Health System Capacity Constraints- The Severe Shortage of Doctors in Hong Kong Public Hospitals

Executive Summary

OUR HONG KONG FOUNDATION
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Our Hong Kong Foundation has actively been advocating for the need to improve our ailing health system to make it fit for purpose in the 21st century. We previously launched a health policy research report that looks into how Hong Kong's health system can prepare and adapt in the face of (a) an ageing population and (b) the growing burden of chronic diseases that have become more prevalent among younger generations. We advocate for system-wide changes to be developed, designed and implemented in moving towards a primary care-led, integrated, person-centred health system that adequately meets the healthcare needs of our population.

Amidst the many challenges faced by our health system, the issue of shortage of doctors remains unresolved and has once again resurfaced in the public arena causing widespread concerns. Particularly in the public sector, the severe shortage of doctors contributes to the challenge of timely access to quality healthcare for our local population and immediate action needs to be taken. While the current study puts focus on the critical doctor shortage issue in Hong Kong, we recognise that many other aspects of our health system need enhancement for a good health ecosystem and these will be addressed in future reports.

1. Hong Kong's health system is challenged by the severe shortage of doctors

i. Sufficient healthcare manpower is fundamental in a well-functioning health system that provides timely and appropriate care to meet healthcare needs of the population. However, in the city's first comprehensive healthcare manpower review by the Food and Health Bureau (2017), **projections forecasted a shortfall of approximately 500 doctors by 2020 and 1,007 by 2030.** Notably, these projections assumed the maintenance of the 2015 standard of health services provision (and various other assumptions that may not be realistic), a standard characterised by chronically overloaded public hospital wards manned by chronically overworked doctors. As we work to move away from this standard of care, the projected shortfalls are clearly underestimated.

ii. In 2017, our population of close to 7.4 million people was served by 14,290 fully registered doctors, equating to having approximately 1.9 doctors for every 1,000 people in Hong Kong. This number is well below the Organisation for Economic Cooperation and Development (OECD) average of 3.4 and we lag behind international peers including Singapore (2.4). In other words, **Hong Kong needs an addition of approximately 3,000 doctors to catch up with Singapore, and approximately 10,000 doctors to catch up with other well-developed regions.** This shortfall would continue to worsen if we do not increase the number of doctors in the public sector on a massive scale very quickly. In tackling a shortage of doctors, reference could be made to Singapore- a place with fewer doctors per 1,000 population than Hong Kong in 2008 but subsequently increased the total number of doctors by 70% to surpass Hong Kong in less than a decade.

2. The severe shortage of doctors is exacerbated by a rapidly ageing population and the growing burden of chronic diseases

i. **Hong Kong is home to a rapidly ageing population.** The percentage of our population aged 65 years or above is expected to double from 15.9% in 2016 to 29.1% in 2036 (representing an increase of approximately 1.2 million people). This wave of ageing of the baby boomers cohort is just at the beginning phase and the speed of population ageing in the next two decades is expected to increase.

ii. **Ageing population and the more profound complexity of illnesses among the elderly 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 2016, every 1,000 people aged 65 years or above required 10.5 beds compared to 1.9 required by every 1,000 aged below 65 years. The ratio was 15.7 for every 1,000 aged 75 years or above. In other words, each of the abovementioned 1.2 million additional people aged 65 years or above would require 5 times as much of medical resources than those aged below 65 years.

iii. **Alongside ageing population is the rising prevalence of chronic diseases that adds to the burden of our already ailing health system.** Thematic Household Survey data shows that in 2017, the prevalence of reported chronic diseases increased in every age group compared to that observed in 2000. Notably, the prevalence increase in younger age groups hints at an earlier onset of chronic conditions. Adding to the burden on our health system are those with multiple chronic diseases and more complex health conditions.

