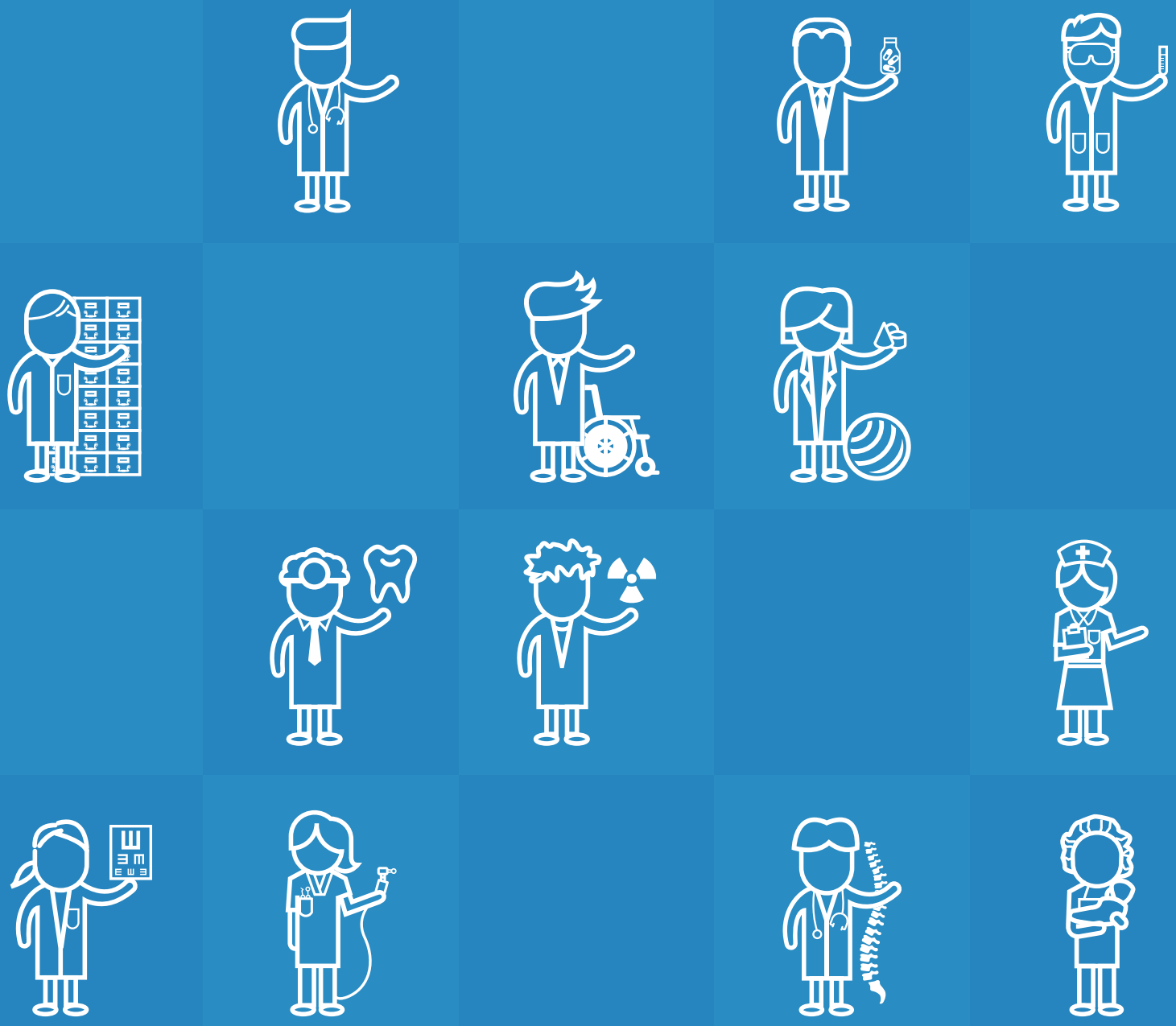
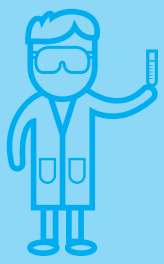
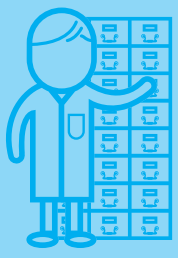
STRATEGIC REVIEW ON HEALTHCARE MANPOWER PLANNING AND PROFESSIONAL DEVELOPMENT

REPORT

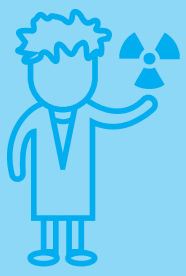


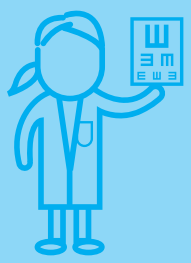
Food and Health Bureau
Hong Kong Special Administrative Region Government










MESSAGE

FROM DR. KO WING-MAN, B.B.S., J.P.
CHAIRMAN, STEERING COMMITTEE ON STRATEGIC REVIEW ON HEALTHCARE MANPOWER PLANNING AND PROFESSIONAL DEVELOPMENT
SECRETARY FOR FOOD AND HEALTH

Over the years, our healthcare system has evolved and developed in tandem with the needs and aspirations of our society. Thanks to the diligence, competence and dedication of our healthcare professionals, we have made commendable strides on nearly all fronts of healthcare, and climbed to the top of the world league table of longevity. These are remarkable achievements, but, as our society ages and with rising expectations for healthcare services, we could not rest on our laurels. Nothing is more important to the health of our citizens and the future of our city than a sustainable healthcare system supported by adequate and quality healthcare professionals. We must plan ahead, invest in our future and make necessary changes. It was against this background of healthcare reform that the Steering Committee on Healthcare Manpower Planning and Professional Development, which I chaired personally, was established in 2012.

The Report is the fruit of intensive dialogues, insightful deliberation and comprehensive review by members of the Steering Committee and its six Sub-groups over the past years, underpinned by two commissioned studies conducted by the University of Hong Kong (HKU) and the Chinese University of Hong Kong (CUHK) respectively on healthcare manpower projections and professional development and regulation. I would like to extend my personal thanks to all

members of the Steering Committee and its Sub-groups for their insight, contribution and dedication throughout the Review. The unfailing efforts by HKU and CUHK in providing professional input and technical support to the Review are also appreciated. My thanks also go to all the healthcare professionals and other stakeholders of the community for their valuable comments and suggestions.

I am also deeply grateful that in the course of the Review, we have been able to grasp and delve into various issues and come up with findings and recommendations in a collaborative and consensus-building process that has absorbed and integrated as many views and suggestions as possible into the final product of the Review. The findings and recommendations of this report lay a solid foundation for healthcare manpower planning, and point the way forward for making our healthcare professionals better and stronger, as well as ensuring that they would continue to command the respect and earn the trust of the community.

Following the conclusion of the Review, the Government will soon embark on an updating exercise on manpower projections in consultation with the relevant stakeholders and invite each and every of the Boards and Councils for healthcare professions to submit detailed and concrete proposals for implementing the recommendations of the Review taking into account the unique circumstances of individual professions. We will take all necessary steps to bring supply and demand of healthcare professionals into broad equilibrium over time. This is the shared mission of the Government and all members of the Steering Committee and its Sub-groups, and surely is also one that is dear to the hearts of people of Hong Kong.

Healthcare is everyone's business. Your valuable view and participation is an integral component of building a sustainable healthcare system. We urge you to spare some time to go through the report, and would be delighted to hear from you any idea or suggestion you may have on healthcare manpower planning and professional development and regulation.

Dr. KO Wing-man, B.B.S., J.P.
Chairman, Steering Committee on
Strategic Review on
Healthcare Manpower Planning and
Professional Development
Secretary for Food and Health
June 2017

Strategic Review on Healthcare Manpower Planning and Professional Development

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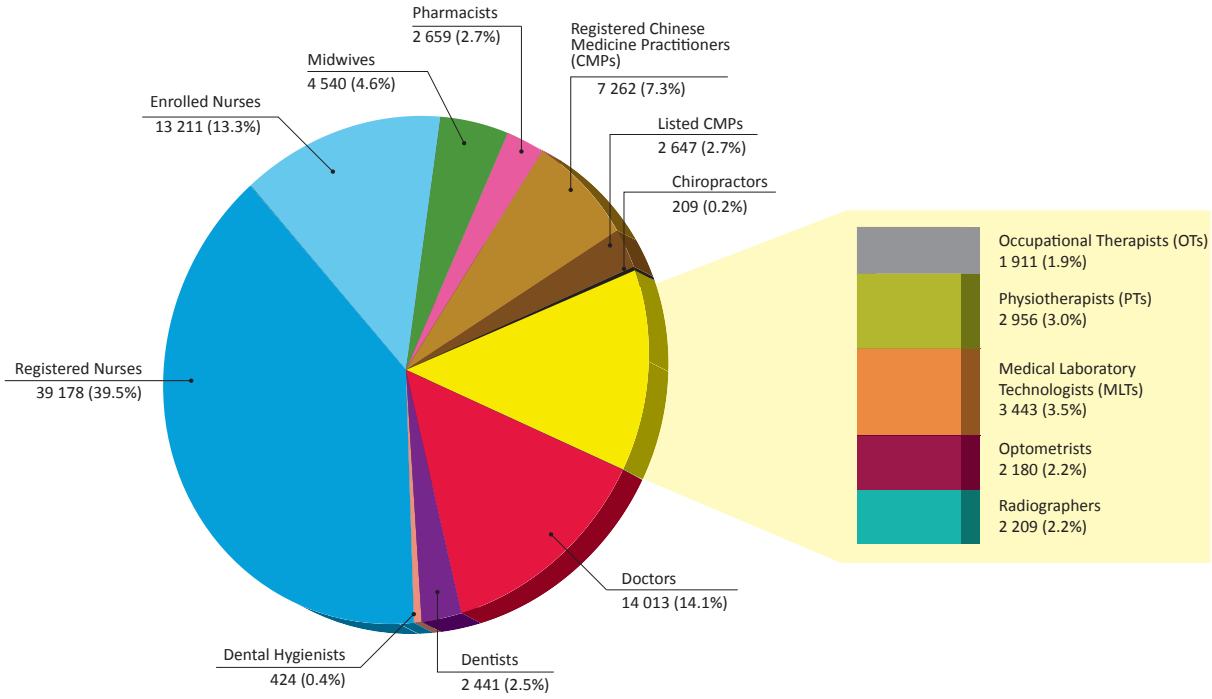
Part One: OVERVIEW

BACKGROUND

Over the years, Hong Kong has developed a highly efficient healthcare system and achieved impressive health outcome for its population. Hong Kong is among the best in the world in terms of many health indicators such as life expectancy and infant mortality rate. The standard and quality of our healthcare services enjoy renowned international standing, stay at the forefront of advances in medical technology, and compare favourably with other advanced economies.

2. Our healthcare system is supported by teams of dedicated healthcare professionals. As at end 2016, there are over 99 000 healthcare professionals from the 13 professions which are subject to statutory registration, growing from about 83 000 in 2011.

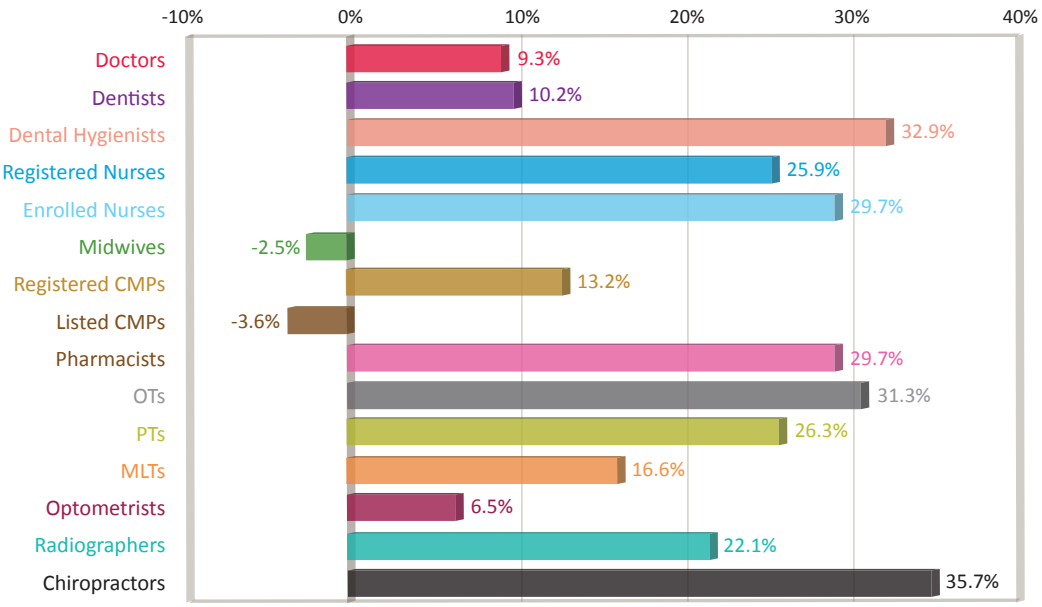
Figure 1. Healthcare workforce (as at end 2016)



Source: Department of Health (DH)

Note: Percentage in bracket denotes the proportion of respective healthcare professionals

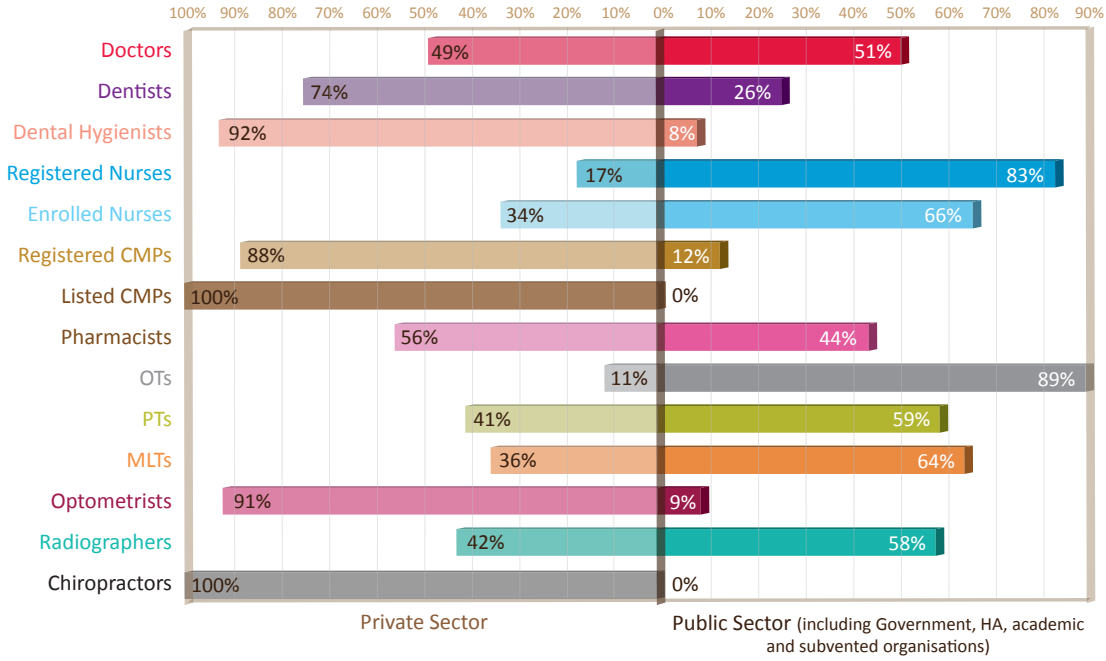
Figure 2. Growth of healthcare professionals, 2011-2016



Source: DH

3. The majority of doctors, nurses, OTs, PTs, MLTs and radiographers work in the public sector[1]. Healthcare professionals who are more commonly engaged in the private sector include dentists, dental hygienists, CMPs, pharmacists, optometrists and chiropractors.

Figure 3. Healthcare professionals by type of work sector



Source: Health Manpower Survey

[1] Public sector includes HA, DH, academic and subvented organisations.

4. As in the case of many advanced economies, the healthcare system of Hong Kong faces a number of major challenges, including an ageing population, increasing occurrence of lifestyle-related diseases and rising expectations for healthcare services. Confronted by these challenges, the Government, together with the Hospital Authority (HA) and in partnership with the private healthcare sector, have over the past few years embarked on a major reform of the healthcare system to ensure its sustainability.

5. Apart from efforts to enhance primary care, facilitate the development of hospital services through strengthening of infrastructure and regulation including regulation of private healthcare facilities, improve the public healthcare system, promote public-private partnership in the delivery of healthcare services and introduction of the Voluntary Health Insurance Scheme, the Government also seeks to formulate a healthcare manpower strategy to ensure an adequate supply of qualified professionals for meeting future needs and for supporting the sustainable development of our healthcare system.

Figure 4. Major initiatives under the healthcare reform

THE STRATEGIC REVIEW

6. Against the above backdrop, a Steering Committee was established in 2012 to conduct a strategic review on healthcare manpower planning and professional development in Hong Kong (the Strategic Review).

Aims of the Strategic Review

7. The Steering Committee is tasked to make recommendations to –

(a) cope with the anticipated demand for healthcare manpower; and

(b) facilitate professional development of healthcare professions,

with a view to ensuring the healthy and sustainable development of our healthcare system.

Figure 5. Aims of the Strategic Review

Structure of the Steering Committee

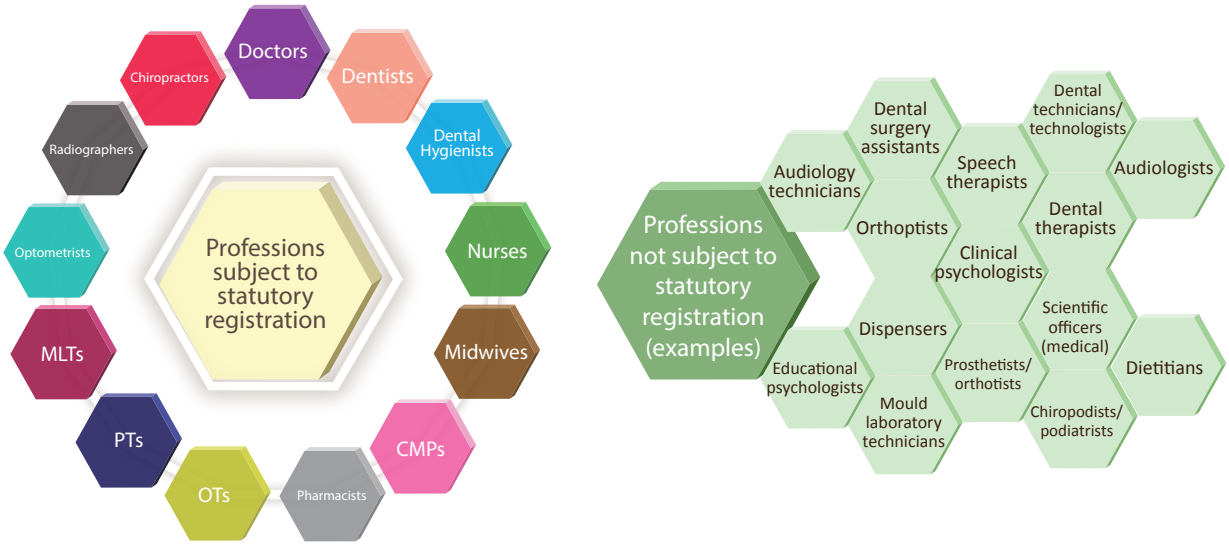
8. Chaired by the Secretary for Food and Health, the Steering Committee comprises some 30 members from wide-ranging backgrounds including renowned experts from overseas. It is underpinned by a Coordinating Committee chaired by the Permanent Secretary for Food and Health (Health), which comprises six Steering Committee representatives from non-healthcare background as non-official members. These six members in turn convene six consultative Sub-groups (namely the 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), with a total membership of over 100, to hear and consolidate views from the healthcare professions and other stakeholders in the community.

Figure 6. Structure of the Steering Committee

Coverage of the Review

9. The Review primarily covers 13 healthcare professions which are subject to statutory registration, including doctors, dentists and dental hygienists, nurses and midwives, CMPs, pharmacists, OTs, PTs, MLTs, optometrists, radiographers and chiropractors. For healthcare professions not subject to statutory registration, the Other Healthcare Professionals Sub-group provides a platform for views on future development of the relevant professions to be suitably reflected through the consultative process.

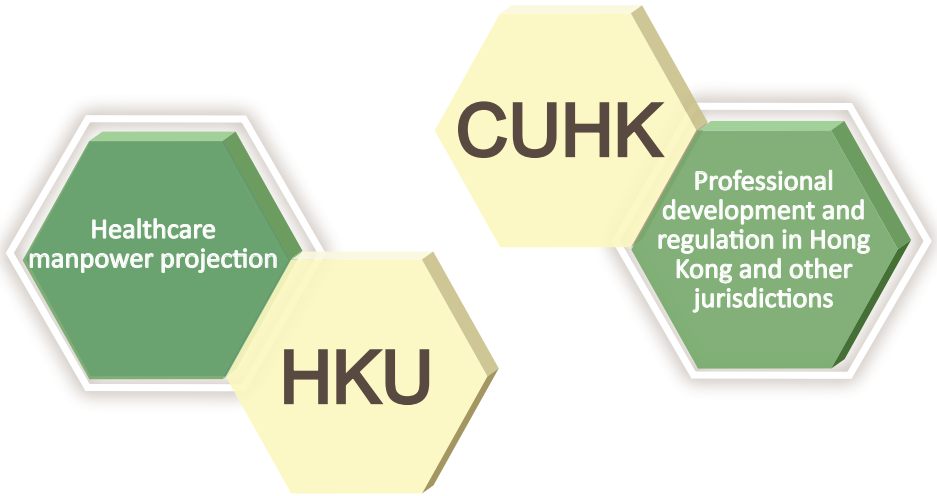
Figure 7. Coverage of the Review



Commissioned Studies

10. The Steering Committee commissioned **The University of Hong Kong (HKU) and The Chinese University of Hong Kong (CUHK)** to provide professional input and technical support by conducting two studies respectively on healthcare manpower projections of the relevant professions and regulatory frameworks governing healthcare professions in Hong Kong and other jurisdictions. The two universities completed the independent studies in 2016.

Figure 8. Commissioned studies



Part Two:

MANPOWER PLANNING AND PROJECTIONS

OVERVIEW

11. As our society ages, there is more demand for healthcare services. Technological advancement and higher expectation for healthcare services have added to the ever-increasing demand. There is a need for more healthcare professionals to cope with the challenges. However, healthcare training is costly and takes years to complete while demand, in particular those of the private sector, could fluctuate for reasons that could not have been fully and accurately captured by a projection model no matter how sophisticated it is.

12. Furthermore, for a dual-track healthcare system with a vibrant private sector, demand fluctuation in the short to medium term could be met, partly if not fully, through increased productivity among healthcare professionals in private practice. Innovation in healthcare practices would also have the effect of changing the demand on healthcare professionals in general or a particular type of healthcare professional.

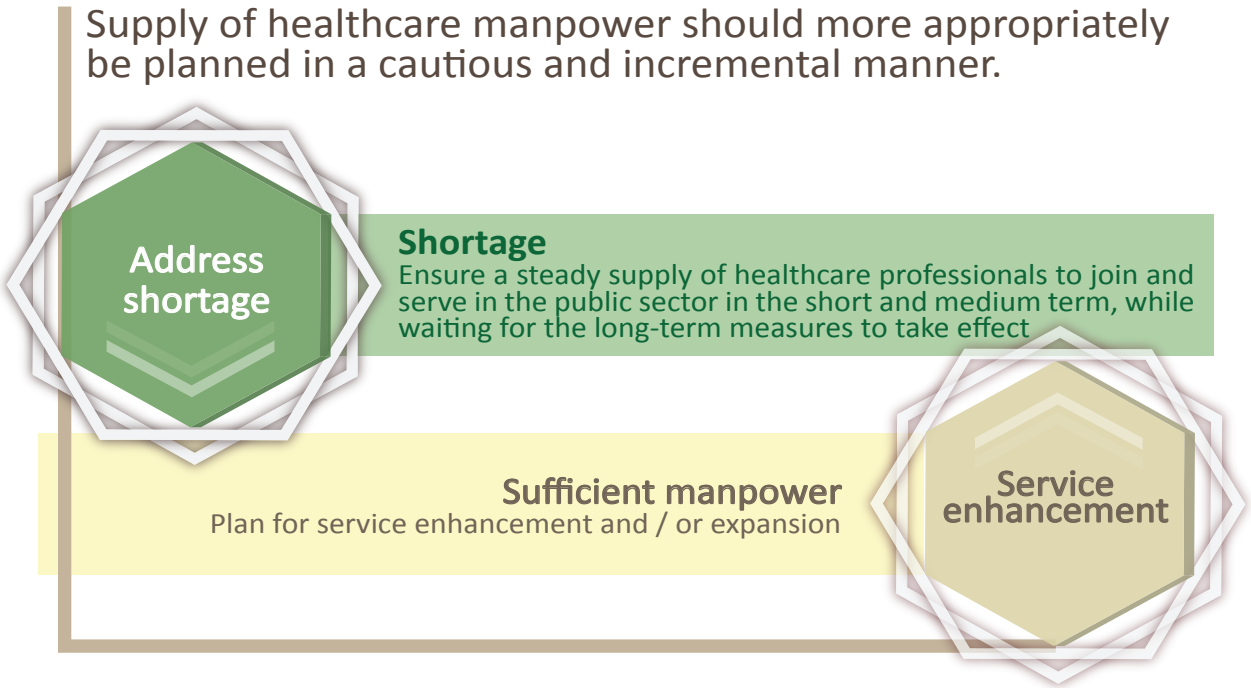
Figure 9. Factors affecting manpower projections

13. In the light of the complex dynamism between supply and demand, the Steering Committee considers that **the supply of healthcare manpower should more appropriately be planned in a cautious and incremental manner.**

14. The provision of healthcare services depends on the supply of healthcare professionals. If a **shortage is likely to persist for a prolonged period, it is necessary to ensure a steady supply of healthcare professionals to join and serve in the public sector in the short and medium term, while waiting for the long-term measures to take effect.**

15. If **sufficient manpower is expected for a particular profession, this may not necessarily call for supply adjustment. It may instead enable us to plan for service enhancement and/or expansion.** With a more accommodating manpower supply situation in various professions, the public healthcare system and social welfare sector would have greater room and flexibility to make service plans and implement new or improved delivery models to cope with the needs and challenge of our ageing society.

Figure 10. Manpower Gap: Interpretation



Increasing training places over the past ten years

16. In light of the ageing population and the general shortage of healthcare manpower in the past years, the provision of healthcareservices has been expanding. Against this backdrop, the Government has already increased University Grants Committee (UGC)-funded places for doctors, nurses, pharmacists, and allied health professionals since the 2009/10 triennium. Details are as follows –

Figure 11. Number of first-year-first-degree UGC-funded training places

Healthcare Professions	2005 / 06 - 2008 / 09	2009 / 10 - 2011 / 12	2012 / 13 - 2015 / 16	2016 / 17 - 2018 / 19
Doctors	250	320	420	470
Dentists	50	53	53	73
Registered Nurses (General)	518 - 550 for both streams	560	560	560
Registered Nurses (Psychiatric)		30	70	70
Registered CMPs	79	79	79	79
Pharmacists	30	50	80	90
OTs	40	46	90	100
PTs	60	70	110	130
MLTs	35	32	44	54
Optometrists	35	35	34	40
Radiographers	35	48	98	110

17. The increase in UGC-funded training places has boosted the supply of healthcare professionals and met part of the manpower demand. Particularly, the increase in the number of UGC-funded pharmacy training places provides relief to pharmacists manpower, in which we have resorted to non-local source in the past. Other professions including doctors, dentists, nurses, OTs, PTs, MLTs, optometrists and radiographers are facing manpower shortage as the increase in manpower supply falls behind demand growth. For CMPs, the number of UGC-funded training place remains stable for the past ten years given our stable supply of listed and registered CMPs.

18. As it takes time to train healthcare professionals and there is also limitation to the UGC-funded tertiary institutions to increase its training capacity in the short-to-medium term because of infrastructure constraints, the existing manpower gaps in various healthcare professions cannot be addressed simply through increasing publicly-funded training places.

Figure 12. Training period of healthcare professionals

Healthcare Professions	Years of Study (Year of internship before getting registration)
Doctors[2]	6 (1)
Dentists[2]	6
Dental Hygienists	2
Registered Nurses (General)	5
Registered Nurses (Psychiatric)	2
Registered CMPs	6
Pharmacists	4 (1)
OTs	4
PTs	4
MLTs	4
Optometrists	5
Radiographers	4

[2] It takes at least another six years to obtain a specialist qualification.

Self-financing sector

19. To meet the manpower shortage, the self-financing sector has taken on a bigger role over the years.

20. For example, there was a substantial increase in the training capacity in the self-financing sector for nurses, including—

(a) Launch of nursing degree programme offered by the Open University of Hong Kong (OUHK) in 2005;

(b) HA's re-opening of its own nursing schools in 2008;

(c) Launch of nursing degree programme offered by the Tung Wah College (TWC) in 2012; and

(d) Launch of nursing degree programme offered by the Caritas Institute of Higher Education (Caritas) in 2015.

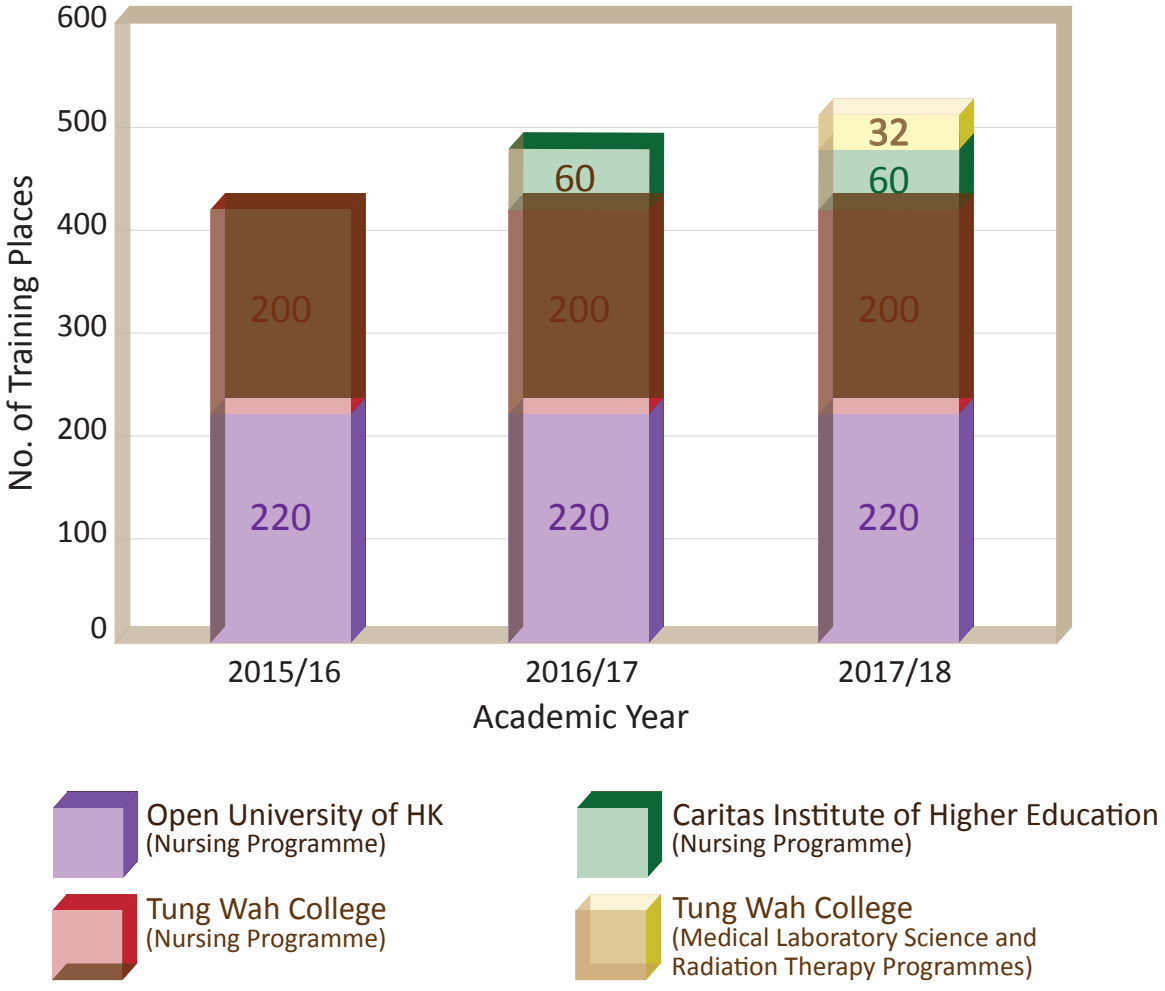
Figure 13. Increase in the training capacity for nurses in self-financing sector

21. The Study Subsidy Scheme for Designated Professions/Sectors (SSSDP)[3] subsidised a total of 420 nursing training places for the 2015/16 cohort; and the number of subsidised places further increased to 480 for the 2016/17 and 2017/18 cohorts, leveraging on the supply of the self-financing sector to help ease the shortage of nurses in the market.

22. The self-financing sector has also started to offer courses in some of the allied health professions (such as occupational therapy, medical laboratory science and radiation therapy). SSSDP subsidises another 32 places of the medical laboratory science and radiation therapy programmes to be offered by TWC for the 2017/18 cohort. The trend of a growing self-financing sector complementing the public-funded institutions in providing local healthcare training is becoming more prevalent and mature.

[3] SSSDP was a pilot scheme announced in the 2014 Policy Address to subsidise about 1 000 students per cohort to pursue designated full-time locally-accredited self-financing undergraduate programmes in selected disciplines for three cohorts of students admitted in the 2015/16 to 2017/18 academic years.

Figure 14. Number of subsidised healthcare training places under SSSDP



23. Healthcare professions with demand mainly coming from the private sector are more susceptible to the fluctuation of economic cycle. The Steering Committee considers that providing **a steady stream of locally trained graduates with a mix between UGC-funded and, where applicable, self-financing training places would be the most effective way of maintaining the supply for these professionals. Locally trained graduates should be the primary source of supply, supplemented as necessary by qualified non-locally trained ones through established mechanism in the short term.**

HKU's manpower projections

24. Despite what the Government has done to boost the supply of healthcare professionals, the manpower situation, as forecasted by HKU, remains challenging for the coming decade and beyond.

25. HKU has developed a generic manpower projection model that suits the local circumstances and is adaptable to changing parameters to cater for differences in utilisation patterns among individual professions. The manpower projection model[4] seeks to quantify the difference between the projected demand for and supply of healthcare professionals in terms of full time equivalents (FTEs).

[4] Under this model, the demand at the base year (i.e. 2015) is assumed to be at an equilibrium, and takes into account known shortage in the public and subvented sectors for healthcare professionals as at end 2015. Future demand is derived having regard to demographic changes and other relevant factors including externalities and policy interventions through a sophisticated computer model, to which known and planned services and developments are incorporated. Future supply is derived from existing and planned local programmes as well as new registrants holding non-local qualifications.

