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Panel on Health Services

**Background brief prepared by the Legislative Council Secretariat
for the meeting on 13 December 2019**

Healthcare manpower planning

Purpose

This paper summarizes the concerns of members of the Panel on Health Services ("the HS Panel"), the Education Panel ("the ED Panel") and the Subcommittee on Health Protection Scheme ("the Subcommittee") appointed by the HS Panel in the Fifth Legislative Council ("LegCo") on healthcare manpower planning.

Background

2. Healthcare manpower planning is part of healthcare planning as the supply of adequate healthcare professionals is crucial to ensuring the availability, accessibility and quality of healthcare services to meet the service demand. At present, local graduates from University Grants Committee ("UGC")-funded programmes and self-financing programmes in healthcare-related disciplines are the primary source of manpower supply, supplemented as necessary by qualified non-local ones through established mechanism in the short term. The issue of healthcare manpower planning was featured in the two-stage public consultation conducted by the Administration in 2008 and 2010 respectively to take forward the healthcare reform.¹ The

¹ On 13 March 2008, the Administration put forth a package of healthcare service reforms and six possible supplementary healthcare financing options in the First Stage Healthcare Reform Consultation Document entitled "Your Health Your Life". Based on the outcome of the public consultation, the Administration published the Healthcare Reform Second Stage Public Consultation Document entitled "My Health My Choice" on 6 October 2010, in which a voluntary and government-regulated private health insurance scheme was proposed for public consultation. Members of the public have expressed support for the introduction of the scheme. The Voluntary Health Insurance Scheme has been fully implemented since 1 April 2019 to increase consumers' confidence in purchasing hospital insurance, thereby facilitating their use of private healthcare services when needed.

outcome of the two public consultation exercises revealed that the community considered that there was a need to ensure a steady and adequate supply of healthcare manpower to support the sustainable development of the healthcare system.

3. The Administration established the Steering Committee on Strategic Review on Healthcare Manpower Planning and Professional Development ("the Steering Committee") in January 2012. The Steering Committee, which is chaired by the Secretary for Food and Health, is tasked to formulate recommendations on how to cope with anticipated demand for healthcare manpower, strengthen professional training and facilitate professional development, with a view to ensuring the healthy and sustainable development of the healthcare system. The review covers the 13 healthcare disciplines that are subject to statutory regulation, viz. medical practitioners, dentists, dental hygienists, nurses, midwives, Chinese medicine practitioners, pharmacists, chiropractors, medical laboratory technologists, occupational therapists, optometrists, radiographers and physiotherapists. The Steering Committee is supported by a Coordinating Committee, which is chaired by the Permanent Secretary for Food and Health (Health) and comprises six Steering Committee representatives from non-healthcare background as non-official members (who in turn convene six consultative sub-groups, viz. Medical Sub-group, Dental Sub-group, Nursing and Midwifery Sub-group, Traditional Chinese Medicine Practitioners Sub-group, Pharmacists Sub-group and Other Healthcare Professionals Sub-group), in carrying out its work.

4. To assist the Steering Committee in making informed recommendations on healthcare manpower planning, The University of Hong Kong ("HKU") was commissioned under the Health and Medical Research Fund to conduct a comprehensive manpower projection for the healthcare professions under study, including collation and in-depth analysis of data from multiple sources related to the healthcare professions, followed by detailed mathematical modeling and projection for each profession.² The commissioned study was completed in 2016. A total of 12 supplementary manpower projection reports for the respective professions³ were prepared.⁴ The Report on Strategic Review on

² On the subject of professional development and regulation of healthcare professionals, The Chinese University of Hong Kong ("CUHK") was commissioned to conduct a comprehensive review of the regulatory frameworks in local and overseas contexts of the healthcare professions concerned, as well as mechanisms for setting standards and maintaining competence.

³ The manpower projection for midwife is not available. According to the Administration, it is considered that a meaningful manpower projection cannot be conducted, as a midwife may hold dual registration in both nursing and midwifery, and nurses are also deployed to work in the field of midwifery obstetrics and gynaecology.

