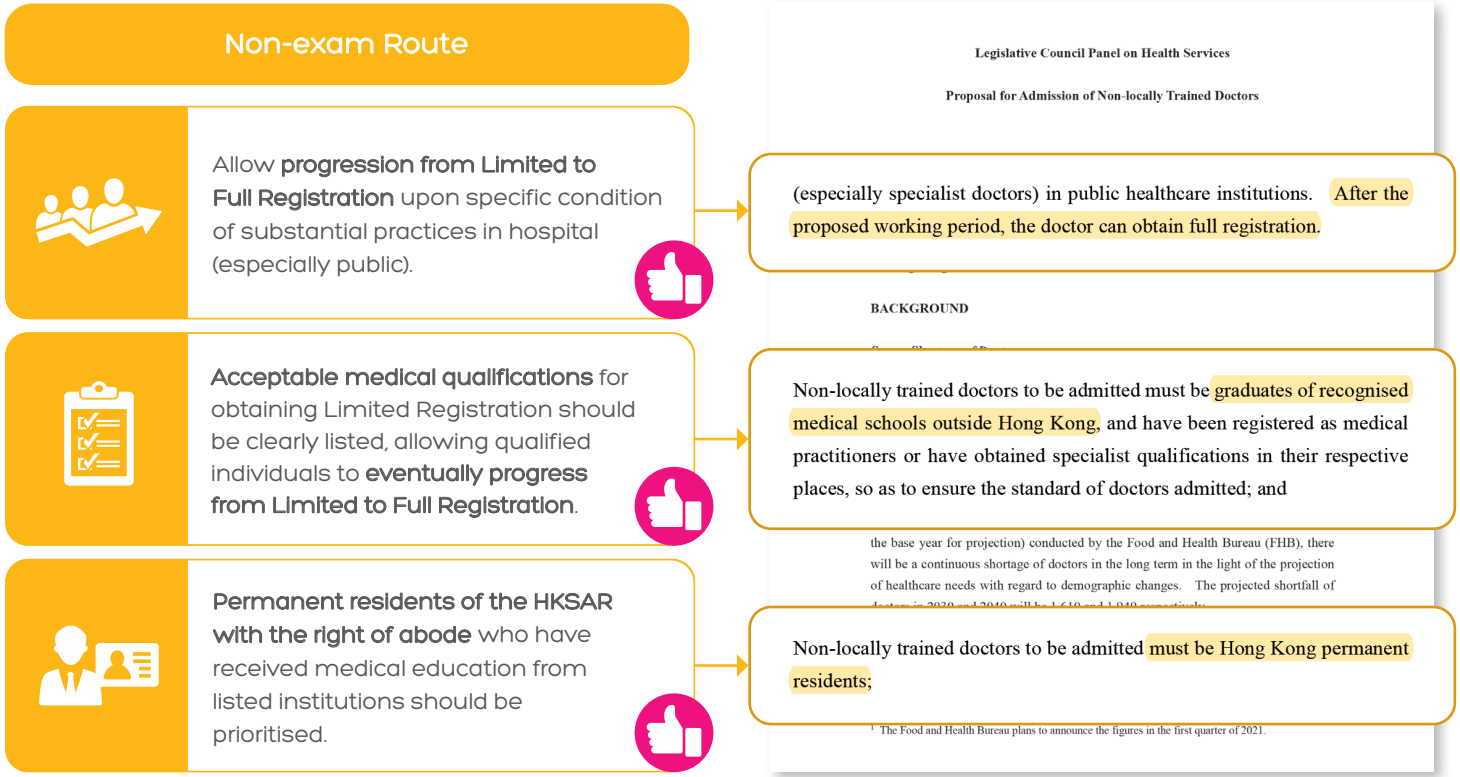
In May 2019, the MCHK endorsed a reduction for the period of assessment generally, for non-locally trained doctors who i) have passed the Licensing Examination; ii) hold a specialist qualification comparable to a Fellowship of the Academy Colleges; and iii) have completed at least three years of full-time employment in the Hospital Authority, the Department of Health, the University of Hong Kong, or The Chinese University of Hong Kong (LEIP, 2019c). Upon successful application, candidates will need to attend an "Assessment Programme of Generally Reduced Period of Assessment", lasting for two working days. Candidates will pass the assessment if they answer at least 8 out of 10 multiple choice questions correctly in each of the 7 subject areas (LEIP, 2019b).

In another noteworthy initiative, as an effort to encourage the sustainable development of Hong Kong' s health system, the Chief Executive's *2019 Policy Address* put forward a proposal to explore the feasibility of providing specialist training for non-locally trained doctors who are newly registered or with a couple years' experience (HKSARG, 2019b).

Findings and recommendations from our 2019 advocacy study continue to receive widespread recognition, particularly in the local discourse on uplifting the local doctor shortage crisis. Of note, content from the 2019 advocacy study was widely cited during a Legislative Council meeting in November 2020 when members debated a non-binding motion (with no legislative effect) on "Formulating a new mechanism for importing non-locally trained doctors" moved by Hon Tommy Cheung that was successfully passed by the Legislative Council (Legislative Council, 2021a).

The Government's proposal borrows heavily from OHKF's 2019 recommendations

Appendix 2.



Sources: OHKF, 2019; Legislative Council, 2021b

In another landmark achievement, a proposal for the admission of qualified non-locally trained doctors was tabled by the Government on 5th February 2021 at a Legislative Council Panel on Health Services meeting (Legislative Council, 2021b). The initiative to pave a legislated pathway for non-locally trained doctors with Hong Kong permanent residency to return home borrows heavily from the three major policy recommendations put forward in OHKF's 2019 advocacy study (Our Hong Kong Foundation, 2019). Notably, the three elements put forward by OHKF were incorporated into the Government's proposal which specifies that non-locally trained doctors to be admitted must be **Hong Kong permanent residents**; graduates of **recognised medical schools outside Hong Kong**; and receive **Full Registration** after working at public healthcare institutions for a specified period.

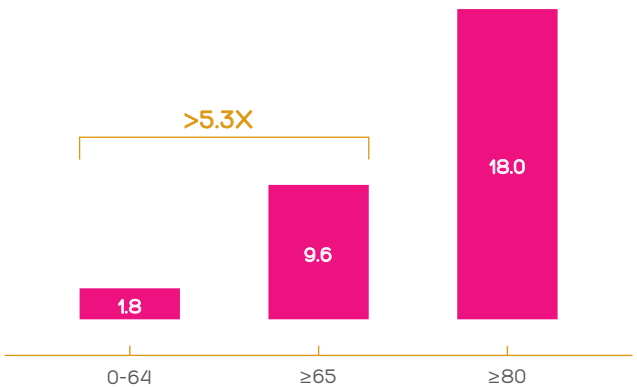
The peak velocity of ageing just started - our public healthcare system will become increasingly overstretched

The following section includes key statistics with updated figures from OHKF's 2019 advocacy study:

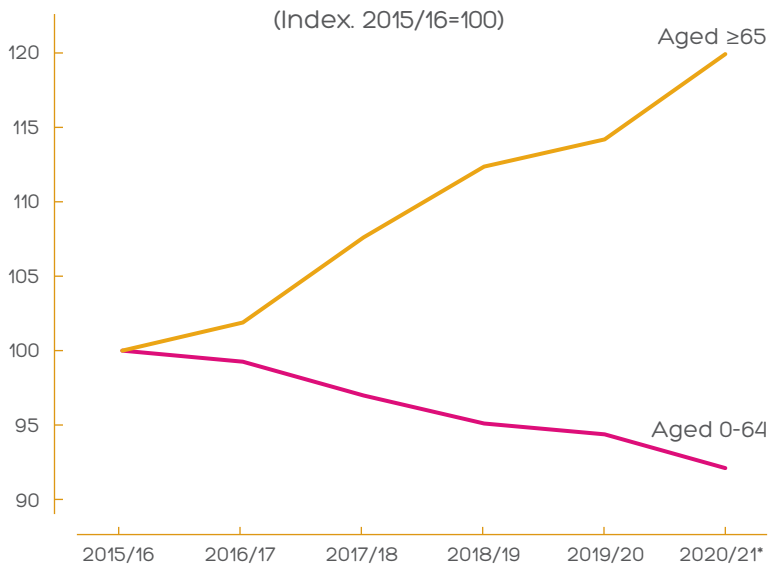
Appendix 3.

Percentage of population aged ≥65

Number of public hospital beds required per 1,000 population by age group in 2019/20[1]



Growth of A&E attendances of persons aged ≥65 vs growth of A&E attendances of persons aged 0-64 in public hospitals



Note: *Provisional figures up to 31 December 2020

[1] No. of public hospital beds required = total number of patient days utilised per thousand population / 365. Patient days include inpatient patient days and day inpatient discharges & deaths.

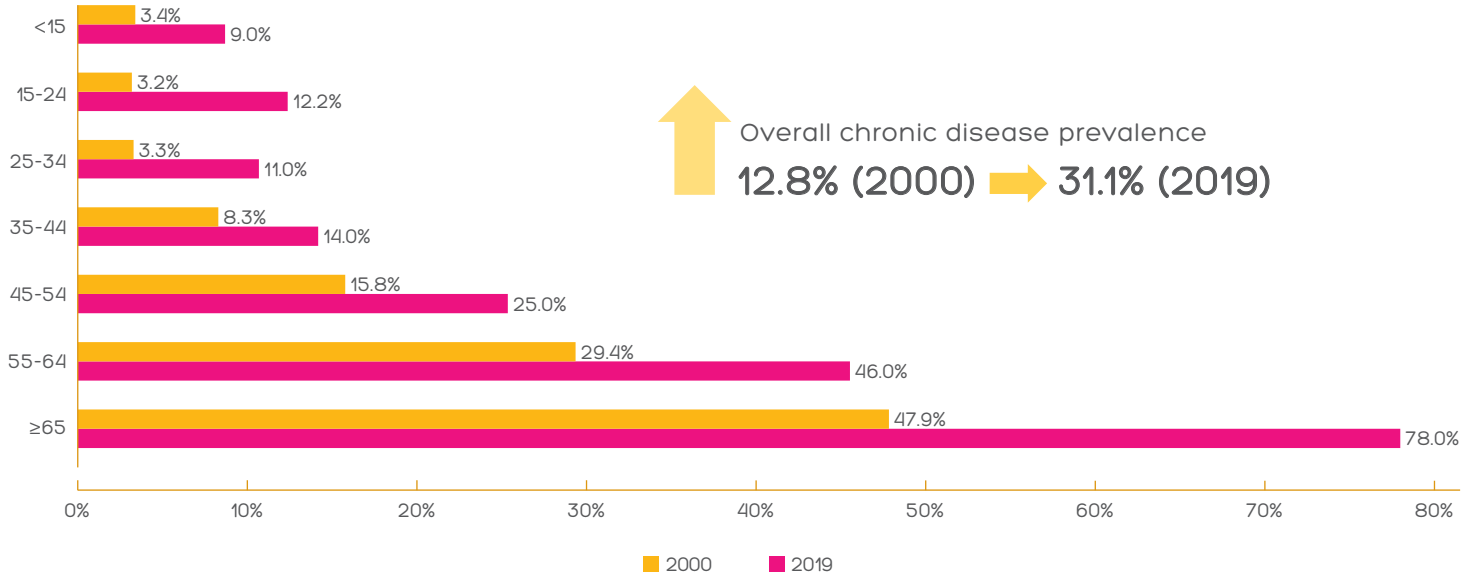
Sources: Census and Statistical Department, 2020b, 2021; Hospital Authority, 2021b; Food and Health Bureau, 2018, 2020, 2021