Figure 15. HKU's demand model

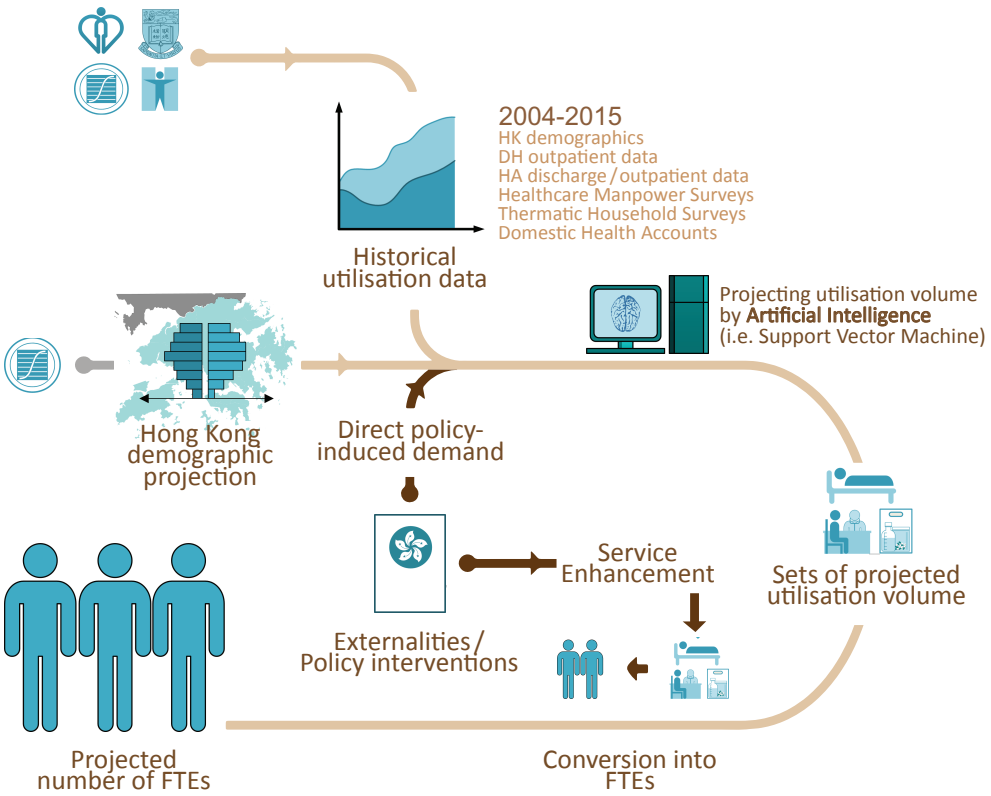
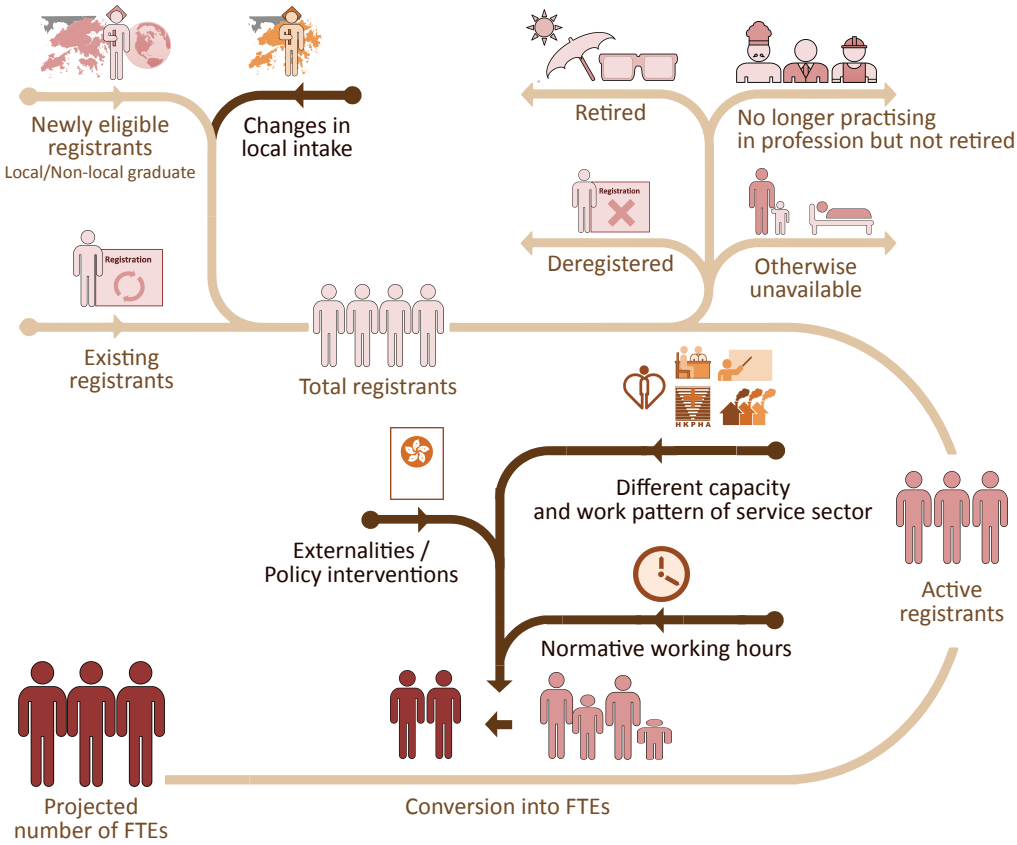
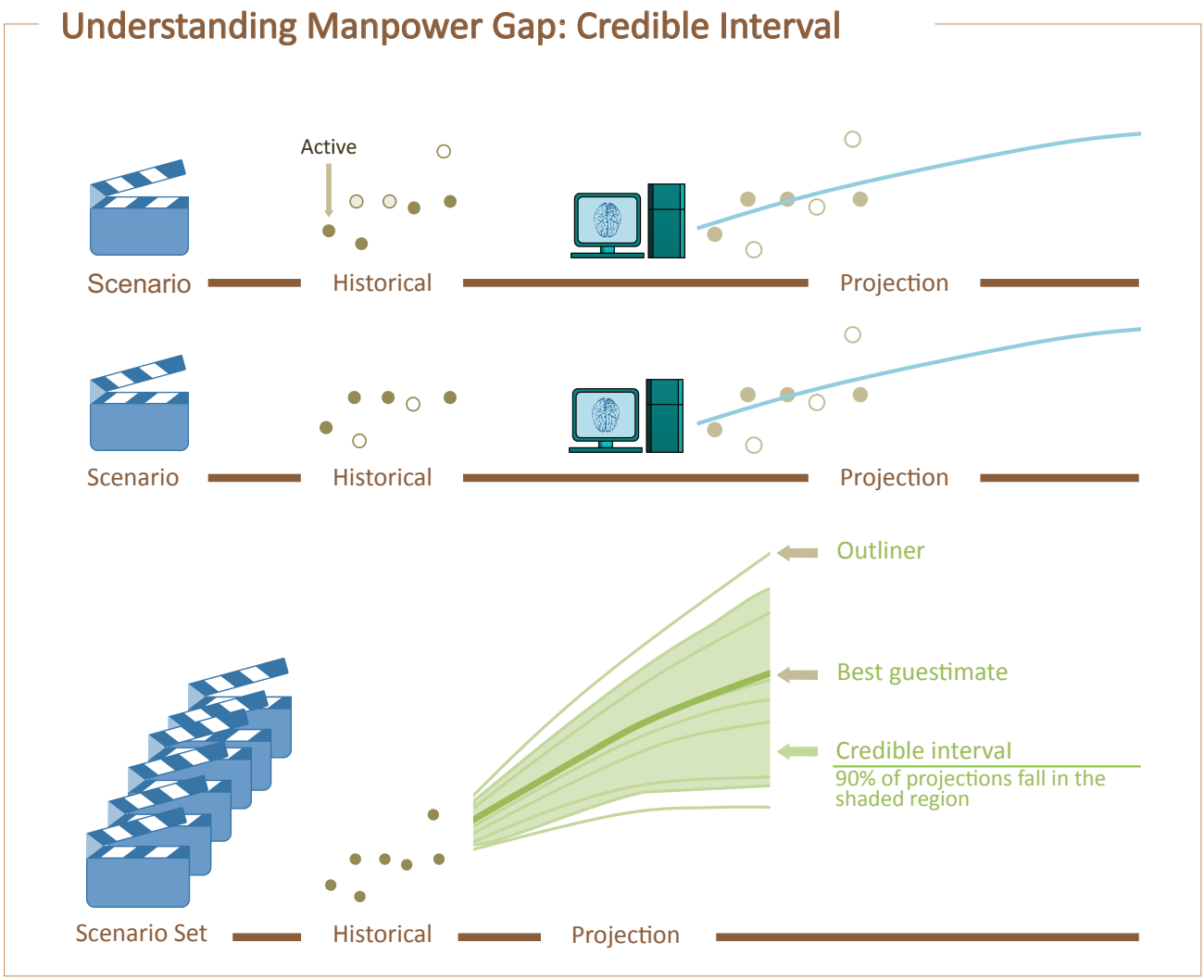


Figure 16. HKU's supply model



26. The manpower projection results for the healthcare professions subject to statutory registration are summarised as follows. Because of the nature of manpower forecast and the inherent limitations of the model itself, the projections should be viewed in perspective. In interpreting the projection results, we should focus on the trend rather than the absolute gap. The medium to long-term projection could change significantly if events unknown now happen in future.

Figure 17. Credible Interval



MANPOWER PROJECTION FOR EACH PROFESSION

27.1 DOCTORS
Key Facts

Full registration	14 013
Provisional registration	379
Limited registration	134
Temporary registration	81

Registered specialists	6 797

Doctor to population ratio	1 : 526
Proportion of public and private practice	51% : 49%

HA employs over 40% of registered doctors in HK.

Male to female ratio	68% (Male); 32% (Female)

Median age	46
Age distribution	
20-29	10.1%
30-39	23.6%
40-49	25.8%
50-59	19.7%
≥60	20.8%

* Based on information from 13 689 doctors with full registration (around 98% of total number of doctors with full registration) whose date of birth information is available.

Regulatory body	Medical Council of Hong Kong (MCHK)

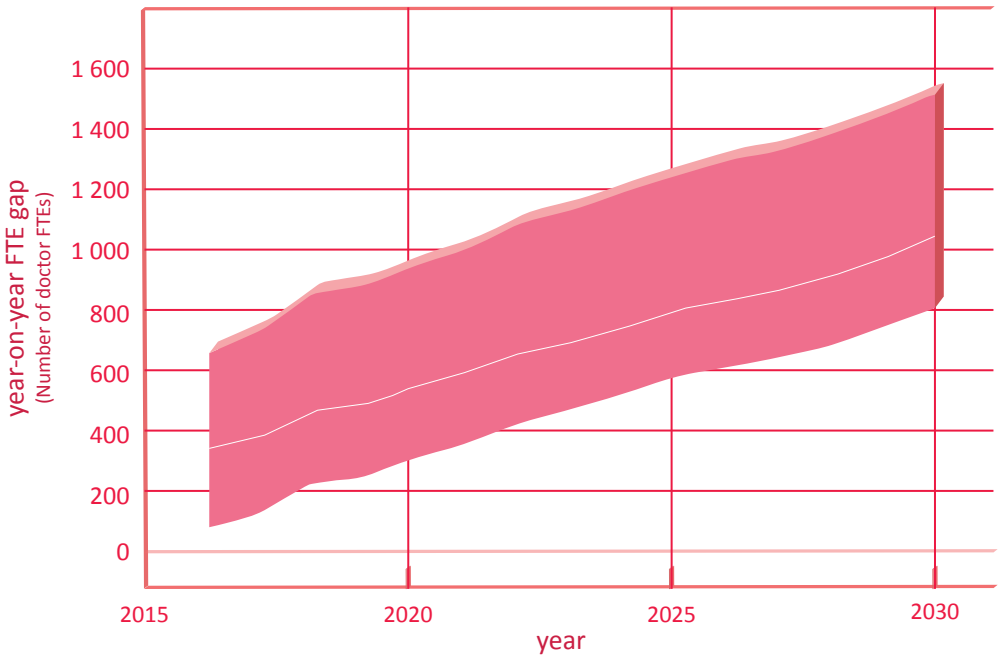
Training of medical doctors	CUHK HKU

Training of specialists	Hong Kong Academy of Medicine (HKAM)

The training cycle of a specialist is very long. It takes at least 13 years to become a specialist (six years of basic medical training, a year of internship training at HA and at least six years of specialist training).

Manpower Projection

Manpower Gap in FTE



Year	2016	2020	2025	2030
5th percentile	80	320	596	829
	(0.7%)	(2.6%)	(4.4%)	(5.7%)
Best guestimate	285	500	755	1 007
	(2.4%)	(3.9%)	(5.5%)	(6.8%)
95th percentile	690	989	1 296	1 575
	(5.7%)	(7.5%)	(9.0%)	(10.3%)

Note:

1. A positive number indicates shortfall, whereas a negative number indicates sufficient manpower (or surplus under the model).
2. Historical number of vacancies in the public sector, known and planned hospital development and expansion projects in both the public and private sectors, as well as the assumed impact of the Voluntary Health Insurance Scheme, have been taken into account in the projection.
3. Age-, sex-specific parameters are used in the projections.
4. Retirement pattern with reference to Health Manpower Survey.

Observations and Recommendations

Locally trained doctors

27.1.1 The Steering Committee notes that ...
With the ageing population and increasing demand for healthcare services, it is projected that there will be manpower shortage of doctors in the short to medium term. Local graduates are the predominant source of doctors serving in the public sector.

27.1.2 The Steering Committee recommends that ...
The Government should consider further increases in medical training places having regard to the supply of and demand for doctors.

Doctor manpower in the public sector

27.1.3 The Steering Committee considers that ...
In considering ways to address the doctor shortage, the Steering Committee is mindful that the private sector is more flexible in adjusting productivity in response to market demand. The Steering Committee also notes the observations of some that there remains spare capacity in the private sector and thus considers that the Government's priority should be focused on filling the manpower gap in HA, which provides nearly 90% of all in-patient services and around 30% of primary care services in Hong Kong.

Retaining doctors to work in HA

27.1.4 The Steering Committee welcomes ...

HA's adoption of a higher retirement age of 65 for new recruits commencing employment on or after 1 June 2015.

HA's initiative to rehire retired healthcare professionals for two years up to 62 on a pilot basis. Through the re-hiring scheme in 2015/16 and 2016/17, HA has recruited 63 doctors, 48 nurses, nine allied health professionals and 884 healthcare support staff. The Steering Committee supports that HA should continue to re-employ suitable retirees through the Special Retired and Rehire Scheme in 2017/18.

Recruiting non-locally trained doctors through limited registration

27.1.5 The Steering Committee recommends that ...
In a bid to alleviate manpower shortage, HA should continue to recruit non-locally trained doctors through limited registration. It is noted that the Government introduced an amendment bill into the Legislative Council (LegCo) to amend the Medical Registration Ordinance (MRO) to extend the validity period and renewal period of limited registration from not exceeding one year to not exceeding three years. Subject to the passage of the Bill, this will help HA recruit more non-locally trained doctors through limited registration to ease its doctor shortage problem in the short term.

Non-locally trained doctors

27.1.6 The Steering Committee welcomes MCHK's initiatives to ...
- increase the frequency of its Licensing Examination
- refine the exemption requirements for the examination
- refine requirement of internship assessment

Around 70 candidates passed the Part III Clinical Examination of the Licensing Examination in 2014 and another 40 in 2015 and 41 in 2016, which was significantly higher than the five-year average of 30 from 2009 to 2013.

27.1.7 The Steering Committee notes that ...
The Government has provided additional resources to MCHK to set up an online platform for candidates sitting the Licensing Examination in order to increase the transparency of the Licensing Examination.

27.2 DENTISTS
Key Facts

Registered dentists	2 441
Registered dental specialists	260
Dentist to population ratio	1 : 3 021
Proportion of public and private practice	26% : 74%

The majority of registered dentists are in private practice.

Male to female ratio	68% (Male); 32% (Female)

Median age	48
Age distribution	
20-29	12.0%
30-39	21.6%
40-49	20.7%
50-59	27.9%
≥60	17.8%

* Based on information from 2 392 dentists (around 98% of total number of registrants) whose date of brith information is available.

Regulatory body	Dental Council of Hong Kong (DCHK)
Training of dentists	HKU

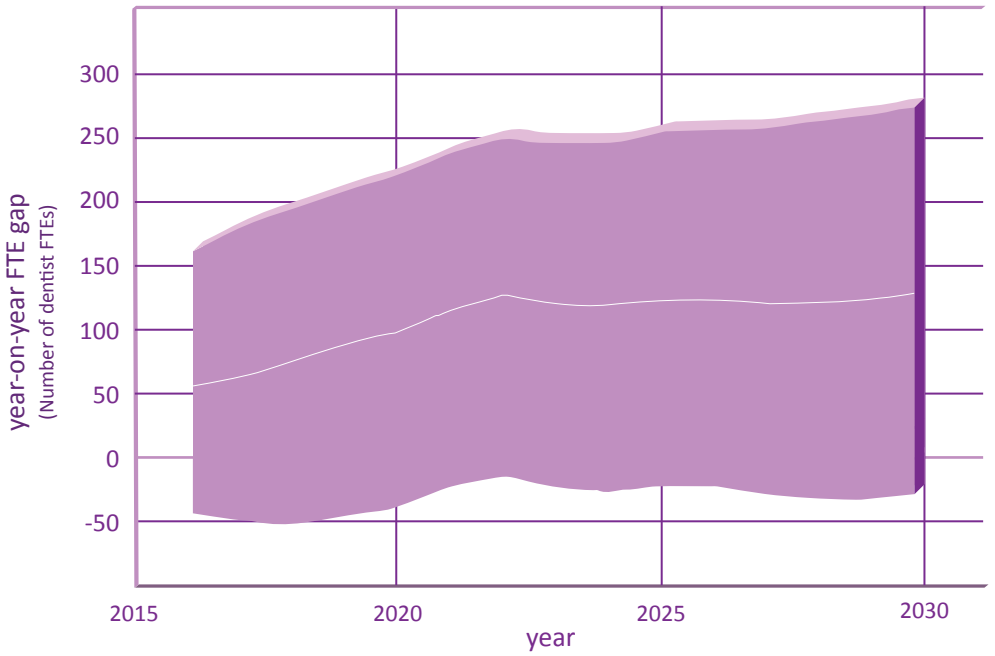
The Faculty of Dentistry of HKU is the sole provider of undergraduate training in dentistry.

Training of dental specialists	HKAM (The College of Dental Surgeons of Hong Kong)

The training cycle of a specialist is very long. It takes at least 12 years to become a specialist (six years of basic dentistry training and at least six years of specialist training).

Manpower Projection

Manpower Gap in FTE



Year	2016	2020	2025	2030
5th percentile	-46	-42	-24	-31
	(-2.2%)	(-2.0%)	(-1.1%)	(-1.3%)
Best guestimate	53	96	121	127
	(2.5%)	(4.2%)	(5.1%)	(5.1%)
95th percentile	162	223	256	277
	(7.1%)	(9.2%)	(10.1%)	(10.5%)

Note:

1. A positive number indicates shortfall, whereas a negative number indicates sufficient manpower (or surplus under the model).
2. Historical number of vacancies in the public sector and known and planned projects in the public sector have been taken into account in the projection.
3. Age-, sex-specific parameters are used in the projections.
4. Retirement pattern with reference to Health Manpower Survey.

Observations and Recommendations

Locally trained dentists

27.2.1 The Steering Committee notes that ...
It is projected that there will be manpower shortage of dentists in the short to medium term. As our society ages and with enhanced public awareness of dental care, the private demand for dental services is set to increase. Furthermore, with the introduction of new dental initiatives by the Government, notably the Outreach Dental Care Programme for the Elderly, the Community Care Fund Elderly Dental Assistance Programme and the Pilot Project on Dental Service for People with Intellectual Disability, the demand for subsidised dental services is on the rise with consequential implications for dental manpower.

27.2.2 The Steering Committee recommends that ...
The Government should keep in view the manpower supply of dentists and consider increasing the number of publicly-funded training places as appropriate.

Non-locally trained dentists

27.2.3 The Steering Committee welcomes that ...
DCHK's initiatives to hold two Licensing Examinations for non-locally trained dentists every year starting from 2015. DCHK has further improved the arrangement of certain parts of the Licensing Examination starting from 2015, including allowing candidates to re-sit those unsuccessful part(s) for certain papers of the Licensing Examination, while retaining partial pass results for the successful ones. DCHK has also updated its result retention policy and examination admission arrangement.

27.2.4 The Steering Committee recommends that ...
A limited registration mechanism be put in place for the dentist profession so as to supplement the local manpower in the short term when necessary.

27.3 DENTAL HYGIENISTS
Key Facts

Enrolled dental hygienists	424
Proportion of public and private practice	8% : 92%

Over 90% of dental hygienists are engaged in the private sector.

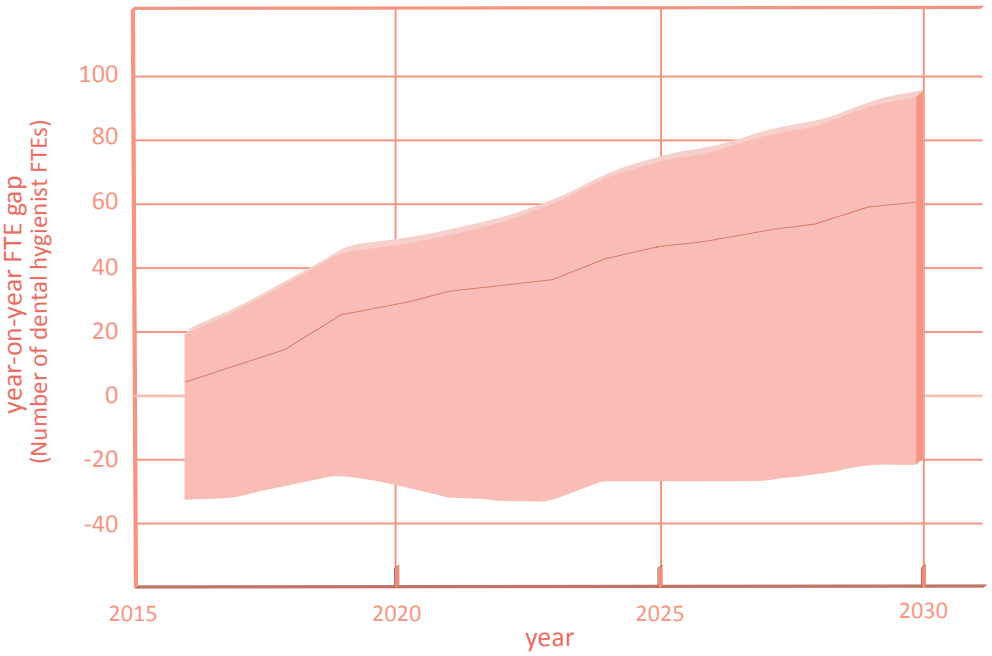
Male to female ratio	5% (Male); 95% (Female)

The vast majority of dental hygienists are female.

Regulatory body	DCHK
Training of dental hygienists	HKU School of Professional and Continuing Education (HKU SPACE) Community College

Manpower Projection

Manpower Gap in FTE



Year	2016	2020	2025	2030
5th percentile	-31	-26	-25	-20
	(-11.2%)	(-7.9%)	(-6.5%)	(-4.6%)
Best guestimate	6	30	48	62
	(1.9%)	(7.8%)	(10.7%)	(12.2%)
95th percentile	22	49	75	95
	(6.7%)	(12.1%)	(15.7%)	(17.7%)

Note:

1. A positive number indicates shortfall, whereas a negative number indicates sufficient manpower (orsurplus under the model).
2. Age-, sex-specific parameters are used in the projections.
3. Retirement pattern with reference to Health Manpower Survey.

Observations and Recommendations

Manpower projection of dental hygienists

27.3.1 The Steering Committee notes that …
It is projected that there will be manpower shortage of dental hygienists in the short to medium term.

27.3.2 The Steering Committee considers that …
The Government should consider devising a more robust mechanism with updated registration status of dental hygienists, as dental hygienists, once enrolled, will stay on the list without the need for annual renewal.

27.4 NURSES
Key Facts

Registered nurses (General)	36 555
Registered nurses (Psychiatric)	2 612
Registered nurses (Mentally Sub-normal)	5
Registered nurses (Sick Children)	6
Enrolled nurses (General)	11 719
Enrolled nurses (Psychiatric)	1 492

Nurses, comprising registered nurses and enrolled nurses, constitute more than half of the total healthcare workforce in Hong Kong.

Nurse to population ratio	1 : 141
Proportion of public and private practice	Registered nurses: 83% : 17% Enrolled nurses: 66% : 34%
Male to female ratio	Registered nurses: 15% (Male); 85% (Female) Enrolled nurses: 11% (Male); 89% (Female)

The majority of nurses are female.

Median age (Registered nurses)	42
Median age (Enrolled nurses)	41
Age distribution	
20-29	22.8%
30-39	21.5%
40-49	25.5%
50-59	21.4%
≥60	8.8%

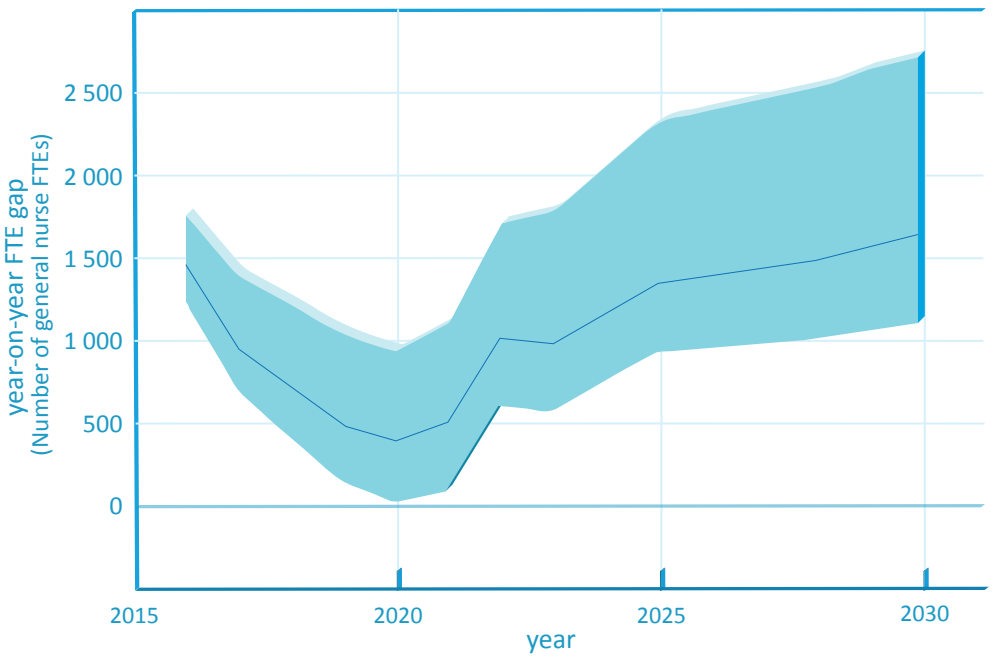
* Based on information from 38 954 registered nurses and 13 144 enrolled nurses (around 99% of total number of registrants) whose date of birth information is available.

Regulatory body	Nursing Council of Hong Kong (NCHK)
Training of nurses	Accredited pre-service nursing programmes offered by training institutions, HA and private hospitals

There is a strong and vibrant self-finacing sector dedicated to nurse training, in addition to nurse prgrammes offered by UGC-funded institutions. CUHK, HKU and the Hong Kong Polytechnic University (PolyU) provide a total of 630 UGC-funded first-year-first-degree places and 125 senior-year intake places each year. HA, private hospitals and other tertiary institutions operate in parallel a variety of self-financed nursing programmes, which add up to about 2 200 places annually. All in all, there are around 3 000 nursing training places offered each year.

Manpower Projection General Nurses

Manpower Gap in FTE



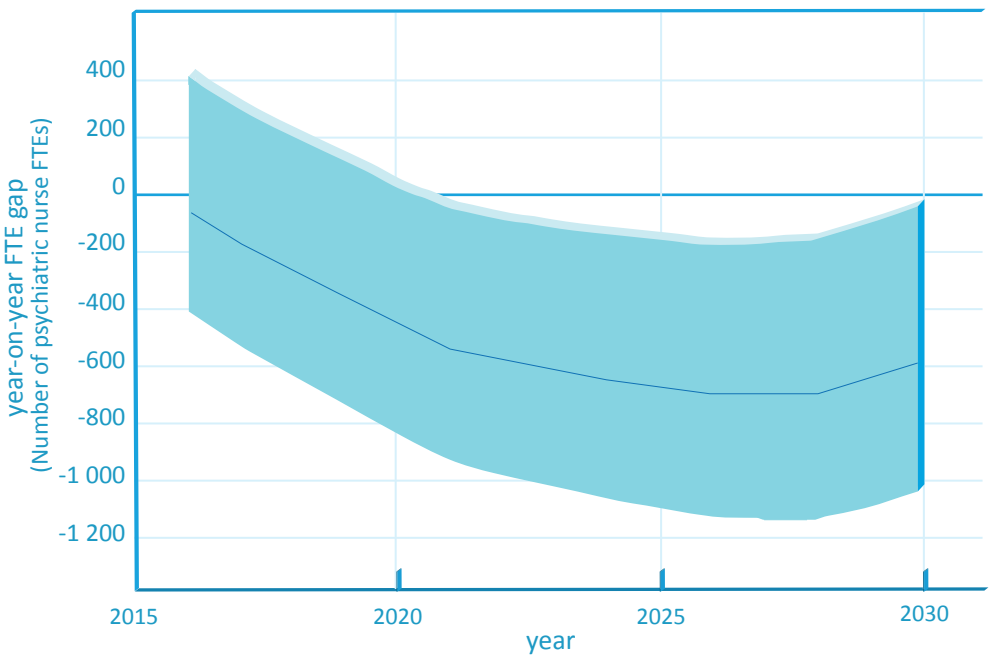
Year	2016	2020	2025	2030
5th percentile	1 245	83	964	1 131
	(3.6%)	(0.2%)	(2.1%)	(2.3%)
Best guestimate	1 485	455	1 383	1 669
	(4.2%)	(1.2%)	(3.0%)	(3.3%)
95th percentile	1 813	993	2 341	2 727
	(5.1%)	(2.5%)	(5.0%)	(5.3%)

Note:

1. A positive number indicates shortfall, whereas a negative number indicates sufficient manpower (or surplus under the model).
2. Historical number of vacancies in public sector, and known and planned projects in the public and subvented sectors have been taken into account in the projection.
3. Age-, sex-specific parameters are used in the projections.
4. Retirement pattern with reference to Health Manpower Survey.

Manpower Projection Psychiatric Nurses

Manpower Gap in FTE



Year	2016	2020	2025	2030
5th percentile	-441	-873	-1 131	-1 078
	(-16.1%)	(-30.1%)	(-35.9%)	(-31.6%)
Best guestimate	-94	-487	-708	-623
	(-3.0%)	(-14.8%)	(19.8%)	(-16.1%)
95th percentile	401	17	-174	-55
	(11.2%)	(0.4%)	(-4.2%)	(-1.2%)

Note:

1. A positive number indicates shortfall, whereas a negative number indicates sufficient manpower (or surplus under the model).
2. Historical number of vacancies in public sector, and known and planned projects in the public and subvented sectors have been taken into account in the projection.
3. Age-, sex-specific parameters are used in the projections.
4. Retirement pattern with reference to Health Manpower Survey.

Observations and Recommendations

Locally trained nurses

27.4.1 The Steering Committee notes that ...
There is a strong and vibrant self-financing sector dedicated to nurse training, in addition to nurse programmes offered by UGC funded institutions. CUHK, HKU and PolyU providing a total of 630 UGC-funded first-year-first-degree places and 125 senior-year intake each year. HA, private hospitals and other tertiary institutions operate in parallel a variety of self-financed nursing programmes, which add up to about 2 200 places annually. All in all, there are some 3 000 nursing training places offered each year.

The Government has also provided sizable subsidy to nursing programmes meeting the criteria and selected under the mechanism of SSSDP. A total of 420 self-financing nursing places were subsidised for the 2015/16 cohort and the number of subsidised self-financing nursing places was increased to 480 for the 2016/17 and 2017/18 cohorts.

Manpower projection - General Nurses

27.4.2 The Steering Committee notes that ...
It is projected that there will be manpower shortage of general nurses in the short to medium term. There is also increasing demand for general nurses from the welfare sector with the implementation of enhancement initiatives to strengthen the nursing support in terms of elderly and rehabilitation services.

27.4.3 The Steering Committee notes that ...
When considering whether to increase the annual UGC-funded nursing places, the Government should take into account, among others, the training cycle of nurses and the fact that the self-financing market is flexible and responsive in adapting to market demand.

Manpower projection - Psychiatric Nurses

27.4.4 The Steering Committee notes that ...
It is projected that 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. This is based on the model assumption that the existing service level and model will remain unchanged throughout the projection period and no new services will be provided. In reality, service provision and planning are dependent on the availability and sufficiency of the necessary healthcare manpower. Knowing that there is an increasing supply of psychiatric nurses in relation to existing service level and model, various service providers such as HA and social welfare institutions should capture this opportunity to plan ahead to make better and fuller use of psychiatric nurses in the provision of existing and new healthcare services. Furthermore, given the adaptability and flexibility of the self-financing sector, there would be natural adjustment in response to the need and demand for nurses.

Non-locally trained nurses

27.4.5 The Steering Committee welcomes that ...
NCHK's initiative to increase the frequency of Licensing Examination for non-locally trained nurses from once to twice a year from 2016.

27.5 MIDWIVES
Key Facts

Registered midwives	4 540
Midwife to population ratio	1 : 1 624
Proportion of public and private practice	85% : 15%
Male to female ratio	0% (Male); 100% (Female)

Midwife may hold dual registration in both nursing and midwifery. About 95% of registered midwives possess registered nurses registrations.

Regulatory body	Midwives Council of Hong Kong
Training of midwives	School of Midwifery of the Prince of Wales Hospital (Clinical placement will be conducted in the maternity unit of various clinical training grounds approved by the Midwives Council of Hong Kong)

The School of Midwifery of the Prince of Wales Hospital is currently the only institution providing midwifery training in Hong Kong. It runs an 18-month post-registation diploma course in midwifery which admits only registered nurses. Any person who wishes to practise as a midwife in Hong Kong has to pass the Midwives Council Examination before she can register with the Midwives Council of Hong Kong.

Observations

There were 4 540 midwives as at end 2016. To the best of our understanding, only 40% of them are working in the field of midwifery, obstetrics and gynaecology, due to the low fertility level in Hong Kong. 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 HA and private hospitals, it would not be possible to present a meaningful manpower projection for midwives. Given the low fertility level in Hong Kong and the stable demand for midwives, the supply of midwives should be more or less sufficient to meet the demand.

27.6 CHINESE MEDICINE PRACTITIONERS
Key Facts

Registered CMPs	7 262
Listed CMPs	2 647
CMPs with limited registration	47

The number of listed CMPs is declining over the years while the number of registered CMPs is rising.

Male to female ratio (Registered CMPs)	63% (Male); 37% (Female)
Male to female ratio (Listed CMPs)	76% (Male); 24% (Female)

CMPs to poplulation ratio	1 : 744

Proportion of public and private practice of registered CMPs	12% : 88%

The vast majority of CMPs, registered or listed, worked in the private sector.

Median age (Registered CMPs)	59
Median age (Listed CMPs)	66
Age distribution	
20-29	5.2%
30-39	11.4%
40-49	8.6%
50-59	20.6%
≥60	54.2%

The CMP profession is a relatively ageing profession as compared to other healthcare professions.

Regulatory body	Chinese Medicine Council of Hong Kong (CMCHK)

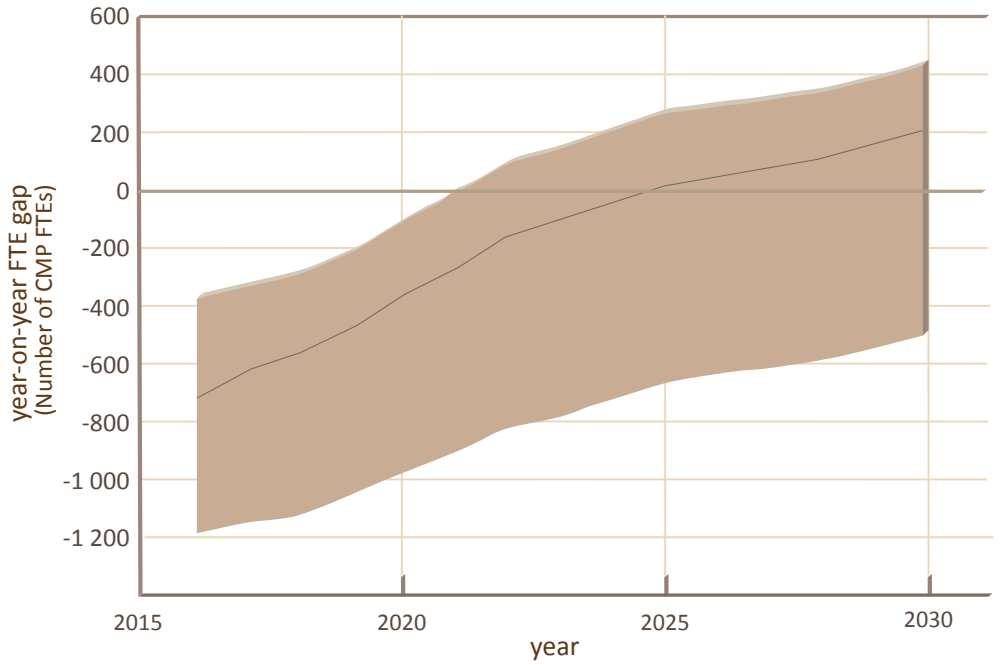
Training of CMPs	Hong Kong Baptist University (BU) CUHK HKU

A person who aspires to be a CMP must have satisfactorily completed such an undergraduate degree course of training in Chinese Medicine practice or its equivalent, whether or not conferred by a local university, approved by the CMP Board of CMCHK before they can take the Licensing Examination and obtain registration to practise in Hong Kong.

Three local universities, viz. BU, CUHK and HKU offer six-year undergraduate courses in Chinese Medicine which are recognised by CMCHK as approved courses for Licensing Examination. The number of training places has remained steady over the past decade, around 80 annually.

Manpower Projection

Manpower Gap in FTE



Year	2016	2020	2025	2030
5th percentile	-1 198	-984	-673	-505
	(-18.7%)	(-14.8%)	(-9.8%)	(-7.2%)
Best guestimate	-716	-354	25	222
	(-10.4%)	(-4.9%)	(0.3%)	(2.9%)
95th percentile	-359	-82	287	451
	(-4.9%)	(-1.1%)	(3.7%)	(5.7%)

Note:

1. A positive number indicates shortfall, whereas a negative number indicates sufficient manpower (or surplus under the model).
2. According to the statistics provided by CMCHK, the average number of candidates passing the Licensing Examination and getting registered for the period from 2012 to 2016 is about 200 each year.
3. The number of students studying Chinese Medicine programmes in the Mainland recognised by CMCHK has decreased from the peak from about 470 in 2013/14 to 260 in 2015/16. The potential impact on the supply of CMPs needs further assessment, pending the availability of more data e.g. graduation rate, willingness to practice in HK and their passing rate of the Licensing Examination.
4. Age-, sex-specific parameters are used in the projections.
5. Retirement pattern with reference to Health Manpower Survey.

Observations and Recommendations

Manpower projection of CMPs

27.6.1 The Steering Committee notes that ...
It is projected that there will be sufficient manpower of CMPs in the short term and manpower shortage in the medium term.

27.6.2 The Steering Committee notes that ...
There is no urgent need to adjust the training places for CMPs considering that there will be sufficient manpower before 2025 in the profession.

HK students studying Chinese Medicine in the Mainland

27.6.3 The Steering Committee notes that ...
During the deliberation of the CMP Sub-group, there was concern over the trend of HK students studying Chinese Medicine in the Mainland.

According to the statistics provided by CMCHK, the average number of candidates passing the Licensing Examination and getting registered for the period from 2012 to 2016 is about 200 each year.

2012	2013	2014	2015	2016
189	255	190	204	233

It is observed that the number of students studying Chinese Medicine programmes in the Mainland recognised by CMCHK has decreased from the peak from about 470 in 2013/14 to 260 in 2015/16. The potential impact on the supply of CMPs needs further assessment, pending the availability of more data e.g. graduation rate, willingness to practise in HK and their passing rate of the Licensing Examination.

The Steering Committee considers that the Government should continue to keep in view the trend of HK students studying Chinese Medicine in the Mainland and the number of candidates passing the Licensing Examination. Assessment should also be conducted regarding the impact of HK students studying in the Mainland on the overall manpower supply of CMPs.

27.7 PHARMACISTS
Key Facts

Registered pharmacists	2 659

Non-locally trained pharmacists accounted for 56% newly registered pharmacists in the past five years (2012 to 2016).

Pharmacist to population ratio	1 : 2 774
Male to female ratio	47% (Male); 53% (Female)
Proportion of public and private practice	44% : 56%

Median age	39
Age distribution	
20-29	20.5%
30-39	31.8%
40-49	23.0%
50-59	14.6%
≥60	10.1%

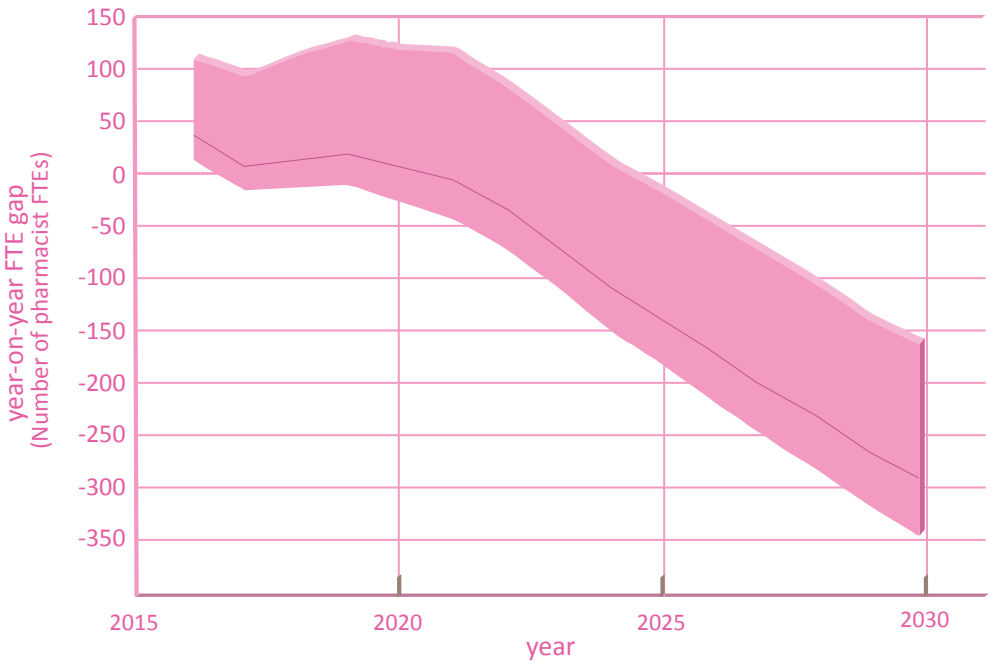
* Based on infomation from 2 478 registered pharmacists (around 93% of total number of registrants) whose date of birth information is available.