⁴ The supplementary reports, which are in English version only, can be assessed at the website of the Food and Health Bureau ("FHB") at https://www.fhb.gov.hk/en/press_and_publications/otherinfo/180500_sr/srsupplementaryreports.html.

Healthcare Manpower Planning and Professional Development ("the Strategic Review") was released in June 2017.⁵ The five recommendations put forth by the Steering Committee in relation to healthcare manpower are in **Appendix I**.

Deliberations of the HS Panel, the ED Panel and the Subcommittee

5. Issues relating to the Strategic Review were discussed at a number of meetings of the Subcommittee between 2013 and 2016, by the HS Panel in 2017 and 2019 and the ED Panel in 2019. Views from deputations on the findings of the Strategic Review were received at one meeting of the HS Panel. The deliberations and concerns of members are summarized in the following paragraphs.

The healthcare manpower projection model

6. Members noted that HKU had developed a generic forecasting model, which comprised a demand model and a supply model,⁶ for projecting the medical manpower up to 2041 ("the generic model"). Concern was raised as to whether the generic model would take into account the local circumstances such as the challenges arising from an ageing population, and could be adopted to adjust for the impact of externalities such as an increase in inpatient beds arising from known and planned hospital development projects in the public and private sectors.

7. According to the Administration and HKU, there was no universal model for estimating healthcare manpower whether in the literature or among the jurisdictions surveyed. The more common approaches adopted included workforce-population ratios,⁷ demand/utilization-based or need-based models⁸ and supply models. Developed to suit the local circumstances and adopting the methodology of curve-fitting of historical sample, the generic model would use historical inpatient and outpatient utilization data from the public and private healthcare sectors and the population projections of the Census and Statistics

⁵ The Report can be assessed at FHB's website at https://www.fhb.gov.hk/download/press_and_publications/otherinfo/180500_sr/e_sr_final_report.pdf.

⁶ The demand and supply models are in **Appendix II**.

⁷ According to the Administration, by way of benchmarking, manpower requirements were estimated on the basis of healthcare worker-to-population ratios and current healthcare services.

⁸ According to the Administration, demand/utilization-based models projected healthcare service need based on service utilization data, under the assumption that healthcare workload remained constant over time, and that population growth directly led to increased workload. The need-based models allowed for estimates of a population's healthcare need by considering changes in population health status and efficacy of healthcare services while adjusting for population size and characteristics including age, sex, household income, risk behavior, and self-perceived health.

Department to project the healthcare service utilization of age-, sex-specific population groups. Support vector machine⁹ would then be used to project the required number of doctors, which would be sector-specific (i.e. for the public and private sectors) and separated by clinical settings (i.e. inpatient and outpatient services). The projected demand would be compared with the projected supply and the difference so derived would be quantified in the gap analysis to see if any surplus or shortage of medical manpower existed. The generic model was so designed such that it could be adopted to adjust for the impact of externalities, such as an increase in public and/or private inpatient beds over and above endogenous historical growth and an increase in demand for private healthcare services in view of the implementation of the Voluntary Health Insurance Scheme.

8. Given that an assumption of the generic model was that the manpower projection followed the historical trend in the data, question was raised as to the reason why historical utilization volume of a relatively short span of time (i.e. from 2005 to 2011) was used for projecting service utilization in the public healthcare sector. Concern was also raised as to whether the generic model would take into account the fluctuation in healthcare service utilization.

9. The Administration advised that using more recent service utilization data in the modeling would help project more accurately the demand for doctors in the coming years brought about by an increase in public healthcare service utilization due to an ageing population. In addition, data of earlier years could not reflect changes in the service delivery models of the Hospital Authority ("HA") (e.g. the introduction of the grade of Health Care Assistant to relieve nurses of simple care duties). The reason why data from 2005 but not 2004 onwards was used for the projection was that the data of 2004 might be unduly influenced by the outbreak of Severe Acute Respiratory Syndrome in 2003. Given that the commissioned study commenced in 2012, data up to 2011 was used for making the initial projections. The projections could be updated when more up-to-date data became available. According to HKU, sensitivity analysis was used to compute the projection by omitting a portion of historical data where the omitted data was regarded as unreliable. All projection trials converged to a locus when historical data was reliable.