Hong Kong is home to a rapidly ageing population. The percentage of our population aged ≥65 years is rising and expected to increase from 18.3% in 2020 to 29.9% in 2036 (representing an increase of approximately 1 million people) (Census and Statistics Department, 2020b, 2021). This growth in the size of the elderly population has only just begun and the speed of population ageing over the next two decades is expected to increase alongside corresponding healthcare demands. This is exemplified by the growth of Accident and Emergency attendances of persons aged ≥65 years as a percentage of the total attendances that has increased from **28.4%** (converted to a baseline of 100) in **2015/16** to **34.0%** in **2020/21** (Food and Health Bureau, 2018, 2020, 2021).

A rapidly ageing population and the more profound complexity of illnesses among the elderly population correspond to a greater demand for health services, particularly in the public sector. This can be exemplified by public hospital bed utilisation ratios where in **2019/20**, every 1,000 people aged ≥65 years **required 9.6 beds** on average, compared to **1.8** required by every 1,000 people aged <65 years (Hospital Authority, 2021b). The ratio was **18.0 for every 1,000 people** aged ≥80 years. In other words, the same number of people aged ≥65 years would require **at least 5 times** as many medical resources as those aged <65.

Chronic diseases are becoming more prevalent with earlier onset

Appendix 4. **Percentage of persons with chronic diseases in respective age groups in 2000 and 2019*[1]**



Notes: *Refers to issue date of Thematic Household Survey instead of data collection date.

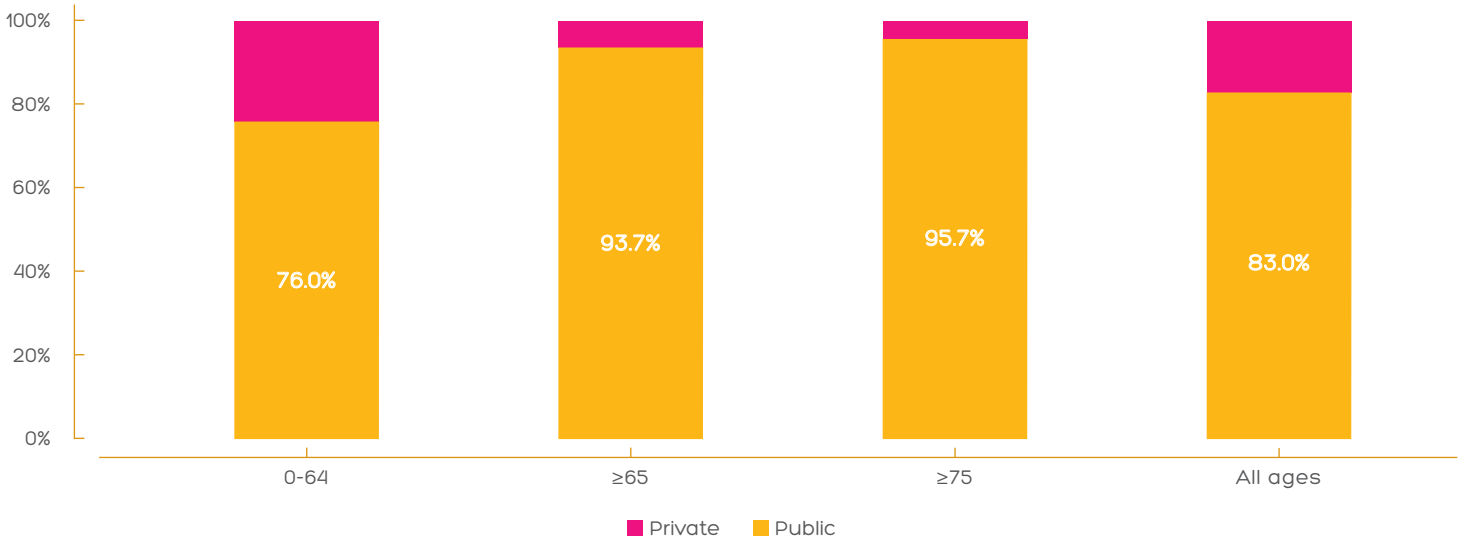
[1] Figures in 2000 THS refer to respondents who reported diseases that required long term follow up. Figures in 2019 THS refer to persons who reported chronic health conditions as diagnosed by practitioners of Western medicine.

Sources: Census and Statistics Department, 2000, 2019b

Alongside the ageing population is the rising prevalence of chronic diseases that adds to the burden of our already ailing health system. *Thematic Household Survey* (THS) data shows that in 2019, the overall percentage of persons with chronic diseases increased from 12.8% to 31.1% between 2000 and 2019 (Census and Statistics Department, 2000, 2019b). Notably, the prevalence of reported chronic diseases also increased in every age group compared to that observed in 2000, which hints at an earlier onset of chronic conditions. Also adding to the burden on our health system are those with multiple chronic diseases and more complex health conditions. Therefore, regardless of how we size the current shortage, the current shortage of doctors is likely well above the number estimated by the Government in the *Healthcare Manpower Projection 2020*.

The public sector is handling more than 80% of hospital care

Appendix 5. **Inpatient and Day Inpatient Discharges and Deaths**[1]



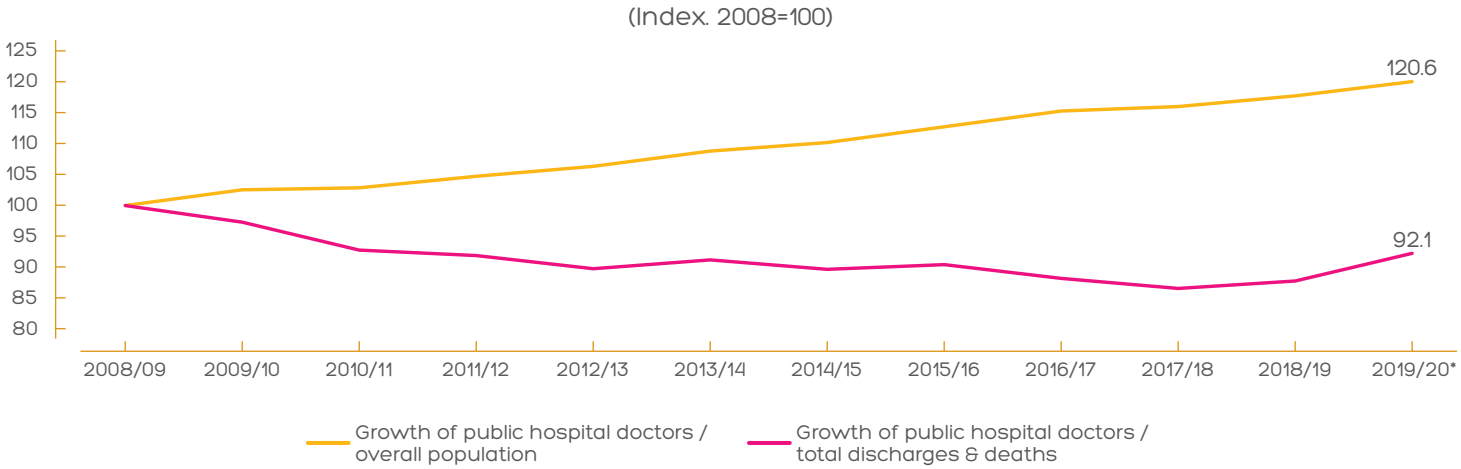
In 2018, public hospitals covered **>90%** of aged ≥65 and ≥75 inpatient and day inpatients discharges and deaths.

Note: [1] Refers to discharges on an episode basis and deaths. Day inpatients refer to those who are admitted into hospitals for non emergency treatment and who are discharged within the same day. Inpatients are those who are admitted into hospitals via Accident & Emergency Department at the Hospital Authority or those who have stayed for more than one day.
Source: Census and Statistics Department, 2020a

The public sector in Hong Kong's health system provides more than 80% of hospital care. In 2018, the public sector accounted for over 80% of all inpatient and day inpatient discharges and deaths for the entire population and over 90% for those aged ≥65 and ≥75, respectively (Census and Statistics Department, 2020a).