The pharmacist profession is a relatively young profession.

Regulatory body	Pharmacy & Poisons Board of Hong Kong (PPBHK)
Training of pharmacists	CUHK HKU

Manpower Projection

Manpower Gap in FTE



Year	2016	2020	2025	2030
5th percentile	22	-20	-175	-341
	(1.2%)	(-0.9%)	(-7.4%)	(-13.5%)
Best guestimate	47	16	-129	-283
	(2.5%)	(0.7%)	(-5.4%)	(-11.0%)
95th percentile	123	131	-5	-151
	(6.3%)	(5.7%)	(-0.2%)	(-5.6%)

Note:

1. A positive number indicates shortfall, whereas a negative number indicates sufficient manpower (or surplus under the model).
2. Initiatives in the public sector and the development in the private sector have been taken into account in the projection.
3. Age-, sex-specific parameters are used in the projections.
4. Retirement pattern with reference to Health Manpower Survey.

Observations and Recommendations

Manpower projection of pharmacists

27.7.1 The Steering Committee notes that …
It is projected that the supply of pharmacists is in slight shortage or close to equilibrium in the short term and there will be sufficient manpower in the medium term under the existing service level and model.

Enhancement of pharmacy services

27.7.2 The Steering Committee considers that …
With a steady locally trained pharmacists in the tune of 90 every year, healthcare service providers including HA should make full use of the manpower resources to plan for new and enhanced initiatives, e.g. clinical pharmacy services, in response to the challenges of ageing population.

Demand for community pharmacists in the private sector

27.7.3 The Steering Committee notes that ...
The demand for community pharmacists in the private sector is contingent on the economic situation and the condition of the retail market. The demand-supply dynamics could shift swiftly in the face of economic fluctuations with consequential impact on the retail market. During an economic boom, the supply of community pharmacists would be tight or even in shortage whereas an economic downturn could cause short-term sufficient manpower of community pharmacists.

Next manpower projection exercise for pharmacists

27.7.4 The Steering Committee recommends that ...
The Government should make use of the next projection exercise (which will start in the second half of 2017 for the 2019/20 - 2021/22 triennium) to re-assess the supply and demand projection having regard to the latest changes in the retail market, in particular local community pharmacies.

27.8 OCCUPATIONAL THERAPISTS
Key Facts

Registered OTs	1 911
OT to population ratio	1 : 3 859
Proportion of pubilc and private practice	89% : 11%

Male to female ratio	33% (Male); 67% (Female)

Median age	33
Age distribution	
20-29	35.1%
30-39	45.4%
40-49	15.3%
50-59	3.6%
≥60	0.6%

* Based on information from 1 413 registered OTs (around 74% of total number of registrants) whose date of birth information is available.

The OT profession is a relatively young profession.

Regulatory body	Supplementary Medical Professions Council (SMP Council) Occupational Therapists Board (OTs Board)

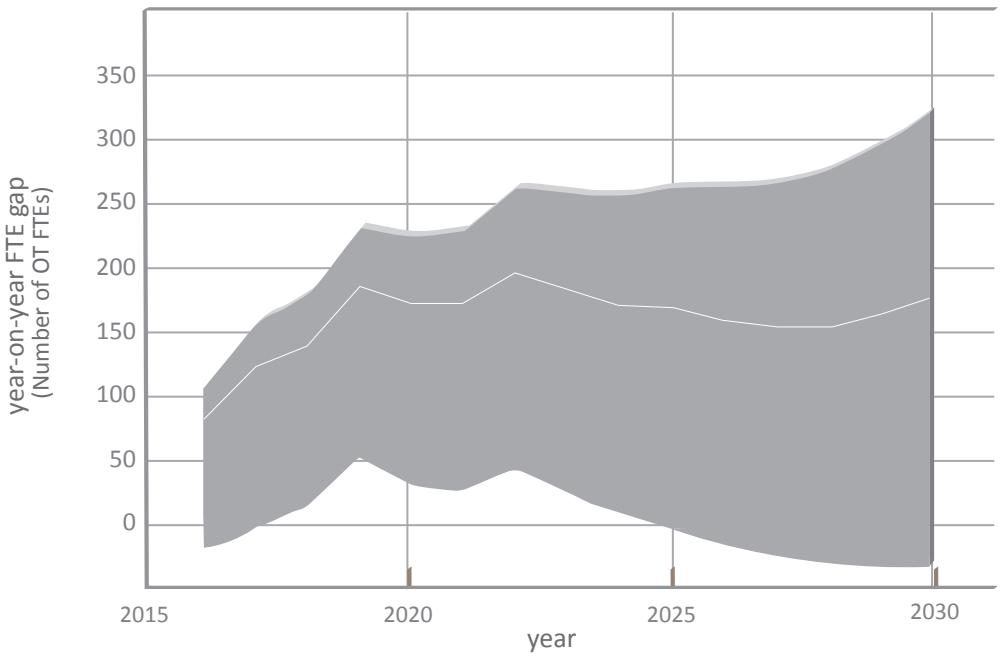
Training of OTs	PolyU TWC (undergoing accreditation)

TWC

TWC has started to operate a self-finanacing programme in occupational therapy, providing about 50 training places in the 2013/14 academic year. The programme is undergoing accreditation by SMP Council. The first cohort of students will graduate in 2017.

Manpower Projection

Manpower Gap in FTE



Year	2016	2020	2025	2030
5th percentile	-33	33	0	-52
	(-2.0%)	(1.6%)	(0.0%)	(-2.0%)
Best guestimate	87	181	178	186
	(5.3%)	(8.9%)	(7.6%)	(7.1%)
95th percentile	117	237	277	337
	(6.6%)	(10.6%)	(10.5%)	(11.2%)

Note:

1. A positive number indicates shortfall, whereas a negative number indicates sufficient manpower (or surplus under the model).
2. Manpower requirement ratio set by SWD, known and planned projects in the public and subvented sectors have been taken into account in the projection.
3. Age-, sex-specific parameters are used in the projections.
4. Retirement pattern with reference to Health Manpower Survey.

Observations and Recommendations

Manpower projection of OTs

27.8.1 The Steering Committee notes that …
It is projected that there will be manpower shortage of OTs in the short to medium term under the existing service level and model.

Manpower shortage in the welfare sector

27.8.2 The Steering Committee notes that …
The social welfare sector has expressed concerns over the manpower shortage of OTs due to ageing population and increasing service provision. However, there is only one UGC-funded institution i.e. PolyU providing OT programme in HK.

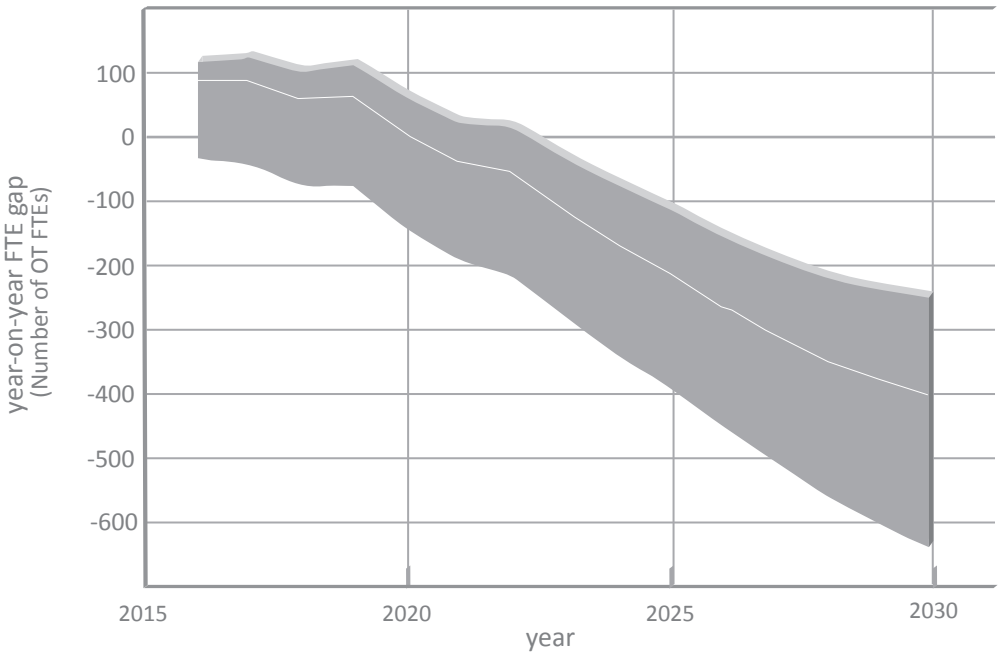
To alleviate the shortage of OTs in the welfare sector, PolyU launched a two-year entry level Master in Occupational Therapy (MOT) programme in January 2012 on a self-financing basis. To encourage graduates of the MOT programme to join the welfare sector, the Social Welfare Department (SWD) has introduced a Training Sponsorship Scheme to provide funding support for the non-governmental organizations (NGOs) to offer tuition fee sponsorship to students whom they recruited. Students obtaining the sponsorship have to work for NGOs concerned for not less than two years. The first and second cohorts of around 30 students graduated in January 2014 and January 2016 respectively. PolyU cooperated with SWD again to implement the third batch of MOT programme in 2016/17, providing a total capacity of around 24 places. The graduates need to undertake to work in the welfare sector for not less than three years.

Self-financing training

27.8.3 The Steering Committee notes that …
TWC has started to operate a self-financing programme in occupational therapy, providing about 50 training places. The programme is undergoing accreditation by SMP Council. The first cohort of students will graduate in 2017. There will be sufficient manpower in the medium term after taking into the account graduates from TWC.

Scenario Analysis
(Taking into account TWC's graduates of 50)

Manpower Gap in FTE



Year	2016	2020	2025	2030
5th percentile	-33	-141	-384	-635
	(-2.0%)	(-6.9%)	(-16.3%)	(-24.3%)
Best guestimate	87	7	-206	-397
	(5.0%)	(0.3%)	(-8.1%)	(-13.9%)
95th percentile	117	63	-107	-246
	(6.6%)	(2.8%)	(-4.1%)	(-8.2%)

Note:

1. A positive number indicates shortfall, whereas a negative number indicates sufficient manpower (or surplus under the model).
2. Assuming additional supply from the occupational therapy programme offered by TWC.

27.8.4 The Steering Committee considers that …

Increased graduates from the self-financing sector world better enable healthcare service providers in particular social welfare organisations to plan for new and /or improved services.

Demand in the welfare sector

27.8.5 The Steering Committee notes that ...

The manpower of OTs might be insufficient as the demand for OTs in the welfare sector has long been suppressed because of manpower shortage.

Next manpower exercise projection for OTs

27.8.6 The Steering Committee notes that ...

The Government should make use of the next projection exercise (which will start in the second half of 2017 for the 2019/20 - 2021/22 triennium) to re-assess the supply and demand projection, in particular when the new and increased demand for OTs in the welfare sector is fully captured.

27.9 PHYSIOTHERAPISTS
Key Facts

Registered PTs	2 956
PT to population ratio	1 : 2 495
Proportion of pubilc and private practice	59% : 41%

Male to female ratio	41% (Male); 54% (Female)

Median age	37
Age distribution	
20-29	23.3%
30-39	36.1%
40-49	25.2%
50-59	13.2%
≥60	2.2%

The PT profession is a relatively is a young profession.

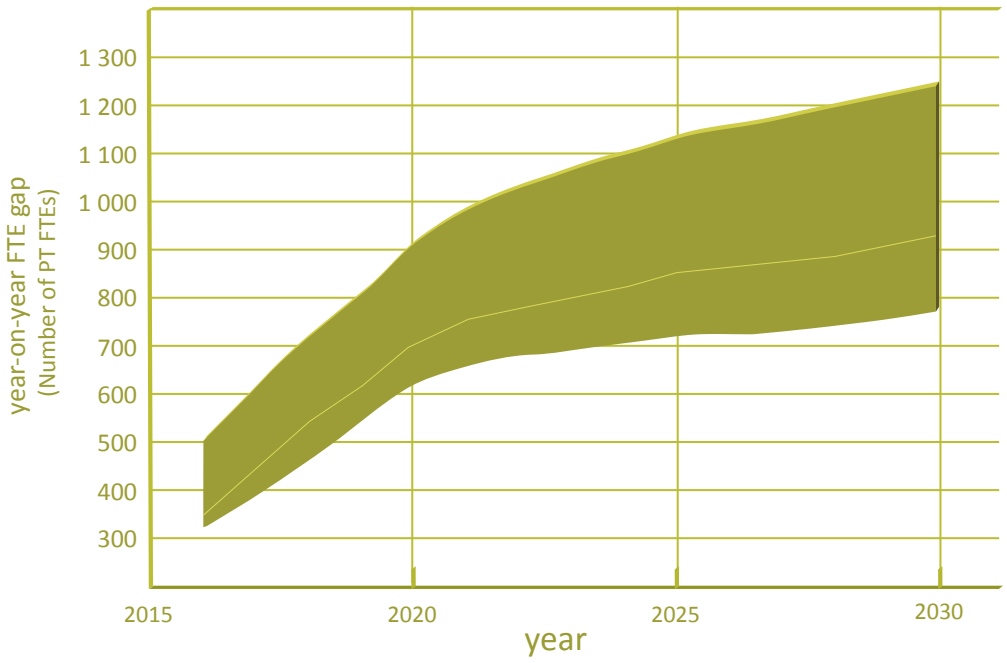
Regulatory body	SMP Council Physiotherapists Board (PTs Board)

Training of PTs	PolyU

PolyU is the only institution providing PT training in HK.

Manpower Projection

Manpower Gap in FTE



Year	2016	2020	2025	2030
5th percentile	321	623	723	775
	(11.4%)	(18.2%)	(18.7%)	(18.6%)
Best guestimate	351	710	854	933
	(12.4%)	(20.2%)	(21.4%)	(21.6%)
95th percentile	509	919	1 137	1 243
	(17.0%)	(24.7%)	(26.6%)	(26.8%)

Note:

1. A positive number indicates shortfall, whereas a negative number indicates sufficient manpower (or surplus under the model).
2. Historical manpower shortage in the subvented sector, known and planned projects in the public and subvented sectors have been taken into account in the projection.
3. Age-, sex-specific parameters are used in the projections.
4. Retirement pattern with reference to Health Manpower Survey.

Observations and Recommendations

Manpower projection of PTs

27.9.1 The Steering Committee notes that ...
It is projected that there will be manpower shortage of PTs in the short to medium term.

Manpower shortage in the welfare sector

27.9.2 The Steering Committee notes that ...
The social welfare sector has expressed concerns over the manpower shortage due to ageing population and increasing service provision. However, there is only one UGC-funded institution i.e. PolyU providing PT programme in HK.

To alleviate the shortage of PTs in the welfare sector, PolyU launched a two-year entry level Master in Physiotherapy (MPT) programme in January 2012 on a self-financing basis. To encourage graduates of MPT programme to join the welfare sector, SWD has introduced a Training Sponsorship Scheme to provide funding support for the NGOs to offer tuition fee sponsorship to students whom they recruited. Students obtaining the sponsorship have to work for NGOs concerned for not less than two years. The first and second cohorts of around 30 students graduated in January 2014 and January 2016 respectively. PolyU cooperated with SWD again to implement the third batch of MPT programme in 2016/17, providing a total capacity of around 48 places. The graduates need to undertake to work in the welfare sector for not less than three years.

Self-financing training

27.9.3 The Steering Committee recommends that ...
The Government should encourage the self-financing sector to offer physiotherapy programmes as in the case of OTs, in addition to increasing publicly-funded training places.

27.10 MEDICAL LABORATORY TECHNOLOGISTS
Key Facts

Registered MLTs	3 443
MLT to population ratio	1 : 2 142
Proportion of pubilc and private practice	64% : 36%

Male to female ratio	46% (Male); 54% (Female)

Median age	36
Age distribution	
20-29	24.6%
30-39	40.5%
40-49	27.8%
50-59	5.4%
≥60	1.7%

* Based on information from 2 224 registered MLTs (around 65% of total number of registrants) whose date of birth information is available.

The MLT profession is a relatively young profession.

Regulatory body	SMP Council Medical Laboratory Technologists Board (MLTs Board)

Training of MLTs	PolyU TWC HKU SPACE

TWC

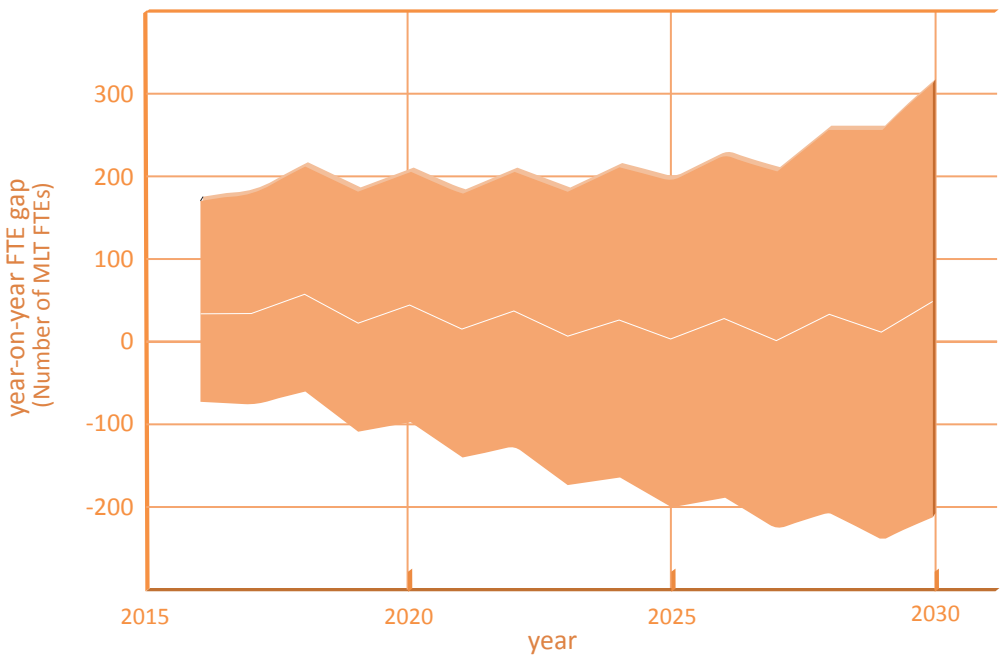
TWC has started to operate a self-financing programme in medical laboratory science, providing about 20 training places in the 2012/13 academic year. The programme is accredited by SMP Council in August 2016 and the first cohort of students graduated in the same year.

SSSDP

Considering that there is a sustained demand for MLTs in HK and the programme of TWC has obtained professional accreditation from SMP Council, the Government has decided to subsidise 20 training places of the medical laboratory science pragramme by TWC under SSSDP for the 2017/18 cohort.

Manpower Projection

Manpower Gap in FTE



Year	2016	2020	2025	2030
5th percentile	-71	-95	-196	-207
	(-2.6%)	(-3.3%)	(-6.2%)	(-6.0%)
Best guestimate	33	44	3	49
	(1.2%)	(1.4%)	(0.1%)	(1.3%)
95th percentile	167	201	190	309
	(5.7%)	(6.3%)	(5.3%)	(7.8%)

Note:

1. A positive number indicates shortfall, whereas a negative number indicates sufficient manpower (or surplus under the model).
2. Age-, sex-specific parameters are used in the projections.
3. Retirement pattern with reference to Health Manpower Survey.

Observations and Recommendations

Manpower projection of MLTs

27.10.1 The Steering Committee notes that …

It is projected that there will be slight shortage (but close to equilibrium) of MLTs in the short to medium term.

27.10.2 The Steering Committee considers that …

The Government should keep in view the manpower situation of MLTs in the market.

Self-financing training

27.10.3 The Steering Committee notes that …

There is an increasing demand for MLTs in both public and private sectors. The increased training places and provision of self-financing programmes could help meet such increasing demand.

Considering that there is a sustained demand for MLTs in Hong Kong and the programme of TWC has obtained professional accreditation from SMP Council, the Government has decided to subsidise 20 training places of the medical laboratory science programme operated by TWC under SSSDP for the 2017/18 cohort.

27.11 OPTOMETRISTS
Key Facts

Registered optometrists	2 180
Optometrists to population ratio	1 : 3 383
Proportion of pubilc and private practice	9% : 91%

Regulatory body	SMP Council Optometrists board
Training of optometrists	PolyU

The vast majority of optometrists worked in the private sector.

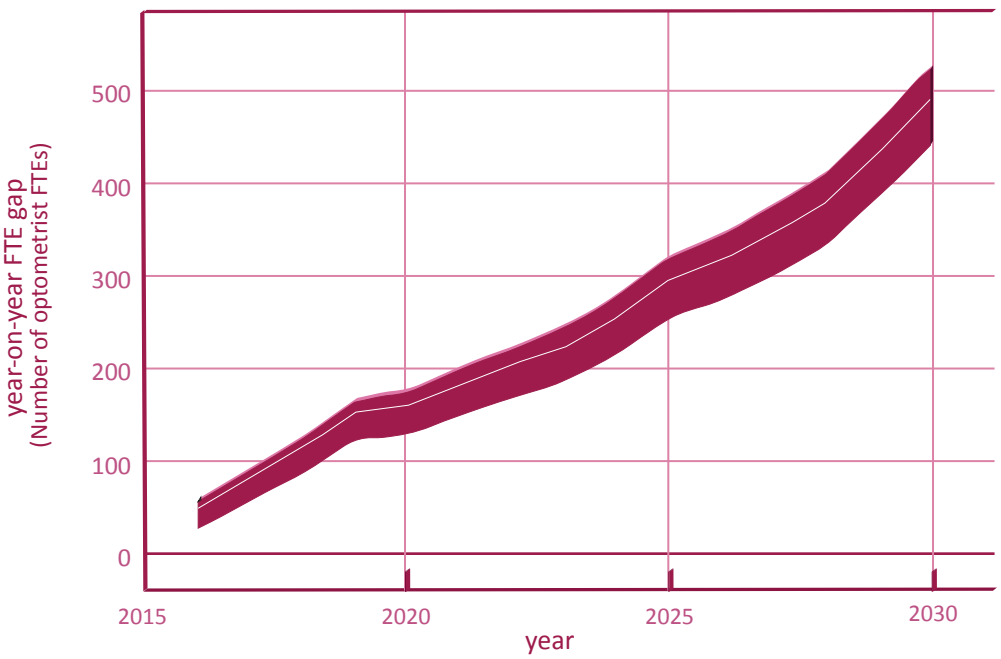
PolyU is the only institution providing optometry training in HK.

Male to female ratio	76% (Male); 24% (Female)

Median age	50
Age distribution	
20-29	10.4%
30-39	15.0%
40-49	24.0%
50-59	32.4%
≥ 60	18.2%

Manpower Projection

Manpower Gap in FTE



Year	2016	2020	2025	2030
5th percentile	31	134	259	446
	(1.7%)	(7.0%)	(13.2%)	(22.2%)
Best guestimate	56	167	302	497
	(3.0%)	(8.6%)	(15.0%)	(24.1%)
95th percentile	63	181	326	533
	(3.3%)	(9.2%)	(16.0%)	(25.4%)

Note:

1. A positive number indicates shortfall, whereas a negative number indicates sufficient manpower (or surplus under the model).
2. Age-, sex-specific parameters are used in the projections.
3. Retirement pattern with reference to Health Manpower Survey.

Observations and Recommendations

Manpower projection of optometrists

27.11.1 The Steering Committee notes that …
It is projected that there will be manpower shortage of optometrists in the short to medium term.

27.11.2 The Steering Committee recommends that …
The Government should encourage self-financing sector to offer optometry programmes, in addition to increasing publicly-funded training places.

Optometrists in the private sector

27.11.3. The Steering Committee notes that ...
Similar to the pharmacists profession, the demand for optometrists in the private sector is contingent on the economic situation and the condition of the retail market.

27.11.4 The Steering Committee notes that …
As the vast majority (over 90%) of optometrists are in private practice, the quality and availability of data for the purpose of manpower projection may not be as robust and reliable as those where there is a significant proportion of public service. The shortage in the short to medium term could be mitigated by market adjustments and behavioral change of practising private optometrists. The projected manpower shortage would be reduced if optometrists in private practice opt to work well beyond the retirement age commonly observed in public organisations.

Next manpower projection exercise for optometrists

27.11.5 The Steering Committee recommends that …
The Government should make use of the next projection exercise (which will start in the second half of 2017 for the 2019/20 - 2021/22 triennium) to re-assess the supply and demand projection, having regard to the latest changes in the retail market and other relevant factors.

27.12 RADIOGRAPHERS
Key Facts

Registered radiographers	2 209
Registered radiographers (Category : Diagnostic)	1 842
Registered radiographers (Category : Therapeutic)	367
Radiographer to population ratio	1 : 3 339
Proportion of public and private practice	
(Category : Diagonostic)	57% : 43%
(Category : Therapeutic)	62% : 38%
Male to female ratio	55% (Male); 45% (Female)
Median age	41
Age distribution	
20-29	22.5%
30-39	23.8%
40-49	26.7%
50-59	20.4%
≥60	6.6%

Regulatory body	SMP Council Radiographers Board
Training of radiographers	PolyU TWC

TWC

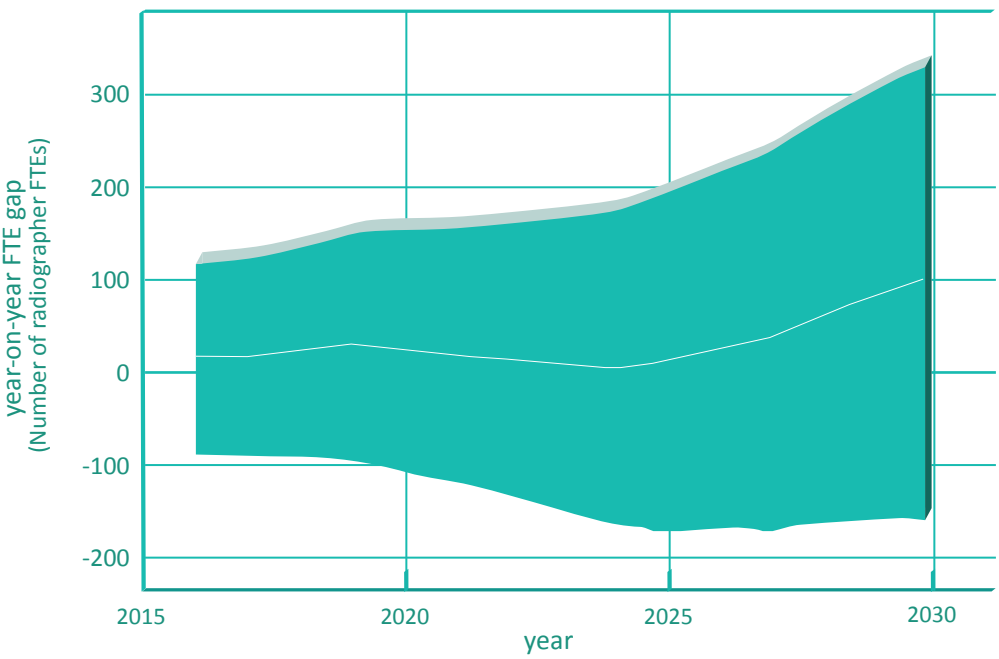
In addition to PolyU, TWC has started to operate a self-financing programme in radiation therapy, providing about 15 training places in the 2012/13 academic year. In 2016, the programme was accredited by SMP Counil with the first cohort of students graduated in the same year.

SSSDP

Considering that there is a sustained demand for radiographers in HK and the programme of TWC has obtained professional accreditation from SMP Council, the Government has decided to subsidise 12 training places of the radiation therapy programme operated by TWC under SSSDP for the 2017/18 cohort.

Manpower Projection

Manpower Gap in FTE



Year	2016	2020	2025	2030
5th percentile	-94	-114	-178	-166
	(-4.9%)	(-5.2%)	(-6.9%)	(-5.7%)
Best guestimate	18	26	14	106
	(0.9%)	(1.1%)	(0.5%)	(3.3%)
95th percentile	123	161	202	349
	(5.8%)	(6.5%)	(6.8%)	(10.2%)

Note:

1. A positive number indicates shortfall, whereas a negative number indicates sufficient manpower (or surplus under the model).
2. Age-, sex-specific parameters are used in the projections.
3. Retirement pattern with reference to Health Manpower Survey.

Observations and Recommendations

Manpower projection of radiographers

27.12.1 The Steering Committee notes that …

It is projected that there will be slight shortage but close to equilibrium of radiographers in the short to medium term.

27.12.2 The Steering Committee considers that …

The Government should keep in view the manpower situation of radiographers in the market.

Self-financing training

27.12.3 The Steering Committee notes that ...

Considering that there is a sustained demand for radiographers in Hong Kong and the programme of TWC has obtained professional accreditation from SMP Council, the Government has decided to subsidise 12 training places of the radiation therapy programme operated by TWC under SSSDP for the 2017/18 cohort.

Manpower planning for radiographers

27.12.4 The Steering Committee notes that ...

Registered radiographers in Hong Kong are divided into two categories: diagnostic and therapeutic. While the manpower projection conducted by HKU is for the whole radiography profession, the two streams of radiographers have different skill sets and are specialised in different types of work. For the current exercise, radiographers are treated as one for the purpose of manpower projections. The Government would consider whether and, if so, how separate projections could be made in the next round of projection exercise.

27.13 CHIROPRACTORS
Key Facts

Registered chiropractors	209
Chiropractor to population ratio	1 : 35 287
Proportion of pubilc and private practice	0% : 100%

Regulatory body	Chiropractors Council
Training of chiropractors	Not available in HK

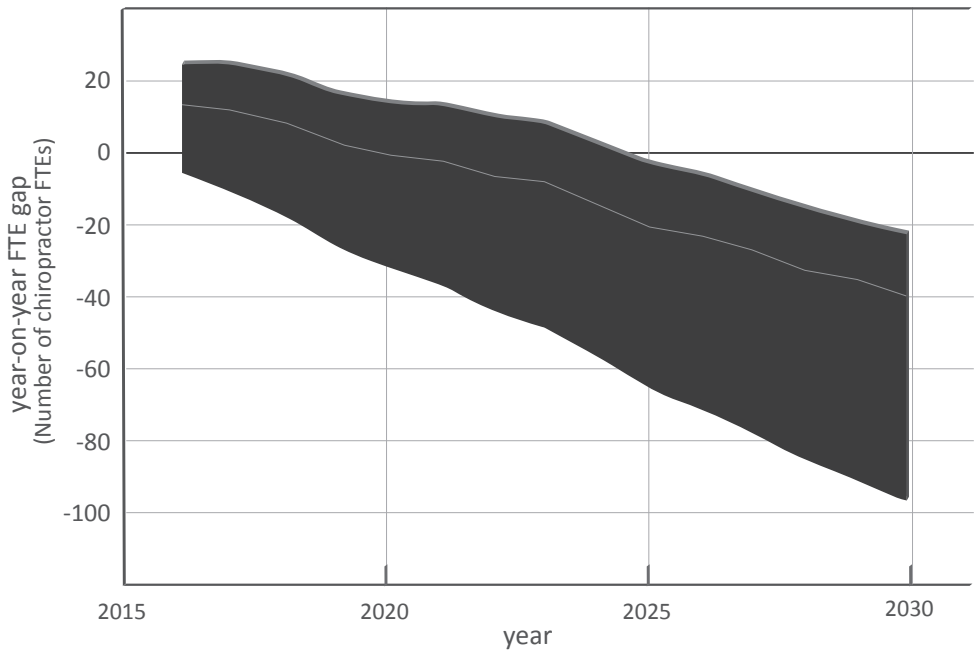
All registered chiropractors are engaged in the private sector.

Male to female ratio	70% (Male); 30% (Female)

Median age	42
Age distribution	
20-29	10.0%
30-39	35.4%
40-49	23.0%
50-59	15.8%
≥ 60	15.8%

Manpower Projection

Manpower Gap in FTE



Year	2016	2020	2025	2030
5th percentile	-6	-33	-66	-98
	(-3.1%)	(-15.6%)	(-29.0%)	(-41.4%)
Best guestimate	13	-1	-21	-40
	(6.3%)	(-0.4%)	(-7.6%)	(-13.8%)
95th percentile	25	14	-3	-23
	(11.5%)	(5.4%)	(-1.1%)	(-7.3%)

Note:

1. A positive number indicates shortfall, whereas a negative number indicates sufficient manpower (or surplus under the model).
2. Age-, sex-specific parameters are used in the projections.
3. Retirement pattern with reference to Health Manpower Survey.

Observations and Recommendations

Manpower projection of chiropractors

27.13.1 The Steering Committee notes that …

It is projected that the manpower supply of chiropractors is close to manpower equilibrium in the short term and there will be sufficient manpower in the medium term.

For chiropractors, given the current demand situation, the supply of non-locally trained graduates should be adequate to meet the local demand in the short to medium term.

27.13.2 The Steering Committee considers that …

All chiropractors are working in the private sector. As in the case of optometrists, the current projection of chiropractors should be viewed in context. Concerted efforts should be made in the next round of exercise to improve the quality and reliability of data from the private sector.

RECOMMENDED MEASURES

RECOMMENDATION 1

LOCAL SOURCE – PUBLICLY-FUNDED HEALTHCARE TRAINING

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

28. The Steering Committee considers that locally trained healthcare professionals should continue to be the bedrock of our healthcare workforce. To meet the increasing demand for healthcare services, the Steering Committee recommends that the Government should consider increasing the number of UGC-funded training places for those professions which will still be facing manpower shortage in the medium to long term.

RECOMMENDATION 2

LOCAL SOURCE – 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, notably nurses, OTs, PTs, MLTs, optometrists and radiographers and provide the necessary support to the self-financing sector in terms of infrastructural and funding support.

The Government should continue to subsidise the pursuit of study in those healthcare disciplines facing manpower shortage as appropriate, in particular, in the allied health disciplines, under SSSDP with a view to sustaining the healthy development of the self-financing tertiary sector to complement the UGC-funded sector in broadening and diversifying study opportunities.

29. At present, there are two medical school (i.e. HKU and CUHK), one dental school (i.e. HKU), and one UGC-funded university for training allied health professionals (i.e. PolyU). UGC-funded places are costly and usually require a long planning horizon. There is also limitation to their capacity for expansion in the short to medium term because of infrastructural constraints.

30. Tertiary institutions should and could help meet part of our healthcare manpower needs through a wider and greater provision of self-financing training programmes. The Steering Committee notes that OUHK, TWC, PolyU, Caritas and HKU SPACE are heading towards this direction.

31. The Steering Committee recommends that the Government should make better use of the self-financing sector to help meet part of the increasing demand for healthcare professionals, in particular nurses, OTs, PTs, MLTs, optometrists and radiographers, and provide necessary support to the self-financing sector in terms of infrastructural and funding support.

32. The availability of self-financing programmes for nurses and allied health professionals could provide more flexibility to meet changes in demand. These programmes produce graduates who may have greater incentive to work in sectors, such as social welfare institutions, which have hitherto experienced difficulties in recruitment. The nursing profession is the first healthcare profession with a strong and vibrant self- financing training capacity. Its experience shows that with the active participation of the self-financing sector, shortage in nurses could be addressed effectively within a reasonable period of time.

33. In order to nurture talents to meet our social and economic needs, the Government has decided to regularise SSSDP from the 2018/19 academic year to subsidise students to undertake designated self-financing undergraduate programmes. The number of subsidised places will be increased from about 1 000 per cohort to 3 000. Current students of the designated programmes will also receive the subsidy from the 2018/19 academic year. It is expected that about 13 000 students will benefit from the scheme each academic year.

34. The Steering Committee recommends that the Government should continue to subsidise the pursuit of study in those healthcare professions facing manpower shortage as appropriate, in particular, in the allied health professions, with a view to sustaining the healthy development of the self-financing tertiary sector to complement the UGC-funded sector in broadening and diversifying study opportunities.

RECOMMENDATION 3
HEALTHCARE MANPOWER IN THE PUBLIC SECTOR

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.

Retaining doctors to work in HA

35. The Steering Committee recommends that to address manpower shortage in the short to medium term, more proactive measures should be adopted by HA to attract and retain healthcare professionals including doctors in the public sector. This would provide relief to the shortage of doctors in HA.

Recruiting non-locally trained doctors through limited registration

36. In a bid to alleviate manpower shortage, HA should continue to recruit non-locally trained doctors through limited registration. The Government introduced an amendment bill into LegCo to amend MRO to extend the validity period and renewal period of limited registration from not exceeding one year to not exceeding three years. Subject to the passage of the Bill, this will help HA recruit more non-locally trained doctors to ease its doctor shortage problem in the short term.

37. The Steering Committee considers that while measures should be taken to facilitate experienced non-locally trained doctors to come and practise in Hong Kong, the quality and competency level of these doctors should not be compromised. MCHK should continue to be entrusted to uphold the professional standards of doctors in order to safeguard patient safety and interest in Hong Kong.

RECOMMENDATION 4

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 publicise the registration arrangements overseas with targeted and proactive recruitment drive to facilitate non-locally trained healthcare professionals, many of whom are Hong Kong citizens or have deep roots here, to come to Hong Kong to practise.

38. While locally trained healthcare professionals should be the primary source of supply, they should be supplemented as necessary by qualified, non-locally trained ones through established mechanism in the short term.

39. There are avenues for non-locally trained healthcare professionals to practise in Hong Kong. For those professions where full registration is granted to non-locally trained professionals through licensing examinations, the Steering Committee notes that MCHK, DCHK and NCHK have increased their frequency of licensing examinations and, where appropriate, introduced more flexibility for internship arrangement (see Figure 18).

40. As for allied health professions, non-locally trained professionals could gain full registration without licensing examination through recognised qualifications in general. There is, thus, no need to increase the frequency of the relevant licensing examinations which often attract a small number of candidates.

41. However, where there is shortage of local supply, the Steering Committee recommends that more efforts should be made to publicise 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. For instance, it is noted that the Government led a delegation, with the participation of various social welfare institutions in Hong Kong, to the UK in November 2016 to attract and recruit healthcare professionals (in particular OTs and PTs) to work in Hong Kong. More efforts should be put on attracting non-locally trained professionals through the Government's economic and trade offices overseas.

42. For pharmacists and chiropractors, it is noted that non-locally trained professionals account for an important source of manpower supply in Hong Kong. As for CMPs, the trend of HK students studying Chinese Medicine in the Mainland needs attention and close monitoring of its consequential impact on the overall supply of CMPs in Hong Kong in the years to come.