10. Question was raised as to whether using historical service utilization data of HA with adjustments for population growth and demographic changes as the parameter to forecast HA's healthcare manpower demand would fail to take into account the problem of HA of having inadequate healthcare manpower to

⁹ According to HKU, support vector machine (i.e. neural network analysis) was a supervised learning method that analyzed data and recognized data patterns in the historical data. As such, this artificial intelligence predicted for each given variable the corresponding outcome. As compared with linear and exponential regression models, it had the flexibility to evolve an optimal structure according to historical data.

support its services in the past years. According to HA, when translating the time requirement (man-hours) of the healthcare professionals of HA in carrying out each unit of the projected service workloads, there would be a +5% to +10% adjustment with a view to improving the services provided. There was a view that given the rising public expectations for longer consultation time for public outpatient services, the factor of consultation time per patient should be included as a parameter for the medical manpower demand model for converting the healthcare demand/utilization to public sector doctor full time equivalent. HKU advised that under the generic model, an increase in outpatient consultation time per patient would represent a decrease in manpower supply of doctors in the planning horizon.

11. Members were concerned that the impact brought about by the retirement of an experienced doctor could not be offset by the addition of a fresh medical graduate to the total doctor pool under the medical manpower supply model. According to the Administration, the estimated number of local medical graduates in each of the coming academic years up to 2018 would be based on the actual number of students currently in different years of study in UGC-funded medical undergraduate programmes. The supply model assumed that there would be an addition of 420 local medical graduates per year from 2019 to 2041, and a constant annual inflow of 60 non-local graduates to the registration pool.

12. As regards whether the generic model would take into consideration the distribution of medical manpower resource between the public and private healthcare sector, as well as the elasticity of medical manpower supply in the private market, HKU advised that these factors would be taken into account in the medical manpower projection if needed be.

13. Members noted that the generic model would be suitably adapted to cater for utilization parameters peculiar to individual professions in forecasting the manpower demand for and supply situation of the other healthcare disciplines under study. There was a suggestion that the parameters for projecting the demand for nurses and allied healthcare professionals should include the utilization of care services provided in the welfare setting, such as those provided at the residential care homes for the elderly and people with disabilities and day care centres for the elderly, and those under the home care services schemes for frail elders and programmes for autistic persons. According to the Administration, the Social Welfare Department would be invited to provide profession-specific service utilization data in the welfare setting for the purpose of making projections for nurses, occupational therapists and physiotherapists.

14. There was a concern about the neural network architecture (with elements of inputs, weights, biases and transfer function) for forecasting the long-term manpower requirements of the 13 healthcare professions under study; and how

future actual adjustments of the variables, say, there was an oversupply of medical graduates in a certain year, would feed back into the generic model for a corresponding adjustment in the projection of the relevant healthcare manpower requirements.

15. Some members pointed out that the existing doctor to population ratio of Hong Kong was not comparable to that of other places. In their opinion, HA should set a fixed doctor-bed ratio or doctor-outpatient attendee ratio in each specialty. There was also a view that the common international standard on nursing manpower ratio (i.e. one nurse to six patients) should be adopted for projecting the manpower requirements for nurses. The Administration advised that there was no universally applicable set of international standard on these ratios. Given that healthcare systems of different countries varied, adjustments for differences in care setting were important for such models to be relevant.

Accuracy of the manpower projections

16. Noting that in the base year adopted in the study (i.e. 2015), there were unduly long waiting time for specialist outpatient services of HA, shortfall of doctors and general nurses in HA, and the incidents concerning the poor service quality of some private residential care homes for the elderly, members cast doubt on the accuracy of the manpower projections which assumed that the manpower situation in the base year was at an equilibrium. They voiced disappointment that the Report on the Strategic Review had failed to devise a concrete plan to resolve the long-existing healthcare manpower shortage in HA and enhance the quality of public healthcare services. Manpower planning based on the projection results generated under the existing service level and model would induce a vicious cycle that the acute shortage problem and heavy workload of healthcare professionals in HA could never be alleviated and the quality of care could not be improved. Members called on the Administration to consider conducting afresh the projection by taking the element of service enhancement into account. There was also a suggestion to incorporate the performance pledges and indicators for public healthcare services in projecting the manpower demand.