Hong Kong's doctor shortage crisis is particularly serious in the public sector

Appendix 6. Growth of public hospital doctors per 1,000 overall population vs growth of public hospital doctors per 1,000 total discharges and deaths



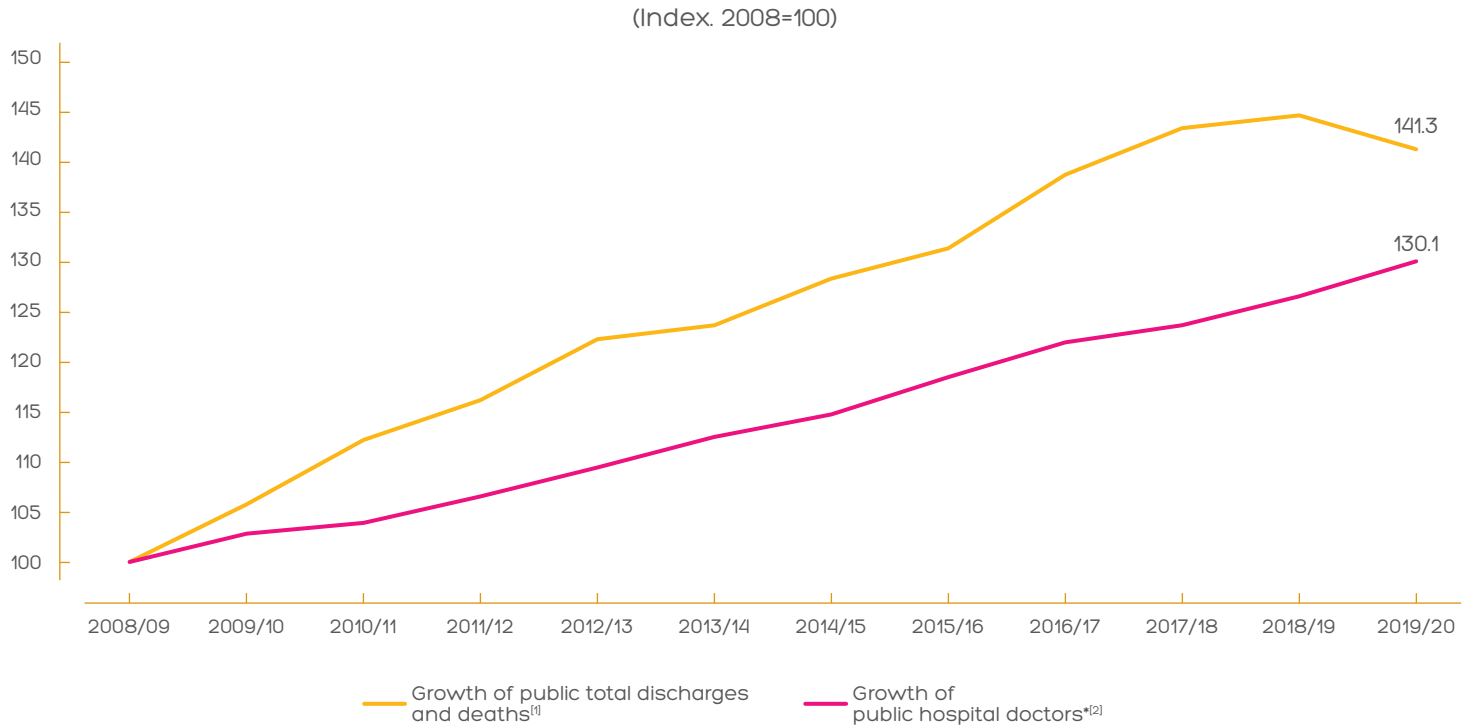
	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20*
Public hospital doctors[1] / overall population	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.9
(index)	(100.0)	(102.6)	(102.9)	(104.8)	(106.5)	(109.0)	(110.5)	(113.1)	(115.7)	(116.4)	(118.2)	(120.6)
Public hospital doctors[1] / total discharges & deaths[2]	3.9	3.8	3.6	3.5	3.5	3.5	3.5	3.5	3.4	3.3	3.4	3.6
(index)	(100.0)	(97.2)	(92.6)	(91.7)	(89.5)	(91.0)	(89.4)	(90.2)	(87.9)	(86.2)	(87.5)	(92.1)

Notes: *Provisional figures up to 31 December 2019 for public hospital doctors
[1] Refers to doctors in the Hospital Authority with Full Registration on the Resident List or Non-resident List
[2] In the Hospital Authority, total discharges and deaths includes inpatient and day inpatient discharges and deaths. Day inpatients refer to those who are admitted into hospitals for non emergency treatment and who are discharged within the same day. Inpatients are those who are admitted into hospitals via Accident & Emergency Department or those who have stayed for more than one day.
Sources: Census and Statistics Department, 2019a, 2020a; Hospital Authority, 2021b

While there were 2.0 doctors for every 1,000 people in 2019, there are **only 0.9 public hospital doctors for every 1,000 people** (Census and Statistics Department, 2019a, 2020a). Despite the slight increase in the number of public doctors per 1,000 population over the past decade, the number of public doctors per 1,000 total discharges and deaths decreased continuously up to 2019/20 (Hospital Authority, 2021b).

The workload of public sector doctors has been increasing over time

Appendix 7. Growth of public hospital doctors vs growth of total discharges and deaths



Notes: *Provisional figures up to 31 December 2019 for public hospital doctors

[1] In the Hospital Authority, total discharges and deaths includes inpatient and day inpatient discharges and deaths. Day inpatients refer to those who are admitted into hospitals for non emergency treatment and who are discharged within the same day. Inpatients are those who are admitted into hospitals via Accident & Emergency Department or those who have stayed for more than one day.

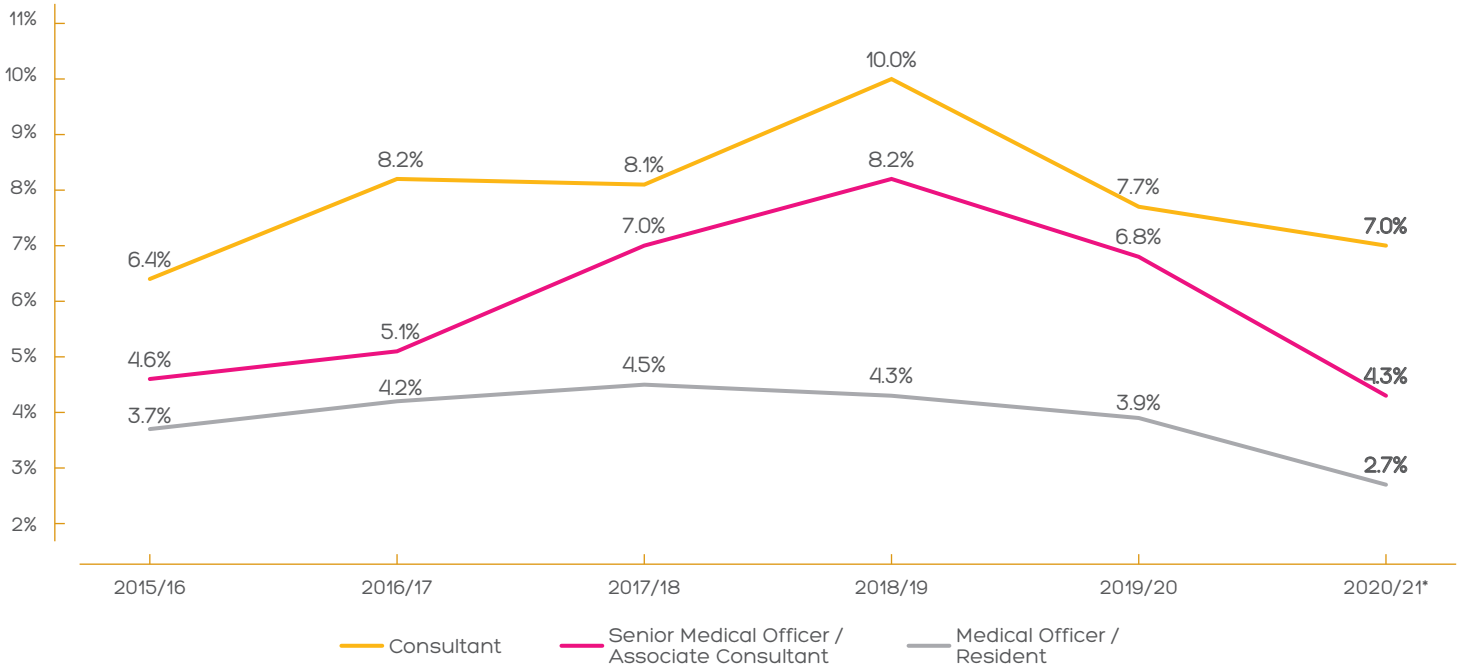
[2] Refers to doctors in the Hospital Authority with Full Registration on the Resident List or Non-resident List.

Sources: Census and Statistics Department, 2019a, 2020a; Hospital Authority, 2021b

The growth rate of public hospital doctors has not matched the upsurge in service demand. Relative to their respective values in 2008/09, the number of public hospital doctors increased **30.1%**, while the accompanying growth in the number of public hospital total discharges and deaths increased **41.3%** by 2020 (Census and Statistics Department, 2019a, 2020a; Hospital Authority, 2021b). This implies that each doctor has had to care for an increasing number of patients over the years that continuously adds to their already heavy workload.

Public hospital doctors are leaving their posts

Appendix 8. **Attrition rate of full time public hospital doctors by rank**[1]



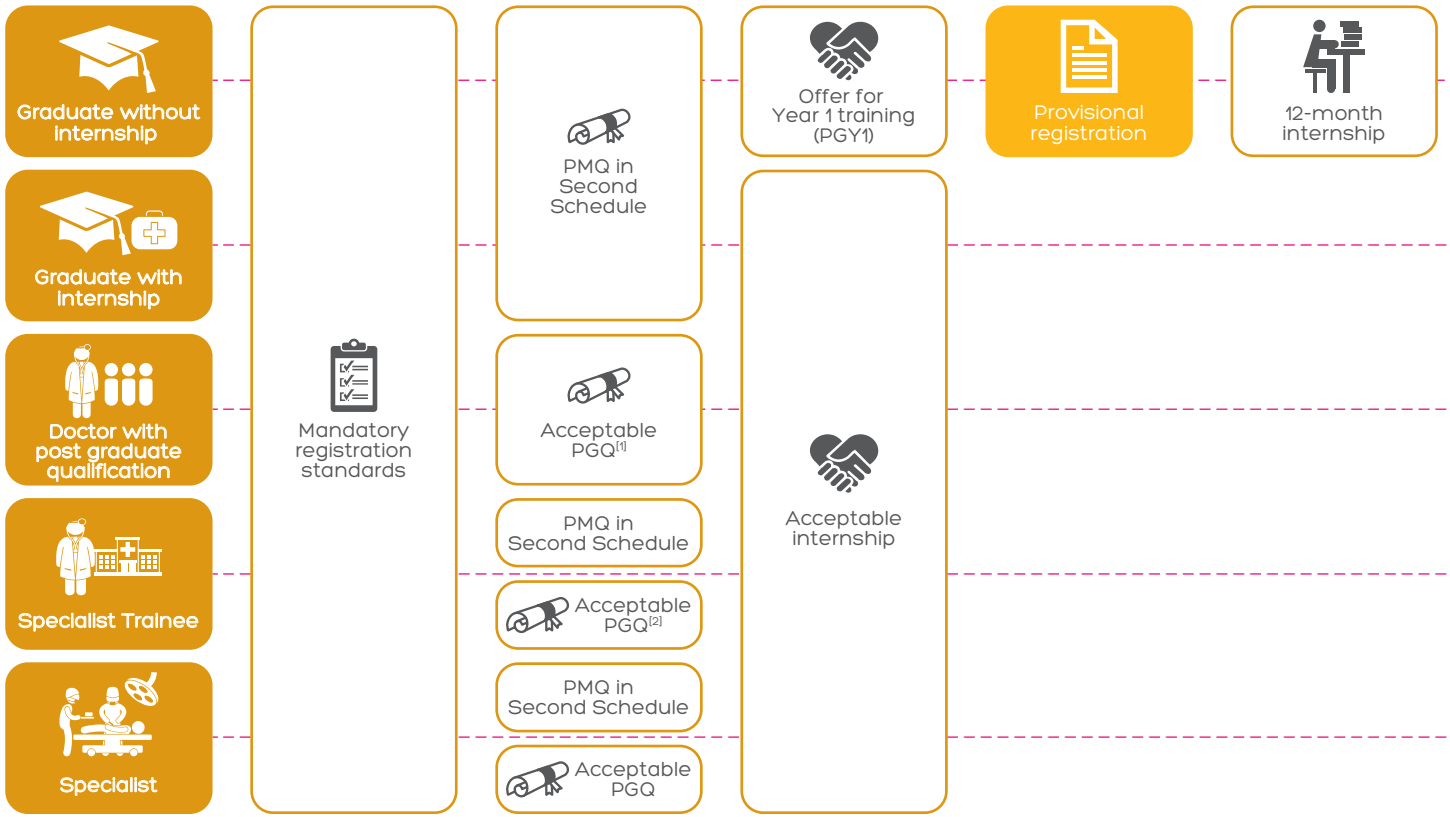
	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21*
Total attrition	4.4%	5.1%	5.8%	6.4%	5.4%	3.9%