Figure 18. Measures taken to facilitate non-locally trained professionals to practise in Hong Kong

Doctors

- Increase of frequency of the Licensing Examination
- Refinement of exemption requirement for the Licensing Examination
- Refinement of internship arrangement for non-locally trained doctors
- An online platform to improve the transparency of Licensing Examination
- Recruitment of non-locally trained doctors by way of limited registration

Dentists

- Increase of frequency of the Licensing Examination
- Refinement of the Licensing Examination arrangements e.g. candidates are allowed to retain partial pass results

Nurses

- Increase of frequency of the Licensing Examination

Introducing further measures to facilitate non-locally trained healthcare professionals to practise in HK while upholding standard and quality

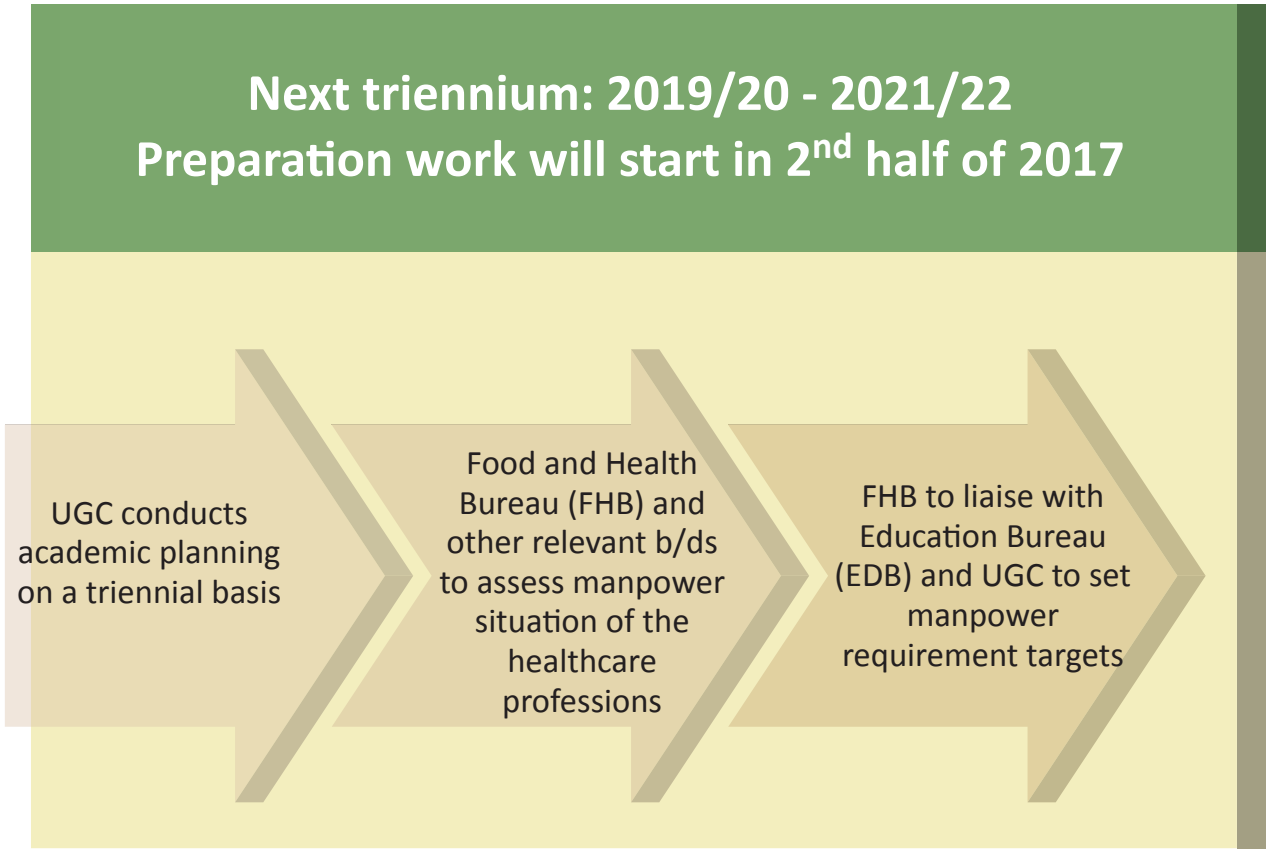
RECOMMENDATION 5
MANPOWER PLANNING AND PROJECTIONS

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

43. The current manpower projection exercise and the manpower forecast model designed by HKU have provided a starting point and good basis for the Government to conduct manpower planning regularly. To keep in view the manpower situation of the healthcare professions, the Steering Committee recommends that the Government should conduct manpower planning and projections for healthcare professionals once every three years in step with the triennial planning cycle of UGC. The next projection exercise will start in the second half of 2017 for the 2019/20 - 2021/22 triennium.

44. The Steering Committee recommends that the Government should devise a more sophisticated data collection mechanism so as to facilitate manpower projections in the future. The Government should also continue its engagement with the healthcare professions so as to keep abreast of the latest manpower situation of healthcare professionals.

Figure 19. Conducting manpower planning and projections once every three years



Part Three:

PROFESSIONAL DEVELOPMENT AND REGULATION

OVERVIEW

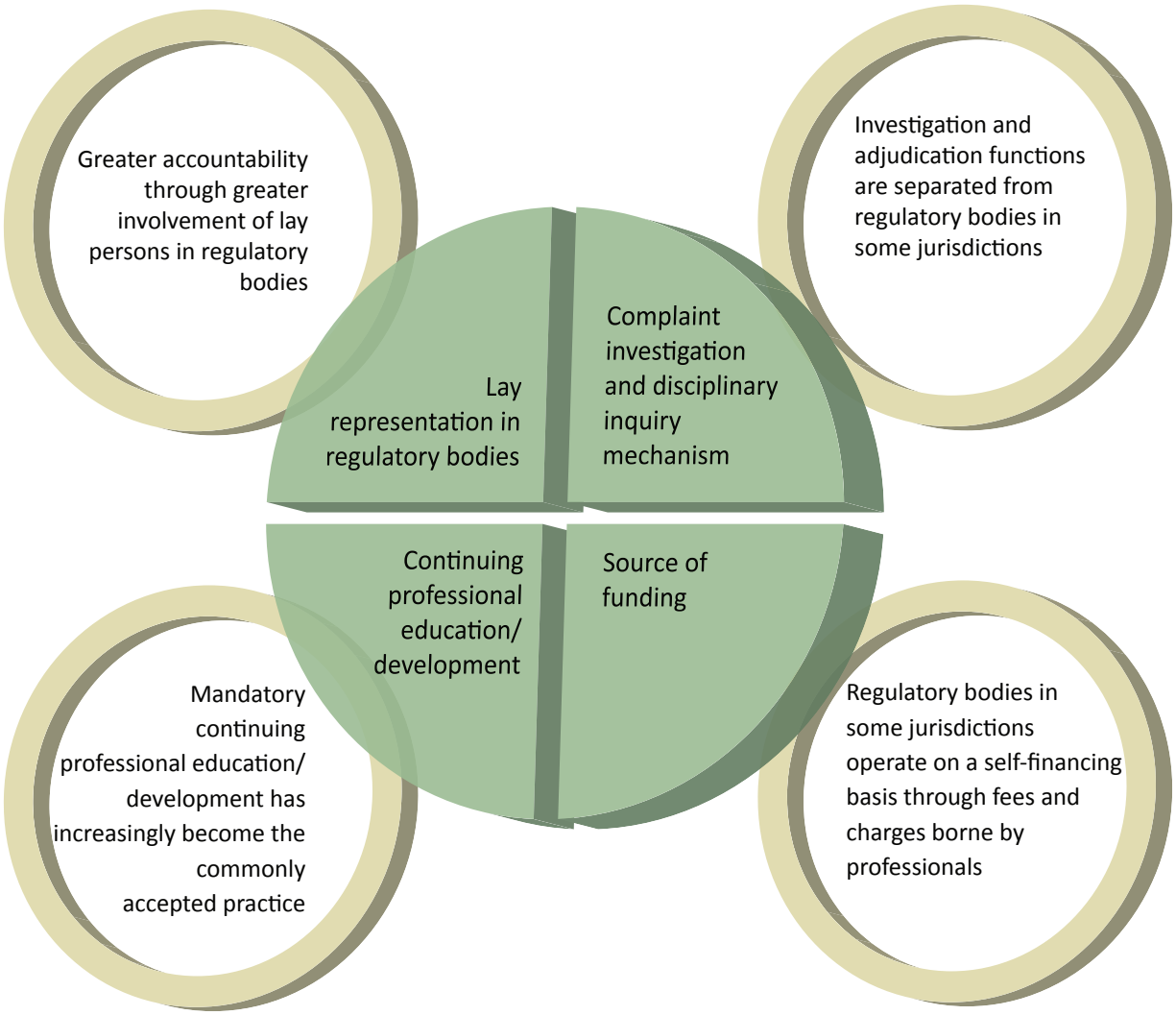
45. The healthcare system of Hong Kong is renowned for its quality, efficiency and cost-effectiveness. The achievements we have made on the front of healthcare owe much to the competence, dedication and commitment of our healthcare professionals. Their good and hard work has earned the trust and respect of the community over the years. Public trust is a crucial element for professional self-regulation which has been accepted here without much dispute for decades while professional regulation elsewhere undergoes substantive changes. However, professional self-regulation must evolve and improve itself in keeping with the prevailing rules and values of our open and cosmopolitan society.

CUHK's Findings

46. The findings and observations of the study commissioned to CUHK offer a comprehensive view of the latest regulatory models for healthcare professionals in different parts of the world. There is no one-size-fits-all solution, and differences in regulatory regimes are inevitable because of differences in circumstances. The regulatory regimes among developed economies in the west are converging towards a more modern mechanism with more openness, greater accountability, a more independent and separate complaint investigation and disciplinary inquiry mechanism, and increased emphasis on continuing professional education and development (see Figure 20). While Asian jurisdictions tend to follow a more traditional mode of professional self-regulation with strong government oversight, there are signs that efforts are being made to build a more modern regulatory framework.

47. In its deliberations, the Steering Committee has adopted a holistic and balanced approach, taking into account both the views and concerns of healthcare professionals and other stakeholders in the community as well as the findings and observations of CUHK's study. We fully recognise the importance of ensuring stability in professional regulation. Any change proposed must be based on solid grounds that would advance professionalism and are in the interest of maintaining public trust in our healthcare professionals. We appreciate the contribution of our healthcare professionals, and would strive to ensure that the hard-earned trust remains as strong as it is through measures that strike a balance between upholding professional autonomy and responding to legitimate calls for more credibility and greater accountability.

Figure 20. Global trends in regulatory regime of healthcare professionals



RECOMMENDED MEASURES

RECOMMENDATION 6

LAY INVOLVEMENT IN
BOARDS AND COUNCILS

Boards and Councils should ensure meaningful lay involvement by, among others, setting a minimum lay membership of 25%.

48. The Steering Committee considers that there is a need to ensure meaningful lay involvement in Boards and Councils. Having an appropriate proportion of lay members, who are neither post-tied ex-officio members nor members of the profession under regulation, could help bring in fresh views and offer wider perspectives. A meaningful presence of lay members provides an institutional assurance for enhanced public accountability while preserving professional self-regulation.

49. The Steering Committee believes that lay members should generally make up at least 25% of the membership of Boards and Councils. A survey of the current situation (see Figure 21) shows that 11 Boards and Councils have already had a lay ratio equal to or larger than 25%. There are two, namely MCHK and Midwives Council of Hong Kong, which have less than 25% of lay members.

Figure 21. Lay participation in Boards and Councils: current situation

	Total no. of members	No. of lay members (percentage)
MCHK	28	4 (14%) [4 lay persons]
DCHK	12	3 (25%) [1 lay person and 2 doctors]
NCHK	15	3[5] - 6 (20% - 40%) [3 lay persons, 1 member nominated by HA, 2 members selected from a pool of persons nominated by each of the tertiary institutions providing accredited nursing programmes]
Midwives Council of Hong Kong	18	4 (22%) [2 lay persons and 2 doctors]
CMCHK	19	6[6] - 8 (32% - 42%) [chairman, 2 public officers, 2 from educational or scientific research institutions in Hong Kong and 3 lay persons]
PPBHK	11	3 (27%) [2 doctors and 1 lawyer]
SMP Council	15-18	6[7] - 13 (33% - 72%)[8] [chairman, deputy chairman, 4 public officers, 4 other persons not being public officers and 3 persons nominated by CUHK, HKU and PolyU]
OTs Board PTs Board MLTs Board Optometrists Board Radiographers Board	8-11	2[9] - 3 (18% - 27%)[10] [chairman, 1 doctor and 1 person specially qualified to advise on professional education]
Chiropractors Council	10	5 (50%) [4 lay persons and 1 public officer]

[5] There will be three fewer lay members if the member nominated by HA and the two members selected from a pool of persons nominated by each of the tertiary institutions providing accredited nursing programmes are not considered so. According to past record, these members are usually registered nurses.

[6] There will be two fewer lay members if the two members from educational or scientific research institutions in Hong Kong are not considered so. According to past record, these two members are usually filled by registered CMPs or persons in the field of Chinese Medicine.

[7] There will be seven fewer lay members if the four other persons not being public officers and three persons nominated by CUHK, HKU and PolyU are not considered so. According to past record, except the person nominated by PolyU, the other six members are usually other registered healthcare practitioners.

[8] In calculating the lay proportion, assuming the total number of members is 18 members.

[9] There will be one fewer lay member if the person specially qualified to advise on professional education is not considered so. According to past record, this member is usually from education institution being registered in that SMP profession.

[10] In calculating the lay proportion, assuming the total number of members is 11 members.

50. Lay participation in MCHK was discussed at the Tripartite Platform on Amendments to the MRO[11]. The Government would weigh all relevant considerations, including the recommendation of the Steering Committee and deliberations at the Tripartite Platform, and make a decision that has balanced the best interest of the community as a whole. The Government introduced an amendment bill into LegCo on 7 June 2017 to –

(a) improve the complaint handling and disciplinary inquiry mechanism of MCHK for greater efficiency, accountability and credibility;
(b) increase lay membership in MCHK for enhanced accountability and credibility; and
(c) enable MCHK to approve applications for limited registration from not more than one year to not more than three years.

51. As regards the Midwives Council of Hong Kong, the Steering Committee considers that it should deliberate and advise the Government whether the present lay involvement is adequate and, if not, what changes should be made in further increasing lay participation.

52. As for other Boards and Councils, the Steering Committee notes that there are seats where the law provides latitude for them to be filled by persons either within the profession or outside. Taking NCHK as an example, the actual involvement of lay persons varies year from year depending on whether such seats (three in total) are filled up by nurses or lay members as they are open to both. There are also seats to be filled by public officers — either (ad-personam or post-tied) or another professional members such as doctors and lawyers. Boards and Councils may deliberate on their own and, where necessary and justified, make suggestions on refinement to their respective composition, with a view to better ensuring a meaningful involvement of lay persons to enhance public accountability.

[11] A tripartite platform comprising doctors, representatives of patients' interests and consumers' interests, and LegCo Members was set up to promote understanding and communication, as well as provide views and deliberate on amendment proposals to MRO.

RECOMMENDATION 7

CONTINUING PROFESSIONAL EDUCATION AND/OR DEVELOPMENT

Boards and Councils should continue to upkeep the strong professional competency of healthcare professionals through, among others, making continuing professional education and/or continuing professional development a mandatory requirement.

53. Continuing Professional Education (CPE) / Continuing Professional Development (CPD) is an integral element of professionalism. Maintaining and developing skills, expertise and professional practice are the core aspects of good healthcare practice. This requires participation in professional development, practice improvement and any other activities that would help ensure professional capabilities.

54. The Steering Committee is pleased to note that all healthcare professions value and recognise the importance of CPE/CPD but the practice and legal requirement vary among them (see Figure 22). Continuing education is a mandatory requirement for continuing practice of registered CMPs[12]. It is also mandatory for doctors and dentists[13] on the specialist registers. Non-specialist doctors and non-specialist dentists may on their own volition voluntarily enrol in CPE/CPD administered by MCHK and DCHK respectively, but they do not have an obligation as that of their specialist counterparts to undertake and complete continuing professional education. There are also voluntary CPE/CPD programmes administered by relevant Boards and Councils for nurses, midwives, OTs, PTs, MLTs, optometrists, radiographers and chiropractors. The above-mentioned voluntary CPE/CPD programmes are summarised in Figures 22 and 23. For dental hygienists and pharmacists, there is no CPE/CPD programme administered by the relevant Board and Council.

[12] Under section 82(2) of the Chinese Medicine Ordinance (Cap. 549), the CMPs Board shall determine the requirements relating to continuing education in Chinese Medicine which are to be complied with before a practising certificate may be renewed under section 76 or 77 (of the Ordinance).

[13] Under the Medical Registration Ordinance (Cap. 161) and the Dentists Registration Ordinance (Cap. 156), a registered doctor and a registered dentist who wishes to have his name included in the Specialist Register must satisfy the continuing education requirements.

Figure 22. CPE/CPD requirement for the 13 healthcare professions concerned

Mandatory for all practitioners	Mandatory for specialists	Voluntary programmes	No voluntary programmes
• Registered CMPs	• Specialist doctors • Specialist dentists	• Non-specialist doctors • Non-specialist dentists • Nurses (Registered & Enrolled) • Midwives • OTs • PTs • MLTs • Optometrists • Radiographers • Chiropractors	• Dental hygienists • Pharmacists

Figure 23. Voluntary CPE/CPD programmes at a glance

	No. of registrants (as at end 2016)	CPE/CPD Programme	Since	Situation as at end 2016
Doctors	14 013 (6 782 who are also on specialist register)	Voluntary "CME Programme for Practising Doctors who are not taking CME Programme for Specialists"	1 Oct 2001	No. of doctors awarded CME certificate: 1 091 No. of doctors holding valid "CME Certified" title: 1 268
Dentists	2 441 (260 who are also on specialist register)	Voluntary "CPD Programme for Practising Dentists"	1 Jul 2002	No. of dentists awarded CPD certificate for the 2015 CPD Cycle: 575
Nurses	Registered nurses: 39 178 Enrolled nurses: 13 211	Voluntary Continuous Nursing Education (CNE) System for all Registered/Enrolled Nurses	1 Nov 2006	See Note 1
Midwives	4 540	Post-registration Education in Midwifery (PEM) Pilot Scheme for all Registered Midwives on a voluntary basis	1 Nov 2006	See Note 2
OTs	1 911	Voluntary CPD Scheme for registered OTs	1 Oct 2006	No. of OTs that met the specified CPD requirement in 2015/16: 101
PTs	2 956	Voluntary CPD scheme for registered PTs	1 Jul 2005	No. of PTs that met the specified CPD requirement in 2015/16: 166
MLTs	3 443	Voluntary CPD scheme for registered MLTs	1 Jan 2005	No. of MLTs that met the specified CPD requirement in 2015/16: 72
Optometrists	2 180	Voluntary CPD programme for registered Optometrists	1 Nov 2004	No. of optometrists that met the specified CPD requirement in 2015/16: 138
Radiographers	2 209	Voluntary CPD programme for registered Radiographers	1 Jan 2006	No. of radiographers that met the specified CPD requirement : 38
Chiropractors	209	Voluntary CPD scheme for registered Chiropractors	1 Jan 2010	No. of chiropractors that met the specified CPD requirement: 5

Note 1 There are a total of 123 providers of CNE accredited by NCHK. CNE points and certificates are awarded to the participants of the CNE programmes/activities by the providers accredited by NCHK.

Note 2 There are a total of 19 providers of PEM accredited by the Midwives Council of Hong Kong. The PEM points and certificates are awarded to the participants of the PEM programmes/activities by the providers accredited by the Midwives Council of Hong Kong.

55. The Steering Committee considers that CPE/CPD should not be just an option or confined to specialists, but should be widely promoted and ultimately become a mandatory requirement for healthcare professionals under statutory registration. The process should be carefully planned with due consideration to the current situation, readiness of the profession as well as the legal and resource implication to achieve smooth progression over time. Respecting the principle of professional self-regulation, the Steering Committee considers that, subject to deliberations at the relevant Board and Council, a possible route for implementing mandatory CPE/CPD – as an alternative to legislative amendments – is that Boards and Councils may determine and set out the CPE/CPD requirements as part and parcel of their professional standard requirements e.g. the code of professional conduct and establish a mechanism to oversee whether the healthcare professionals have satisfied the CPE/CPD requirement. Once the relevant Board and Council has reached a view on how mandatory CPE/CPD should be achieved, it should draw up an implementation plan in consultation with the profession, having regard to all relevant considerations, including legal feasibility, practicality, sustainability and enforceability. All relevant Boards and Councils should also ensure that there is sufficient training capacity before CPE/CPD is made mandatory.

RECOMMENDATION 8

COMPLAINT INVESTIGATION AND DISCIPLINARY INQUIRY MECHANISM

Boards and Councils should review and, where necessary, improve the mechanism for complaint investigation and disciplinary inquiry by –

- Boards and Councils concerned should review and, where necessary, improve the mechanism for complaint investigation and disciplinary inquiry, with a view to minimising potential conflict of interest and shortening the duration in processing complaints against malpractice or misconduct;
- The Secretariats of Boards and Councils should, where appropriate, strive to provide more user-friendly services by, among others, streamlining the existing administrative procedures; and
- Boards and Councils concerned should, where appropriate, explore the feasibility of using mediation in handling complaints not involving professional misconduct.

Reviewing and improving the mechanism for complaint investigation and disciplinary inquiry for profession(s) where there is long delay with caseload far exceeding capacity

56. The number of complaint cases and the time required for concluding them through investigation and where necessary, disciplinary hearings vary greatly across the 13 professions. Figure 24 summarises the number of complaints received by Boards and Councils of healthcare professions from 2014 to 2016.

Figure 24. Number of complaint cases and processing time

Boards and Councils	No. of registrants (as at end 2016)	No. of complaints received			Average time required (months)		
		2014	2015	2016	Pre-PIC stage (if any) and PIC stage	Inquiry stage	Total
MCHK	14 013	624	493	628	36	36	72
DCHK	2 441	173	126	132	22	12	34
NCHK	52 389	38	25	52	12	6	18
Midwives Council of Hong Kong	4 540	2	0	0	12	6	18
CMCHK	9 956	361	186	209	1	8	9
PPBHK	2 659	3	0	0	3 Note 1	6	9
OTs Board	1 911	4	1	2	7	7	14
PTs Board	2 956	9	7	10	7	7	14
MLTs Board	3 443	4	4	1	7	7	14
Optometrists Board	2 180	9	6	12	7	7	14
Radiographers Board	2 209	1	2	2	7	7	14
Chiropractors Council	209	5	8	9	7	7	14

Note 1 There is no PIC established under PPBHK. The complaints received will be brought up to PPBHK for consideration. It takes about 3 months for PPBHK to make decisions on whether to initiate a disciplinary inquiry against the pharmacist concerned.

57. The majority of complaint cases are lodged with MCHK, which alone received 580 cases a year on average in the past three years (i.e. 2014-2016). The Steering Committee understands that this reflects the paramount importance of doctors in our healthcare system and the nature of their profession where they are considered to often bear the ultimate responsibility for the life and death of patients under their care. As a result, the caseload, together with increased complexities, has far exceeded the current capacity of MCHK, resulting in prolonged delay. MCHK Secretariat estimates that the delay would be aggravated to 72 months in the years ahead.

58. CMCHK and DCHK received, on average, about 250 and 140 cases respectively per year in the past three years (i.e. 2014-2016). The number of complaints lodged with other Boards and Councils is limited, ranging from zero to 52 each year. Because of the small number of complaints, these Boards and Councils are able to complete investigation and conclude cases, where necessary, through disciplinary hearings within a reasonable time. Even for DCHK, the average time required for concluding cases requiring disciplinary hearings is around 34 months whereas that for CMCHK is around nine months.

59. It is vital for Boards and Councils to handle complaint cases in a timely manner for the interest of both the public and the healthcare professionals concerned. The Steering Committee considers that all Boards and Councils should spare no efforts in looking for ways to improve the efficiency of its complaint investigation and disciplinary inquiry mechanism through administrative or, if necessary, legislative means.

60. The Steering Committee notes that a bill i.e. the Medical Registration (Amendment) Bill 2016 was introduced in March 2016 to amend

MRO with a view to, among others, improving the efficiency of the complaint investigation and disciplinary inquiry mechanism under MRO. This bill was unable to complete the legislative process before prorogation of the fifth term (2012-2016) of LegCo in July 2016. The Steering Committee further notes that this issue was discussed at the Tripartite Platform on Amendments to the MRO. The Steering Committee looks forward to a viable and practical proposal that could not only improve efficiency by addressing bottlenecks inherent in the present mechanism, but also respond to the strong call for separating the investigative and disciplinary function from the main council but under the auspices of MCHK, in keeping with the international trend.

61. As regards CMCHK and DCHK, the Steering Committee considers that each should review and deliberate among its respective council as to whether the present mechanism is adequate and efficient enough to deal with existing caseload and also estimated caseload in the coming years. If changes are considered necessary, the relevant council should advise the Government what amendments should be made to their respective ordinances.

62. As for other Boards and Councils, the Steering Committee considers that they should review their respective mechanism for complaint investigation and disciplinary inquiry as appropriate. Each Board and Council, however, should keep in view the situation and start deliberations among its council if there is indication that changes are called for.

63. It has become an international norm that the complaint investigation and adjudication functions are separated under or outside the healthcare regulatory bodies. Participation of council/board members is limited, or none in some jurisdictions. Such separation of functions aims to increase public confidence in the disciplinary inquiry process. The Steering Committee considers that, in their deliberations, Boards and Councils should have due regard to the international trend for separation and consider whether or not, and if so, how their respective complaint handling and disciplinary inquiry mechanism should be devised.

64. Enabling parties to communicate, negotiate and eventually resolve their dispute amicably and efficiently through a trained neutral third party, mediation is generally used and promoted in Hong Kong as a cooperative and consensus-oriented dispute resolution method which can be used in diverse practice areas, including both public and private spheres. The Steering Committee considers that Boards and Councils with a significant number of complaint cases, where appropriate, should explore the feasibility of using mediation in handling complaints not involving professional misconduct. As far as cases involving professional misconduct are concerned, mediation is not a solution by itself and cannot replace in total an efficient complaint handling mechanism.

RECOMMENDATION 9
COST RECOVERY OF BOARDS/COUNCILS

The Government should improve cost recovery of the operations of Boards and Councils.

65. The Government is currently funding the operation of Boards and Councils and meeting in full, including secretariat expenses and all legal costs associated with their actions and decisions. Such cost involved are partially recovered by fees and charges collected from the professionals under the relevant legislation (see Figure 25).

66. The Steering Committee notes that the existing funding arrangement of Boards and Councils is different from the norm of the developed economies that CUHK has surveyed, where regulatory bodies in the UK, the US, Canada, Australia and New Zealand operate on a self-financing basis through fees and charges borne by professionals.

67. It is also different from how professional self-regulated regulatory bodies outside the healthcare sector are being funded. For instance, the Hong Kong Institute of Certified Public Accountants operates on a self-financing basis and fixes fees and charges to cover its operating expenses including costs and expenses related to disciplinary proceedings. The Law Society of Hong Kong (the Law Society) and the Bar Association of Hong Kong (the Bar Association) are also financially independent from the Government, but the relevant Ordinance provides for the costs of legal proceedings to be funded by the Government.[14]

68. In line with the "cost recovery" and "user pays" principle, it is Government's policy that fees charged by the Government should in general be set at levels adequate to recover the full cost of providing the services.[15] The Steering Committee considers that DH should conduct a comprehensive review of the full costs of each Board and Council, including the legal costs. The Steering Committee considers that DH should also review the level of existing fees and charges stipulated in the legislations. For those fees which have not yet attained the relevant full cost level, adjustment of the fees should be made so as to improve the cost recovery of the operations of the Boards and Councils.

[14] Under the Legal Practitioners Ordinance, disciplinary proceedings of solicitors and barristers are conducted by the respective Disciplinary Tribunal, independent from the Law Society and the Bar Association. Disciplinary cases are referred by the Law Society and the Bar Association to the respective tribunal for adjudication.

[15] In the 2013-14 Budget Speech, the Financial Secretary emphasised the need to review fees and charges systematically for upholding the "user pays" principle, with priority given to those fees that had not been revised for years and did not directly affect people's livelihood, as well as items which had low cost recovery rates. In 2014, DH has reviewed the statutory fees relating to registration (including licensing examination) of the healthcare professionals (except fees under schedule 9 of Pharmacy and Poisons Regulations (Cap. 138A), Pharmacy and Poisons (Pharmacy and Poisons Appeal Tribunal) Regulations (Cap. 138D) and Pharmacists (Disciplinary Procedures) Regulations (Cap. 138E)). These fees were either last revised between 2000 and 2006 or had not been revised since their introduction, and DH's costing review shows that their current cost recovering levels range from 11% to 116%. In order to achieve full cost recovery gradually and avoid a steep fee increase, 117 fees were proposed to be increased by 7% to 20%, while the remaining fee to be reduced by 14%. With the revised fee levels, the cost recovering rates of these existing statutory fee items are in the range of 13% to 100%.

Figure 25. Cost recovering rates of the fees stipulated under the relevant legislations

	Cost recovering rates (before 2016)	Cost recovering rates (after 2016)
Medical Registration (Fees) Regulation (Cap. 161C)	11% - 94%	13% - 100%
Dentists (Registration and Disciplinary Procedure) Regulations (Cap. 156A)	44% - 84%	50% - 92%
Ancillary Dental Workers (Dental Hygienists) Regulations (Cap. 156B)	61%	70%
Nurses (Registration and Disciplinary Procedure) Regulations (Cap. 164A)	33% - 52%	40% - 60%
Enrolled Nurses (Enrolment and Disciplinary Procedure) Regulations (Cap. 164B)	36% - 52%	43% - 60%
Midwives Registration (Fees) Regulation (Cap. 162B)	43% - 89%	13% - 98%
Chinese Medicine Practitioners (Fees) Regulation (Cap. 549B)	11% - 116%	14% - 100%
Occupational Therapists (Registration and Disciplinary Procedure) Regulations (Cap. 359B)	26% - 84%	31% - 93%
Physiotherapists (Registration and Disciplinary Procedure) Regulation (Cap. 359J)	26% - 84%	31% - 93%
Medical Laboratory Technologists (Registration and Disciplinary Procedure) Regulations (Cap. 359A)	26% - 84%	31% - 93%
Optometrists (Registration and Disciplinary Procedure) Regulation (Cap. 359F)	26% - 84%	31% - 93%
Radiographers (Registration and Disciplinary Procedure) Regulation (Cap. 359H)	26% - 84%	31% - 93%
Chiropractors Registration (Fees) Regulation (Cap. 428A)	34% - 81%	41% - 89%

RECOMMENDATION 10

REGULATION OF HEALTHCARE PROFESSIONS NOT SUBJECT TO STATUTORY REGISTRATION

The Government should introduce an accreditation scheme for healthcare professionals which are not subject to statutory registration.

69. The Steering Committee notes that at present, the regulation of most healthcare professions which are not subject to statutory registration has been achieved through voluntary, society-based registration. While recognising the importance and effectiveness of voluntary society-based registration, the Steering Committee considers that a more structured scheme with enhanced credibility could be set up to promote good service standards for the professions and provide more information to members of the public who intend to use their services.

70. The Steering Committee supports the Government's initiative to introduce an accredited registers pilot scheme for healthcare professions not subject to statutory registration in Hong Kong. The Scheme could help enhance the current society-based registration arrangement under the principle of professional autonomy, with a view to ensuring the professional competency of healthcare professionals and providing more information to the public so as to facilitate them to make informed decision. This is in line with the international trend to adopt a "right-touch" approach, for regulating healthcare professions in a way commensurate with the level of risks they pose to public health.

71. In end 2016, the Government launched the Pilot Accredited Registers Scheme (Pilot AR Scheme). The Pilot AR Scheme covers the existing 15 non-statutorily registered healthcare professions within the health services functional constituency of LegCo. These professions may, having regard to their own aspirations and circumstances, opt to join the Pilot AR Scheme. If healthcare professions other than the above-mentioned are interested in joining the Pilot AR Scheme, their applications would be considered on a case-by-case basis. The result of the Pilot AR Scheme is expected to be announced by end 2017.

PROFESSION-SPECIFIC ISSUES

72. Apart from the general and generic issues set out in the preceding section, the Steering Committee has also taken stock of profession-specific issues and concerns that have been brought to its attention during the Review. The deliberations at the six Sub-groups and the study commissioned to CUHK, in particular the SWOT analysis conducted with the participation of healthcare professionals, have brought to light issues and concerns pertaining to regulation and development of each profession. The Steering Committee heeds the call for changes from healthcare professionals, in particular, nurses, CMPs, pharmacists and other allied health professionals, to enhance their functions and make better use of their expertise in order to advance their professional development. Some healthcare professionals are making efforts to develop specialist education and accreditation on a voluntary and administrative basis, with the vision that this would eventually result in a well-established framework for the training, recognition, and practice of specialists. These issues and views of the professions are summarised below.

DOCTORS

Urgency to Improve the Complaint Handling and Disciplinary Inquiry mechanism of MCHK

- Strong and almost unanimous call for improving the complaint investigation and disciplinary inquiry mechanism so that cases could be concluded within a reasonable period

- Clear call for increasing lay participation in MCHK

- Strong and divergent views over the proposed change to the composition of MCHK during the deliberations and debates on the Medical Registration (Amendment) Bill 2016. More engagement and communication to promote understanding and hopefully narrow differences among parties with different views

- Mediation has long been made use of outside the context of MCHK for resolving medical disputes. Exploration of the feasibility of introducing mediation as part and parcel of MCHK's complaint investigation and disciplinary inquiry mechanism

Manpower Projection for Specialist Doctors

- Suggestion for conducting manpower projection for doctors in different specialities for better manpower planning

DENTISTS

Non-locally Trained Dentists

- Introduction of a limited registration mechanism similar to that for doctors to facilitate qualified non-locally trained personnel to practise dentistry in Hong Kong for teaching, research and hospital work under prescribed conditions, and abolishment of the "deemed-to-register" arrangement upon the introduction of limited registration[16]

- Introduction of temporary registration for persons employed/invited for clinical teaching, research or academic exchange

Specialist Training

- Ensuring continuous provision of quality specialist training for dentists in Hong Kong so that our dental profession can acquire core competencies to deliver professional dental healthcare services

Manpower Projection for Specialist Dentists

- Suggestion for conducting manpower projection for dentists in different specialities for better manpower planning

[16] Under Dentists Registration Ordinance (Cap. 156), there is a "deemed-to-register" arrangement for dentists recruited from overseas for the purpose of teaching and performing hospital work in the Faculty of Dentistry of HKU. These registrants are not subject to disciplinary action under the Dentists Registration Ordinance.

DENTAL HYGIENISTS

Review of Relevant Regulation

- Consideration of amending the legislation[17] regulating dental hygienists to, among others, establish a statutory registration system for dental hygienists and a statutory disciplinary framework in order to safeguard professional conduct of dental hygienists and protect patients' interests

Role of Dental Hygienists

- Review on the scope of work of dental hygienists
- Exploration of the possibility of enhancing the role of dental hygienists

Regulation of Other Ancillary Dental Workers

- Views that other ancillary dental workers including dental therapists and dental surgery assistants under the Dentists Registration Ordinance (Cap. 156) should be regulated

[17] The subsidiary legislation, Ancillary Dental workers (Dental Hygienists) Regulations, of the Dentists Registration Ordinance (Cap. 156) empowers DCHK to provide enrolment and regulation of dental hygienists. A roll of enrolled dental hygienists is maintained by the Council.

NURSES

Elected Members of NCHK

- Strong call to introduce elected members in NCHK as provided by the Nurses Registration (Amendment) Ordinance 1997 as soon as possible

Development of Nursing Practice Specialisation

- Recognition of the pivotal role played by nurses in revitalising healthcare systems through advanced nursing practice and enhanced clinical specialties. Specialisation in nursing is an important milestone in the professionalisation of the nursing profession. The Hong Kong Academy of Nursing was established in 2011 to provide structured training and promote professional development of nurse specialists and advanced practice. The Government has set up a task force with wide participation from the nursing profession to look into the critical issues concerning specialisation of nursing practice in order to map out the way forward, with the ultimate goal of putting in place a legal framework on nursing specialisation in the long run

CHINESE MEDICINE PRACTITIONERS

Non-locally Trained CMPs

- Views over the trend of Hong Kong people studying Chinese Medicine in the Mainland, with consequential implication for the supply of CMPs in future

- Views that the rigour and adequacy of Licensing Examination as well as the need for local internship (which is not required as of now) should be critically reviewed, in order to ensure the quality and standard of non-locally trained CMPs

Development of Practice Specialisation and Specialist Registration

- Establishment of a statutory specialist registration system for CMPs, and credentialing of the specialist qualification. The Chinese Medicine Development Committee (CMDC) was established in February 2013 to focus on the study of four major areas, namely the development of Chinese Medicine services, personnel training and professional development, development of scientific research and development of the Chinese Medicine industry (including Chinese Medicine testing). To tie in with the development of the Chinese Medicine hospital and enhance the level of Chinese Medicine services, the Government has started to explore with CMDC on the way forward of the development of Chinese Medicine specialisation. The Chinese Medicine Practice Sub-committee, set up under CMDC, is studying the issue and will maintain communication with the profession, and make recommendations to the Government in due course

Separation of Regulation of CMPs and Chinese Medicine

- Views that CMPs, who are now regulated under the same roof as Chinese Medicine, should be regulated separately as a profession under another piece of legislation

Roles and Functions of CMPs

- In the course of studying on how to strengthen the cooperation of Chinese and Western medicine, comments from different parties should be considered, including views that CMPs should be empowered to prescribe common imaging and laboratory tests such as x-ray for their patients, and also to make direct referrals to allied health professionals

PHARMACISTS

Non-locally Trained Pharmacists

- Views that the rigorous and adequacy of Licensing Examination as well as the need for local internship (which is not required as of now) should be critically reviewed

Regulation of Pharmacists

- Differing views on establishment of a separate regulatory body -

  - Pharmacists should be regulated as a profession on par with the statutory arrangement for other healthcare professions such as doctors, dentists and nurses, and that a separate Pharmacy Council should be set up as a long-term goal rather than having pharmacists regulated as of now under the same statutory umbrella for pharmaceutical trade, drugs and poisons. Establishment of a separate regulatory body would contribute positively towards branding of the profession and promoting the use of pharmacy service by the general public

  - It is not necessary to set up a Pharmacy Council as PPBHK is effective in regulating the profession and setting up a separate regulatory body is merely one of the many measures to enhance the role and contribution of pharmacists

  - Some small and medium enterprise community pharmacists are worried that their interests might not be well looked after if a separate regulatory body is set up

Separation of Regulation of Pharmacists and Drugs

- Views that pharmacists, who are now regulated under the same roof as drugs, should be regulated separately as a profession under another piece of legislation

Enhanced Roles for Pharmacists

- In view of the expansion of local supply of pharmacists and having regard to overseas experience, pharmacists should take up an enhanced role in the provision of healthcare services, particularly in HA. For instance, clinical pharmacists should gradually be integrated into the clinical care team and to provide out-patient consultations along the patient care path in various clinical areas e.g. oncology, pediatrics and chronic diseases management in HA. In addition, HA may enhance its provision of drug refill services through deploying more pharmacists to provide medication advice to high risk patients with long duration of prescriptions. This can help enhance medication safety and reduce drug wastage

ALLIED HEALTH PROFESSIONALS (OCCUPATIONAL THERAPISTS, PHYSIOTHERAPISTS, MEDICAL LABORATORY TECHNOLOGISTS, OPTOMETRISTS AND RADIOGRAPHERS)

Functions of Supplementary Medical Professions Council and its Boards

- Views that the set-up of SMP Council and its statutory Boards, which currently overseeing the five professions including OTs, PTs, MLTs, optometrists and radiographers, should be reviewed

- There is no perfect model of the set-up of statutory regulatory body and each model has its merits

Composition of SMP Council and its Statutory Boards

- Views that allied health professionals should be given a presiding role in their own regulatory Boards[18]

Non-locally Trained Allied Health Professionas

- Views that the current assessment system[19] should be reviewed and the feasibility of introducing a universal registration examination for assessing a person's qualification for registration should be explored

Enhanced Role in Primary Care

- Enhancement of the role of the five professions in the provision of primary care, including increasing the multi-disciplinary element in the healthcare service delivery model

- Views that there should be stream/specialty in the registration of MLTs

[18] Currently, the chairmanship of SMP Council and its five Boards are taken up by persons who are not a member of its respective professions.