17. The Administration explained that HKU had already incorporated all known factors at the base year to improve the accuracy of the manpower projection. While the manpower situation in 2015 was assumed to be in equilibrium, the manpower projection model had taken into account known shortage in the public and subvented sectors for healthcare professionals as at end 2015. This was not a performance indicator of manpower and service levels in 2015. It should be noted that the performance indicators developed by HA was for facilitating performance benchmarking across clusters and identifying service gaps, and performance pledges were only for the waiting time for provision of treatment for patients whose clinical conditions were

triaged as critical, emergency and urgent cases under the triage system implemented in the accident and emergency departments of public hospitals. The Administration further advised that any further enhancement in service level or delivery models would entail implications on manpower demand. It was necessary to ensure a steady supply of healthcare professionals to join and serve in the public sector if a profession was projected to have a shortage of manpower. The Administration had been working towards this goal by increasing UGC-funded training places and encouraging self-financing training institutions to provide qualified training places in this regard.

Healthcare manpower planning in the light of the projections

18. Members noted that the projections revealed that a number of healthcare professions would face manpower shortage in the short to medium term.¹⁰ They enquired whether the Administration would adhere to the recommendations put forth in the Report on the Strategic Review to increase the number of UGC-funded training places for those healthcare disciplines facing a manpower shortage, and enhance those public healthcare services which had a sufficient manpower supply.

19. The Administration advised that on the recommendation of the Steering Committee, it would increase the number of UGC-funded first-year-first-degree ("FYFD") training places for those healthcare disciplines which would be facing manpower shortage in the medium to long term and, where appropriate, make better use of the self-financing sector to help meet part of the increasing demand for healthcare professionals. For the profession of Chinese medicine practitioners which was projected to have sufficient manpower supply in the short term, various services providers could capture the opportunity to make fuller use of the manpower in the provision of existing and new services.

20. Members were subsequently advised in January 2019 that the number of healthcare-related UGC-funded FYFD intake places would be increased from 1 776 to 1 929 in the 2019-2020 to 2021-2022 triennium in preparation for the foreseeable tight manpower situation of the healthcare profession. The 153 additional intake places included 60 medical, 60 nursing, eight dental, 20 physiotherapy and five optometry places.¹¹ There was a concern about the

¹⁰ According to the manpower projections, there would be manpower shortage of doctors, dentists, dental hygienists, general nurses, occupational therapists, physiotherapists and optometrists in the short to medium term. A summary of the projections for each of the healthcare professions under the study is in **Appendix III**.

¹¹ It was announced in the Chief Executive's 2018 Policy Address that to expand the capacity for relevant professional healthcare training, the Government would earmark about \$20 billion for short, medium and long-term works projects to upgrade and increase the teaching facilities of HKU, CUHK and The Hong Kong Polytechnic University. Moreover, while the Government had set aside resources for renovating the Prince Philip Dental Hospital in the short term, re-provisioning options would also be considered for the longer-term development of this dental teaching hospital.

arrangement for capping the total number of UGC-funded FYFD places at 15 000 per annum in full-time-equivalent terms, under which an increase in the number of healthcare-related places would result in a reduction in the number of non-healthcare-related places. A motion was passed at the meeting of the ED Panel on 4 January 2019 to urge the Government to explore increasing the number of "manpower-planned" healthcare-related places by 150-odd without affecting the number of "non-manpower-planned" places under the recurrent funding for the 2019-2020 to 2021-2022 triennium, such that the total number of UGC-funded places would be correspondingly increased to a minimum of 15 150.

21. The Administration stressed that the UGC-funded universities enjoyed autonomy in determining the distribution of their UGC-funded FYFD places. They would draw reference to the Administration's advice on manpower requirements before submitting their triennium planning proposals for UGC's consideration. UGC would strive to ensure that the higher education sector was capable of meeting the manpower requirements of Hong Kong, but it would also take the actual needs of the universities into consideration when allocating student places.