Notes: *Provisional figures up to 31 December 2020
[1] Full-time doctors only; Rolling Attrition Rate = Total no. of doctors who left the Hospital Authority in the past 12 months /Average strength in the past 12 months x 100%
Sources: Food and Health Bureau, 2018, 2020, 2021

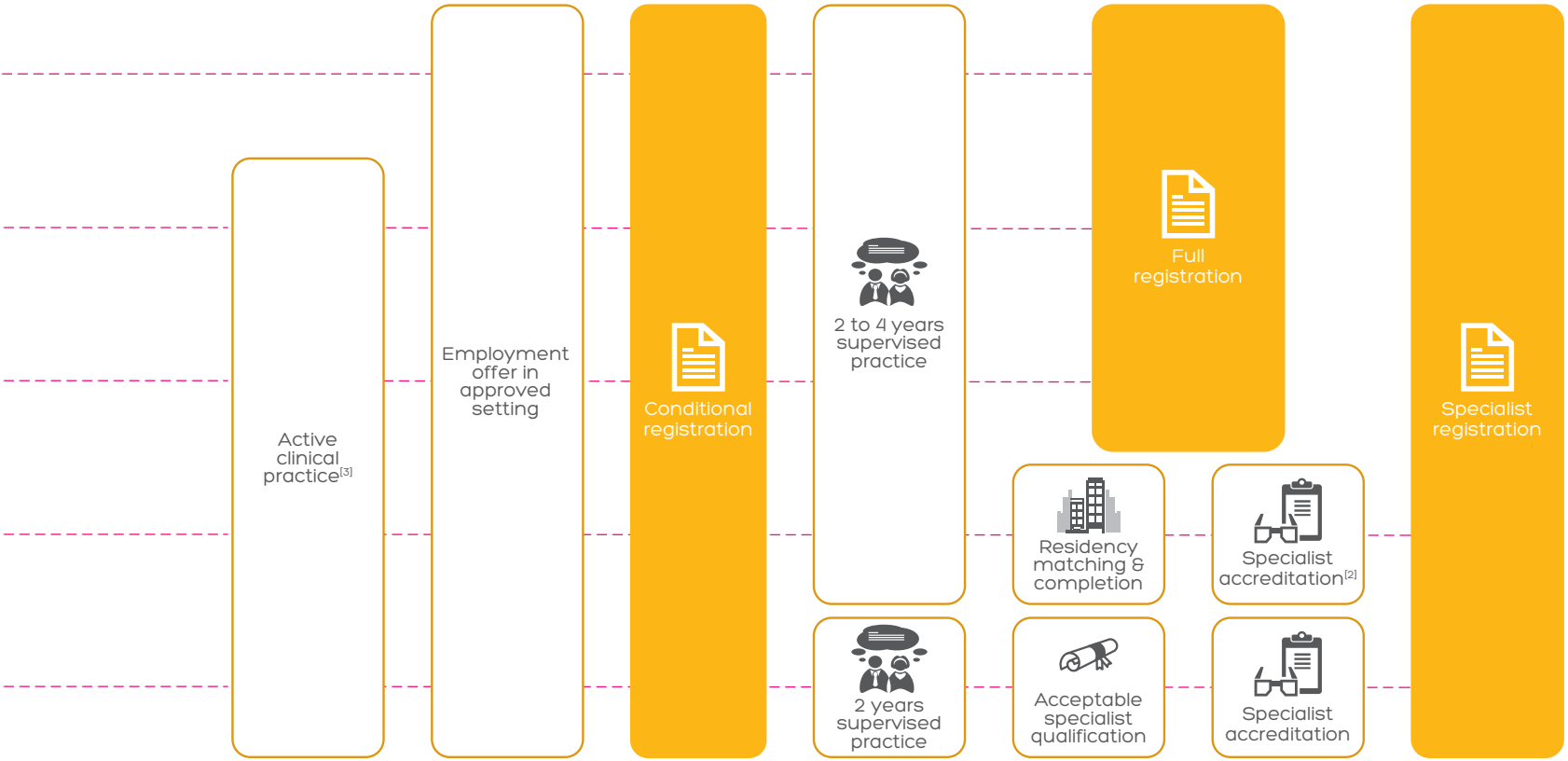
The attrition rate of full-time doctors in the Hospital Authority has been on the rise with an increase observed from an overall 4.4% in 2015/16 to 6.4% in 2018/19. Notably, attrition rates were particularly high among senior grade doctors. For instance, 2018/19 recorded an attrition rate of 10.0% among Consultants and 8.2% among Senior Medical Officers / Associate Consultants (Food and Health Bureau, 2018, 2020). As further observed in 2020/21, the attrition rate was 7.0% for Consultants and 4.3% for Senior Medical Officers / Associate Consultants (Food and Health Bureau, 2021). While doctor supply and retention measures could have contributed to relieving the climbing attrition rates in the public sector, observed declines could also potentially be due to the negative impact of the Covid-19 pandemic that has put stress on the private sector thus diminishing its lure. This decline may therefore only be temporary. If factors such as work overload, poor working environments and other pull factors that attract public hospital doctors to practise in the private sector do not significantly improve, the risk for high attrition rates of public hospital doctors would continue to exist, eventually amounting to a small or no net increase of doctors in public hospitals.

Overview of entry points into Singapore's health system

Appendix 9.



Notes: [1] Refers to a registrable postgraduate Family Medicine qualification and accredited as a Family Physician by the Family Physicians Accreditation Board.
[2] Applicable to candidates that have completed partial training in selected jurisdictions.
[3] Minimum requirement of clinical practice should meet an average of 168 hours per year during the 3 years prior to the registration application.
Sources: SMC, 2018b, 2018d, 2019b, 2019c, 2019e, 2019f, 2020a, 2020c, 2021a, 2021c, 2021d


Active clinical practice[3]
Employment offer in approved setting
Conditional registration
2 to 4 years supervised practice
2 years supervised practice
Residency matching & completion
Acceptable specialist qualification
Full registration
Specialist accreditation[2]
Specialist accreditation
Specialist registration

Singapore has **multiple entry points** for non-locally trained doctors with a range of qualifications to consider for the practice of medicine in Singapore. All doctors irrespective of qualification level must meet the **mandatory registration standards** (SMC, 2020c).

Box 1.1 Mandatory registration standards

1. Be practising as a bona fide medical practitioner currently; and
2. have a job offer or an offer of training position in a healthcare institution approved by the SMC; and
3. be in good standing and does not have any report(s), complaints or disciplinary actions taken against him for professional misconduct or for poor performance, or criminal acts under police or regulatory investigations pending against him; and
4. pass the national licensing examination as required in the country where the primary medical qualification was conferred (if applicable); and
5. hold certificates of registration with other medical licensing authorities (if applicable); and
6. provide evidence of proficiency in English language (if applicable).[11]

Adapted from Singapore Medical Council, 2020c

Medical graduate without internship

Non-local medical graduates **without prior internship** experience can enter Singapore's health system through **provisional registration** (SMC, 2020a). These graduates must have a primary medical qualification[12] from an institution listed on Singapore's Second Schedule. Individuals must apply for provisional registration through a local employer whose hospitals are accredited for the training of PGY1. Thereafter, the provisionally registered doctor may apply for conditional registration after complying with the requirements for conditional registration. **The conditional registration is a unique pathway built specifically for non-locally trained doctors to undertake their practice of medicine in an SMC-approved healthcare institution** under a supervision of a fully registered medical practitioner (SMC, 2019b). Conditionally registered doctors must complete a stipulated minimum period of supervised practice to then become eligible for full registration.

[11] Applicants must show evidence of proficiency in the English language if their qualification is obtained from a medical school where the medium of instruction is not in English.
[12] Refer to as basic medical qualification by the Singapore Medical Council

Medical graduate with internship

Generally, a non-locally trained doctor **with prior internship** can join Singapore's health system directly through **conditional en route to full registration**. Medical graduates with an internship can apply for conditional registration if they have graduated from an institution listed in the Second Schedule, hold a certificate of experience or equivalent as proof of internship period, is currently in active clinical practice, and has been selected for employment in an SMC-approved healthcare institution (SMC, 2019b). To apply for progressing to full registration, conditionally registered doctors (with a non-specialist status) must complete two to four years of supervised practice (two years required only if you are a Singaporean citizen). Thereafter, conditional registered doctors may become eligible for full registration if they fulfil the supervised practice among other prevailing criteria.

Box 1.2 Specific requirements to progress from conditional to full registration

If a conditionally registered doctor is registered by a primary medical qualification from a school listed in the Second Schedule and has not completed PGY1 in Singapore, the satisfactory assessment reports must include:

i) at least 12 months of broad-based practice in General Medicine or Family Medicine; or

ii) 6 months of General Medicine (or Family Medicine) and another 6 months in Internal Medicine related specialties; or

iii) 6 months of General Medicine (or Family Medicine) and another 6 months in any of the following specialties: Emergency Medicine, Obstetrics and Gynaecology, General Surgery, Orthopaedic Surgery or Paediatric Medicine; or

iv) 6 months of clinical posting in a Community Hospital and another 6 months in General Medicine or Family Medicine in an acute hospital.