iv. Regardless of how we size the current shortage (not to mention the massive needs in the next decade), the current shortage of doctors is well above the number estimated by the Government and is in the thousands, not the hundreds. As the health needs of our population are becoming increasingly difficult to meet, the number of doctors for every 1,000 people aged 65 years or above has dropped from 13.9 in 2000 to 11.8 in 2017. Concurrently, the number of doctors for every 1,000 people with chronic diseases dropped from 11.7 in 2000 to 7.2 in 2017. **We estimate that Hong Kong will need an addition of at least 2,000 and 9,000 doctors, respectively, to bring the ratios back to the ones observed in 2000.**

3. Hanging on a rope stretched too thin — our public healthcare system is on the verge of collapse

i. Our public hospitals provide over 80% and over 90% of all inpatient bed days for the entire population and for those aged 65 years or above, respectively. They are, however, staffed with just close to 50% of active doctors in Hong Kong.

ii. Although the number of public hospital doctors increased by 24% between 2008 and 2017, the growth in the number of public hospital inpatient and day inpatient discharges and deaths was 43% — nearly double. **The growth rate of public hospital doctors did not match the upsurge in service demand and workload.** As a result, each doctor has been having to care for an increasing number of patients that add to their already heavy workload.

iii. The situation is likely to worsen. Based on current healthcare utilisation patterns and population projections, the number of public hospital inpatient bed days utilised by those aged 65 years or above is projected to increase from the current 50% to more than 70% by 2036. **Ageing clearly contributes to a substantially heavier burden on our already overloaded public healthcare system.**

iv. **There has been a distinct uptrend of health insurance expenditures over the past decade, hinting at the general growth and the potentially increasing attractiveness of working in the private sector.** Among many other indicators, expenditures via privately purchased and employer-based insurance schemes increased 335% from HKD 5.3 billion in 2001-02 to HKD 23.3 billion in 2016-17. However, over the same period, the ratio of inpatients taken care of by public and private hospitals stayed roughly unchanged, which implies that even though there are more financial resources available in private sector, the workload of public hospitals has not lessened. As 'pull factors' from the private sector increase and public hospitals continue to be overloaded, an ever-worsening doctor shortage situation, particularly in the public sector, becomes likely.

v. **Further worsening the crisis is the increase in attrition of public hospital doctors that is fast catching up with the intake of doctors in public hospitals.** In 2016-17, an intake of 467 full-time and part-time doctors in public hospitals was observed and 337 were lost to attrition in the same period. Among the doctors lost to attrition, some were lost due to retirement (and this retirement wave has just begun), while others were potentially lost to attrition to the private sector. If attrition of public hospital doctors continues to increase due to factors such as work overload, stress and other 'pull factors' that may attract them to practice in the private sector, then even a greater intake of doctors would amount to no, or slow net increase of doctors in public hospitals. This vicious cycle would mean that the chronic shortage of public hospital doctors will remain unresolved and would get worse very quickly as our population ages and chronic diseases become more prevalent.

4. There is an urgent need to become more receptive towards augmenting the role of foreign-trained doctors

i. To stand a chance at ameliorating this undesirable and unsustainable reality, evaluating the *supply* of doctors is a must. **Scattered efforts have been made to address the shortage in doctors, albeit evidently, with limited effectiveness since the shortage of doctors are in the thousands, not the hundreds.** For instance, 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. The number will further increase by 60 each year in the 2019-20 to 2021-22 UGC triennium. Meanwhile, the Medical Council of Hong Kong (MCHK) increased the frequency of the Licensing Examination from one to two sittings in 2014, and in 2016 introduced flexible arrangements for the post-Licensing Examination internship requirement. In 2018, the Government extended the validity and renewal period of limited registration from not exceeding 1 year to not exceeding 3 years. In effort to specifically address the shortage of doctors in our public healthcare system, the Hospital Authority (HA) introduced the 'Special Retired and Rehire Scheme' in 2015-16 to rehire healthcare professionals after their retirement. As of 31st December 2018, 61 doctors continued to work under the scheme at the HA. The HA also set a higher retirement age for new recruits employed from June 2015 onwards, and increased the Special Honorarium Scheme (SHS) allowance by 10% for frontline medical staff in January 2019. Still, despite all these efforts, we continue to face a doctor shortage crisis.