22. Question was raised as to how the manpower projection for doctors could help avoid the situation which occurred in early 2000s whereby medical graduates could not undergo training in HA due to a downward adjustment in the Government subvention to HA during economic downturn, and hence, a decrease in HA's budget for the recruitment of new resident trainees. There was a view that the Administration should make a commitment to provide adequate subvention for HA and the welfare sector to augment the supply of healthcare professionals according to the healthcare manpower projections.

23. The Administration advised that while an economic downturn might affect healthcare demand and manpower needs during a certain period of time, the medium to long-term manpower requirements brought about by factors such as an ageing population and changes in the delivery models of healthcare would remain unchanged. Hence, the generic model would shed light on the need to maintain a stable supply of medical graduates to HA notwithstanding economic cycles. This would avoid over-reaction during economic downturn which might prove short-sighted at a later day. The Administration further advised that the healthcare manpower projections would provide a basis to consider the introduction of appropriate long-term policies and measures to better enable society to meet the projected demand. This would enable the Administration to plan ahead the training places and financial resources required to ensure healthy and sustainable development of the healthcare system and provision of quality healthcare services for the public.

24. There was a view that the high tuition fees of self-financing training courses might deter those who were unable to afford the tuition fees from

pursuing their study. The Administration advised that the Steering Committee was of the view that providing a steady stream of locally trained graduates with a mix of UGC-funded and, where applicable, self-financing training places would be most effective in maintaining the supply of the healthcare professionals. The Administration would continue to subsidize students to pursue designated full-time locally-accredited self-financing undergraduate programmes in selected disciplines under the Study Subsidy Scheme for Designated Professions/Sectors.

25. In respect of the recommendation of the Strategic Review that measures should be put in place to attract more non-locally trained healthcare professionals to come to Hong Kong to practise, there were suggestions that non-locally trained medical practitioners who had been in employment with HA for certain years should be exempted from the internship assessment, and those who graduated from medical schools of renowned overseas universities should be qualified for full registration as medical practitioners in order to encourage more Hong Kong students studying medicine overseas to return to and practise in Hong Kong.

26. According to the Administration, various measures had been put in place to facilitate and attract qualified non-locally trained healthcare professionals, in particular those who were Hong Kong permanent residents, to practise in Hong Kong. For instance, the Medical Council of Hong Kong ("the Medical Council") had increased the frequency of the Licensing Examination from once to twice a year starting from 2014 and had introduced more flexibility into the internship requirement since 2016 with a view to facilitating more overseas-trained doctors to register for practice in Hong Kong.¹² With the coming into operation of the relevant provisions of the Medical Registration (Amendment) Ordinance 2018 (Ord. No. 15 of 2018) in April 2018, the validity period and renewal period of limited registration had been extended from not exceeding one year to not exceeding three years to attract more qualified non-locally trained medical practitioners to practise in the public healthcare sector. In May 2019, the Medical Council had approved that the period of assessment for non-locally trained medical practitioners with specialist status who passed the Licensing Examination would be reduced to one to three days if they had served in HA, the Department of Health ("DH"), HKU and CUHK for three years. In addition, starting from 2016, the Dental Council of Hong Kong and the Nursing Council of Hong Kong had respectively increased the frequency of the licensing examinations for overseas-trained dentists and nurses from once to twice a year.

¹² Under the enhanced internship requirement, any person who had passed the Licensing Examination could apply for exemption from a specialty of internship assessment if he/she had a comparable specialist experience. In addition, the internship period could be shortened from one year to six months.

27. Some members considered that employing more non-locally trained medical practitioners through limited registration was the most effective measure to ease HA's medical manpower shortage problem in the short term. Some other members opined that poor working environment of HA as well as the brain drain from the public sector to the private sector were the underlying causes of the medical manpower shortage in HA. These problems could not be addressed by a manpower projection exercise. The Administration stressed that locally trained medical graduates would continue to be the bedrock of the healthcare workforce. HA had implemented a number of short-term measures to tackle medical manpower shortage, including re-employing suitable retired doctors, recruiting part-time doctors, providing special honorarium to doctors who work overtime voluntarily and strengthening its efforts to retain doctors. The above apart, HA would continue to proactively recruit qualified non-locally trained medical practitioners under limited registration to supplement local recruitment drive.