Adapted from Singapore Medical Council, 2019b

Doctors with postgraduate qualification (non-specialist)

Non-locally trained doctors **with postgraduate qualification (PGQ)** that do not hold a primary medical qualification from institutions listed in the Second Schedule can also enter Singapore's health system through **conditional en route to full registration.** The candidate must have obtained a registrable postgraduate qualification in Family Medicine and be accredited as a Family Physician by the Family Physicians Accreditation Board (SMC, 2019b, 2021c). The minimum period of supervised practice under conditional registration for Family Physicians is two to four years (two years for Singapore citizens) in the new role as a Family Physician. Thereafter, conditionally registered doctors may become eligible for full registration if they fulfil the supervised practice among other performance-related criteria (SMC, 2021a).

Doctors intending to commence or continue specialist training

Non-locally trained doctors who intend to **commence or continue their specialist training** in Singapore can also enter Singapore's health system through **conditional or full registration** (SMC, 2021d). Eligible candidates must secure an offer of employment from the Ministry of Health Holdings or a local healthcare institution. The candidate must be conditionally or fully registered with the SMC at the commencement of their residency. Applicants may opt to apply for two specialties and undergo a series of interviews. The candidates will submit their rankings based on preference and the process of residency matching will be based on available positions per specialty and evaluation based on merit. Moreover, non-locally trained doctors who are specialist trainees in selected jurisdictions (the United States, Australia, New Zealand, Canada, and United Kingdom) can have their training accredited by the Specialist Accreditation Board. The applicants must first apply to a residency programme and thereafter have their training retrospectively accredited. In general, specialist trainees under conditional registration can eventually progress to full registration after completing the minimum period of supervised practice.

Doctors with specialist status

Non-locally trained doctors **with a specialist status** in their respective country of training can enter Singapore's health system through **conditional or full registration** and then have their specialist qualification accredited (SMC, 2018b; SMC, 2019e). For first time applicants, the doctor should apply for conditional registration before applying for specialist accreditation and registration. Conditionally registered specialists can progress to full registration after completing the minimum period of supervised practice. Applicants can refer to a list of post graduate medical qualifications eligible for consideration for conditional registration and must secure an employment offer from Singapore before commencing the process of specialist accreditation (SMC, 2019c, 2019e, 2019f, 2021c).

The process of specialist accreditation requires doctors to have their qualification accredited by the Specialists Accreditation Board and apply for registration with the SMC. The specialty must be listed in the specialties recognised in Singapore and applicants' training experience should be recognised as equivalent to the training in Singapore. Pending on the location of specialist training, the requirements for eligibility of specialist accreditation in Singapore may vary slightly and are clearly stipulated in the Specialist Accreditation Body's website and summarised in **Box 1.3**.

Box 1.3 Requirements for specialist registration

Specialists trained in the United Kingdom, the United States, Australia, New Zealand, Canada and Hong Kong. Postgraduate qualifications or certification of a specialist will be recognised and accredited only if deemed equivalent to that in Singapore training.

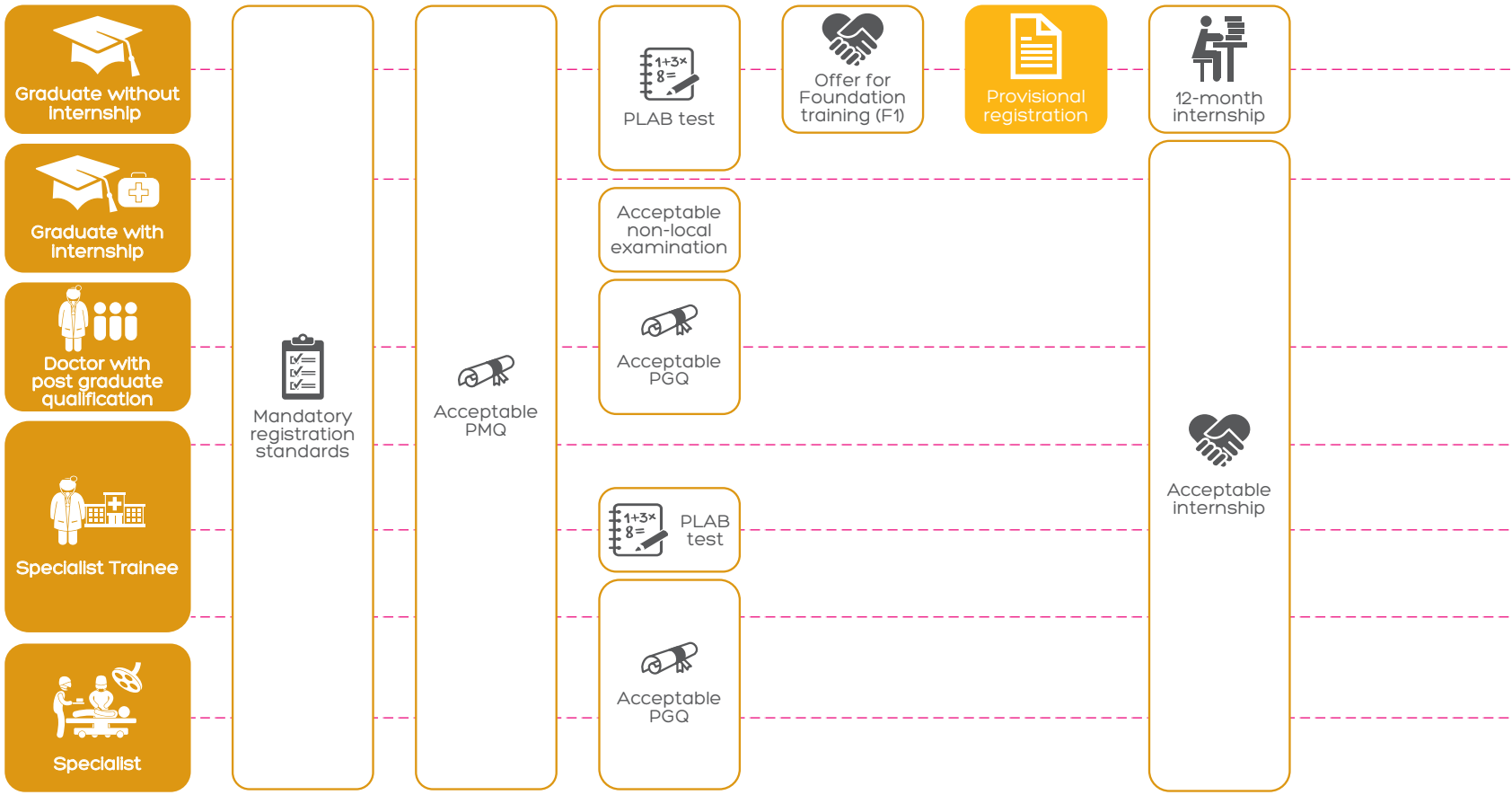
Specialists trained and certified in approved centres in European countries should have a PMQ from a recognised medical school in the Second Schedule and have completed the entire specialist training in a university training hospital(s) of a recognised medical school in the Second Schedule.

Specialists who do not belong to the above two categories will be required to have several years of specialist working experience in public hospitals of adequate size and standing and possess training and experiences equivalent to that in Singapore.

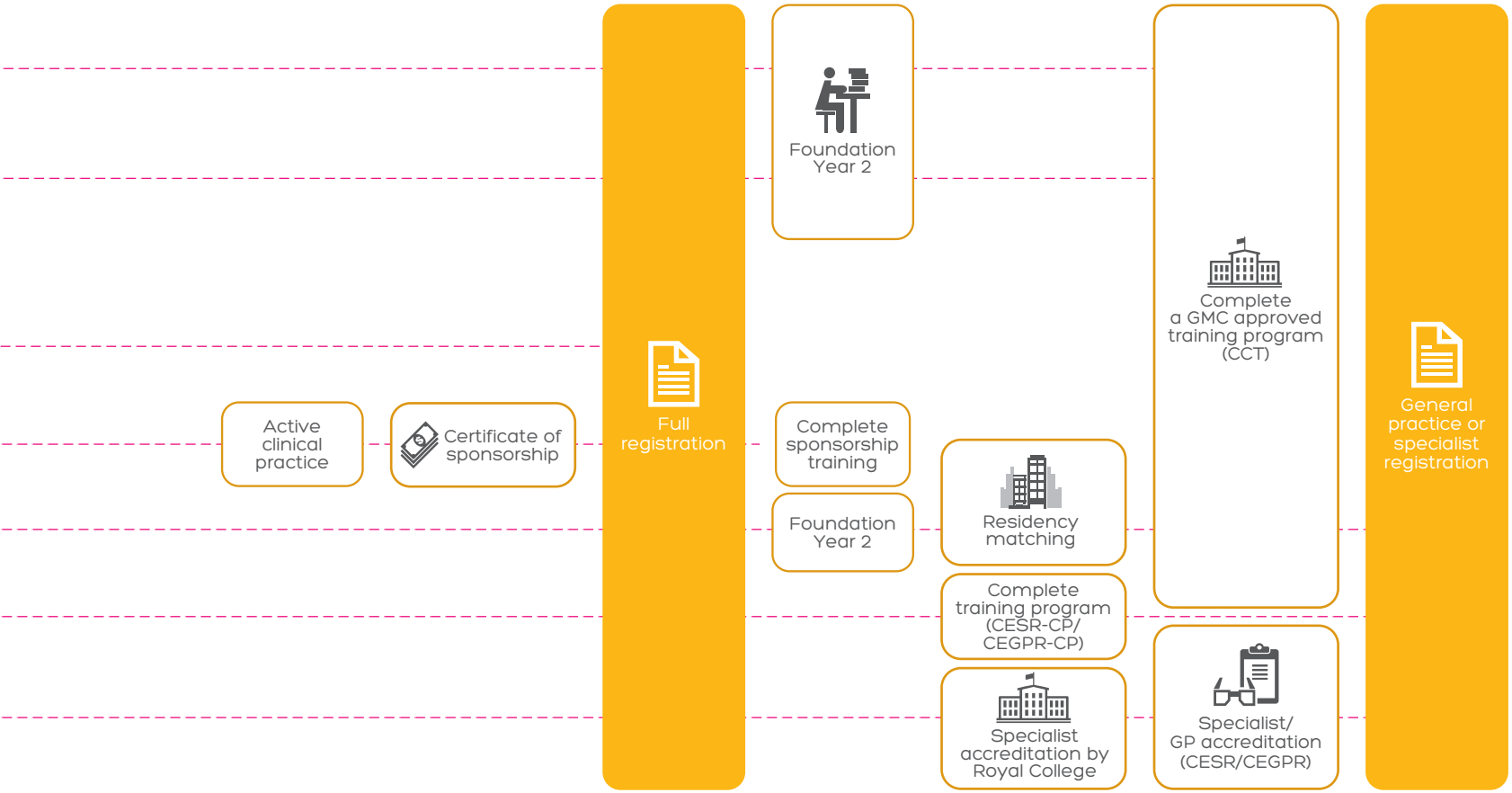
Adapted from Singapore Medical Council, 2019c, 2019e, 2019f

Overview of entry points into the United Kingdom's health system

Appendix 10.