[19] Currently, the individual Boards under SMP Council set the registration requirement for non-locally trained healthcare professionals, taking into account the circumstances of each discipline.

CHIROPRACTORS

Request for Provision of Local Training Programme and Public Chiropractic Services

- Views that there should be local chiropractic training programme in Hong Kong
- Views that HA should introduce chiropractic service

Introduction of Universal Registration Examination

- Views that there should be a universal registration examination

Part Four:

RECOMMENDATIONS AND IMPLEMENTATION

73. The ten recommendations of the Steering Committee are summarised as follows and implementation of the recommendations requires the concerted efforts among the Government, HA, regulatory bodies concerned, healthcare professionals and other relevant stakeholders.

A. HEALTHCARE MANPOWER

RECOMMENDATION 1
LOCAL SOURCE – PUBLICLY-FUNDED HEALTHCARE TRAINING

RECOMMENDATION

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

IMPLEMENTATION

The Government should …

For healthcare professions with manpower shortage

- Consider to increase publicly-funded degree places for healthcare professions facing manpower shortage for the 2019/20-2021/22 UGC triennium. Consideration should be given to capacity constraints of UGC-funded universities and the need to preserve their flexibility to allocate first-year first degree (FYFD) places to non-healthcare disciplines which also face manpower shortage if the total number of UGC-funded FYFD places should remain unchanged at 15 000 per annum, as well as availability of self-financing programmes; and

- Engage relevant stakeholders in the professions in the UGC triennial planning process.

For healthcare professions with sufficient manpower

- Encourage healthcare services providers to consider and, where appropriate, plan for service enhancement and/or expansion.

RECOMMENDATION 2
LOCAL SOURCE – SELF-FINANCING HEALTHCARE TRAINING

RECOMMENDATION

- The Government should make better use of the self-financing sector to help meet part of the increasing demand for healthcare professionals, notably nurses, OTs, PTs, MLTs, optometrists and radiographers and provide the necessary support to the self-financing sector in terms of infrastructural and funding support.

- The Government should continue to subsidise the pursuit of study in those healthcare disciplines facing manpower shortage as appropriate, in particular, in the allied health disciplines, under SSSDP with a view to sustaining the healthy development of the self-financing tertiary sector to complement the UGC-funded sector in broadening and diversifying study opportunities.

IMPLEMENTATION

The Government should …

- Encourage tertiary institutions to continue to provide self-financing training courses for nurses and allied healthcare professions to meet the demand in a flexible and responsive manner;

- Facilitate more tertiary institutions to introduce, where appropriate, more healthcare training courses on a self-financing basis to better cope with the rising demand for healthcare professionals in various sectors ranging from healthcare, social welfare to education;

- Consider and vet proposals submitted by interested and ready tertiary institutions on the introduction of healthcare training courses; and

- Subsidise self-financing programme(s) which provide training for healthcare professions facing manpower shortage under SSSDP as appropriate.

RECOMMENDATION 3
HEALTHCARE MANPOWER IN THE PUBLIC SECTOR

RECOMMENDATION

- 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.

IMPLEMENTATION

HA should …

- Draw up plans and advise the Government on the progress made over retention of retired healthcare professionals and recruitment of non-locally trained doctors under limited registration; and

- Recruit non-locally trained doctors with limited registration more proactively.

The Government should …

- Provide funding support for HA to retain existing healthcare professionals, attract retired doctors and other healthcare professional and recruit non-locally trained doctors under limited registration.

RECOMMENDATION 4
NON-LOCALLY TRAINED HEALTHCARE PROFESSIONALS

RECOMMENDATION

- 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 publicise the registration arrangements overseas with targeted and proactive recruitment drive to facilitate non-locally trained healthcare professionals, many of whom are Hong Kong citizens or have deep roots here, to come to Hong Kong to practise.

IMPLEMENTATION

The Government should …

For healthcare professions facing local manpower shortage

- Provide necessary support to organisations concerned to proactively recruit healthcare professionals from overseas, including doctors, dentists and allied health professionals, to fill supply gaps in the healthcare, welfare and education sectors in the short term, while awaiting increase in local supply to catch up with demand in the long term;
- Amend MRO to extend the validity period and renewal period of limited registration for non-locally trained doctors from not exceeding one year to not exceeding three years; and
- Make more efforts to publicise the registration arrangements overseas with targeted and proactive recruitment drive to facilitate non-locally trained healthcare professionals, many of whom are HK citizens or have deep roots here, to come to Hong Kong to practise.

For healthcare professions which depend significantly on non-local sources

- Closely monitor whether the existing manpower supply is sufficient to meet manpower demand.

For CMP Profession

- Closely monitor the impact of HK students studying Chinese medicine in the Mainland on the overall supply of CMPs in HK.

Boards and Councils should …

- On the premise of preserving professional standards, review the existing administrative arrangements of facilitating non-locally trained healthcare professionals, in particular, those originally from Hong Kong, to practise in Hong Kong.

RECOMMENDATION 5
MANPOWER PLANNING AND PROJECTIONS

RECOMMENDATION

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

IMPLEMENTATION

The Government should …

- The Food and Health Bureau should continue to engage relevant stakeholders in future manpower planning and projections exercise; and

- Devise a more sophisticated data collection mechanism so as to facilitate manpower projections in the future.

B. PROFESSIONAL DEVELOPMENT AND REGULATION

RECOMMENDATION 6
LAY INVOLVEMENT IN BOARDS AND COUNCILS

RECOMMENDATION

- Boards and Councils should ensure meaningful lay involvement by, among others, setting a minimum lay membership of 25%.

IMPLEMENTATION

The Government should …

- Weigh all relevant considerations, including the recommendation of the Steering Committee and deliberations at the Tripartite Platform, and make a decision on lay participation in MCHK that is in the best interest of the community as a whole.

Boards and Councils should …

Midwives Council of Hong Kong

- Deliberate and advise the Government whether the present lay involvement is adequate and, if not, what changes should be made in further increasing lay participation.

Other Boards and Councils

- Noting that there are seats where the law provides latitude for them to be filled by persons either within the profession or outside, deliberate on their own and, where necessary and justified, make suggestions on refinement to their respective composition, with a view to better ensuring a meaningful involvement of lay persons to enhance public accountability.

RECOMMENDATION 7
CONTINUING PROFESSIONAL EDUCATION AND/OR DEVELOPMENT

RECOMMENDATION

- Boards and Councils should continue to upkeep the strong professional competency of healthcare professionals through, among others, making continuing professional education and/or continuing professional development a mandatory requirement.

IMPLEMENTATION

Boards and Councils should …

- Deliberate on the implementation for mandatory CPE/CPD with due consideration to the current situation, readiness of the profession as well as the legal and resource implication to achieve smooth progression over time. Subject to deliberations at the relevant Board and Council, a possible route for implementing mandatory CPE/CPD – as an alternative to legislative amendments – is that Boards and Councils may determine and set out the CPE/CPD requirements as part and parcel of their professional standard requirements and establish a mechanism to oversee whether the healthcare professionals have satisfied the CPE/CPD requirement;

- Draw up an implementation plan in consultation with the profession, having regard to all relevant considerations, including legal feasibility, practicality, sustainability and enforceability; and

- Ensure that there is sufficient training capacity before CPE/CPD is made mandatory.

RECOMMENDATION 8
COMPLAINT INVESTIGATION AND DISCIPLINARY INQUIRY MECHANISM

RECOMMENDATION

- Boards and Councils should review and, where necessary, improve the mechanism for complaint investigation and disciplinary inquiry by -

  - Boards and Councils concerned should review and, where necessary, improve the mechanism for complaint investigation and disciplinary inquiry, with a view to minimising potential conflict of interest and shortening the duration in processing complaints against malpractice or misconduct;

  - The Secretariats of Boards and Councils should strive to provide more user-friendly services by, among others, streamlining the existing administrative procedures; and

  - Boards and Councils concerned should, where appropriate, explore the feasibility of using mediation in handling complaints not involving professional misconduct.

IMPLEMENTATION

The Government should …

- Introduce necessary legislative amendments to enable MCHK to speed up its complaint handling process having regard to, among others, the discussion at the Tripartite Platform on Amendments to the MRO.

Boards and Councils should …
All Boards and Councils

- Proactively look for ways to improve the efficiency of its complaint investigation and disciplinary inquiry mechanism through administrative or, if necessary, legislative means; and

- Deliberate and consider whether or not, and if so, how their respective complaint handling and disciplinary inquiry mechanism should be devised, having due regard to the international trend for separation of complaint investigation and adjudication functions under outside

Boards and Councils with a significant number of complaint cases

- Explore the feasibility of using mediation in handling complaints not involving professional misconduct where appropriate.

Dental Council of Hong Kong and Chinese Medicine Council of Hong Kong

- Review and deliberate as to whether the present mechanism is adequate and efficient enough to deal with existing caseload and also estimated caseload in the coming years. If changes are considered necessary, advising the Government what amendments should be made to their respective ordinances.

Other Boards and Councils

- Review the respective mechanism for complaint investigation and disciplinary inquiry as appropriate and start deliberations among its Board/Council if there are indications that changes are called for.

RECOMMENDATION 9
COST RECOVERY OF BOARDS AND COUNCILS

RECOMMENDATION

- The Government should improve cost recovery of the operation of Boards and Councils.

IMPLEMENTATION

The Government should …

- Conduct a comprehensive review of the full costs of each Board/Council, including the legal costs; and

- Review the level of existing fees and charges stipulated in the legislations. For those fees which have not yet attained the relevant full cost level, adjustment of the fees should be made so as to improve the cost recovery of the operation of the Boards and Councils.

RECOMMENDATION 10
REGULATION OF HEALTHCARE PROFESSIONS NOT SUBJECT TO STATUTORY REGISTRATION

RECOMMENDATION

The Government should …

- Introduce an accreditation scheme for healthcare professionals which are not subject to statutory registration.

IMPLEMENTATION

The Government should …

- Monitor the implementation of the Pilot Accredited Registers Scheme, and review and improve the scheme taking into account the experience of the pilot scheme;
- Strengthen communication with healthcare professionals which are not subject to statutory registration; and
- Consider formulating a regulatory framework for healthcare professions which are not subject to statutory registration in the long term.

WAY FORWARD

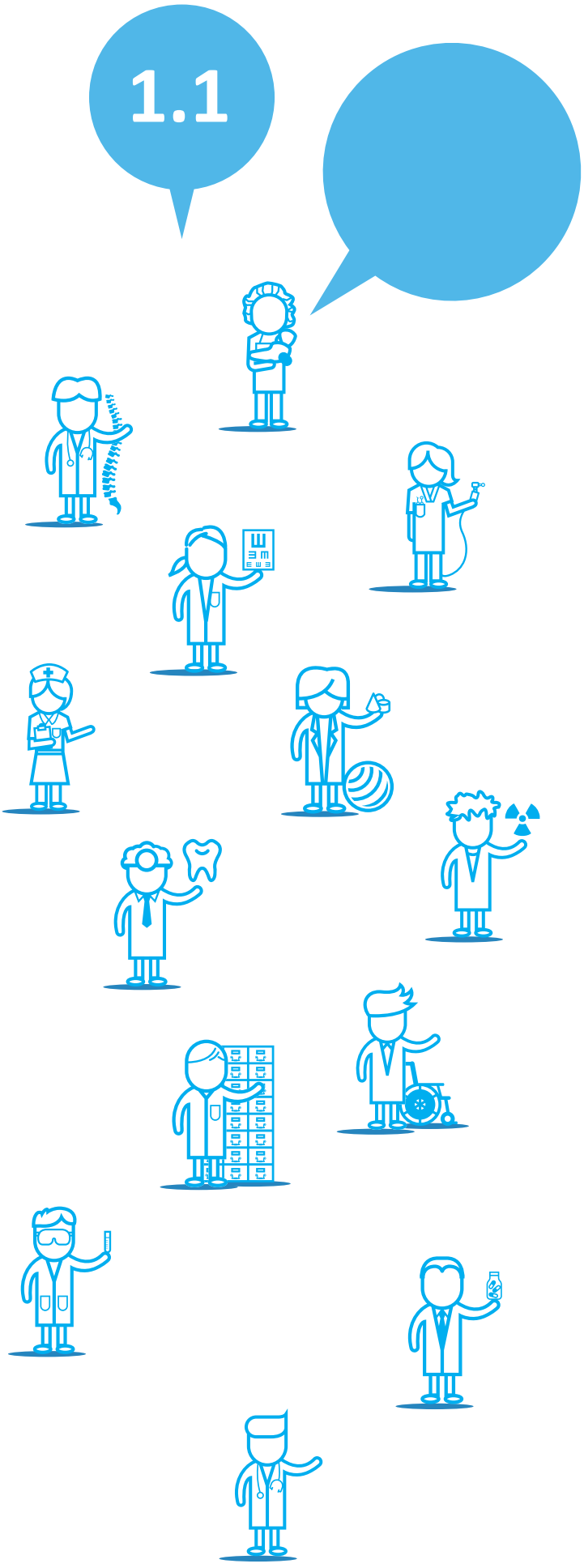
74. In order to take forward recommendations 4, 6, 7 and 8 in an effective and efficient manner, the Government should invite Boards and Councils to submit proposals within **6 – 12 months** on how they would implement the recommendations in their respective professions, and that the Government should conduct a comprehensive review of the existing legislations governing healthcare professions after taking into account profession-specific issues, present-day circumstances, international practices, and possible legislative amendments required arising from the proposals of relevant regulatory bodies.

Part Five:
VOTE OF THANKS

75. We would like to take the opportunity to express our gratitude to all members of the Steering Committee, Coordinating Committee, six consultative Sub-groups for their insight, contribution and dedication throughout the Review. The efforts by HKU and CUHK in providing professional input and technical support to the Review are also deeply appreciated. Our thanks also go to all the healthcare professionals and other relevant stakeholders of the community for their valuable comments and suggestions, in particular the Subcommittee on Health Protection Scheme of LegCo Panel on Health Services, LegCo Members, HA, DH, SWD, EDB and representatives of healthcare service providers.

76. For details on HKU's projection models and projections for individual professions and CUHK's findings on the regulatory frameworks for healthcare professions elsewhere and in Hong Kong, please refer to the reports prepared by HKU and CUHK which are supplementary to this review report. Soft copies of the reports are available online at **www.hpdo.gov.hk.**

1.1



1.1.1 Over the past decades, Hong Kong has developed a healthcare system with high efficiency and good quality, providing accessible and affordable healthcare services to the population. Thanks to the diligence, dedication and professionalism of our healthcare professionals, we have made notable achievements on public health. The infant mortality rate has dropped from 19.6 per 1 000 registered live births in 1970 to 1.5 per 1 000 registered live births in 2015. The life expectancy at birth has increased from 67.8 years for male and 75.3 years for female in 1971 to 81.4 years and 87.3 years respectively in 2015. We are now ranked among the best in the world in terms of many health indicators including life expectancy and infant mortality.

1.1.2 Hong Kong's healthcare system is underpinned by a robust public sector and a burgeoning private sector which operate along a dual track. The public healthcare system is financed by the Government and its healthcare services are mainly delivered through the Department of Health (DH) and the Hospital Authority (HA). DH performs public health functions including health promotion, disease prevention as well as regulation of drugs, healthcare professionals and healthcare facilities. HA provides a wide range of highly subsidised curative and rehabilitative services through its 42 hospitals, 47 specialist outpatient clinics, 73 general out-patient clinics, 18 Chinese Medicine outpatient clinics and community outreach teams.

CHAPTER 1
Hong Kong Healthcare System and Healthcare Professionals

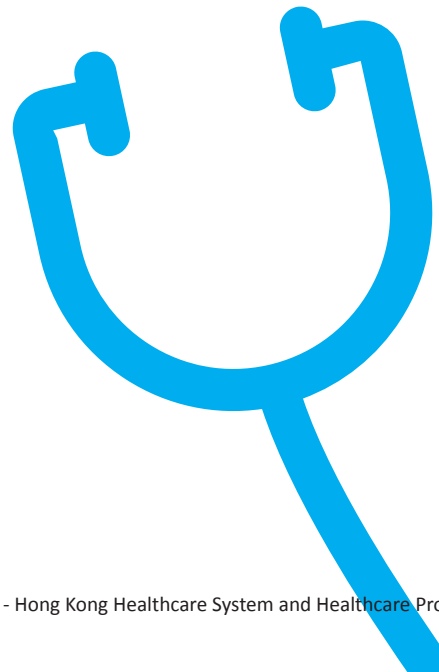
1.1.3 It is the Government's established policy that no one in Hong Kong should be denied medical care due to lack of means. The public system serves as a safety net for Hong Kong residents, by making public healthcare services available to all at affordable prices. Regardless of their ability to pay, patients who use public services only need to pay a small fraction of the actual cost of service provision. Those receiving Comprehensive Social Security Assistance or are granted full medical fee waiver are exempted from payment of medical fees and charges.

1.1.4 The public system is complemented by a private sector which offers those who can afford it and are willing to pay for access to more flexible services at their own expense. The private sector has a sizable presence in the delivery of healthcare services, through a broad range of service providers including 11 private hospitals and thousands of clinics, nursing homes, community pharmacies, medical laboratories, diagnostic imaging centres and optical shops. It engages a large number of healthcare professionals.

1.1.5 The private sector is the chief provider of ambulatory care, accounting for about 70% of all medical visits and dental visits, and the majority of these encounters occur in primary care settings. For primary care, general practitioners in private practice is the most common type of medical practitoners consulted in Hong Kong, followed by doctors in outpatient clinics under DH or HA, and Chinese medicine practitioners (CMPs) in private practice[1].

1.1.6 The public sector, meanwhile, dominates secondary and tertiary care. Hong Kong has 42 public hospitals and 11 private hospitals, providing some 27 800 and 4 200 beds respectively. The public hospitals under HA manage approximately 80% of all hospital admissions and their share of total bed-days almost reaches 90%. Virtually all critical emergencies are tackled by the accident and emergency departments of the public hospitals.

[1] Census and Statistics Department (2015). Thematic Household Survey Report No. 58.



1.2 Health Expenditure

1.2.1 The Government has invested heavily on Hong Kong's quality healthcare system. The total health expenditure increased from 3.6% to 5.7% of Gross Domestic Product (GDP) over the period from 1989-90 to 2013-14. Over the same period, public share in total health spending rose from 39% to 49%.

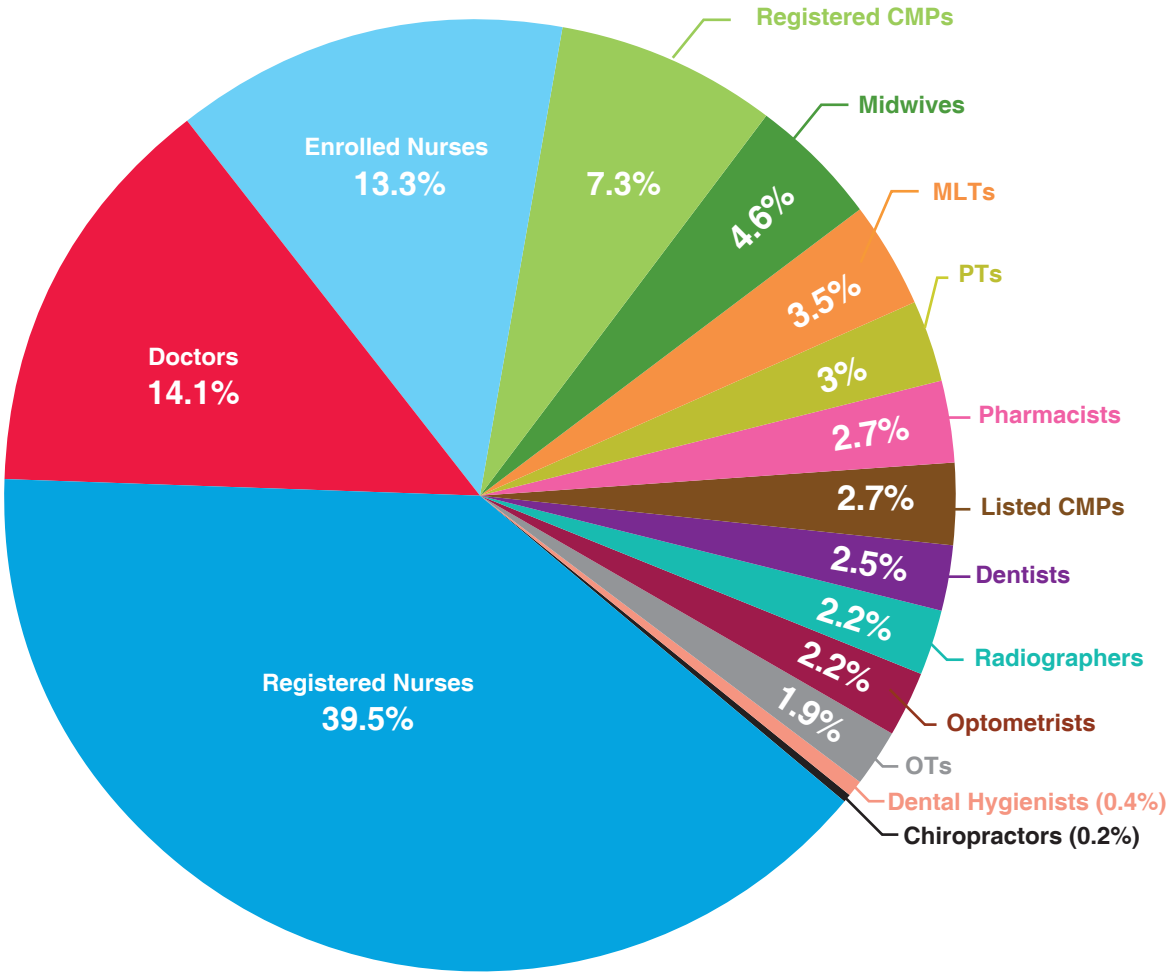
1.2.2 The Government's commitment to healthcare is manifested by the continuing and increasing investment on healthcare development throughout the years. The recurrent government expenditure on health reached $56 billion in 2015-16, accounting for 17% of the total recurrent government expenditure. This represents an increase of 54% over 2010-11. As a result of the continued investment, people in Hong Kong are able to enjoy public healthcare services at highly subsidised rates. Nearly 93% of the costs involved in delivering public healthcare services are financed by public funding. The largest proportion of our Government healthcare expenditure goes to human resources. Staff cost represents about 70% of HA's total recurrent expenditure.

1.3 Health Workforce

1.3.1 Our world-class healthcare system is supported by a highly professional league of healthcare workers. Growing from about 83 000 in 2011, there are about 99 000 healthcare professionals from 13 healthcare professions that are subject to statutory registration as at end 2016. They comprised 14 013 doctors, 2 441 dentists, 424 dental hygienists, 52 389 registered and enrolled nurses[2], 4 540 midwives[2], 9 909 registered CMPs and listed CMPs, 2 659 pharmacists, 1 911 occupational therapists (OTs), 2 956 physiotherapists (PTs), 3 443 medical laboratory technologists (MLTs), 2 180 optometrists, 2 209 radiographers and 209 chiropractors.

[2] In terms of registrants, of whom some individuals may hold multiple registrations as registered nurses, enrolled nurses and registered midwives.

Figure 1.1 Healthcare professionals (as at end 2016)

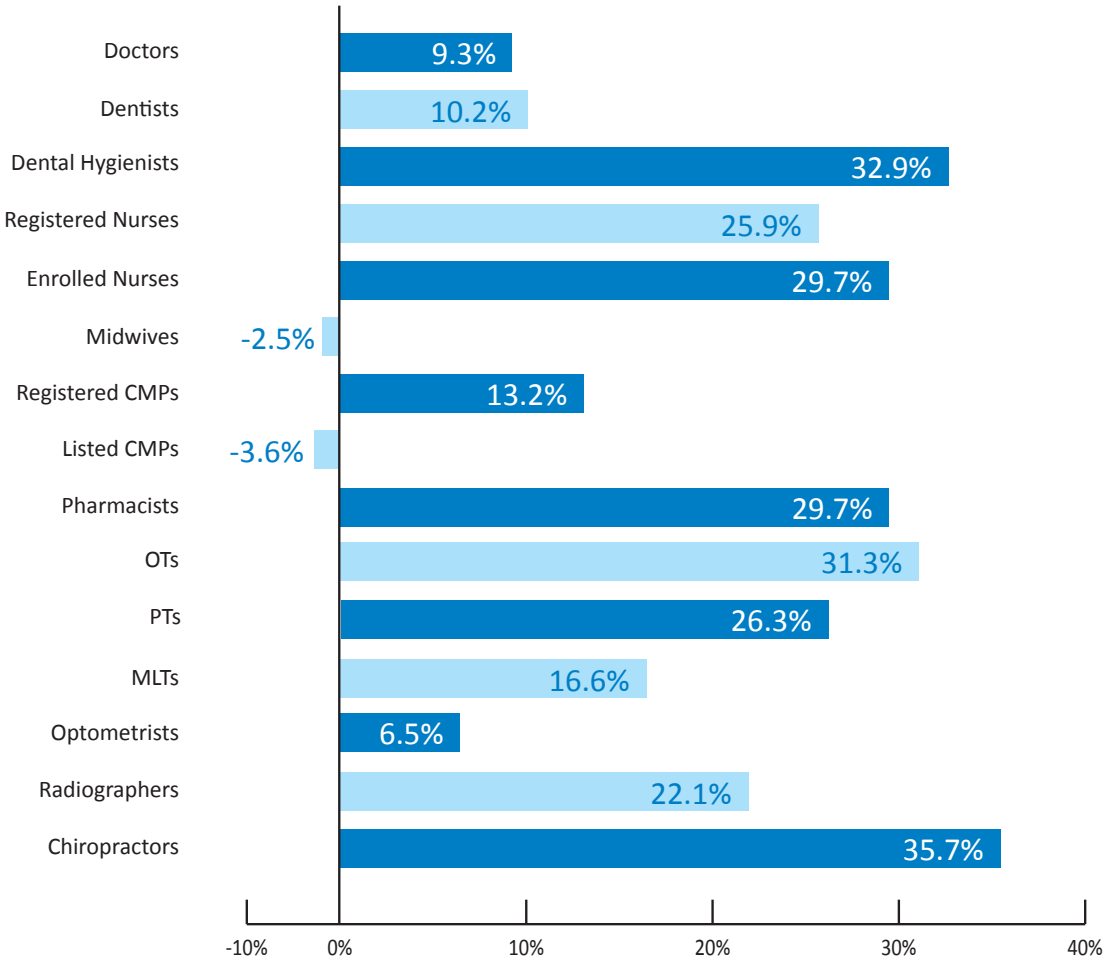


Source : DH

- Registered Nurses 39 178 (39.5%)
- Doctors 14 013 (14.1%)
- Enrolled Nurses 13 211 (13.3%)
- Registered CMPs 7 262 (7.3%)
- Midwives 4 540 (4.6%)
- MLTs 3 443 (3.5%)
- PTs 2 956 (3%)
- Pharmacists 2 659 (2.7%)
- Listed CMPs 2 647 (2.7%)
- Dentists 2 441 (2.5%)
- Radiographers 2 209 (2.2%)
- Optometrists 2 180 (2.2%)
- OTs 1 911 (1.9%)
- Dental Hygienists 424 (0.4%)
- Chiropractors 209 (0.2%)

Note : Percentage in brackets denotes the proportion of respective healthcare professionals over total number.

Figure 1.2 Growth of healthcare professionals, 2011-2016



Source : DH

Figure 1.3 Healthcare professionals per 1 000 population, 1990-2016[3]

	1990	1995	2000	2005	2010	2015	2016
Doctors	1.1	1.3	1.5	1.7	1.8	1.9	1.9
Dentists	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Nurses (registered and enrolled)	4.8	5.6	6.0	5.2	5.7	6.9	7.1
Midwives	1.7	1.8	1.8	0.7	0.7	0.6	0.6
CMPs	N/A	N/A	N/A	1.2	1.3	1.3	1.3
Pharmacists	0.1	0.2	0.2	0.2	0.3	0.3	0.4
OTs	N/A	0.1	0.1	0.2	0.2	0.2	0.3
PTs	N/A	N/A	0.2	0.3	0.3	0.4	0.4
MLTs	N/A	0.4	0.4	0.4	0.4	0.5	0.5
Optometrists	N/A	N/A	0.3	0.3	0.3	0.3	0.3
Radiographers	N/A	N/A	0.2	0.2	0.2	0.3	0.3
Chiropractors	N/A	N/A	N/A	0.01	0.02	0.03	0.03

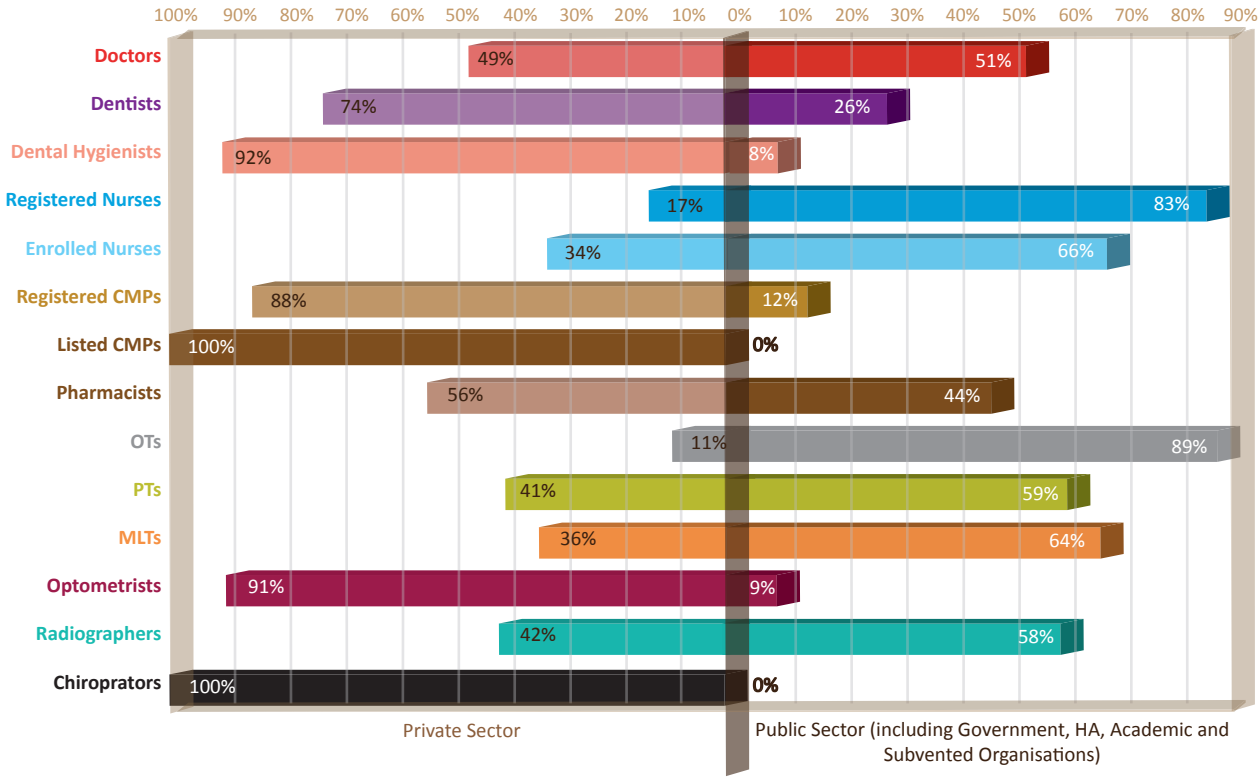
Source : DH

[3] Figures are as at end of the respective year. Besides year-on-year fluctuation due to joiners and leavers, the number of midwives in 2001 and nurses in 2005 showed marked drops from the preceding year as a result of removal of names (over 7 000 midwives and 10 000 nurses) from the corresponding register/roll of those who failed to comply with the requirement to obtain a valid practising certificate. The figures before the year concerned refer to the cumulative sum of midwives and nurses who had registered or enrolled with the licensing authorities. Eligible health professionals might have re-registered/re-enrolled in subsequent years.

1.3.2 Based on the latest Health Manpower Surveys (HMSs), 51% of doctors worked in the public sector[4]. The majority of nurses, OTs, PTs, MLTs and radiographers worked in the public sector. Healthcare professionals who were more commonly engaged in the private sector include dentists, dental hygienists, registered and listed CMPs, pharmacists, optometrists and chiropractors.

[4] Public sector includes Government, HA, academic institutions and subvented organisations unless otherwise specified.

Figure 1.4 Healthcare professionals by type of work sector



Source: HMS, DH

Healthcare professions subject to statutory registration

DOCTORS
KEY FACTS (as at end 2016)

Full registration	14 013
Provisional registration	379
Limited registration	134
Temporary registration	81

Registered specialists	6 797

Doctor to population ratio	1 : 526
Proportion of public and private practice	51% : 49%

HA employs over 40% of registered doctors in HK.

Male to female ratio	68%(Male); 32%(Female)

Median age	46
Age distribution	
20-29	10.1%
30-39	23.6%
40-49	25.8%
50-59	19.7%
≥60	20.8%

* Based on information from 13 689 doctors with full registration (around 98% of total number of doctors with full registration) whose date of birth information is available.

Regulatory body	Medical Council of Hong Kong (MCHK)
Training of doctors	The Chinese University of Hong Kong (CUHK) The University of Hong Kong (HKU)
Training of specialists	Hong Kong Academy of Medicine (HKAM)

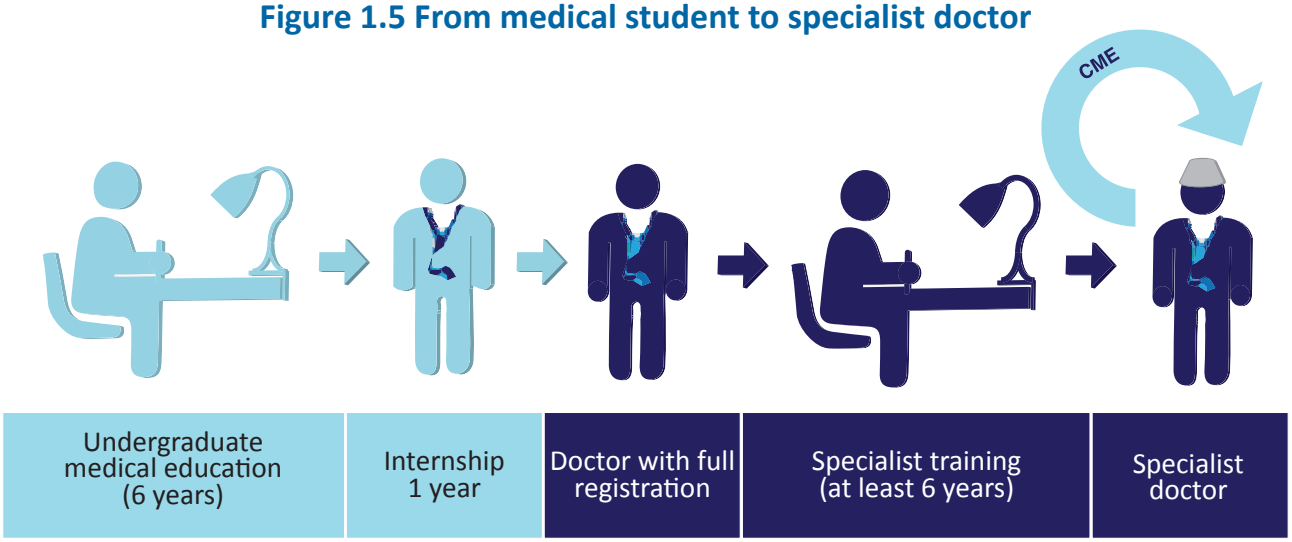
The training cycle of a specialist is very long. It takes at least 13 years to become a specialist (six of basic medical training, a year of internship training at HA and at least six years of specialist training).

1.3.3 As at end 2016, there were 14 013 doctors with full registration and 134 doctors with limited registration in Hong Kong. Among them, 6 797 doctors were registered as specialists. The number of doctors in Hong Kong has been increasing steadily. There were 3 632 and 4 887 doctors in Hong Kong in 1980 and 1985 respectively, amounting to a ratio of 0.7 and 0.9 doctors per 1 000 population. Following the establishment of the second medical school, with the first batch of students being conferred the medical degree in 1986, the number of doctors further increased to 1.1 per 1 000 population by 1990 and 1.9 per 1 000 population by 2016.

1.3.4 A total of 51% of doctors worked in the public sector including HA, DH, subvented and academic institutions. The rest were engaged in the private sector. The median age was 46. About 32% of registered doctors were female and 68% were male. In 2007, the female and male ratio was 27% and 73% respectively.

1.3.5 There are currently two medical schools in Hong Kong providing basic medical training of doctors. People wishing to become doctors must undergo a six-year medical programme leading to a degree in medicine and surgery offered by either CUHK or HKU. After being awarded a degree in medicine and surgery by the local medical school, medical students are granted provisional registration to undergo a year of internship training at HA before they are eligible for registration with MCHK as registered doctor.