28. Members were subsequently advised that a platform comprising representatives from the Medical Council, the Hong Kong Academy of Medicine, the Hong Kong Medical Association, the Medical Faculties of HKU and CUHK, HA and DH had been set up in March 2019 to discuss how to increase medical manpower supply to address the manpower constraint in the public healthcare sector. At the policy briefing of the HS Panel on 21 October 2019, the Administration advised that the Medical Council had shortened the period of assessment for non-locally trained specialist doctors from six months to two days in August 2019. The Administration was exploring means to effectively provide specialist training for non-locally trained doctors as an incentive for them to serve in the public healthcare system, provided that training opportunities for locally trained doctors would not be compromised.

Future healthcare manpower planning exercises

29. Noting that the manpower projections for the healthcare professions under the commissioned study were up to 2041, there was a suggestion that the projection period should be extended for 25 more years to take into account the likely factor that the proportion of elderly people in the population and their healthcare demands might decline after the peak period. An adjustment mechanism should also be put in place to address the deviation between the projected and the actual demand for individual healthcare professions, if any, in the planning horizon. The Administration advised that it would conduct health manpower planning once every three years in step with the triennial planning cycle of UGC. Where necessary, adjustments would be made to address the differences between the projected and the actual demand. It was expected that results of the new round of projection exercise would be available in 2020.

30. Noting that there was currently no registration or certification system in Hong Kong for Chinese medicine pharmacists, some members were concerned about the manpower planning of Chinese medicine pharmacists whom had a vital role to play in the development of Chinese medicine. The Administration assured members that it would look into the professional development of Chinese medicine pharmacists.

Relevant papers

31. A list of the relevant papers on the Legislative Council website is in **Appendix IV**.

Council Business Division 2
Legislative Council Secretariat
11 December 2019

Recommendations of the Steering Committee on Strategic Review on Healthcare Manpower Planning and Professional Development in relation to healthcare manpower

The five recommendations on healthcare manpower are as follows:

(a) Publicly-funded healthcare training

The Government should consider increasing the number of University Grants Committee ("UGC")-funded healthcare training places for those disciplines which will still be facing manpower shortage in the medium to long term.

(b) Self-financing healthcare training

The Government should make better use of the self-financing sector to help meet part of the increasing demand for healthcare professionals as appropriate, notably nurses, occupational therapists, physiotherapists, medical laboratory technologists, radiographers and optometrists and provides the necessary support to the self-financing sector in terms of infrastructural and funding support.

The Government should continue to subsidize the pursuit of study in those healthcare disciplines facing manpower shortage as appropriate, in particular, in the allied health disciplines, under the Study Subsidy Scheme for Designated Professions/Sectors with a view to sustaining the healthy and sustainable development of the self-financing higher education sector to complement the UGC-funded sector in broadening and diversifying study opportunities.

(c) Healthcare manpower in the public sector

The Hospital Authority ("HA") should make every effort to retain existing healthcare professionals and attract retired doctors and other healthcare professionals to work in the public sector for an extended period after retirement.

HA should recruit non-locally trained doctors under limited registration more proactively.

(d) Non-locally trained healthcare professionals

On the premise of preserving professional standards, Boards and Councils should consider suitable adjustments to the current arrangements, including but not limited to those on Licensing Examinations, internship arrangements, and limited registration (where applicable).

The Government should actively promote and publicize the registration arrangements overseas with targeted and proactive recruitment drive to attract non-locally trained healthcare professionals, many of whom are Hong Kong citizens or have deep roots here, to come to Hong Kong to practise.

(e) Healthcare manpower planning and projections

The Government should conduct manpower planning and projections for healthcare professionals once every three years in step with the triennial planning cycle of UGC.