Sources: GMC, 2020, 2021g, 2021h, 2021i, 2021q, 2021r, 2021s, 2021t, 2021u, 2021v, 2021w


Active clinical practice
Certificate of sponsorship
Full registration
Foundation Year 2
Complete sponsorship training
Foundation Year 2
Residency matching
Complete training program (CESR-CP/ CEGPR-CP)
Specialist accreditation by Royal College
Complete a GMC approved training program (CCT)
Specialist/ GP accreditation (CESR/CEGPR)
General practice or specialist registration

United Kingdom has **multiple entry points** for non-locally trained doctors with a range of qualifications to enter the United Kingdom to practise medicine. Prior to applying, all doctors irrespective of qualification levels must meet the **mandatory registration standards** (GMC, 2021q).

Box 2.1 Mandatory registration standards

1. Evidence of English language capacity through a valid IELTs certificate, Occupational English Test certificate, and/or PMQ from a list of universities as accepted evidence; and
2. evidence of fitness to practise, including relevant information regarding health conditions, cautions and convictions, fixed penalty notices, actions taken against the candidate by a medical school or employer, and criminal negligence and medical negligence claims; and
3. verification of PMQ by an institution listed on the World Directory of Medical Schools.

Adapted from General Medical Council, 2021q

Medical graduate without internship

Non-local medical graduates **without prior internship experience** can enter the United Kingdom's health system through **provisional registration**. Candidates that hold a primary medical qualification and have passed both parts of the PLAB test can then enter Foundation Year 1 to complete a 12-month period of internship. Thereafter, candidates can apply for full registration (GMC, 2021g). Doctors may opt to discontinue their training after F1 or continue to progress to Foundation Year 2 and then receive further training in an GMC-approved training programme through the CCT path. This will allow fully registered doctors to then pursue their general practice or specialist training to eventually join the general practice or specialist registers.

Medical graduate with internship

Non-locally trained doctors **with prior internship** can also enter the United Kingdom's health system through **full registration**. The applicant must have an acceptable primary medical qualification, a pass in both parts of the PLAB test, and an acceptable 12-month internship experience to become eligible for full registration (GMC, 2021h). Moreover, doctors who have passed selected non-local registration examinations from the following jurisdictions, the United States, Canada, and Australia, may also apply directly to full registration without sitting the PLAB test. Newly registered doctors under full registration must practise in an approved practice setting. This restriction on the venue of practice remains in place until the first time that a doctor undergoes revalidation, regardless of the doctor was trained in the United Kingdom or elsewhere, unless they are presently on the general practice or specialist registers (GMC, 2021r, 2021s). A doctor with full registration can also pursue further training in the United Kingdom in an GMC-approved training programme through the CCT path to eventually join the general practice or specialist registers.

Doctors with postgraduate qualification (non-specialist)

Non-locally trained doctors **with a postgraduate qualification** can also enter the United Kingdom's health system through **full registration**. The candidate must hold an acceptable primary medical qualification and an acceptable postgraduate qualification to become eligible for full registration (GMC, 2021t). Newly registered doctors under full registration must practise in an approved practice setting. This restriction on the venue of practice remains in place until the first time that a doctor undergoes revalidation.

Doctors intending to commence or continue specialist training

Non-locally trained doctors who intend to **commence or continue their specialist training** can also enter the United Kingdom's health system through **full registration** and subsequently enter a training program through a GMC-approved sponsorship, CCT or CESR/CEGPR (CP) path.

1. Non-locally trained doctors that hold an acceptable primary medical qualification, and have been practising for at least three out of the previous five years, including the most recent 12 months, are eligible to enter a GMC-approved sponsorship from among a list of approved sponsors (GMC, 2021u). The sponsors will aid candidates in applying for full registration first by providing them with a certificate of sponsorship to enable their registration.

2. Non-locally trained doctors intending to commence their specialty or general practice training must hold an acceptable primary medical qualification, pass the PLAB test, and hold an acceptable internship to receive full registration. Thereafter, candidate can apply via the principal pathway known as the CCT path. The training for general practice is comprised of three years while training as a specialist will vary by specialty. After completion of training, doctors will receive a CCT, which will allow them to apply for general practice or specialist registration (GMC, 2021v).

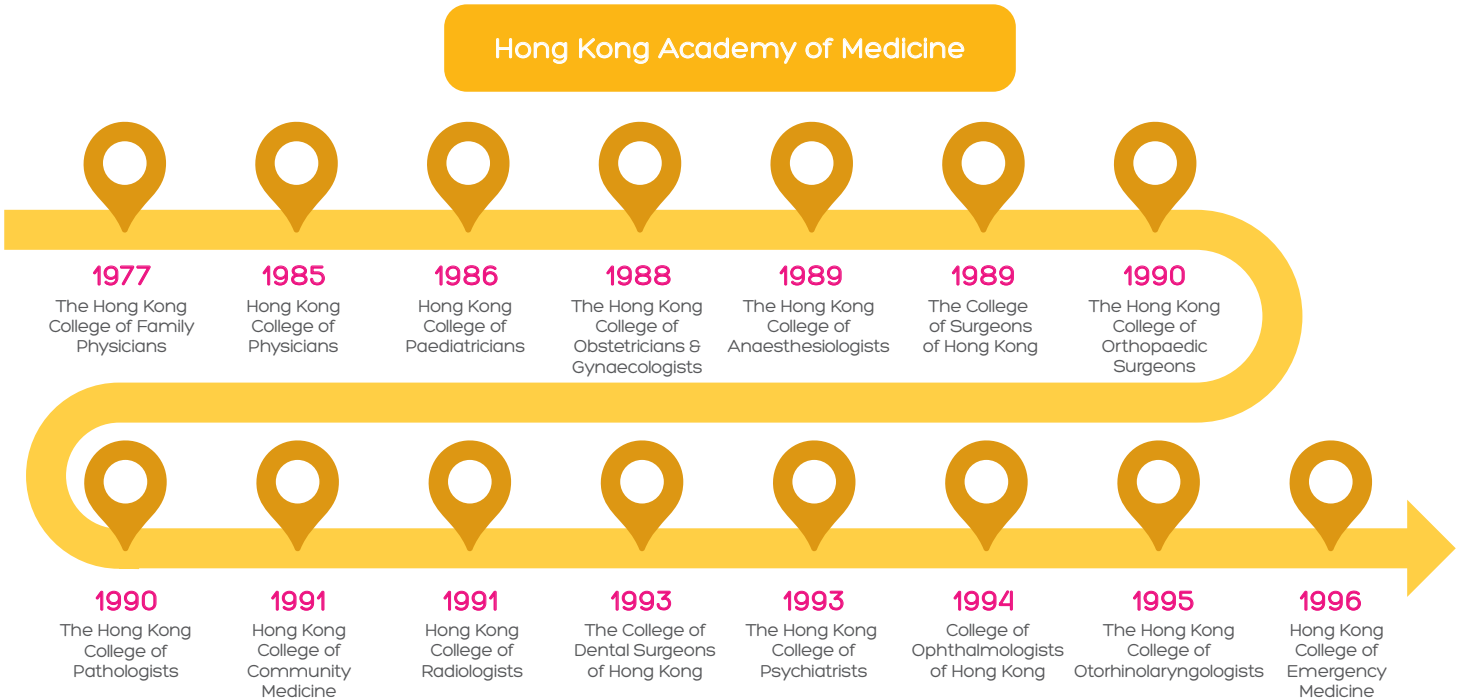
3. Non-locally trained doctors who are specialist trainees in their place of training must hold an acceptable primary medical qualification, an acceptable internship, and an acceptable post graduate qualification to receive full registration. The trainee may continue the remainder of their training in the United Kingdom through the Combined Programme path for specialist training, CESR (CP), or for general practice training, CEGPR (CP) (GMC, 2020). The candidate will be required to prove that they hold the necessary competencies of their peers undergoing the approved training programme at their point of entry. After completion of training, candidates will become eligible for the issue of a CCT. If a doctor has not met the minimum training requirements for the respective specialty, they will not be eligible for a CCT and will instead be granted a CESR or a CEGPR.

Doctors with specialist status

Non-locally trained doctors **with a specialist status** in their respective place of training can enter the United Kingdom's health system through full registration and subsequently apply for general practice or specialist registration. To be eligible for **full registration**, doctors must hold an acceptable primary medical qualification, an acceptable internship, and an acceptable postgraduate qualification. Candidates applying through CESR or CEGPR will apply to the GMC for registration and have their applications vetted through the respective Royal College for evaluation. Candidates must submit evidence that their specialist training matches the CCT curriculum requirements. If their specialty is not a CCT-approved specialty, doctors should find the closest similar CCT-approved specialty and submit evidence of their practice based on the approximate specialty (GMC, 2021w). The GMC will then include successful candidates to either the general practice or specialist registers (GMC, 2021i).

Founding timeline of the Academy Colleges in Hong Kong

Appendix 11.



Sources: HKCPsych, 2021; HKCFP, 2015; HKCP, 2016; HKCPaed, 2020; HKCOG, 2014; HKCA, 2006; CSHK, 2015; HKCOS, n.d.; HKCPath, n.d.; HKCCM, 2009; HKCR, 2021; CDSHK, n.d.; COHK, 2016; HKCORL, 2014; HKCEM, 2006

The **founding timeline of the Academy Colleges** as illustrated in chronological order:

1. **1977** The Hong Kong College of Family Physicians (HKCFP, 2015)
2. **1985** Hong Kong College of Physicians (HKCP, 2016)
3. **1986** Hong Kong College of Paediatricians (HKCPaed, 2020)
4. **1988** The Hong Kong College of Obstetricians and Gynaecologists (HKCOG, 2014)
5. **1989** The Hong Kong College of Anaesthesiologists (HKCA, 2006)
6. **1989** The College of Surgeons of Hong Kong (CSHK, 2015)
7. **1990** The Hong Kong College of Orthopaedic Surgeons (HKCOS, n.d.)
8. **1990** The Hong Kong College of Pathologists (HKCPath, n.d.)
9. **1991** Hong Kong College of Community Medicine (HKCCM, 2009)
10. **1991** Hong Kong College of Radiologists (HKCR, 2021)
11. **1993** The College of Dental Surgeons of Hong Kong (CDSHK, n.d.)
12. **1993** The Hong Kong College of Psychiatrists (HKCPsych, 2021)
13. **1994** College of Ophthalmologists of Hong Kong (COHK, 2016)
14. **1995** The Hong Kong College of Otorhinolaryngologists (HKCORL , 2014)
15. **1996** Hong Kong College of Emergency Medicine (HKCEM, 2006)

Top medical schools in 2021

Appendix 12.