Figure 1.5 From medical student to specialist doctor

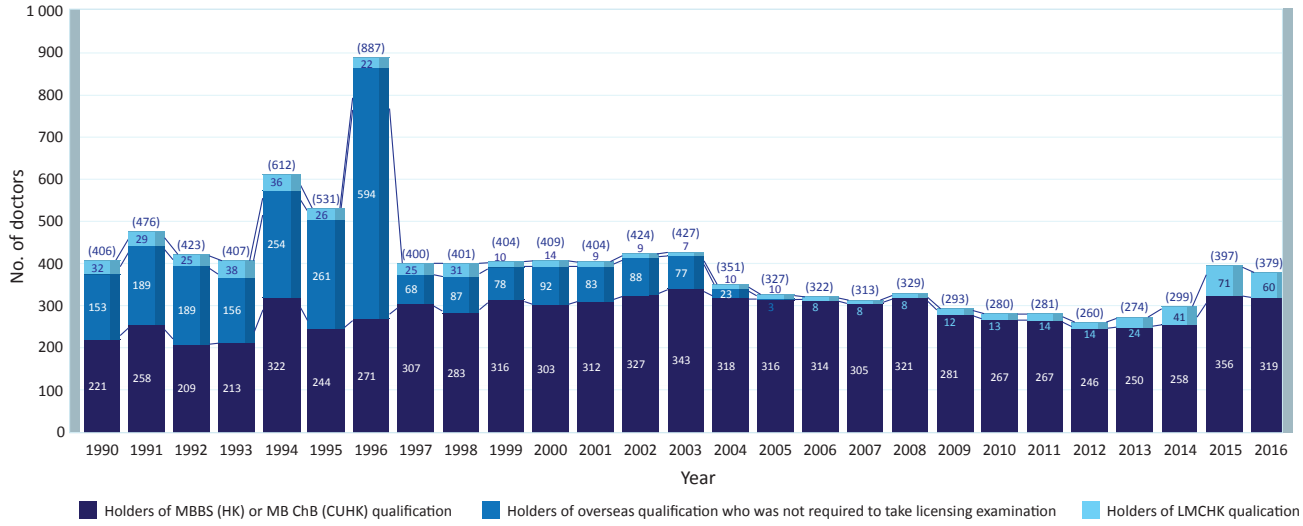


1.3.6 Doctor who has successfully completed internship is eligible to apply for specialist training. HKAM is the statutory body in Hong Kong responsible for the training of specialists. Its 15 colleges offer training in 66 specialties including the dental specialties. After a period of training which lasts for at least six years, a doctor will have to pass an exit examination before being awarded the Fellowship of HKAM and thus becoming eligible for registration with MCHK as a specialist. Specialist doctors need to undergo continuous medical education (CME) to maintain their specialist qualification in Hong Kong.

1.3.7 Non-locally trained doctors were once an important source of doctor supply in Hong Kong, when medical qualifications of recognised Commonwealth countries were recognised by MCHK for registration before September 1996. Since then, all non-locally trained doctors[5] are required to pass the Licensing Examination administered by MCHK and complete a specified period of internship assessment before they can register with full registration for practice in Hong Kong. As a result, the share of newly registered doctors who held a non-local medical qualification dropped significantly, from an average of 56% for the five years between 1992 and 1996 to 13% for the five years between 2012 and 2016.

[5] Except for those non-locally trained doctors registered under the transitional provision in section 35 of the Medical Registration Ordinance.

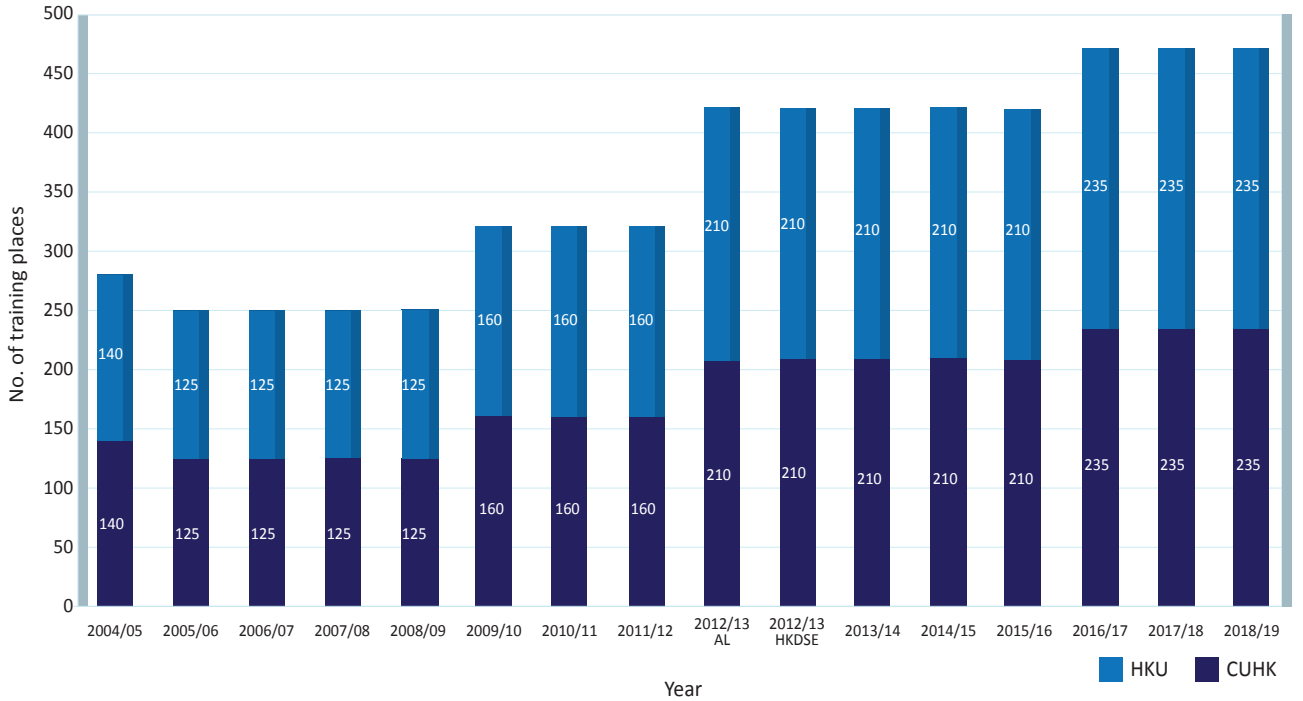
Figure 1.6 Qualifications of the newly registered doctors (1990-2016)



Source: MCHK

1.3.8 Local medical graduates have hitherto become a principal source of doctor supply in Hong Kong. Student intake of the two local medical schools has increased from 250 in the 2005/06 academic year to 320 in the 2009/10 academic year and 420 in the 2012/13 academic year, further to 470 in the 2016/17 academic year.

Figure 1.7 Publicly-funded degree places in medicine



Source: University Grants Committee (UGC)

Note : Due to the change in academic structure, UGC-funded institutions admitted two cohorts of students under the old and new academic structures in the 2012/13 academic year.

Non-locally trained doctors

Full registration through passage of Licensing Examination and completion of internship assessment

1.3.9 Non-locally trained doctors can register and practise in Hong Kong subject to the passage of the Licensing Examination administered by MCHK and completed a specified period of internship at HA.

1.3.10 The Licensing Examination consists of three parts, namely, Examination in Professional Knowledge (Part I), Proficieny Test in Medical English (Part II), and Clinical Examination (Part III). The Licensing Examination used to be held annually. MCHK has increased the frequency of the Licensing Examination from once to twice a year starting from 2014. The number of candidates who sat the Licensing Examination and the passing rates of the examination in the past five years are at Figure 1.8.

Figure 1.8 Number of candidates who sat the Licensing Examination of MCHK and the passing rates

Year	No. of candidates					
	Examination in Professional Knowledge (Part I)		Proficiency Test in Medical English (Part II)		Clinical Examination (Part III)	
	Sat	Passed (Passing rate)	Sat	Passed (Passing rate)	Sat	Passed (Passing rate)
2012	237	61 (26%)	74	67 (91%)	108	47 (44%)
2013	280	102 (36%)	115	103 (90%)	143	46 (32%)
2014	307	60 (20%)	105	80 (76%)	155	74 (48%)
2015	297	59 (20%)	98	80 (82%)	128	40 (31%)
2016	295	36 (12%)	97	90 (93%)	132	41 (31%)

Source: MCHK

1.3.11 Efforts have been made by MCHK to introduce more flexibility into the internship arrangement for non-locally trained doctors with specialist qualifications. Under the new arrangement, any person who has passed the Licensing Examination is eligible to apply for exemption from a specialty of internship training if he/she has a specialist qualification comparable to a Fellowship of the Colleges under HKAM. The internship training can be shortened from one year to six months. In 2015, MCHK has also refined certain exemption requirements for the Licensing Examination. For Part III of the Licensing Examination i.e. Clinical Examination, the minimum requirement of post-registration experience in the relevant discipline(s) of an applicant applying exemption has been reduced from ten years to six years. On the requirement of recognition of the specialist qualification, it has refined from "having outstanding qualities and being an internationally renowned medical practitioner in the opinion of the Licentiate Committee" to "a specialist qualification in the relevant discipline(s) comparable to a Fellowship of HKAM".

Limited registration

1.3.12 Alternatively, non-locally trained doctors with proven experience and knowledge employed by institutions as specified in promulgations of MCHK may apply to MCHK for limited registration in Hong Kong. The maximum duration of limited registration is one year. Upon expiry of the registration, the person can apply to MCHK for renewal for banother period of one year.

1.3.13 MCHK has published 12 promulgations. The types of employment as described in promulgations no. 1, 5, 6, 7, 8 and 11 no longer exist. The details of the six promulgations which are still valid are set out below.

Figure 1.9 Valid promulgations for limited registration

Promulgation No.	Employment	Gazette
No.2	For the following types of full-time employment:- (a) Employment as a medical practitioner by the Government for the purpose of research work or for such clinical practice of medicine or special health care services, as specified by the Director of Health; (b) Employment as a medical practitioner by HA for the purpose of research work or for such clinical practice of medicine or hospital work, as specified by the Authority; (c) Employment as a medical practitioner by CUHK or HKU for the purpose of teaching, research or performing hospital work, in the Faculty of Medicine	23.12.1994
No.3	Being such persons (whose names were entered prior to the end of 1964 into a list maintained by the Registrar of Clinics, DH) appointed for the provision of primary healthcare, and to be responsible for the medical management of those clinics exempted from the provisions of section 7 of the Medical Clinics Ordinance, Cap. 343	3.11.1995
No.4	Being such persons (whose names were entered prior to the end of 1964 into a list maintained by the Registrar of Clinics, DH and who are or who have been registered under Promulgation No. 3 of MCHK on Limited Registration) appointed for the provision of primary healthcare, and to be responsible for the medical management of those clinics registered under the Medical Clinics Ordinance, Cap. 343	9.11.2001
No.9	Employment for the purpose of supervising the medical matters which may arise in connexion with the construction work in compressed air for the Tuen Mun – Chek Lap Kok Link – Northern Connection Sub-sea Tunnel Section project under Highways Department's contract number HY/2012/08	20.3.2015
No.10	Employment by a firm of solicitors registered by the Law Society of Hong Kong to carry out a medical examination of a person in Hong Kong for the sole purpose of preparing a medical expert report on that person for use in a pending court proceedings in Hong Kong	17.7.2015
No.12	Employment for the purpose of the annual rugby event "Sevens World Series"	21.8.2015

Source: MCHK

1.3.14 As at end 2016, there were a total of 134 doctors with limited registration in Hong Kong, who were employed by the two medical schools (79 persons), HA (14 persons), clinics that have been exempted from the provisions of section 7 of the Medical Clinics Ordinance (27 persons) or clinics registered under the Medical Clinics Ordinance (12 persons) and works contractor commissioned by the Highways Department (2 persons).

Figure 1.10 No. of doctors with limited registration

Promulgation	as at Dec 2012	as at Dec 2013	as at Dec 2014	as at Dec 2015	as at Dec 2016
No.2	118	115	97	104	93
CUHK	(62)	(58)	(51)	(62)	(52)
HKU	(45)	(45)	(33)	(30)	(27)
HA	(11)	(12)	(13)	(12)	(14)
DH	(0)	(0)	(0)	(0)	(0)
No.3	41	36	34	31	27
No.4	16	15	15	13	12
No.9	-	-	-	2	2
No.10	-	-	-	0	0
No.12	-	-	-	0	0
Total	175	166	146	150	134

Source: MCHK

No. of newly registered doctors (locally and non-locally trained)

1.3.15 The annual average number of full registration doctors with local qualifications newly registered in 2012 - 2016 was 280 (87%), while the average number of full registration doctors with non-local qualifications was 42 (13%).

DENTISTS
KEY FACTS (as at end 2016)

Registered dentists	2 441
Registered dental specialists	260
Dentist to population ratio	1 : 3 021
Proportion of public and private practice	26% : 74%

The majority of registered dentists are in private practice.

Male to female ratio	68%(Male); 32%(Female)

Median age	48
Age distribution	
20-29	12.0%
30-39	21.6%
40-49	20.7%
50-59	27.9%
≥60	17.8%

* Based on information from 2 392 dentists (around 98% of total number of registrants) whose date of brith information is available.

Regulatory body	Dental Council of Hong Kong (DCHK)
Training of dentists	HKU

The Faculty of Dentistry of HKU is the sole provider of undergraduate training in dentistry.

Training of specialists	HKAM (The College of Dental Surgeons of Hong Kong)

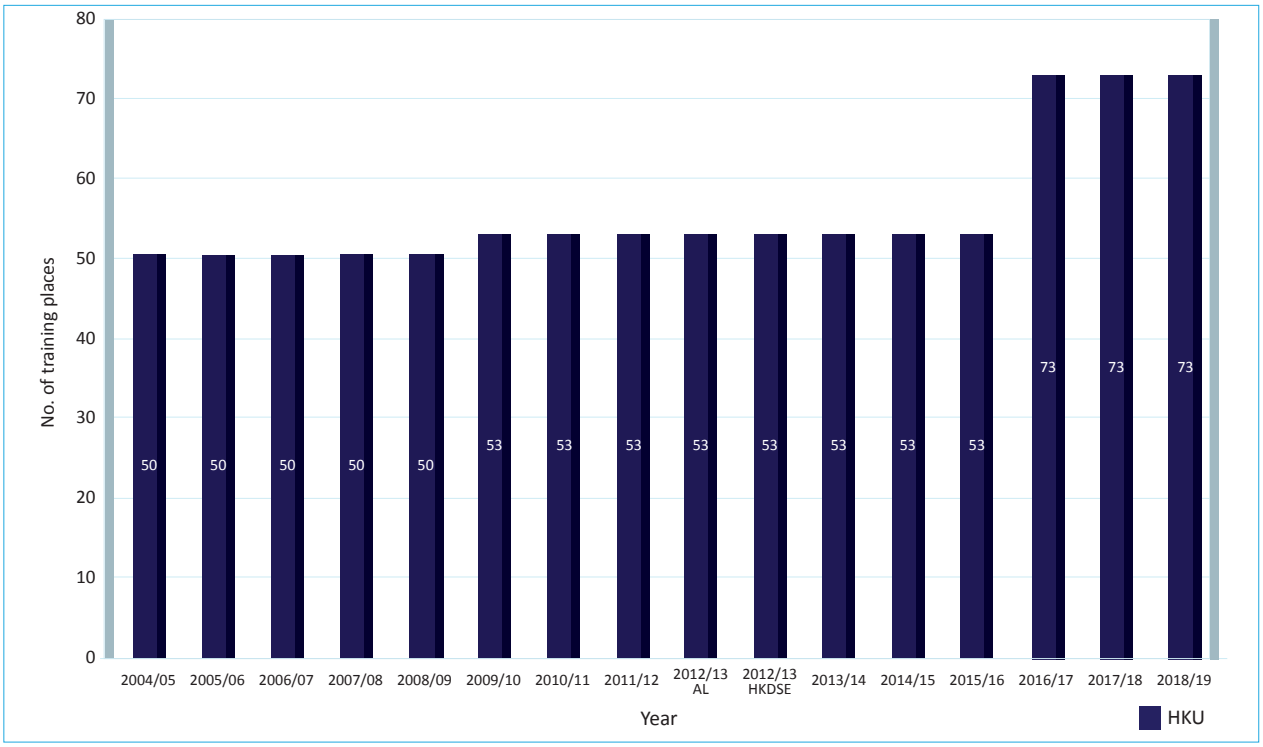
The training cycle of a specialist is very long. It takes at least 12 years to become a specialist (six years of basic dentisty training, and at least six years of specialist training).

1.3.16 As at end 2016, there were 2 441 registered dentists in Hong Kong. Among them, 260 were dental specialists. There were 74% of dentists worked in the private sector. The rest were engaged in government dental clinics or oral maxillofacial surgery and dental units of public hospitals, subvented and academic sectors. The median age was 48. About 32% of registered dentists were female and 68% were male. In 2007, the female and male ratio was 27% and 73% respectively.

1.3.17 Hong Kong had been relying on the supply of foreign-trained dentists until the first batch of dental students graduated from the Faculty of Dentistry of HKU in 1985. Today, the school continues to be the sole provider of undergraduate training in dentistry, enrolling about 50 students each year in the past, and the number of student intake has been increased to 73 a year in the 2016/17 academic year. People wishing to become dentists must undertake a six-year course leading to a degree in dentistry offered by HKU. Thereafter, dental graduates may register with DCHK for practice in Hong Kong without having to undergo any dental internship.

1.3.18 The College of Dental Surgeons of Hong Kong under HKAM organises, monitors, assesses and accredits specialist training, which lasts for at least six years, for one aspires to register with DCHK as a dental specialist.

Figure 1.11 Publicly-funded degree places in dentistry



Source: UGC

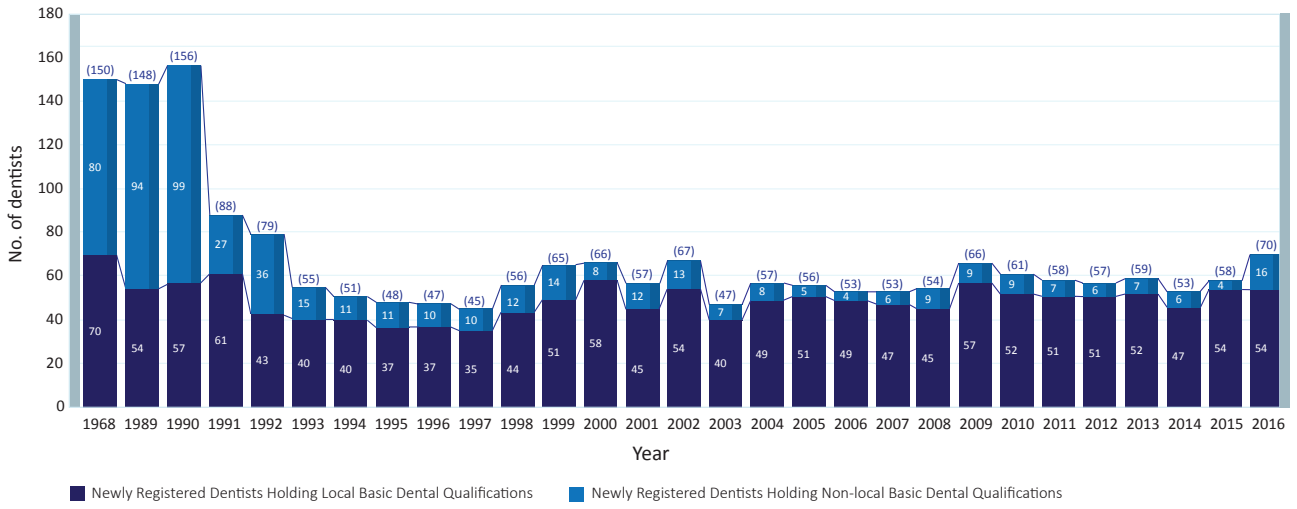
Note : Due to the change in academic structure, UGC-funded institutions admitted two cohorts of students under the old and new academic structures in the 2012/13 academic year.

Non-locally trained dentists

1.3.19 Non-locally trained dentists are required to take a licensing examination administered by DCHK to qualify for registration and practise in Hong Kong. Similar to the case of doctors, non-locally trained graduates in dentistry with recognised qualifications, including those from Commonwealth countries, were eligible for registration in Hong Kong before October 1992.[6] As a result of mandating a licensing examination for all non-locally trained dentists, the percentage of newly registered dentists holding a non-local basic dental qualification dropped significantly, from an average of 54% for the five years between 1988 and 1992 to 13% for the five years between 2012 and 2016.

[6] With effect from 1 April 1990, holders of primary dental qualifications granted in Australia, Canada, the US and South Africa were required to pass DCHK's Licensing Examination as a pre-requisite for registration. With effect from 1 October 1992, holders of primary dental qualifications granted in the UK, Republic of Ireland, Singapore and New Zealand were required to take the Licensing Examination as a pre-requisite for registration.

Figure 1.12 Qualifications of the newly registered dentists (1988-2016)



Source: DCHK

1.3.20 The Licensing Examination for non-locally trained dentists consists of three parts, namely, Written Test (Part I), Practical Test (Part II) and Clinical Test (Part III). The number of candidates who sat the Licensing Examination and the passing rates of the examination in the past five years are at Figure 1.13.

DCHK increases the frequency of Licensing Examination for non-locally trained dentists from once a year to twice a year starting from 2015.[7]

[7] DCHK endorsed to increase the frequency of the Licensing Examination from once to twice a year in 2015. As a transitional arrangement, only one sitting was held in 2015 and three sittings were held in 2016.

Figure 1.13 Number of candidates who sat the Licensing Examination of DCHK and the passing rates

Year	No. of candidates					
	Written Test (Part I)		Practical Test (Part II)		Clinical Examination (Part III)	
	Sat	Passed (Passing rate)	Sat	Passed (Passing rate)	Sat	Passed (Passing rate)
2012	46	4 (9%)	28	9 (32%)	10	7 (70%)
2013	45	4 (9%)	16	3 (19%)	8	6 (75%)
2014	53	17 (32%)	27	7 (26%)	8	3 (38%)
2015	40	3 (8%)	17	7 (41%)	18	12 (67%)
2016	89	20 (22%)	47	13 (28%)	32	19 (59%)

Source: DCHK

1.3.21 DCHK has further improved the arrangement of certain parts of the Licensing Examination starting from 2015, including allowing candidates to re-sit those unsuccessful part(s) for certain papers of the licensing examination, while retaining partial pass results for the successful ones. DCHK has also updated its result retention policy[8] and examination admission arrangement[9].

[8] In the past, candidates were allowed to retain the partial pass results for two years only. Under the revised policy, candidates are allowed to retain partial pass results in Parts I, II and III for four diets or four years, whichever event occurs first. This condition applies to the partial pass results obtained in the Licensing Examination in 2015 and/or after. It also applies to the valid partial pass results obtained in the Licensing Examination in 2013 and/or 2014 under the old result retention policy.

[9] In the past, candidates were required to pass Part I before proceeding to Part II and to pass Part II before proceeding to Part III. Under the revised policy, after passing Part I, candidates are allowed to apply to sit the Examination in the same diet for –
(i) only Part II ; or
(ii) both Part II and Part III irrespective of the result of Part II.

No. of newly registered dentists (locally and non-locally trained)

1.3.22 The average number of newly registered dentists with local qualifications in 2012 - 2016 was 52 (87%), while the average number of those with non-local qualifications was 8 (13%).

DENTAL HYGIENISTS
KEY FACTS (as at end 2016)

Enrolled dental hygienists	424
Proportion of public and private practice	8% : 92%
Over 90% of dental hygienists are engaged in the private sector.	
Male to female ratio	5%(Male); 95%(Female)
The vast majority of dental hygienists are female.	
Regulatory body	DCHK
Training of dental hygienists	HKU School of Professional and Continuing Education (HKU SPACE) Community College

1.3.23 Dental hygienists refer to persons who have met the qualifications prescribed in section 3 of the Ancillary Dental Workers (Dental Hygienists) Regulations (Cap. 156B) (Regulations) and are enrolled with DCHK for enrolment as dental hygienists. The scope of work of a dental hygienist mainly includes cleaning and scaling of teeth, exposure of oral x-ray films, and giving of advice on matters relating to dental hygiene in accordance with the directions of a registered dentist. Once enrolled, dental hygienists will stay on the list without the need of annual renewal. There were 424 dental hygienists as at end 2016. Over 90% of dental hygienists are engaged in the private sector. About 95% of dental hygienists were female and 5% were male. The female and male ratio was more or less the same as in 2007.

1.3.24 HKU SPACE Community College provides higher diploma programme in dental hygiene for people who aspire to become dental hygienists. The programme is supported by the Prince Philip Dental Hospital (PPDH). Except for dental hygienists who have to enrol with DCHK, the other ancillary dental personnel such as dental nurses, dental technicians and dental therapists are not subject to an enrolment registration system.

NURSES
KEY FACTS (as at end 2016)

Registered nurses (General)	36 555
Registered nurses (Psychiatric)	2 612
Registered nurses (Mentally Sub-normal)	5
Registered nurses (Sick Children)	6
Enrolled nurses (General)	11 719
Enrolled nurses (Psychiatric)	1 492

Nurses, comprising registered nurses and enrolled nurses, constitute more than half of the total healthcare workforce in Hong Kong.

Nurse to population ratio	1 : 141
Proportion of public and private practice	Registered nurses: 83% : 17% Enrolled nurses: 66% : 34%
Male to female ratio	Registered nurses: 15%(Male); 85%(Female) Enrolled nurses: 11%(Male); 89%(Female)

The majority of nurses are female.

Median age (Registered nurses)	42
Median age (Enrolled nurses)	41
Age distribution	
20-29	22.8%
30-39	21.5%
40-49	25.5%
50-59	21.4%
≥60	8.8%

* Based on information from 38 954 registered nurses and 13 144 enrolled nurses (around 99% of total number of registrants) whose date of birth information is available.

Regulatory body	Nursing Council of Hong Kong (NCHK)
Training of nurses	Accredited pre-service nursing programmes offered by training institutions, HA and private hospitals

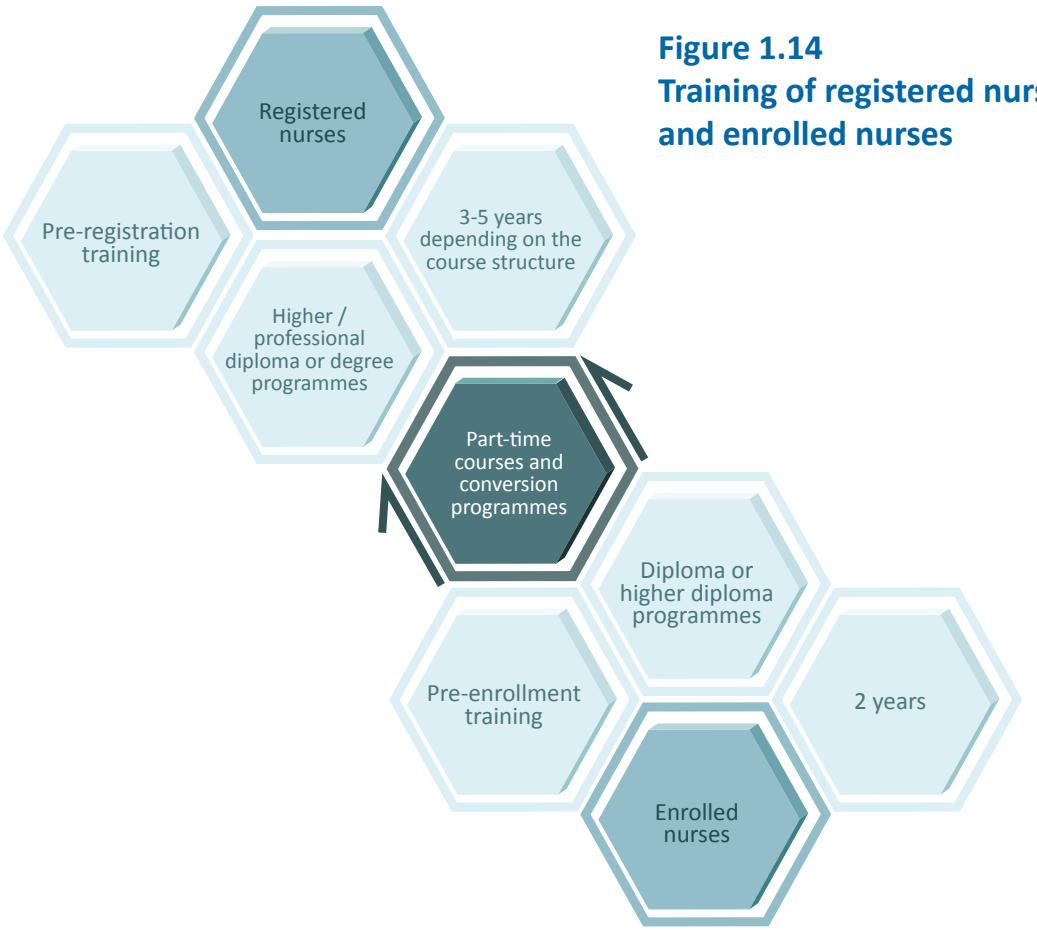
There is a strong and vibrant self-finacing sector dedicated to nurse training, in addition to nurse prgrammes offered by UGC-funded institutions. CUHK, HKU and the Hong Kong Polytechnic University (PolyU) provide a total of 630 UGC-funded first-year-first-degree places and 125 senior-year intake places each year. HA, private hospitals and other tertiary institutions operate in parallel a variety of self-financed nursing programmes, which add up to about 2 200 places annually. All in all, there are around 3 000 nursing training places offered each year.

1.3.25 Nurses, comprising registered nurses and enrolled nurses, constitute more than half of the healthcare workforce in Hong Kong. Nurses must register or enrol with NCHK before they are allowed to practise. As at end 2016, there were 52 389 nurses (in terms of registrants, not headcounts which will be lower because of multiple registration), comprising 39 178 registered nurses and 13 211 enrolled nurses, or alternatively interpreted as 48 274 general nurses and 4 104 psychiatric nurses and 11 nurses of other streams (mentally sub-normal and sick children).

1.3.26 83% of registered nurses and 66% of enrolled nurses were working in the public sector. The median age of registered and enrolled nurses was 42 and 41 respectively. About 85% of registered nurses were female and 15% were male. In 2007, the female and male ratio was 88% and 12% respectively. For enrolled nurses, 89% were female and 11% were male, as compared with 92% and 8% in 2007.

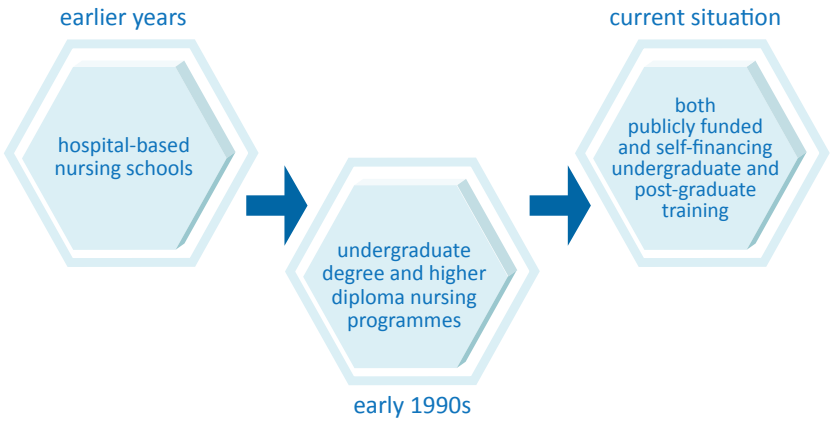
1.3.27 Training of registered nurses is provided through either higher / professional diploma or degree programmes which last from three to five years depending on the course structure. Training of enrolled nurses is provided through two-year diploma or higher diploma programmes. Part-time courses and conversion programmes to enable the migration of enrolled nurses to registered nurses are also available. For registered and enrolled nurses alike, students can opt to study general nursing or specialise in psychiatric nursing.

Figure 1.14
Training of registered nurses and enrolled nurses



1.3.28 Nursing education used to be provided by hospital-based nursing schools in earlier years, when nursing training followed an apprenticeship system under which students learned while working full-time in the wards, supplemented by structured classroom study. It was until the early 1990s that universities started to offer undergraduate degree and higher diploma nursing programmes.

Figure 1.15 Evolution of nursing education



1.3.29 To alleviate the shortage of nurses in the welfare sector, the Social Welfare Department (SWD) has collaborated with HA since 2006 to organise a two-year Enrolled Nurse (General) / Enrolled Nurse (Psychiatric) Training Programme. A total of 14 training classes have been organised so far, providing a total of about 1 800 training places. The Training Programme is fully subsidised by the Government. Trainees are required to sign an undertaking to work in the welfare sector continuously for two years upon graduation. Among the graduates of the first 11 classes, over 90% have joined the social welfare sector after graduation.

1.3.30 Today, there is a flourishing market for training nurses in Hong Kong. Three universities (CUHK, HKU and PolyU) provide an annual total of 630 publicly-funded first-year-first-degree places and 125 senior year places in nursing. Meanwhile, the Open University of Hong Kong (OpenU), HKU SPACE, HKU SPACE Community College, Tung Wah College (TWC), Caritas Institute of Higher Education (Caritas), four nursing schools of HA and another four operated by private hospitals offer some 2 200 places annually on self-financing basis.

Figure 1.16 Training of nurses in Hong Kong

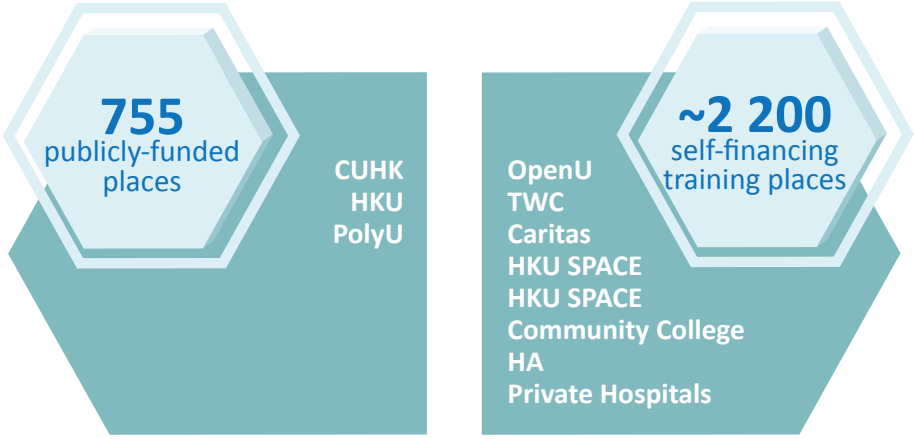
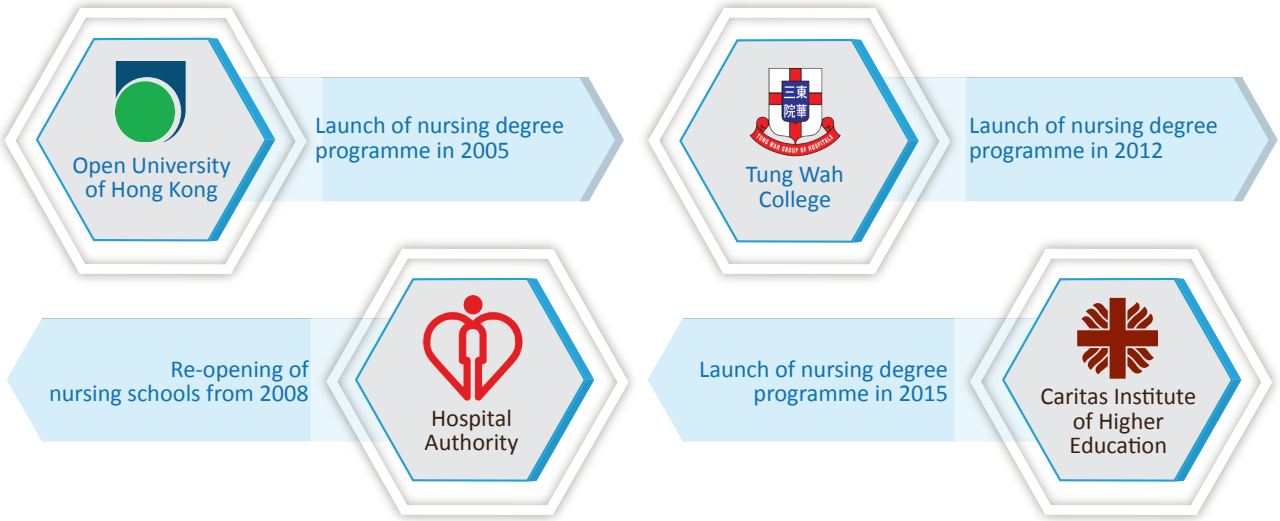


Figure 1.17 Increase in the training capacity for nurses in the self-financing sector

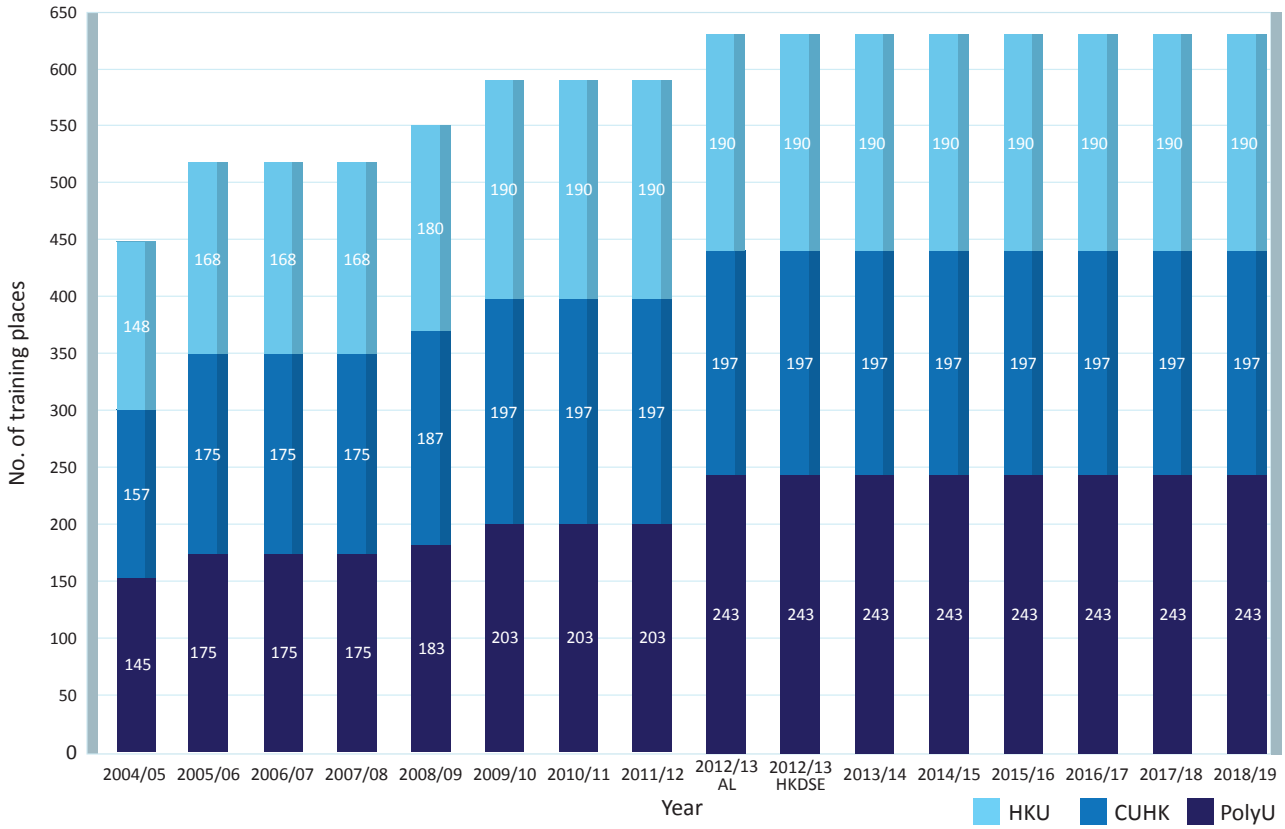


1.3.31 The Government has introduced the Study Subsidy Scheme for Designated Professions/Sectors (SSSDP) to subsidise about 1 000 students per cohort starting from the 2015/16 academic year to pursue designated full-time locally-accredited self-financing local undergraduate programmes in selected disciplines with keen manpower demand, including healthcare. The number of subsidised training places will increase to about 3 000 per cohort starting from the 2018/19 academic year when the scheme is regularised. Under SSSDP, a total of 420 places of nursing programmes[10] were subsidised for the 2015/16 cohort, and a total of 480 places of nursing programmes[11] have been / will be subsidised for the 2016/17 and 2017/18 cohorts respectively.