Source: Report on the Strategic Review on Healthcare Manpower Planning and Professional Development

Extract from the Report on the Strategic Review on Healthcare Manpower Planning and Professional Development

Figure 15. HKU's demand model

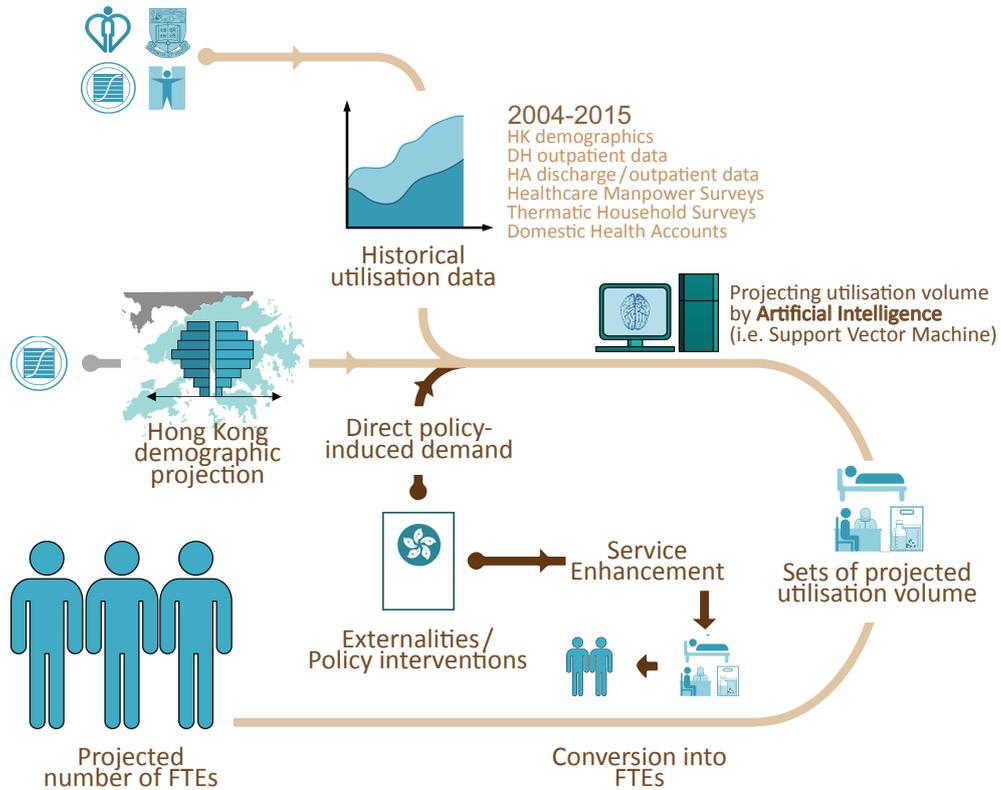
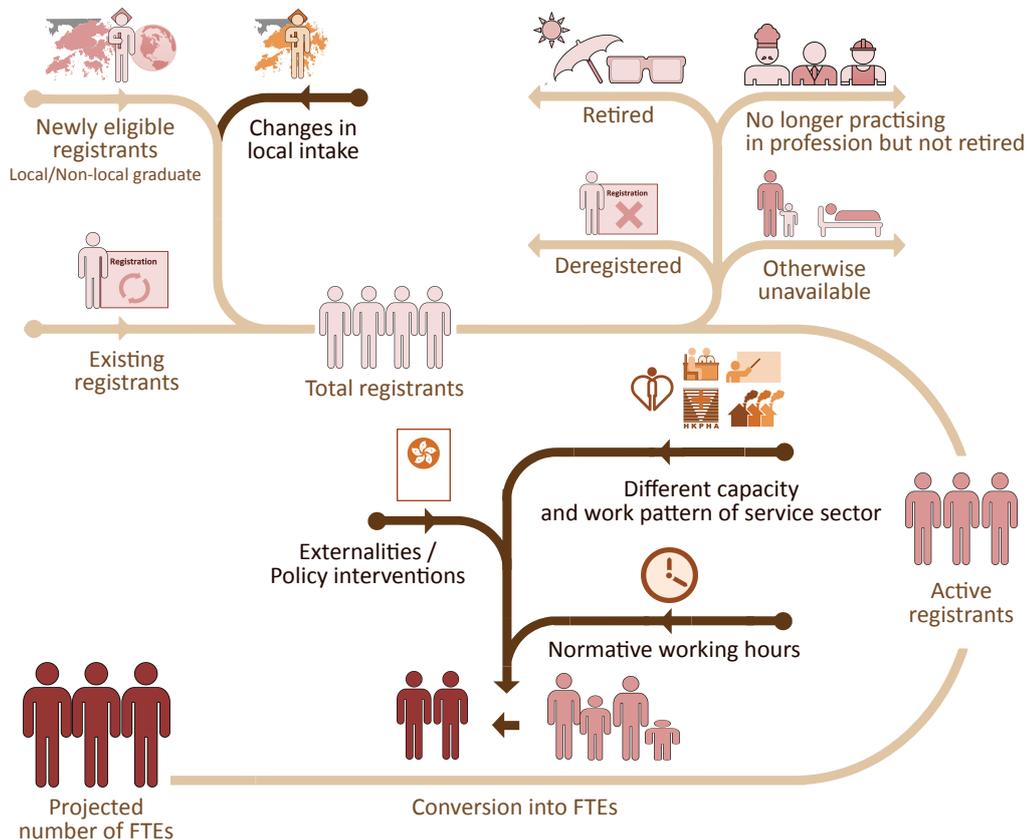