Institute	Location	QS ranking	Times Higher Education ranking	Listed in Singapore Second Schedule
Harvard University	United States	1	2	√
University of Oxford	United Kingdom	2	1	√
Stanford University	United States	3	5	√
University of Cambridge	United Kingdom	4	3	√
Johns Hopkins University	United States	5	8	√
Karolinska Institutet	Sweden	6	10	√
University of California, Los Angeles	United States	7	14	√
Yale University	United States	8	7	√
University College London	United Kingdom	9	9	√
Imperial College London	United Kingdom	10	4	√
Massachusetts Institute of Technology	United States	11	N/A	N/A
University of California, San Francisco	United States	12	N/A	√
Columbia University	United States	13	15	√
University of Toronto	Canada	14	6	√
University of Pennsylvania	United States	15	17	√
Duke University	United States	16	19	√
King's College London	United Kingdom	17	16	√
The University of Melbourne	Australia	18	11	√
The University of Sydney	Australia	19	35	√
University of Washington	United States	20	20	√
University of Edinburgh	United Kingdom	21	21	√
University of Michigan – Ann Arbor	United States	22	21	√

Institute	Location	QS ranking	Times Higher Education ranking	Listed in Singapore Second Schedule
London School of Hygiene and Tropical Medicine	United Kingdom	23	N/A	N/A
National University of Singapore	Singapore	24	18	N/A
McGill University	Canada	25	24	√
University of California, San Diego	United States	26	30	√
University of Chicago	United States	27	24	√
Seoul National University	South Korea	28	37	√
University of Tokyo	Japan	29	27	√
Ruprecht-Karls-Universität Heidelberg	Germany	30	N/A	√
University of British Columbia	Canada	31	39	√
University of Amsterdam	Netherlands	32	60	√
Cornell University	United States	33	N/A	√
New York University	United States	33	46	√
Erasmus University Rotterdam	Netherlands	35	62	√
Monash University	Australia	36	31	√
Washington University in St. Louis	United States	36	26	√
The University of Manchester	United Kingdom	38	52	√
The University of Hong Kong	Hong Kong	39	28	√
The Chinese University of Hong Kong	Hong Kong	40	49	√
McMaster University	Canada	41	11	√
University of Copenhagen	Denmark	41	76	N/A
Ludwig-Maximilians-Universität München	Germany	43	N/A	√
Sorbonne University	France	44	66	√

Institute	Location	QS ranking	Times Higher Education ranking	Listed in Singapore Second Schedule
The University of New South Wales	Australia	45	57	√
University of Pittsburgh	United States	46	50	√
Baylor College of Medicine	United States	47	N/A	√
University of Glasgow	United Kingdom	47	54	√
Emory University	United States	49	42	√
National Taiwan University (NTU)	Taiwan	49	48	√
KU Leuven	Belgium	51	46	√
Northwestern University	United States	51	34	√
The University of Queensland	Australia	51	54	√
Kyoto University	Japan	54	23	√
Boston University	United States	55	38	√
Peking University	China	56	29	√
The University of Texas M.D. Anderson Cancer Center	United States	57	126-150	N/A
Charité - Universitätsmedizin Berlin	Germany	58	43	√
Mayo Medical School	United States	58	N/A	√
Sungkyunkwan University (SKKU)	South Korea	60	41	N/A
University of Zurich	Switzerland	61	70	√
Utrecht University	Netherlands	62	98	√
Queen Mary University of London	United Kingdom	63	64	√
Universitat de Barcelona	Spain	64	101-125	√
University of Bristol	United Kingdom	64	63	√
Universite de Montreal	Canada	66	65	√

Institute	Location	QS ranking	Times Higher Education ranking	Listed in Singapore Second Schedule
Maastricht University	Netherlands	67	70	N/A
Technical University of Munich	Germany	67	56	N/A
ETH Zurich-Swiss Federal Institute of Technology	Switzerland	69	40	N/A
Leiden University	Netherlands	69	72	√
University of Birmingham	United Kingdom	71	101-125	√
Lund University	Sweden	72	101-125	√
University of Milan	Italy	72	151-175	N/A
Fudan University	China	74	44	√
Vanderbilt University	United States	74	58	√
University of Groningen	Netherlands	76	83	N/A
Medical University of Vienna	Austria	77	101-125	N/A
Alma Mater Studiorum - University of Bologna	Italy	78	126-150	N/A
Newcastle University	United Kingdom	79	126-150	N/A
Shanghai Jiao Tong University	China	80	96	√
University of Helsinki	Finland	80	94	√
Brown University	United States	82	52	√
Icahn School of Medicine at Mount Sinai	United States	82	N/A	√
The Ohio State Univeristy	United States	84	82	√
The University of Texas Southwestern Medical Center at Dallas	United States	85	N/A	N/A
Universidade de Sao Paulo	Brazil	85	74	N/A
University of Cape Town	South Africa	87	66	N/A
University of Southampton	United Kingdom	88	101-125	√

Institute	Location	QS ranking	Times Higher Education ranking	Listed in Singapore Second Schedule
Nanyang Technological University, Singapore (NTU)	Singapore	89	101-125	N/A
University of Calgary	Canada	89	126-150	√
Yonsei University	South Korea	89	61	√
The Australian National University	Australia	92	73	√
University of Alberta	Canada	92	78	√
Uppsala University	Sweden	92	101-125	√
University of Basel	Switzerland	95	101-125	√
University of Geneva	Switzerland	96	126-150	√
University of Oslo	Norway	96	126-150	N/A
Osaka University	Japan	98	101-125	√
University of Leeds	United Kingdom	98	176-200	N/A
University of Southern California	United States	98	51	√

Sources: QS World University Rankings, 2021; Times Higher Education, 2021; SMC, 2019d

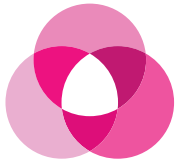
The table lists out the **top 100 medical schools in 2021** ranked primarily by QS World University Ranking by the subject of medicine (QS World University Rankings, 2021). The list was cross compared with the rankings provided by Times Higher Education for respective institutions for the subject of medicine in 2021 (Times Higher Education, 2021). The respective institutions on the list were also cross-checked with the list of institutions stipulated under Singapore's Second Schedule from which medical qualifications are deemed acceptable for medical registration in Singapore (SMC, 2019d). The University of Hong Kong and The Chinese University of Hong Kong also ranked in the top 50 schools listed in both the QS World University Ranking and Times Higher Education ranking. Both local universities are also listed in the Second Schedule.

Synopsis of thematic coding and sample quotations

Appendix 13. **Overview of thematic analysis**

12
Transcripts

28
Codes

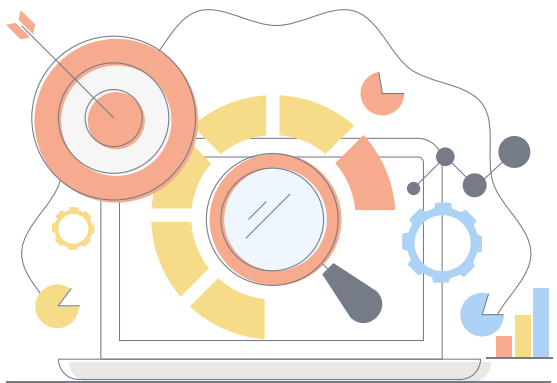


6
Themes

To complement the quantitative survey results, a thematic analysis was conducted to provide qualitative insights into the semi-structured interviews. The analysis reviewed **12 transcripts**, identified a **total of 28 codes**, and further delineated **six themes**.

The semi-structured interviews were audio-recorded and transcribed verbatim. Atlas.ti, a software indexing system, was used for transcript analysis. An iterative data analysis approach was conducted where data analysis took place concurrently with data collection. In parallel, the primary researcher identified relevant quotations, labeled the quotations with codes in each transcript, arranged the codes into themes, and organised themes into a coherent narrative. A team of researchers reached consensus on the finalised code list. A second researcher also completed the full transcription process separately to assess and confirm coding interpretation.

The final output is summarised in the following table encompassing the major themes identified, codes generated, corresponding sample quotations, and the number of respondents and total number of quotations for each unique code.



Theme	Code	Sample Quotation	Number of Respondents	Number of Quotations
Theme #1 **Perception towards doctor manpower concerns in Hong Kong's public sector**	Observation of high attrition from the public to private sector	"Yes, I think [non-locally trained doctors will] definitely help….[I feel that there is a lot of attrition from the public hospitals to private hospitals] …I know that every year there were some doctors from [HKU] or CUHK, or [the Hospital Authority], they will come out and work in the private sectors."	8	13
	Personal experience of doctor manpower shortage	"In [the] private sector I've got no idea because I never worked in there. But I think in [the] public sector, yes. The amount of time we spend per patient I think you always see on the news is not as many as everyone would prefer. I easily hear some of my medical colleagues say, '**I've got 35 patients in my outpatient clinics**.'"	8	16
	Perceived heavy workload as a result of structural and demographic constraints	"Well, the **population is certainly growing**. And they're ageing, and we're not even at the peak yet. So, **we are overworked all the time** and **the ratio between doctor and patient is very low** in Hong Kong. And to be honest, the **private service is very pricey**. It's not affordable for the majority of people..."	7	22
	Expressed recognition of the Hospital Authority's recent efforts to improve manpower constraints	"…There might be things that the [Hospital Authority] can look into as well. And I'm sure they are trying to... I'm sure they can see the problem and are **trying to work a solution**, but it's probably not a very easy solution."	5	7