[10] 150 places in general nursing and 70 places in psychiatric nursing offered by OpenU and 200 places of the nursing programme offered by TWC.

[11] 60 places of nursing programme to be offered by Caritas in addition to the 420 places mentioned in footnote 10.

Figure 1.18 Publicly-funded degree places in nursing



Source: UGC

Note : Due to the change in academic structure, UGC-funded institutions admitted two cohorts of students under the old and new academic structures in the 2012/13 academic year.

Non-locally trained nurses

1.3.32 Non-locally trained nurses who wish to practise in Hong Kong should meet the requirements for registration prescribed by NCHK, which includes the Licensing Examination administered by NCHK. The Licensing Examination for non-locally trained nurses consists of a written part and a practical part. The number of candidates who sat the Licensing Examination and the passing rates of the examination in the past five years are at Figure 1.19.

Figure 1.19 Number of candidates who sat the Licensing Examination of NCHK and the passing rates (general registered and enrolled nurses)

Year	No. of candidates			
	Written Test		Practical Test	
	Sat	Passed (Passing rate)	Sat	Passed (Passing rate)
2012	192	98 (51%)	176	41 (23%)
2013	182	61 (34%)	162	50 (31%)
2014	204	70 (34%)	152	29 (19%)
2015	177	62 (35%)	127	40 (31%)
2016	145	60 (41%)	98	32 (33%)

Source: NCHK

1.3.33 NCHK has increased the frequency of the written part of the Licensing Examination for non-locally trained registered nurses from once to twice a year from 2016.

No. of newly registered and enrolled nurses (locally and non-locally trained)

1.3.34 The annual average number of newly registered nurses with local qualifications in 2012 - 2016 was 1 695 (98%), while the average number of those with non-local qualifications was 27 (2%). The annual average number of newly enrolled nurses with local qualifications was 792 (98%), while the average number of those with non-local qualifications was 13 (2%).

MIDWIVES
KEY FACTS (as at end 2016)

Registered midwives	4 540
Midwife to population ratio	1 : 1 624
Proportion of public and private practice	85% : 15%
Male to female ratio	0%(Male); 100%(Female)

Midwife may hold dual registration in both nursing and midwifery. About 95% of registered midwives possess registered nurses registration.

Regulatory body	Midwives Council of Hong Kong
Training of specialists	School of Midwifery of the Prince of Wales Hospital (Clinical placement will be conducted in the maternity unit of various clinical training grounds approved by the Midwives Council of Hong Kong)

The School of Midwifery of the Prince of Wales Hospital is currently the only institution providing midwifery training in Hong Kong. It runs an 18-month post-registration diploma course in midwifery which admits only registered nurses. Any person who wishes to practise as a midwife in Hong Kong has to pass the Midwives Council Examination before he/she can register with the Midwives Council of Hong Kong.

1.3.35 The School of Midwifery of the Prince of Wales Hospital is currently the only institution providing midwifery training in Hong Kong. It runs an 18-month post-registration diploma course in midwifery which admits only registered nurses.

1.3.36 It is noted that about (95%) midwives possess registered nurses registrations. Only 40% of them were working in the field of midwifery, obstetrics and gynaecology, owing to the low fertility rate in Hong Kong.

Non-locally trained midwives

1.3.37 Non-locally trained midwives who wish to practise in Hong Kong should meet the requirements for registration prescribed by the Midwives Council of Hong Kong, which include the Licensing Examination administered by the Council. The Licensing Examination consists of a written part and an Objective Structured Clinical Examination (OSCE).

Results of licensing examination (locally and non-locally trained)

1.3.38 Any person who wishes to practise as a midwife in Hong Kong has to pass the Midwives Council Examination before he/she can register with the Midwives Council of Hong Kong. The results of Licensing Examination for 2012 - 2016 are as follows.

Figure 1.20 Number of candidates who sat the Licensing Examination of the Midwives Council of Hong Kong and the passing rates

Year	No. of candidates			
	Written Test		OSCE	
	Sat	Passed (Passing rate)	Sat	Passed (Passing rate)
2012	81	81 (100%)	81	80 (99%)
2013	95	93 (98%)	96	95 (99%)
2014	86	84 (98%)	87	83 (95%)
2015	68	66 (97%)	67	65 (97%)
2016	89	88 (99%)	88	88 (100%)

Source: Midwives Council of Hong Kong

No. of newly registered midwives (locally and non-locally trained)

1.3.39 The annual average number of newly registered midwives with local qualifications in 2012 - 2016 was 79 (96%), while the average number of those with non-local qualifications was 3 (4%).

CHINESE MEDICINE PRACTITIONERS
KEY FACTS (as at end 2016)

Registered CMPs	7 262
Listed CMPs	2 647
CMPs with limited registration	47

The number of listed CMPs is declining over the years while the number of registered CMPs is rising.

Male to female ratio (Registered CMPs)	63%(Male); 37%(Female)
Median age (Listed CMPs)	76%(Male); 24%(Female)

CMP to population ratio	1 : 744

Proportion of public and private practice of registered CMPs	12% : 88%

The vast majority of CMPs, registered or listed, worked in the private sector.

Median age (Registered CMPs)	59
Median age (Listed CMPs)	66
Age distribution	
20-29	5.2%
30-39	11.4%
40-49	8.6%
50-59	20.6%
≥60	54.2%

The CMP profession is a relatively ageing profession as compared to other healthcare professions.

Regulatory body	Chinese Medicine Council of Hong Kong (CMCHK)
Training of CMPs	Hong Kong Baptist University (BU) CUHK HKU

A person who aspires to be a CMP must have satisfactorily completed such an undergraduate degree course of training in Chinese Medicine practice or its equivalent, whether or not conferred by a local university, approved by the CMP Board of CMCHK before they can take the Licensing Examination and obtain registration to practise in Hong Kong.

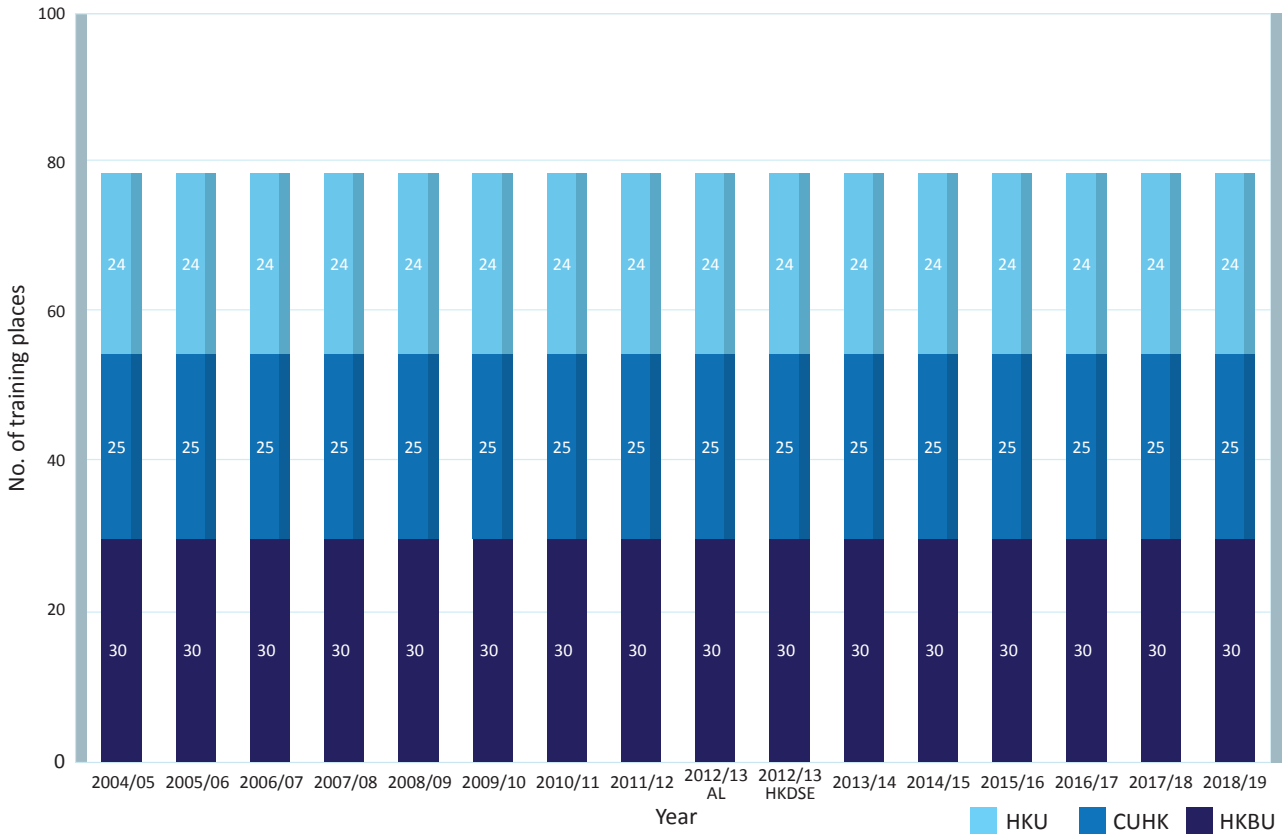
Three local universities, viz. BU, CUHK and HKU, offer six-year undergraduate courses in Chinese Medicine which are recognised by CMCHK as approved courses for Licensing Examination. The number of training place has remained steady over the past decade, around 80 annually.

1.3.40 As at end 2016, there were 7 262 registered CMPs and 2 647 listed CMPs in Hong Kong. Only registered CMPs are allowed to prescribe the Chinese herbal medicine listed in Schedule 1 of the Chinese Medicine Ordinance (Cap. 549). Around 90% of registered CMPs worked in the private sector. The median age was 59 for registered CMPs and 66 for listed CMPs. About 37% of registered CMPs were female and 63% were male. In 2007, the female and male ratio was 30% and 70% respectively. For listed CMPs, about 24% were female and 76% were male, the female and male ratio in 2007 and 2016 are more or less the same.

1.3.41 When the Chinese Medicine Ordinance (Cap. 549) was enacted in 1999, a transitional arrangement was put in place to enable all practitioners at that time to continue their practice as listed CMPs until they became registered practitioners either through direct registration, passing the oral registration assessment or passing a licensing examination, according to their practising experience and qualification. The Ordinance provides that listed CMPs may practise in Hong Kong legally until a date to be announced by the Secretary for Food and Health. There has been a declining number of listed CMPs over the years vis-à-vis rising number of registered CMPs.

1.3.42 Three local universities, viz. BU, CUHK and HKU, offer six-year undergraduate courses in Chinese Medicine which are recognised by CMCHK as approved courses for Licensing Examination. The number of training places has remained steady over the past decade, around 80 annually.

Figure 1.21 Publicly-funded degree places in Chinese Medicine



Source: UGC

Note : Due to the change in academic structure, UGC-funded institutions admitted two cohorts of students under the old and new academic structures in the 2012/13 academic year.

1.3.43 After registration, a registered CMP must receive continuing education in Chinese Medicine for renewal of practising certificate once every three years. At present, specialist training or specialist registration is not available to CMPs.

1.3.44 Similar to the case of doctors, the Chinese Medicine Ordinance also allows qualified non-locally trained practitioners to work for specified institutions (at present HA, BU, CUHK, the City University of Hong Kong, HKU and PolyU) for the purpose of clinical teaching and/or research by way of limited registration.

Results of licensing examination

1.3.45 A person who aspires to be a CMP must have satisfactorily completed such an undergraduate degree course of training in Chinese Medicine practice or its equivalent, whether or not conferred by a local university, as is approved by the CMP Board of CMCHK before they can take the Licensing Examination and obtain registration to practise in Hong Kong. The results of the Licensing Examination for 2012 - 2016 are as follows.

Figure 1.22 Number of candidates who sat the Licensing Examination of CMCHK and the passing rates

Year	No. of candidates			
	Written Test		Clinical Examination	
	Sat	Passed (Passing rate)	Sat	Passed (Passing rate)
2012	323	239 (74%)	429	199 (46%)
2013	398	257 (65%)	445	200 (45%)
2014	341	244 (72%)	450	203 (45%)
2015	396	292 (74%)	492	211 (43%)
2016	437	348 (80%)	573	237 (41%)

Source: CMCHK

No. of newly registered CMPs (locally and non-locally trained)

1.3.46 The average number of candidates passing the Licensing Examination and getting registered for the period from 2012 to 2016 is about 204, including listed CMPs (2; 1%), locally trained graduates (104; 51%), and non-locally trained graduates who had completed a recognised undergraduate degree course of training in Chinese Medicine, or its equivalent, as approved by the CMP Board of CMCHK (98; 48%).

PHARMACISTS
KEY FACTS (as at end 2016)

Registered pharmacists	2 659

Non-locally trained pharmacists accounted for 56% newly registered pharmacists in the past five years (2012 to 2016).

Pharmacist to population ratio	1 : 2 774
Male to female ratio	47%(Male); 53%(Female)
Proportion of public and private practice	44% : 56%

Median age	39
Age distribution	
20-29	20.5%
30-39	31.8%
40-49	23.0%
50-59	14.6%
≥60	10.1%

* Based on information from 2 478 registered pharmacists (around 93% of total number of registrants) whose date of birth information is available.

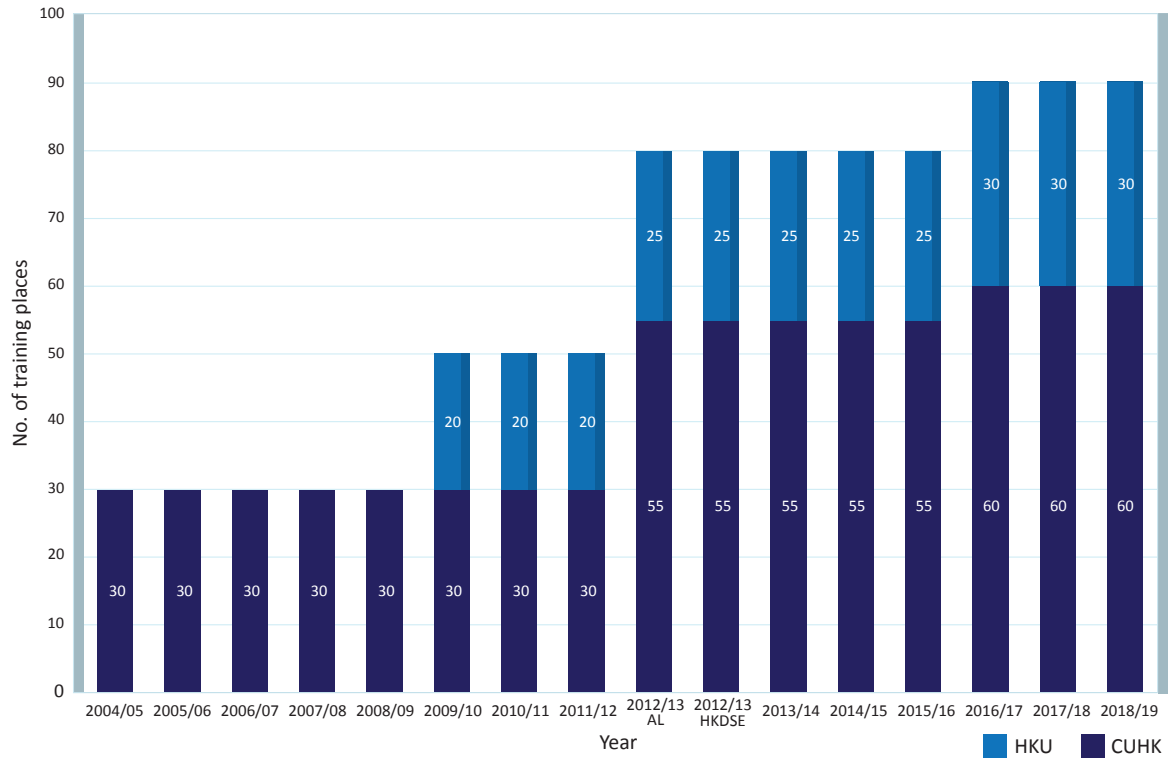
The pharmacist profession is a relatively young profession.

Regulatory body	Pharmacy & Poisons Board of Hong Kong (PPBHK)
Training of pharmacists	CUHK HKU

1.3.47 As at end 2016, there were 2 659 pharmacists in Hong Kong. A total of 44% of pharmacists worked in the public sector, the rest were engaged in the private sector. The median age was 39. About 53% of registered pharmacists were female and 47% were male. In 2007, both genders accounted for half of the profession.

1.3.48 CUHK and HKU offer four-year degree programmes in pharmacy, providing a total of 90 places in the 2016/17 academic year. To qualify for registration with PPBHK, graduates have to complete one year of internship comprising six months of basic training in a hospital and six months of specialty training in a hospital, a community pharmacy or a pharmaceutical manufacturing/wholesale company, both in training institutions accredited by PPBHK.

Figure 1.23 Publicly-funded degree places in pharmacy



Source: UGC

Note : Due to the change in academic structure, UGC-funded institutions admitted two cohorts of students under the old and new academic structures in the 2012/13 academic year.

1.3.49 Separation of prescribing from dispensing is not mandatory in Hong Kong, but it is the practice in public and private hospitals. Pharmacists in these settings are responsible for drug management including procurement, storage and distribution, and they supervise dispensers who carry out supporting and dispensing routines. In recent years, the role of hospital pharmacists has also expanded to clinical pharmacy and medication reconciliation for patients at admission and upon discharge.

1.3.50 Community pharmacists are mainly responsible for dispensing drugs and providing medication counseling services. The Pharmacy and Poisons Ordinance (Cap. 138) requires that certain categories of drugs can only be sold in registered premises of pharmacies by a registered pharmacist or in his presence and under his supervision.

Non-locally trained pharmacists

1.3.51 Non-locally trained pharmacists should meet the prescribed standards set by PPBHK before they can register for practice in Hong Kong. These include the passing of a registration examination, consisting of 3 subjects viz. “Pharmacy Legislation in Hong Kong”, “Pharmacy Practice” and “Pharmacology”. The results of the Registration Examination for 2012 - 2016 are as follows.

Figure 1.24 Number of candidates who sat the Registration Examination of the Pharmacy & Poisons Board of Hong Kong and the passing rates

Year	No. of candidates					
	Pharmacy Legislation in HK		Pharmacy Practice		Pharmacology	
	Sat	Passed (Passing rate)	Sat	Passed (Passing rate)	Sat	Passed (Passing rate)
2012	193	89 (46%)	155	82 (53%)	268	61 (23%)
2013	179	81 (45%)	128	80 (63%)	221	105 (48%)
2014	184	74 (40%)	156	71 (46%)	205	107 (52%)
2015	216	87 (40%)	199	57 (29%)	174	38 (22%)
2016	159	68 (43%)	194	46 (24%)	181	44 (24%)

Source: PPBHK

No. of newly registered pharmacists (locally and non-locally trained)

1.3.52 The annual average number of newly registered pharmacists with local qualifications in 2012 - 2016 was 57 (44%), while the average number of those with non-local qualifications was 73 (56%).

Allied Health Professionals

1.3.53 The following five healthcare professions are subject to statutory regulation under the Supplementary Medical Professions Ordinance (Cap. 359), namely OTs, PTs, MLTs, optometrists and radiographers.

OCCUPATIONAL THERAPISTS
KEY FACTS (as at end 2016)

Registered OTs	1 911
OT to population ratio	1 : 3 859
Proportion of pubilc and private practice	89% : 11%
Male to female ratio	33%(Male); 67%(Female)

Median age	33
Age distribution	
20-29	35.1%
30-39	45.4%
40-49	15.3%
50-59	3.6%
≥60	0.6%

* Based on information from 1 413 registered OTs (around 74% of total number of registrants) whose date of birth information is available.

The OT profession is a relatively young profession.

Regulatory body	Supplementary Medical Professions Council (SMP Council) Occupational Therapists Board (OTs Board)
Training of OTs	PolyU TWC (undergoing accreditation)

TWC

TWC has started to operate a self-financing programme in occupational therapy, providing about 50 training places in the 2013/14 academic year. The programme is undergoing accreditation by SMP Council. The first cohort of students will graduate in 2017.

1.3.54 As at end 2016, there were 1 911 OTs in Hong Kong. A total of 89% of OTs worked in the public sector. The median age was 33. About 67% of registered OTs were female and 33% were male. In 2007, the female and male ratio was 68% and 32% respectively. People wishing to become OTs must register with OTs Board for practice in Hong Kong.

1.3.55 PolyU is the only institution offering publicly-funded degree programme in the field of occupational therapy, providing 100 training places in the 2016/17 academic year. To alleviate the shortage of allied health professionals in the welfare sector, PolyU launched a two-year entry level Master in Occupational Therapy (MOT) programme in January 2012 on a self-financing basis.

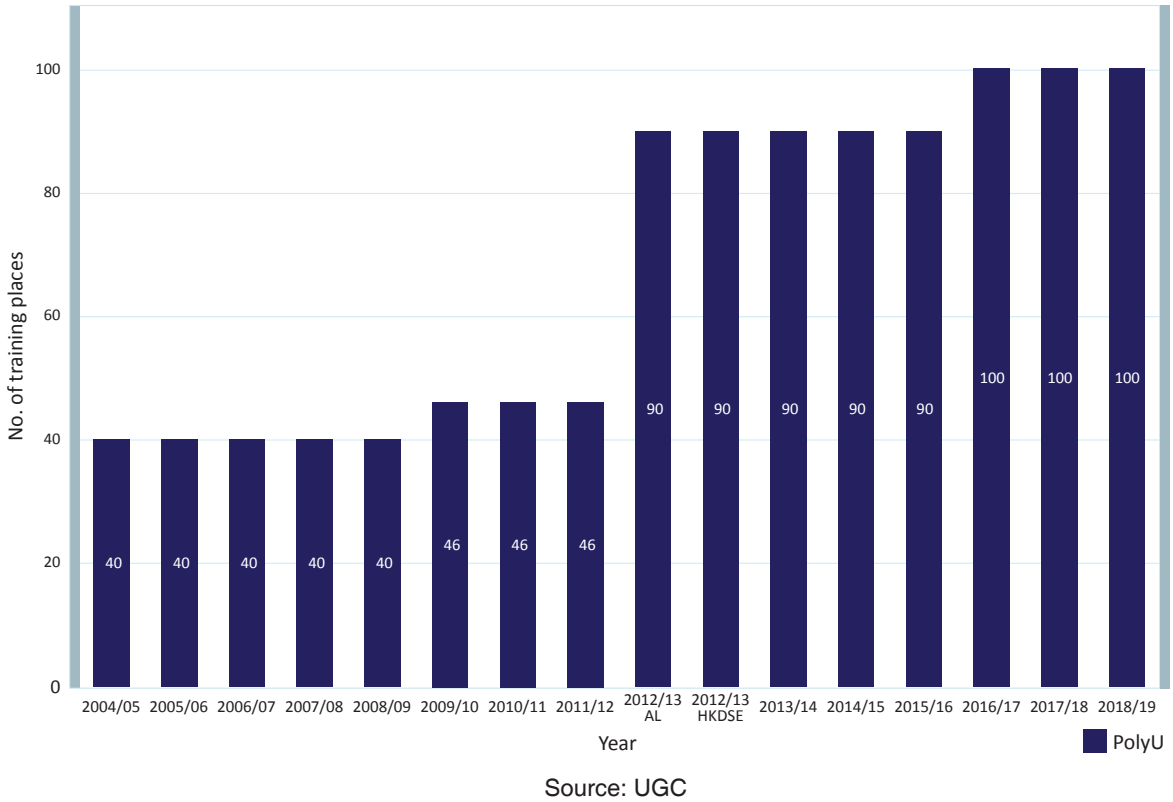
To encourage graduates of MOT programme to join the welfare sector, SWD has implemented a Training Sponsorship Scheme to provide funding support for NGOs to offer tuition fee sponsorship to students whom they recruited. Students obtaining the sponsorship have to work for the NGOs concerned for not less than two years after graduation. The first and second cohorts of about 30 students graduated in 2014 and 2016 respectively. PolyU co-operated with SWD again to implement the third batch of MOT programme in 2016/17, providing a capacity of about 24 places.

1.3.56 TWC has started to operate a self-financing programme in occupational therapy, providing about 50 training places in the 2013/14 academic year. The programme is undergoing accreditation by SMP Council. The first cohort of students will graduate in 2017.

Non-locally trained OTs

1.3.57 Non-locally trained OTs should meet the prescribed standards set by OTs Board before they can register to practise in Hong Kong. Application for registration is handled on individual merits. OTs Board may grant direct registration for holders of recognised qualifications or ask those of other qualifications to undergo a registration examination.

Figure 1.25 Publicly-funded degree places in occupational therapy



Source: UGC

Note due to the change in academic structure, UGC-funded institutions admitted two cohorts of students under the old and new academic structures in the 2012/13 academic year.

No. of newly registered OTs (locally and non-locally trained)

1.3.58 The annual average number of newly registered OTs with local qualifications in 2012 - 2016 was 73 (74%), while the average number of those with non-local qualifications was 26 (26%).

PHYSIOTHERAPISTS
KEY FACTS (as at end 2016)

Registered PTs	2 956
PT to population ratio	1 : 2 495
Proportion of pubilc and private practice	59% : 41%
Male to female ratio	46%(Male); 54%(Female)
Median age	37
Age distribution	
20-29	23.3%
30-39	36.1%
40-49	25.2%
50-59	13.2%
≥60	2.2%

The PT profession is a relatively young profession.

Regulatory body	SMP Council Physiotherapists Board (PTs Board)
Training of PTs	PolyU

PolyU is the only institution providing PT training in HK.

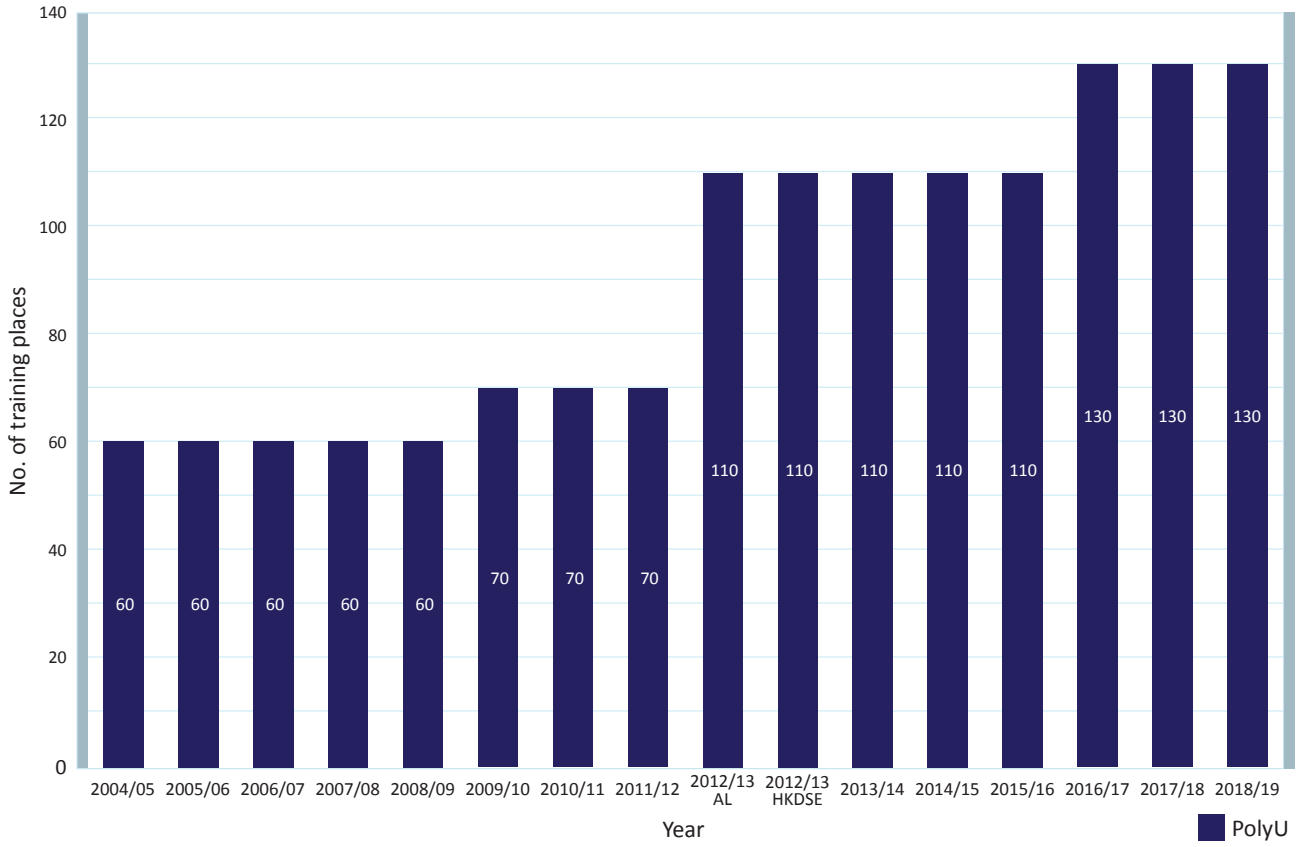
1.3.59 As at end 2016, there were 2 956 PTs in Hong Kong. A total of 59% of PTs worked in the public sector. The median age was 37. About 54% of registered PTs were female and 46% were male. In 2007, the female and male ratio was 57% and 43% respectively. People wishing to become PTs must register with PTs Board in order to practise in Hong Kong.

1.3.60 PolyU is the only institution offering publicly-funded degree programme in the field of physiotherapy, providing 130 training places in 2016/17. Similar to occupational therapy, PolyU launched a two-year entry level Master in Physiotherapy (MPT) programme in January 2012 on a self-financing basis. To encourage graduates of MPT programme to join the welfare sector, SWD provides funding support for NGOs to offer tuition fee sponsorship to students whom they recruited. The first and second cohorts of about 30 students graduated in 2014 and 2016 respectively. Similar to MOT programme, PolyU co-operated with SWD again to implement the third batch of MPT programme in 2016/17, providing a capacity of about 48 places.

Non-locally trained PTs

1.3.61 Non-locally trained graduates must meet the prescribed standards set by PTs Board before they can register to practise in Hong Kong. Application for registration is handled on individual merits. PTs Board may grant direct registration for holders of recognised qualifications or ask those of other qualifications to undergo a registration examination.

Figure 1.26 Publicly-funded degree places in physiotherapy



Source: UGC

Note : Due to the change in academic structure, UGC-funded institutions admitted two cohorts of students under the old and new academic structures in the 2012/13 academic year.

No. of newly registered PTs (locally and non-locally trained)

1.3.62 The annual average number of newly registered PTs with local qualifications in 2012 - 2016 was 96 (71%), while the average number of those with non-local qualifications was 39 (29%).

MEDICAL LABORATORY TECHNOLOGISTS
KEY FACTS (as at end 2016)

Registered MLTs	3 443
MLT to population ratio	1 : 2 142
Proportion of pubilc and private practice	64% : 36%
Male to female ratio	46%(Male); 54%(Female)
Median age	36

Age distribution

20-29	24.6%
30-39	40.5%
40-49	27.8%
50-59	5.4%
≥60	1.7%

* Based on information from 2 224 registered MLTs (around 65% of total number of registrants) whose date of birth information is available.

The MLT profession is a relatively young profession.

Regulatory body	SMP Council Medical Laboratory Technologists Board (MLTs Board)
Training of MLTs	PolyU TWC HKU SPACE

TWC

TWC has started to operate a self-financing programme in medical laboratory science, providing about 20 training places in the 2012/13 academic year. The programme is accredited by SMP Council in August 2016 and the first cohort of students graduated in the same year.

SSSDP

Considering that there is a sustained demand for MLTs in HK and the programme of TWC has obtained professional accreditation from SMP Council, the Government has decided to subsidise 20 training places of the medical laboratory science programme operated by TWC under SSSDP for the 2017/18 cohort.

1.3.63 As at end 2016, there were 3 443 MLTs in Hong Kong. A total of 64% of MLTs worked in the public sector. The median age was 36. About 54% of registered MLTs were female and 46% were male. In 2007, the female and male ratio was 53% and 47% respectively. People wishing to become MLTs must register with MLTs Board in order to practise in Hong Kong.

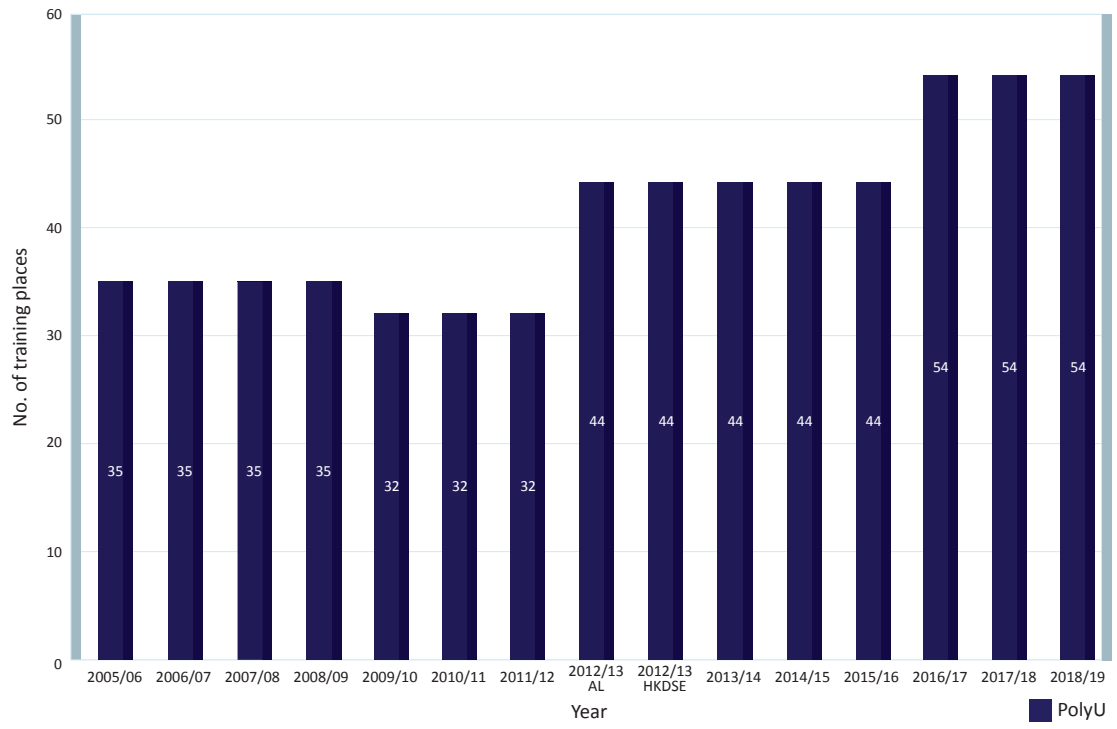
1.3.64 PolyU is the only institution offering publicly-funded degree programme in the field of medical laboratory science, providing 54 training places in the 2016/17 academic year. In addition to the UGC-funded training places offered by PolyU, HKU SPACE runs a higher certificate course in medical laboratory science, providing about 70 training places on

an alternate-year basis. TWC has also started to operate a self-financing programme in medical laboratory science, providing about 20 training places in the 2012/13 academic year. The programme is accredited by SMP Council in August 2016. The first cohort of students graduated in 2016. Considering that there is an increasing demand for MLTs in both public and private sector in Hong Kong and the programme of TWC has obtained professional accreditation from SMP Council, the Government has decided to subsidised 20 training places of the medical laboratory science programme operated by TWC under SSSDP in the 2017/18 academic year.

Non-locally trained MLTs

1.3.65 Non-locally trained graduates must meet the prescribed standards set by MLTs Board before they can register to practise in Hong Kong. Eligibility is assessed on individual merits. MLTs Board may grant direct registration for holders of recognised qualifications or ask those of other qualifications to undergo a registration examination.

Figure 1.27 Publicly-funded degree places in medical laboratory science



Source: UGC

Note : Due to the change in academic structure, UGC-funded institutions admitted two cohorts of students under the old and new academic structures in the 2012/13 academic year.

No. of newly registered MLTs (locally and non-locally trained)

1.3.66 The annual average number of newly registered MLTs with local qualifications in 2012 - 2016 was 99 (77%), while the average number of those with non-local qualifications was 29 (23%).

OPTOMETRISTS
KEY FACTS (as at end 2016)

Registered optometrists	2 180
Optometrist to population ratio	1 : 3 383
Proportion of pubilc and private practice	9% : 91%

The vast majority of optometrists worked in the private sector.

Male to female ratio	76%(Male); 24%(Female)
Median age	50
Age distribution	
20-29	10.4%
30-39	15.0%
40-49	24.0%
50-59	32.4%
≥60	18.2%
Regulatory body	SMP Council Optometrists Board
Training of optometrists	PolyU

PolyU is the only institution providing optometry training in HK.

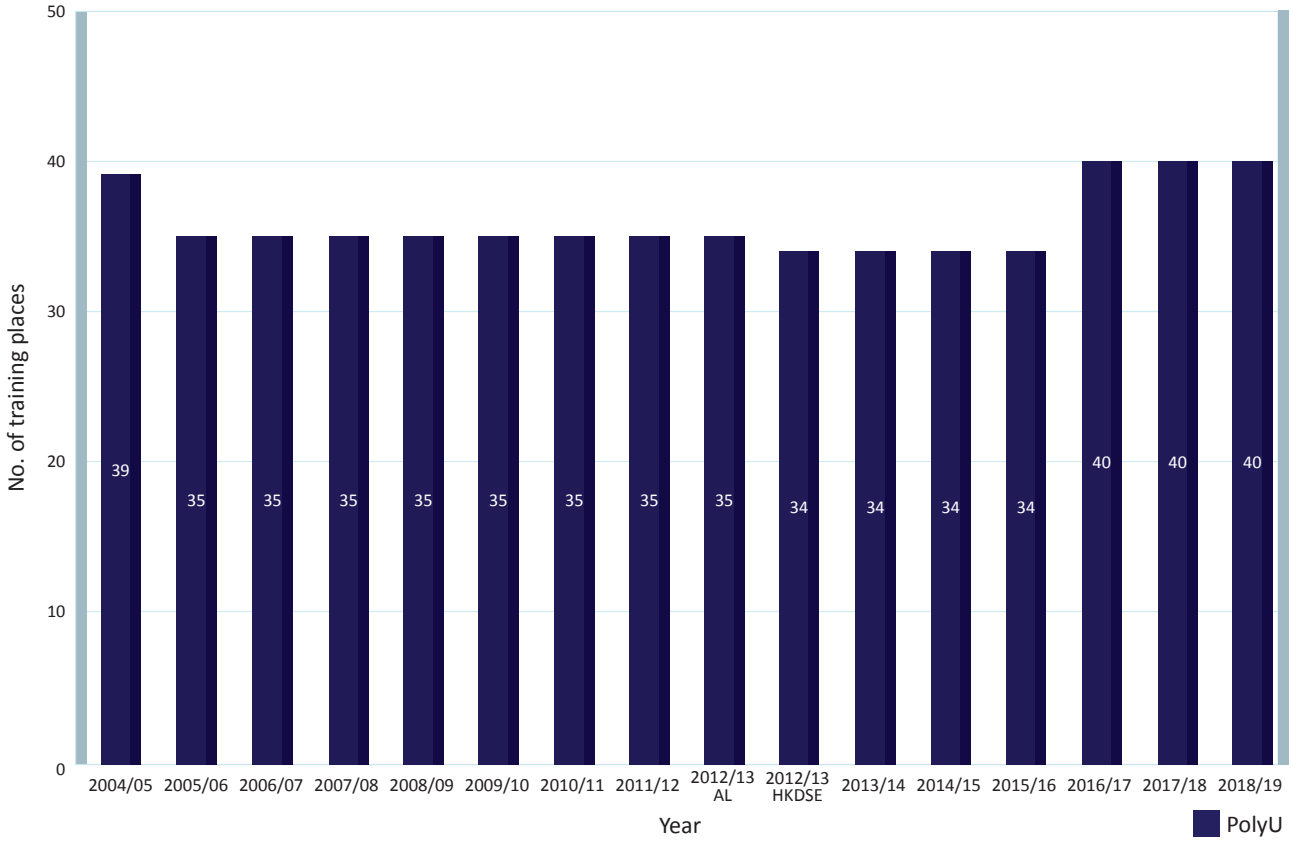
1.3.67 As at end 2016, there were 2 180 optometrists in Hong Kong. More than 90% of optometrists worked in the private sector. The median age was 50. About 24% of registered optometrists were female and 76% were male. In 2007, the female and male ratio was 19% and 81% respectively.