Figure 16. HKU's supply model



**Manpower projections for each healthcare profession
under the Strategic Review on Healthcare Manpower Planning
and Professional Development**

Profession*	Projection
Doctors	● there will be manpower shortage in the short to medium term
Dentists	● there will be manpower shortage in the short to medium term
Dental hygienists	● there will be manpower shortage in the short to medium term
Nurses	● there will be manpower shortage of general nurses in the short to medium term
	● the manpower supply of psychiatric nurses is close to manpower equilibrium in the short term and there will be sufficient manpower in the medium term
Chinese medicine practitioners	● there will be sufficient manpower in the short term and manpower shortage in the medium term
Pharmacists	● the supply is in slight shortage or close to equilibrium in the short term and there will be sufficient manpower in the medium term
Occupational therapists	● there will be manpower shortage in the short to medium term
Physiotherapists	● there will be manpower shortage in the short to medium term
Medical laboratory technologists	● there will be slight shortage (but close to equilibrium) in the short to medium term
Optometrists	● there will be manpower shortage in the short to medium term
Radiographers	● there will be slight shortage but close to equilibrium in the short to medium term
Chiropractors	● the manpower supply is close to manpower equilibrium in the short term and there will be sufficient manpower in the medium term

* According to the Report on Strategic Review on Healthcare Manpower Planning and Professional Development, since a midwife may hold dual registration in both nursing and midwifery, and nurses are also deployed to work in the field of midwifery, obstetrics and gynaecology in both the Hospital Authority and private hospitals, it would not be possible to present a meaningful manpower projection for midwives.

Source: Report on the Strategic Review on Healthcare Manpower Planning and Professional Development

Relevant papers on healthcare manpower planning

Committee	Date of meeting	Paper
Subcommittee on Health Protection Scheme	4.3.2013 (Items I and II)	Agenda Minutes
	11.11.2013 (Item III)	Agenda Minutes
	15.4.2014 (Item II)	Agenda Minutes CB(2)2260/13-14(01)
	12.9.2014 (Item I)	Agenda Minutes
	4.5.2015 (Item I)	Agenda Minutes CB(2)399/15-16(01)
	14.12.2015 (Item III)	Agenda Minutes
	19.4.2016 (Item II)	Agenda Minutes
Panel on Health Services	19.6.2017 (Item IV)	Agenda Minutes CB(2)2090/16-17(01)
	4.7.2017 (Item I)	Agenda Minutes
	15.1.2018 (Item III)	Agenda Minutes CB(2)1857/17-18(01)
	19.3.2019 (Item I)	Agenda Minutes CB(2)1788/18-19(01)
	20.5.2019 (Item IV)	Agenda Minutes

Committee	Date of meeting	Paper
	21.10.2019 (Item I)	Agenda
Panel on Education	4.1.2019 (Item IV)	Agenda Minutes CB(4)544/18-19(02)
Panel on Health Services and Panel on Education	21.1.2019 (Item II)	Agenda Minutes CB(2)1526/18-19(01)

Council Business Division 2
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