Theme	Code	Sample Quotation	Number of Respondents	Number of Quotations
Theme #2 **Motivations for relocation and initial impression of employment in Hong Kong**	Identified family ties as a primary pull factor to relocate	"**Mainly it's my parents**. When I see my parents getting old, it's just... sometimes in life you only have that short window. Ten years down the line, my parents may not even be able to entertain me or they may not even exist. It really depends. I think life is quite unpredictable. So this is actually **one of the main reasons that drive me back [to] Hong Kong**, to be honest."	10	21
	Identified community ties as a pull factor to relocate	"Because **I was born in Hong Kong**, I grew up here and got **my family network over here**, also **some of my friends are still in Hong Kong**, so **I got a good community here**. At that time I've got two young children. One of them was only a few months old, so we thought, family support is quite important at that time. And the children wanted to see the grandparents more and we also have the siblings. So that's **why we chose Hong Kong**."	8	10
	Expressed satisfaction towards attractive salary	"In terms of pay I think it's quite attractive."	6	7
	Experienced positive integration into workplace	"I think when I work as well, **my colleagues [are] very supportive**. Obviously coming from [outside of Hong Kong]... there's things you have to get used to, how people normally deal with this stuff, how people do that stuff, it's slightly different. **The colleagues are supportive**. I think workwise, it's similar."	8	11
	Expressed gratitude to employers for support in streamlining part of the registration procedure	"…when I first came back…**the registration part is very streamlined**. I'm sure in the [Hospital Authority] office they've been doing a lot of these so they're very helpful."	6	8
Theme #3 **Perception towards Limited Registration and licensing requirements in Hong Kong**	Anxiety towards job security and career progression under Limited Registration	"…**job security is main thing**…The concern I have is that 3 years down the line, if this doesn't work out. Let's say [the Hospital Authority] will say, 'Well, I don't quite need you anymore.' **I've got no options. I can't work anywhere else in Hong Kong**…But for me, this is my only job, this is the only medical job I can do in Hong Kong..."	8	21

Theme	Code	Sample Quotation	Number of Respondents	Number of Quotations
	Concerns toward restricted opportunities for fresh graduates and junior doctors	"[I]n Hospital Authority they shouldn't just hire people with intermediate qualifications…**most of the doctors who want to come back here should be, like, at the beginning of their career, before they establish a career** profile in another country. These people usually would be very motivated to come here..."	3	7
	Expressed lack of transparency on level of the Licensing Examination (depth)	"I'm not sure what they claim. I don't know... I might not be informed, **but I don't know of a specific level they're trying to attain**. I don't think they made a clear indication that they're attaining a medical school level or a specialist."	5	10
	Experienced lack of support for the Licensing Examination	"They also **didn't provide any ideas on what materials you should use to study from**. These kinds of things are important. [Study guides] are quite country-specific…If you end up choosing one [study strategy], maybe the completely wrong [strategy], you may end up wasting a lot of time …the other thing is, **you have to come to Hong Kong to do the examination**."	10	21
	Perceived atypical marking practices for the Licensing Examination	"…for the clinical exam **the marking criteria, the passing criteria are not open...** So, this is something that makes candidates **unsure on how they should perform to pass the examination... You have to pass 4 examinations to pass 1 examination**. It's different because if you fail part of the examination they say, 'You failed the examination.'"	8	11
	Expressed lengthy preparation time for the Licensing Examination due to wide coverage of syllabus (breath)	"I felt that I **did not have enough time to study** because I need to work as well at the time. I felt that it was quite difficult, actually, because **it's quite broad**. It's very broad."	6	11
	Questioned the applicability of the Licensing Examination coverage and the scope of clinical aptitude of a specialist	"So that's **basically set a blanket wall for everyone...**There's quite a bit of specific knowledge that you have to attain to be able to pass this [Examination]. And it's a very broad exam. And **when you're specialised or subspecialised in a certain field**, you've lost a lot of the basic knowledge...And six months of my time [preparing for the Examination], I could have been doing other research or something that would really advance my career, whereas **this wasn't any sort of any advancement** [sic]."	6	13
	Questioned the purpose of a period of assessment (post-examination internship) for doctors with local experience	"For me, they've imported me as a Limited Registration [doctor]… They didn't give me any specific orientation but allowed me to work in [the] Hospital Authority…after I **worked a year and a half in the public hospital, why do I have to go back and do internship now**?"	6	20

Theme	Code	Sample Quotation	Number of Respondents	Number of Quotations
Theme #4 **Perception towards specialist training opportunities in Hong Kong**	Expressed concern towards lack of trainee position impeding career prospects and willingness to return	"At a training post…you will become an Associate Consultant…So, in order to attract more [non-local] doctors to come back to Hong Kong, you **need to open up these [service] posts as training posts**. Even though the contract says, 'service post' the [Academy] Colleges have to open it…[for] trainees."	6	11
	Experienced lack of transparency on guidelines for recognition by the Academy Colleges	"The **main problem is getting any useful information from the [Academy College]** as to how I can use my previous training in the UK, what I need to do to get that recognised and become a member of the College. It **took many, many months actually to get to the stage where I could submit my documents**."	5	12
	Expressed concern towards length of specialist training exceeding employment period	"…the **training takes more than 2 or 3 years**, and then... now I [am in] higher training... So I am worried about if they'll allow me to … take the examination...[If the examination date is after the contract period], I could not take the examination."	4	5
Theme #5 **Perception towards recognition of specialist qualifications in Hong Kong**	Observed mismatch of specialist qualifications and occupational rank	"They are already registered as specialist in Australia, so this is not an intermediate qualification, **but the Hospital Authority treats it as intermediate qualification**, which means they downgrade them. So, this is not acceptable, and people would not come for that reason…"	4	9
	Expressed discontent towards not receiving formal recognition as a practicing specialist in Hong Kong	"... If I go back to [the] UK, that's my issue…they might say, 'Well, actually were you practicing as a specialist in Hong Kong at that time?' Then the answer is yes, but **then can I provide proof? Then the answer is no**."	3	10
	Perceived recognition practices across the Academy Colleges as discouraging	"…I know people who are at the Consultant level in UK, they have **passed…the Fellowship of the Royal College of Surgeons of Edinburgh**, in the UK. In fact there is a very nice man…He still had to go through the **basic surgical training**. He might get away with the intermediate [examinations] but not the hours. He had to clock his hours. That would explain **why I have changed my specialty**."	6	14
	Observed instances of mandatory re-training after retrospective accreditation by the Academy Colleges	"…I do have colleagues from, like, say, from America or, say, from the Netherlands. They already are specialists in their country, and they just come here... they **still need to sit their Exit [Examination],** they still **need to go through the process of physician training before they get to the specialist status."**	5	12

Theme	Code	Sample Quotation	Number of Respondents	Number of Quotations
	Perceived uncertainty towards Certification for Specialist Registration Pathway	"Because the other alternative, I understand you can actually pay for the HKD 20,000 or 30,000, give them all your documentation and see whether they recognise you as a specialist or not. **But then the process is not very transparent**. So it's difficult to know whether they would accept it or not."	3	6
Theme #6 **Perception towards Hong Kong's overall hiring and verification processes**	Perceived unattractive recruitment measures	"But then I don't think Hong Kong is very proactive in terms of advertising for [non-local] doctors to come. So **you don't actually feel that welcomed… [however] other countries…seem to be very supportive**. So apart from organising your work,… they will support [you in] how to apply for a working visa and accommodation and benefits and stuff like that…So [Hong Kong] is **not very proactive to try to get people to come** [sic]."	9	20
	Expressed frustration towards prolonged and outdated medical credentials verification processes	"...this is just **a very old-fashioned way of doing things and very counterproductive**. Also, they need the university to have a stamp onto the form to say that you have studied here …in addition to the notarised copy of the transcript and your degree, which is quite duplicated, and it creates an unnecessary disturbance...it's just like a **daunting experience for all people who apply**."	9	18
	Experienced long wait time to officially secure employment	"But it took me **more than one year from the time I post my application to [the] Department of Health, up to now when I just started my new job...** Yes, because I applied … in 2018… And then I got the interview offer in January 2019... And I heard from them that I got a conditional job offer in May…I applied for the Limited Registration in June, and then I knew that I got my Limited Registration successfully in September. And I started my job in November. **So it took me more than one year**."	6	8

List of Abbreviations

A & E
Accident and Emergency

AMC
Australian Medical Council

CAT
Computer Adaptive Test

CCT
Certificate of Completion of Training

CDSHK
The College of Dental Surgeons of Hong Kong

CEGPR
Certificate of Eligibility for General Practitioner Registration

CEGPR(CP)
Certificate of Eligibility for General Practitioner Registration through the Combined Programme

CESR
Certificate of Eligibility for Specialist Registration

CESR(CP)
Certificate of Eligibility for Specialist Registration through the Combined Programme

COHK
College of Ophthalmologists of Hong Kong

CSHK
The College of Surgeons of Hong Kong

CSR
Certification for Specialist Registration

DH
Department of Health

EAC
Education and Accreditation Committee

ECFMG
Educational Commission for Foreign Medical Graduates

EPIC
Electronic Portfolio of International Credentials

F1
Foundation Year 1

F2
Foundation Year 2

FHB
Food and Health Bureau

GMC
General Medical Council

GP
General Practice

HA
Hospital Authority

HKAM
Hong Kong Academy of Medicine

HKCA
The Hong Kong College of Anaesthesiologists

HKCCM
Hong Kong College of Community Medicine

HKCEM
Hong Kong College of Emergency Medicine

HKCFP
The Hong Kong College of Family Physicians

HKCOG
The Hong Kong College of Obstetricians and Gynaecologists

HKCORL
The Hong Kong College of Otorhinolaryngologists

HKCOS
The Hong Kong College of Orthopaedic Surgeons

HKCP
Hong Kong College of Physicians

HKCPaed
Hong Kong College of Paediatricians

HKCPath
The Hong Kong College of Pathologists

HKCPsych
The Hong Kong College of Psychiatrists

HKCR
Hong Kong College of Radiologists

HKD
Hong Kong Dollar

HKSARG
The Hong Kong Special Administrative Region Government

LEIP
Licensing Examination Information Portal

IELTS
International English Language Testing System

MCHK
Medical Council of Hong Kong

MCQ
Multiple-Choice Question

MRO
Medical Registration Ordinance

NHS
National Health Service

OECD
Organisation for Economic Cooperation and Development

OHKF
Our Hong Kong Foundation

PEG
Pre-Employment Grant

PGY1
Postgraduate Year 1

PLAB
Professional and Linguistic Assessment Boards

PMETB
Postgraduate Medical Education and Training Board

PMQ
Primary Medical Qualification

PGQ
Postgraduate Qualification

RCSEd
Royal College of Surgeons of Edinburgh

SAB
Specialists Accreditation Board

SDG
Sustainable Development Goal

SMC
Singapore Medical Council

SOL
Shortage Occupation List

SRRS
Special Retired and Rehire Scheme

THS
Thematic Household Survey

UK
United Kingdom

UKMLA
United Kingdom Medical Licensing Assessment

US
United States

USMLE
United States Medical Licensing Examination

WBA
Workplace-Based Assessment

WHO
World Health Organization

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