ii. System-level changes to the distribution and skill-mix of our healthcare workforce are fundamental in moving towards a primary care-led, integrated, person-centred health system and will contribute to relieving the doctor shortage crisis. Still, these changes will only happen over an extended period of time while immediate action needs to be taken to address our doctor shortage crisis. **Thus, it is our view that due consideration needs to be given to augmenting the role of foreign-trained doctors in our public healthcare system.**

iii. **As of now, doctors who wish to obtain *full* registration to practice in Hong Kong must opt for the ‘exam pathway’ to registration. While a ‘non-exam pathway’ exists for foreign-trained doctors who wish to obtain *limited* registration to practice at limited venues for a limited duration, this pathway does not lead to full registration. Both ‘exam’ and ‘non-exam’ pathways have room for introducing greater flexibility to attract foreign-trained talent and reference could be made to international examples.**

a. **“Exam pathway”**: foreign-trained individuals who wish to be considered for *full registration* (currently making up 7.5% of our fully registered doctor workforce) to practice in Hong Kong must pass the 3-part MCHK Licensing Examination.

(i) This evidently is no easy way out where in 2017, the pass rate for part 1 (written exam) was an average of just 26.5% across two sittings and 42% for part 3 practical clinical exam. More encouraging pass rates were observed in other jurisdictions such as the US (where approximately 25% of practicing doctors are foreign-trained) for both written (>70% in 2017) and practical (>80% in 2017) exams. The comparatively less detailed and accessible examination syllabus, resources and reference material for examination preparation in Hong Kong, compared with other international examples, potentially deter applicants from succeeding in their application. **Therefore, we recommend the availability of a comprehensive examination syllabus and revision material for the MCHK Licensing Examination to be reviewed in order to ensure fairness and facilitate examination preparation.**

(ii) Internship experience is a listed MCHK Licensing Examination prerequisite - a prerequisite not observed for ‘exam pathways’ in other jurisdictions including the UK and US, and serves as a potential barrier for individuals who graduate from medical courses that do not offer relevant experience. To maximise the number of individuals eligible to sit the local examination and stand a chance at obtaining full registration to practice in Hong Kong, **consideration should be given to removing internship experience as a MCHK Licensing Examination prerequisite.**

(iii) English proficiency is examined in a standalone test in Hong Kong. While the pass rate is relatively promising (94.5% in 2017), applicants could not, like in the UK (where approximately 29% of practicing doctors are foreign-trained), opt to demonstrate their English proficiency via other means such as satisfactory International English Language Testing System (IELTS) results. **There is a need to consider allowing the use of similar non-examination means to demonstrate English proficiency in Hong Kong.**

(iv) In addition to passing the MCHK Licensing Examination, individuals looking to obtain full registration in Hong Kong must also complete a period of assessment (internship) at approved local hospitals that cannot be substituted with equivalent overseas experience, like in other jurisdictions such as the UK. **To attract more foreign-trained doctors to serve at the public sector, those who pass the MCHK Licensing Examination should be given the option to substitute the post-exam internship with equivalent overseas experience subject to set conditions (for example, requiring the individual to provide service in the public sector for a set number of years). Reference should be made to requirements for obtaining full registration in the UK.**

b. **“Non-exam pathway”**: individuals applying through the ‘non-exam pathway’ to obtain *limited* registration in Hong Kong (that makes up just close to 1% of our registered medical practitioner workforce[1]) are not required to sit the MCHK Licensing Examination.

(i) While individuals applying for limited registration are not required to sit the MCHK Licensing Examination, they also *do not* eventually progress to full registration. This contrasts with a clear progression track leading to full registration for ‘non-exam pathway’ observed in other jurisdictions such as Singapore - a place where a substantial number of foreign-trained doctors obtain full registration to practice via a ‘non-exam pathway’. Doctors permitted to practice through the ‘non-exam pathway’ make up approximately 40% of registered medical practitioners holding valid practicing certificates. Generally, more experienced individuals could directly apply for *conditional* registration in Singapore using an acceptable primary qualification (listed in the ‘Second Schedule’ of close to 160 institutions in 28 jurisdictions), postgraduate qualification (close to 100 medical qualifications recognised by the Singapore Medical Council) or specialist qualification (accredited specialist by the Specialists Accreditation Board Singapore). Conditionally registered individuals undergo supervised practice in public or private settings for a minimal of 2 years before being considered for *full* registration without sitting a local licensing examination. Also providing ‘non-exam pathways’ to full registration include Australia (e.g. through the Competent Authority Pathway) and the UK (e.g. through demonstration of a recognised postgraduate qualification, sponsorship by recognised local body or eligibility for the specialist or general practitioner registers). **Consideration needs to be given to allow progression from limited to full registration in Hong Kong on condition that the doctor has practiced in the public sector, particularly in public hospitals, for a set number of years.** This also eventually allows individuals opting for the ‘non-exam’ option to practice at venues other than those stated under the 6 approved promulgations for limited registration, potentially increasing the attractiveness of practicing in Hong Kong. **The Hospital Authority should also consider hiring general practioners through limited registration.**

(ii) **Building on current criteria, acceptable medical qualifications for obtaining limited registration should be clearly listed.** The list could, for example, comprise of the world’s top 50 medical schools (many of which are higher ranking than our local medical schools) from which qualifications should be obtained. Individuals with a medical qualification from listed institutions could eventually progress from limited to full registration through the ‘non-exam pathway’. Permanent residents of the HKSAR with the right of abode who have received medical education from listed institutions should be prioritised.

(iii) Singapore allows less experienced medical graduates with an approved primary qualification from the ‘Second Schedule’ (list of close to 160 institutions in 28 jurisdictions that include qualifications from The University of Hong Kong and The Chinese University of Hong Kong) to apply for provisional registration for employment as a ‘Postgraduate Year 1 *trainee*’. These individuals are required to complete a 12-month internship at an approved hospital in Singapore before becoming eligible for *conditional* and eventually *full* registration. **No similar pathway or progression track is currently available in Hong Kong. Introduction of a similar progression track in Hong Kong should be considered.**

[1] Note: some individuals in our medical professional workforce have medical qualifications of recognised Commonwealth countries and were recognised for registration by MCHK before September 1996. From that time, foreign-trained doctors (apart from those registered under the transitional provision detailed in section 35 of the Medical Registration Ordinance) must pass the MCHK-administered Licensing Examination and complete an internship assessment before they become eligible for full registration to practice in Hong Kong.

(iv) Also limiting the attractiveness of the limited registration pathway in Hong Kong is the explicit requirement for doctors to continuously be registered with a medical authority elsewhere, a requirement generally not observed in other jurisdictions. **To enhance the attractiveness of practicing in Hong Kong, consideration should be given to relaxing the requirement for doctors under limited registration to be registered with a foreign medical authority.**

5. Summary

In summary, our public healthcare system is on the verge of collapse. Amidst the many challenges faced by our health system, the issue of shortage of doctors remains unresolved. This longstanding issue is exacerbated by a rapidly ageing population and growing burden of chronic diseases that represent an ever-increasing demand for healthcare services. Particularly in the public sector, the severe shortage of doctors contributes to the challenge of timely access to healthcare for our local population. As we continue our efforts in enhancing our health system, there is an urgent need to tackle the severe shortage of doctors in our health system by becoming more receptive towards augmenting the role of foreign-trained doctors. It is in the best interest of our crippling public healthcare system and for the well-being of our healthcare workforce and our citizens, that we must review the procedures currently in place to attract more well-qualified foreign-trained doctors to join our healthcare workforce to relieve our shortage of doctors, particularly in our public hospitals.

OUR HONG KONG FOUNDATION

19/F Nan Fung Tower, 88 Connaught Road Central, Hong Kong
http://ourhkfoundation.org.hk

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