1.3.68 PolyU is the only institution offering publicly-funded degree programme in the field of optometry, providing 40 training places in 2016/17. People wishing to become optometrists must register with the Optometrists Board in order to practise in Hong Kong.

Non-locally trained optometrists

1.3.69 Non-locally trained graduates must meet the prescribed standards set by the Optometrists Board before they can register to practise in Hong Kong. Application for registration is handled on individual merits. The Optometrists Board may grant direct registration for holders of recognised qualifications. For holders of other qualifications, their application will be assessed on individual merits on the basis that the qualifications should be comparable to the local bachelor degree conferred by PolyU.

Figure 1.28 Publicly-funded degree places in optometry



Source: UGC

Note : Due to the change in academic structure, UGC-funded institutions admitted two cohorts of students under the old and new academic structures in the 2012/13 academic year.

No. of newly registered optometrists (locally and non-locally trained)

1.3.70 The annual average number of newly registered optometrists with local qualifications in 2012 - 2016 was 37 (89%), while the average number of those with non-local qualifications was 4 (11%).

RADIOGRAPHERS
KEY FACTS (as at end 2016)

Registered radiographers	2 209
Registered radiographers (Category : Diagnostic)	1 842
Registered radiographers (Category : Therapeutic)	367
Radiographer to population ratio	1 : 3 339
Proportion of public and private practice (Category : Diagnostic) (Category : Therapeutic)	 57% : 43% 62% : 38%
Male to female ratio	55%(Male); 45%(Female)
Median age	41
Age distribution	
20-29	22.5%
30-39	23.8%
40-49	26.7%
50-59	20.4%
≥60	6.6%

Regulatory body	SMP Council Radiographers Board
Training of radiographers	PolyU TWC

TWC

In addition to PolyU, TWC has started to operate a self-financing programme in radiation therapy, providing about 15 training places in the 2012/13 academic year. In 2016, the programme was accredited by SMP Council with the first cohort of students graduated in the same year.

SSSDP

Considering that there is a sustained demand for radiographers in HK and the programme of TWC has obtained professional accreditation from SMP Council, the Government has decided to subsidise 12 training places of the radiation therapy programme operated by TWC under SSSDP for the 2017/18 cohort.

1.3.71 As at end 2016, there were 2 209 radiographers in Hong Kong, with 1 842 and 367 in diagnostic and therapeutic streams respectively. About 60% of radiographers worked in the Government and HA. The median age was 41. About 45% of registered radiographers were female and 55% were male. In 2007, the female and male ratio was 48% and 52% respectively. People wishing to become radiographers must register with the Radiographers Board in order to practise in Hong Kong.

1.3.72 PolyU is the only institution offering publicly-funded degree programme in the field of radiography, providing 110 training places in the 2016/17 academic year. In addition to PolyU, TWC has started to operate a self-financing

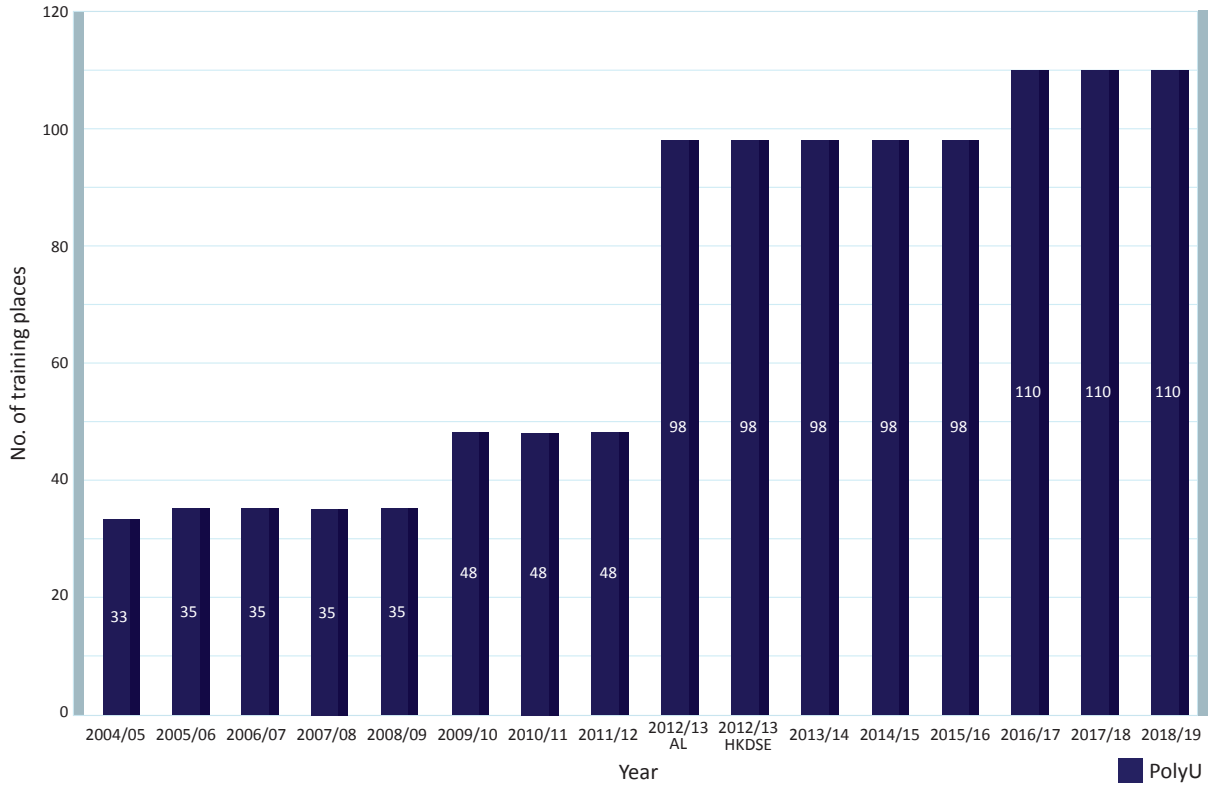
programme in radiation therapy, providing about 15 training places in the 2012/13 academic year. In 2016, the programme was accredited by SMP Council with the first cohort of students graduated in the same year. Considering that there is a strong demand for radiographers in Hong Kong and the programme of TWC has obtained professional accreditation from SMP Council, the Government has decided to subsidise 12 training places of the radiation therapy programme operated by TWC under SSSDP in the 2017/18 academic year.

Non-locally trained radiographers

1.3.73 Non-locally trained radiographers must meet the prescribed standards set by the Radiographers Board before they can register to practise in Hong Kong. Application for registration is handled on individual merits. The Radiographers Board may grant direct registration for holders of recognised qualifications. For applicants in the diagnostic stream not meeting the direct registration criteria, the Radiographers Board may ask them to undergo a registration examination[12].

[12] There is no registration examination held for the Therapeutic Stream.

Figure 1.29 Publicly-funded degree places in radiography



Source: UGC

Note : Due to the change in academic structure, UGC-funded institutions admitted two cohorts of students under the old and new academic structures in the 2012/13 academic year.

No. of newly registered radiographers (locally and non-locally trained)

1.3.74 The annual average number of newly registered radiographers with local qualifications in 2012 - 2016 was 72 (74%), while the average number of those with non-local qualifications was 26 (26%).

CHIROPRACTORS
KEY FACTS (as at end 2016)

Registered chiropractors	209
Chiropractors to population ratio	1 : 35 287
Proportion of pubilc and private practice	0% : 100%

All registered chiropractors are engaged in the private sector.

Male to female ratio	70%(Male); 30%(Female)
Median age	42
Age distribution	
20-29	10.0%
30-39	35.4%
40-49	23.0%
50-59	15.8%
≥60	15.8%
Regulatory body	Chiropractors Council
Training of chiropractors	Not available in HK

1.3.75 As at end 2016, there were 209 chiropractors in Hong Kong. All of them were engaged in the private sector. The median age was 42. About 30% of registered chiropractors were female and 70% were male. In 2007, the female and male ratio was 24% and 76% respectively.

1.3.76 There is no chiropractic education in Hong Kong. To practise as a chiropractor in Hong Kong, one has to fulfill the requirements for registration prescribed by the Chiropractors Council including holding a recognised chiropractic qualification. Registered chiropractors in Hong Kong mainly hold qualifications granted in the US, Australia, Canada and Europe.

Healthcare professions not subject to statutory registration

1.3.77 The healthcare sector engages a considerable number of professionals coming from a wide range of disciplines. In addition to the 13 statutorily registered healthcare professions, there are other healthcare professions that are not subject to statutory registration including audiologists, audiology technicians, chiropodists/podiatrists, clinical psychologists, dental surgery assistants, dental technicians/technologists, dental therapists, dietitians, dispensers, educational psychologists, mould laboratory technicians, orthoptists, prosthetists/orthotists, scientific officers (medical) and speech therapists[13] etc.

1.3.78 At present, the regulation of most healthcare professions which are not subject to statutory registration in Hong Kong has been achieved through voluntary society-based registration. Under society-based registration, a professional body administers a registration system and promulgates a list of its members so that members of the public can make reference when choosing certain type of healthcare services. The professional bodies can also formulate relevant codes of practice to strengthen self-regulation and encourage their members to pursue continuing professional development, obtain qualifications as well as enhance their professional competency. The professional bodies can also develop quality assurance and disciplinary mechanisms to ensure that all their members are qualified healthcare professionals.

[13] According to Section 20I of Legislative Council Ordinance (Cap. 542), the 15 types of health professionals who are currently not subject to statutory registration under the health services functional constituency.

CHAPTER 2
Strategic Review on Healthcare Manpower Planning and Professional Development

2.1 Overview - Background of Healthcare Reform

2.1.1 Hong Kong's healthcare system faces a number of major challenges as in the case of many advanced economies. These include increasing healthcare needs due to demographic changes, rising occurrence of lifestyle-related diseases, mounting medical costs due to advances in medical technology, health expenditure growing at a rate faster than that of the economy, and as a result increasing burden on our future generations.

2.1.2 Of all the challenges, the impact of demographic changes on demand for healthcare is the most imminent. The Hong Kong's population is projected[14] to increase from 7.34 million in mid-2016 to the peak of 8.22 million in mid-2043, with nearly one in three aged 65 or above by 2064. Hong Kong's elderly dependency ratio (number of 65+ elderly persons per 1 000 aged 15-64 population) will increase from 218 in 2016[15] to 567 in 2064. In terms of hospital-bed use, the requirement of those aged 65 or above is about nine times more than younger people; for those aged 85 and above, their hospitalization need is almost 20 folds that of the under-65s. An elderly person on average stays 9.7 days per admission to hospital, as compared to 5.3 days of a non-elderly patient.

[14] Source: Hong Kong Population Projections 2015-2064, Census and Statistics Department.

[15] The 2014 elderly dependency ratio is 424 for Japan, 328 for Germany, 266 for the UK, 162 for Taiwan and 152 for Singapore.

Figure 2.1 Impacts of ageing population on healthcare services

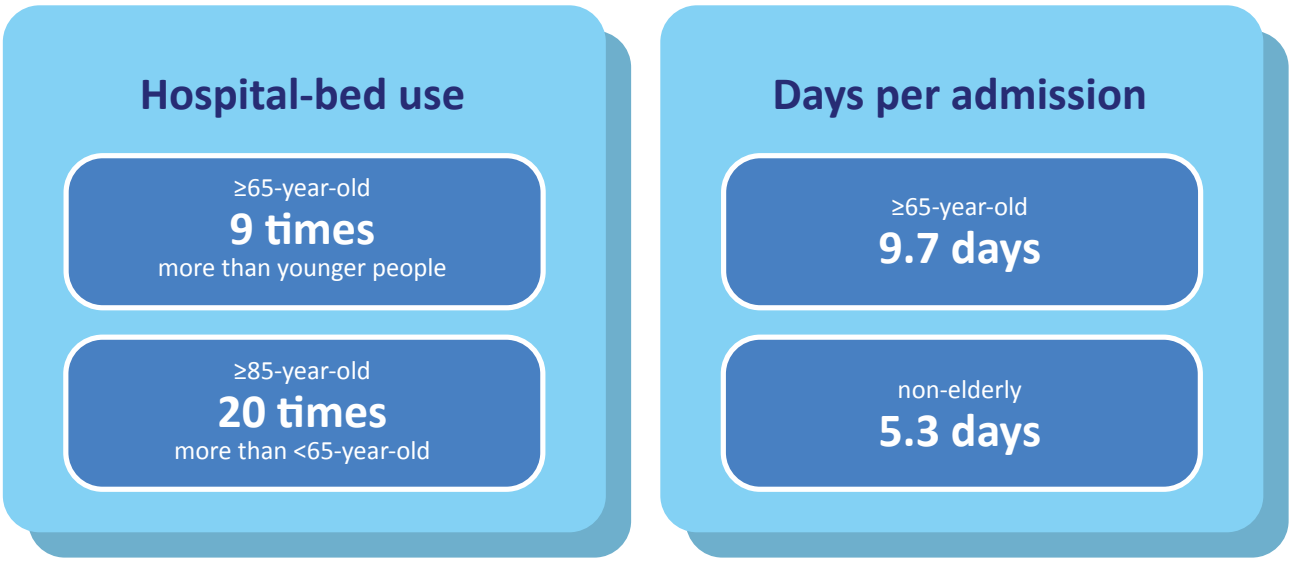
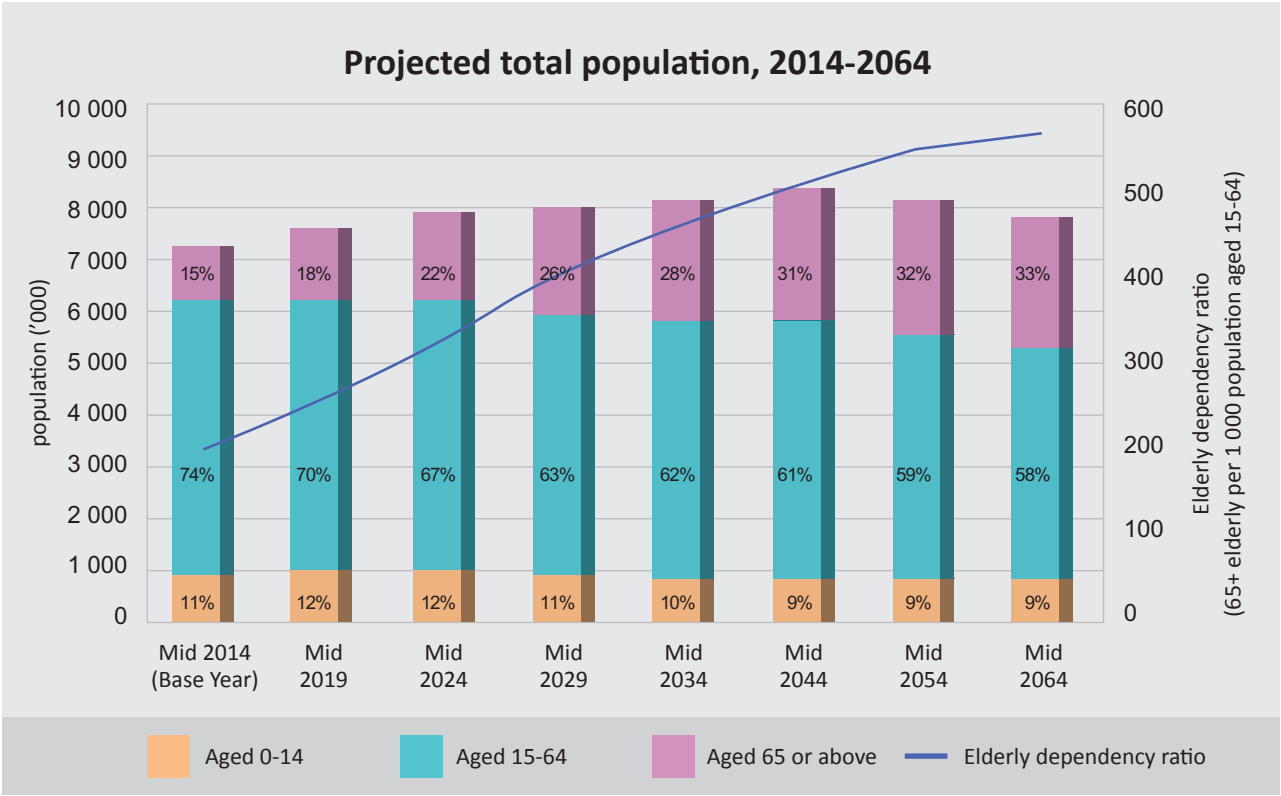


Figure 2.2 Hong Kong's ageing population

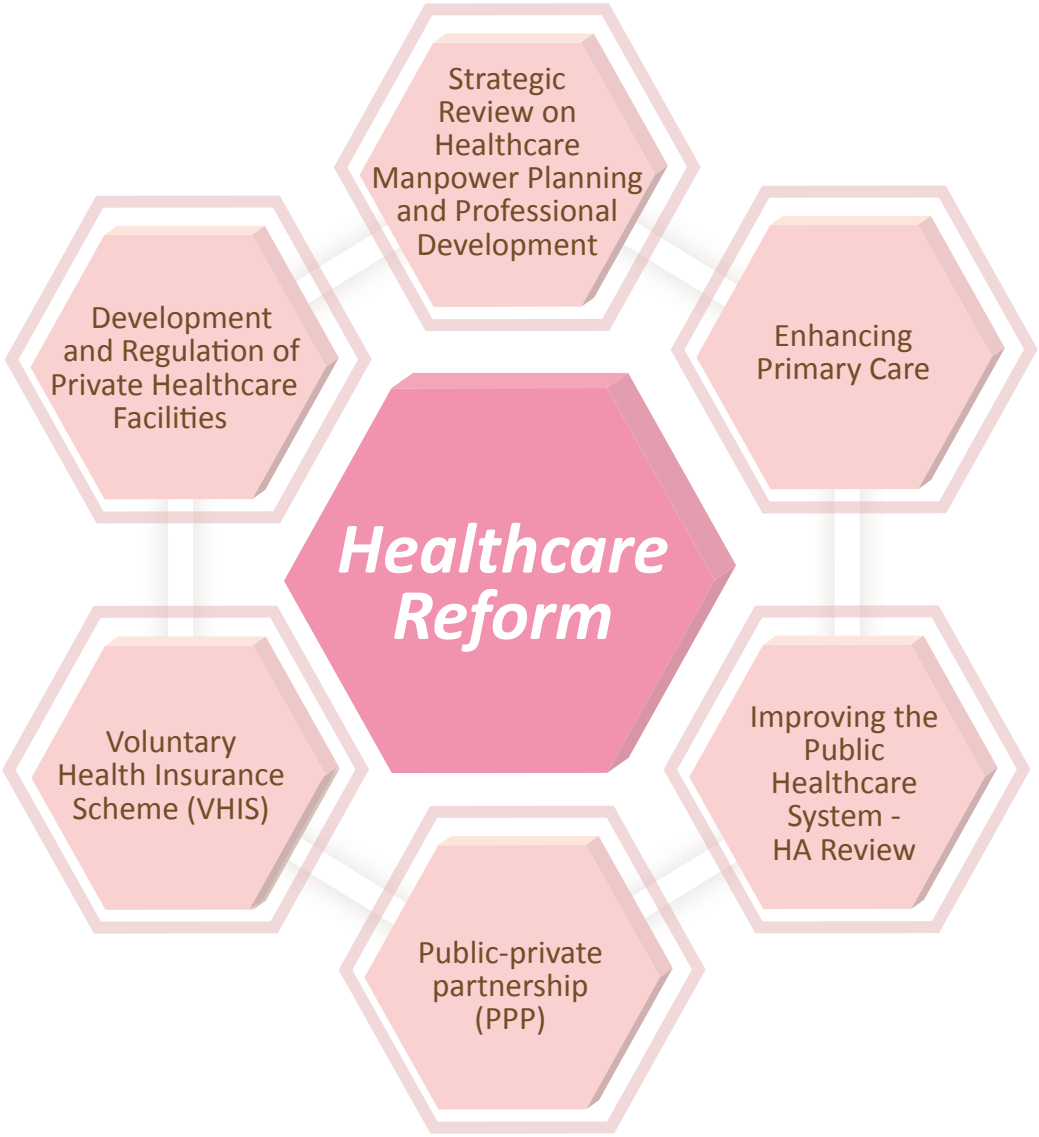


Source: Census and Statistics Department

2.1.3 Confronted by these challenges, the Government, together with HA and in partnership with the private healthcare sector, has over the past few years embarked on a major reform of the healthcare system to ensure its sustainability. Apart from efforts to enhance primary care, facilitate the development of hospital services through strengthening of infrastructure and regulation including regulation of private healthcare facilities, improve the public healthcare system, promote public-private partnership in the delivery of healthcare services and introduction of the Voluntary Health Insurance Scheme, the Government also seeks to formulate a healthcare manpower strategy to ensure an adequate supply of qualified professionals for meeting future needs and for supporting the sustainable development of our healthcare system.

Figure 2.3 Healthcare reforms in Hong Kong

Figure 2.4 Major initiatives under the healthcare reform



2.2 Strategic Review

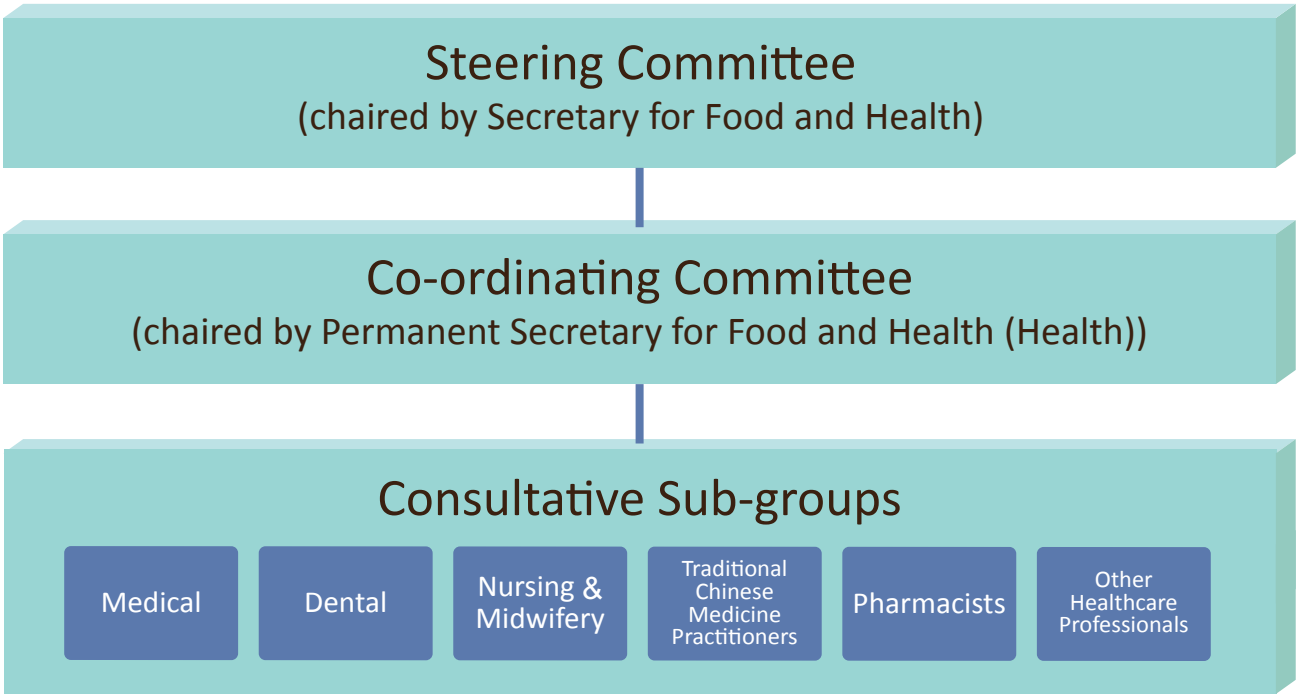
2.2.1 Based on the public consultations conducted in 2008 and 2010, the Government has embarked on a major reform of the healthcare system with a view to ensuring its long-term sustainability. Amidst efforts to build capacity of the healthcare sector, improve quality of healthcare services and strengthen the regulatory environment, the Government has initiated a comprehensive review to look into the issue of healthcare manpower planning. It is keenly aware that for any healthcare system to develop and thrive, there must be an adequate supply of healthcare professionals who are committed to providing quality services through continuing education and professional development.

2.3 Committee Structure

2.3.1 As announced by the Chief Executive in the 2011 Policy Address, the Food and Health Bureau set up a steering committee in January 2012 to conduct a strategic review on healthcare manpower planning and professional development. The Steering Committee is tasked to formulate recommendations on how to cope with anticipated demand for healthcare manpower and facilitate professional development of healthcare professions with a view to ensuring the healthy and sustainable development of the healthcare system.

2.3.2 Chaired by the Secretary for Food and Health, the Steering Committee comprises some 30 members from wide-ranging backgrounds including renowned experts from overseas. It is underpinned by a Coordinating Committee chaired by the Permanent Secretary for Food and Health (Health), which comprises six Steering Committee representatives from non-healthcare background as non-official members. These members in turn convene six consultative Sub-groups, with a total membership of over 100, to hear and consolidate views from the healthcare professions. The terms of reference for the Steering Committee, the Coordinating Committee and the Sub-groups are set out in **Annex 1**, and their membership is listed in **Annex 2**.

Figure 2.5 Structure of the Steering Committee

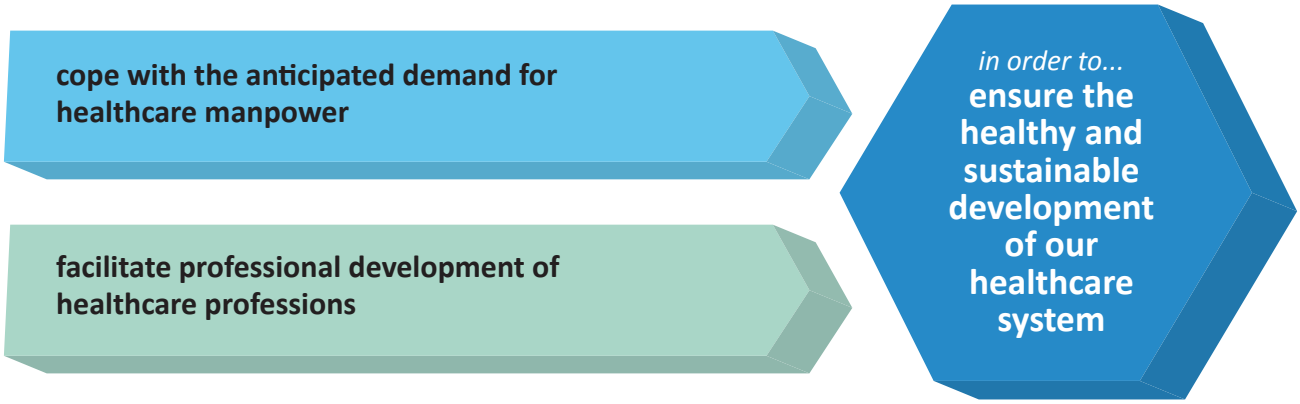


2.4 Scope of the Review

2.4.1 The Review aims to assess manpower needs in various healthcare professions taking into account relevant considerations, including the healthcare needs of a growing and ageing population, delivery models of healthcare services and respective demand for public and private healthcare services, with a view to making recommendations to address relevant manpower demand.

2.4.2 The assessment of manpower needs aside, the Review is also expected to recommend directions for future development of healthcare professions and measures to improve the regulation for our healthcare professions.

Figure 2.6 Aims of the Review



2.4.3 Specifically, the Review covers registered professionals from 13 healthcare professions which are subject to statutory registration, who are represented in the six consultative Sub-groups as follows –

Medical Sub-group
- Doctors registered under the Medical Registration Ordinance (Cap. 161)

Dental Sub-group
- Dentists registered under the Dentists Registration Ordinance (Cap. 156) and dental hygienists enrolled under the Ancillary Dental Workers (Dental Hygienists) Regulations (Cap. 156B)

Nursing and Midwifery Sub-group
- Nurses registered and enrolled under the Nurses Registration Ordinance (Cap. 164)
- Midwives registered under the Midwives Registration Ordinance (Cap. 162)

Traditional Chinese Medicine Practitioners Sub-group
- CMPs registered and listed under the Chinese Medicine Ordinance (Cap. 549)

Pharmacists Sub-group
- Pharmacists registered under the Pharmacy and Poisons Ordinance (Cap. 138)

Other Healthcare Professionals Sub-group
- OTs registered under the Supplementary Medical Professions Ordinance (Cap. 359) and the Occupational Therapists (Registration and Disciplinary Procedure) Regulations (Cap. 359B)
- PTs registered under the Supplementary Medical Professions Ordinance (Cap. 359) and the Physiotherapists (Registration and Disciplinary Procedure) Regulation (Cap. 359J)
- MLTs registered under the Supplementary Medical Professions Ordinance (Cap. 359) and the Medical Laboratory Technologists (Registration and Disciplinary Procedure) Regulations (Cap. 359A)

- Optometrists registered under the Supplementary Medical Professions Ordinance (Cap. 359) and the Optometrists (Registration and Disciplinary Procedure) Regulation (Cap. 359F)
- Radiographers registered under the Supplementary Medical Professions Ordinance (Cap. 359) and the Radiographers (Registration and Disciplinary Procedure) Regulation (Cap. 359H)
- Chiropractors registered under the Chiropractors Registration Ordinance (Cap. 428) and the Chiropractors (Registration and Disciplinary Procedure) Rules (Cap. 428B)

2.4.4 For healthcare professions not subject to statutory registration, the Review does not attempt to look into each and every one of them within the tight timeframe allowed. The Other Healthcare Professionals Sub-group nevertheless provides a platform for views on future development of the relevant professions to be suitably reflected through the consultative process.

Figure 2.7 Coverage of the Review

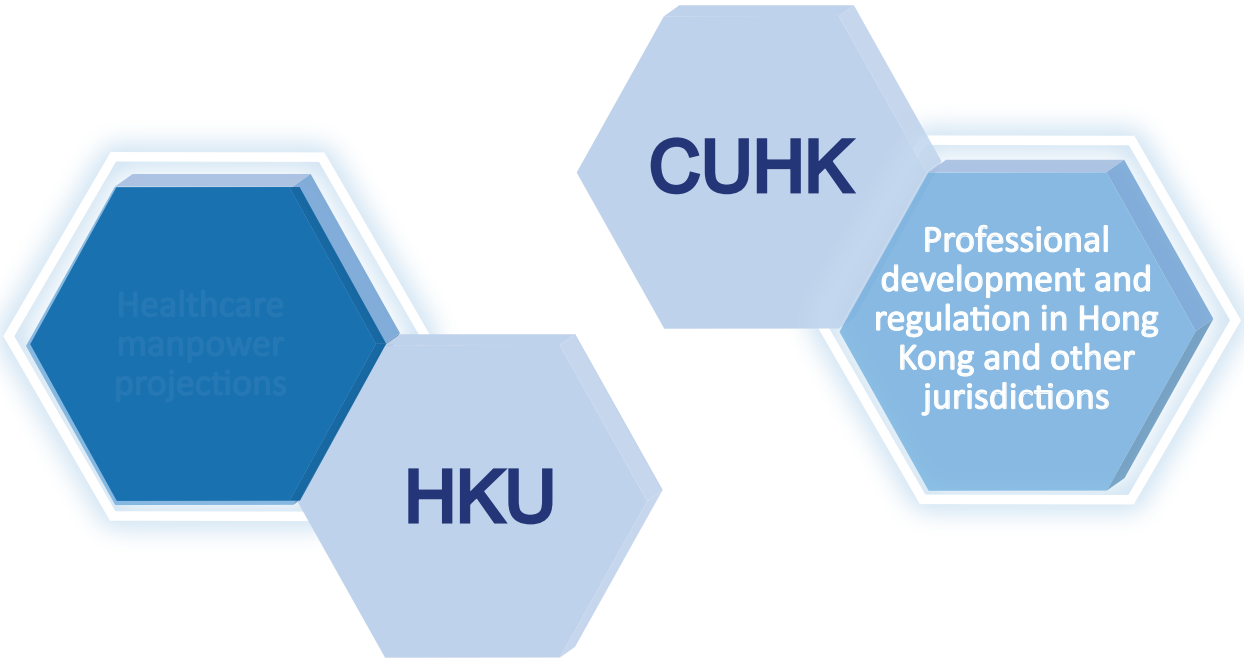
2.5 Commissioning of Studies

2.5.1 To assist its work in making informed recommendations on the means and measures to meet the projected demand for healthcare professionals and strengthen professional development of healthcare professions, the Steering Committee has commissioned HKU and CUHK to provide professional input and technical support to the Review.

2.5.2 HKU has been asked to conduct a comprehensive projection on the manpower needs of the designated healthcare professions

based on objective data collated from a wide range of sources within the community to be analysed and aggregated through statistical methods and scenario modelling, taking into account relevant factors and considerations. CUHK has been tasked to conduct a comparative review of the regulatory frameworks in local and international contexts governing registration, licensing, qualifications and professional conduct of the healthcare professions concerned, as well as mechanisms for setting and upholding professional standards and maintaining continuing competency. The results of the two studies are discussed in Chapter 3 and Chapter 4 respectively.

Figure 2.8 Commissioned studies



CHAPTER 3
Commissioned Study: Manpower Projections

3.1 Current Healthcare Manpower Planning

3.1.1 At present, the Government assesses manpower requirements for healthcare professionals in step with the triennial planning cycle of UGC[16] for the purpose of facilitating academic planning by tertiary institutions. In making long-term manpower projections, the Government takes into consideration, among other things, the number of retirees each year, trend of wastage, demographic changes, special needs of the community for particular areas of services, trend of development of healthcare professions and medical technology.

3.1.2 Various institutions also conduct projections and surveys on healthcare manpower. HA, being the largest employer of healthcare professionals and healthcare service provider in Hong Kong, conducts manpower planning and forecast for the public sector. In projecting its future healthcare workforce requirement, HA takes into account the utilisation rate of its comprehensive spectrum of services, as well as other factors including population growth and ageing trend, changes in service delivery model, medical technology advancement and development of new services. Separately, DH has been conducting a series of HMSs for healthcare professionals practising in Hong Kong since 1980. The surveys aim to obtain up-to-date information on the characteristics and employment status of healthcare professionals working in Hong Kong. Other organisations such as HKAM and the Business Professionals Federation of Hong Kong conduct reviews on manpower planning for healthcare professions from time to time.

3.1.3 All the above-mentioned manpower forecasts, surveys and reviews provide useful inputs for HKU to conduct a comprehensive and in-depth healthcare manpower planning study for Hong Kong.

[16] The Government and UGC follow a triennial planning cycle for the UGC-funded institutions. Every three years there is a major exercise to map out the academic development direction for the next three-year funding period, including the number of degree places, their distribution among different disciplines and the corresponding funding support.

3.2 Study by the University of Hong Kong

3.2.1 The study of HKU starts with a survey of the projection models available in literature and the healthcare workforce planning tools adopted by international organisations, overseas countries and local institutions. References have been drawn to the manpower planning and projection tools by the World Health Organisation and the Organisation for Economic Cooperation and Development. In addition, HKU has reviewed the projection methodology and parameters for manpower projection models of nine overseas jurisdictions including Australia, Canada, Japan, the Netherlands, New Zealand, Scotland, Singapore, the UK and the US. HKU has also taken into account the planning tools

used by local institutions as mentioned in paragraph 3.1.2 above.

3.3 Challenges and Constraints of Healthcare Manpower Projection

3.3.1 HKU has identified a number of challenges in conducting manpower projection in Hong Kong. The changes in the patterns of referral, sector of service delivery (public and private), technological advancement, scope of practice, feminisation of the workforce, healthcare policy and service delivery regulation affect constantly the demand for healthcare service, while changing population demographics, inter-regional and inter-sectoral (public/private) movement of healthcare professionals and patients as well as healthcare utilisation patterns further complicate manpower projection.

3.3.2 It transpires from the exercise that healthcare manpower projection is an extremely complex mission. There is no universal model for projecting healthcare manpower whether in the literature or among the jurisdictions surveyed. The more common approaches adopted include workforce-population ratios, demand/utilisation-based or needs-based models, and supply models. A brief description of these models is set out in **Annex 3**. Each method however has its own strengths and limitations, and involves many compromises, simplifications and assumptions in the projection process.

3.3.3 Manpower projection is also a highly data-intensive activity. Although public sector in-patient and outpatient data for manpower projections is readily available, a substantial proportion of patient care occurs in the private sector for medical and social care where utilisation data are scattered, less complete, or not readily available. The lack of normative standards defining productivity is also a major impediment to workload analysis.

3.4 Generic Projection Model

3.4.1 Bearing in mind the constraints and challenges of healthcare manpower projection, HKU has developed a generic projection model that suits the local circumstances. The manpower projection model of HKU seeks to quantify the difference between the projected demand for and supply of healthcare professionals i.e. projected manpower gap in terms of full time equivalents (FTEs).

3.4.2 A utilisation model (derived from an endogenous, historically informed base case scenario) where current utilisation (as proxy for manpower demand) and a stock and flow model (for manpower supply) was used to project demand and supply. The complex model seeks to project the demand for healthcare professionals in the coming years by projecting healthcare services utilisation of the population to be served using historical utilisation data which are adjusted for population growth and demographic changes, to which known and planned services and developments are incorporated. Future supply is derived from existing and planned local programmes as well as new registrants holding non-local qualifications. The projections will subsequently be further adjusted for externalities and policy interventions.

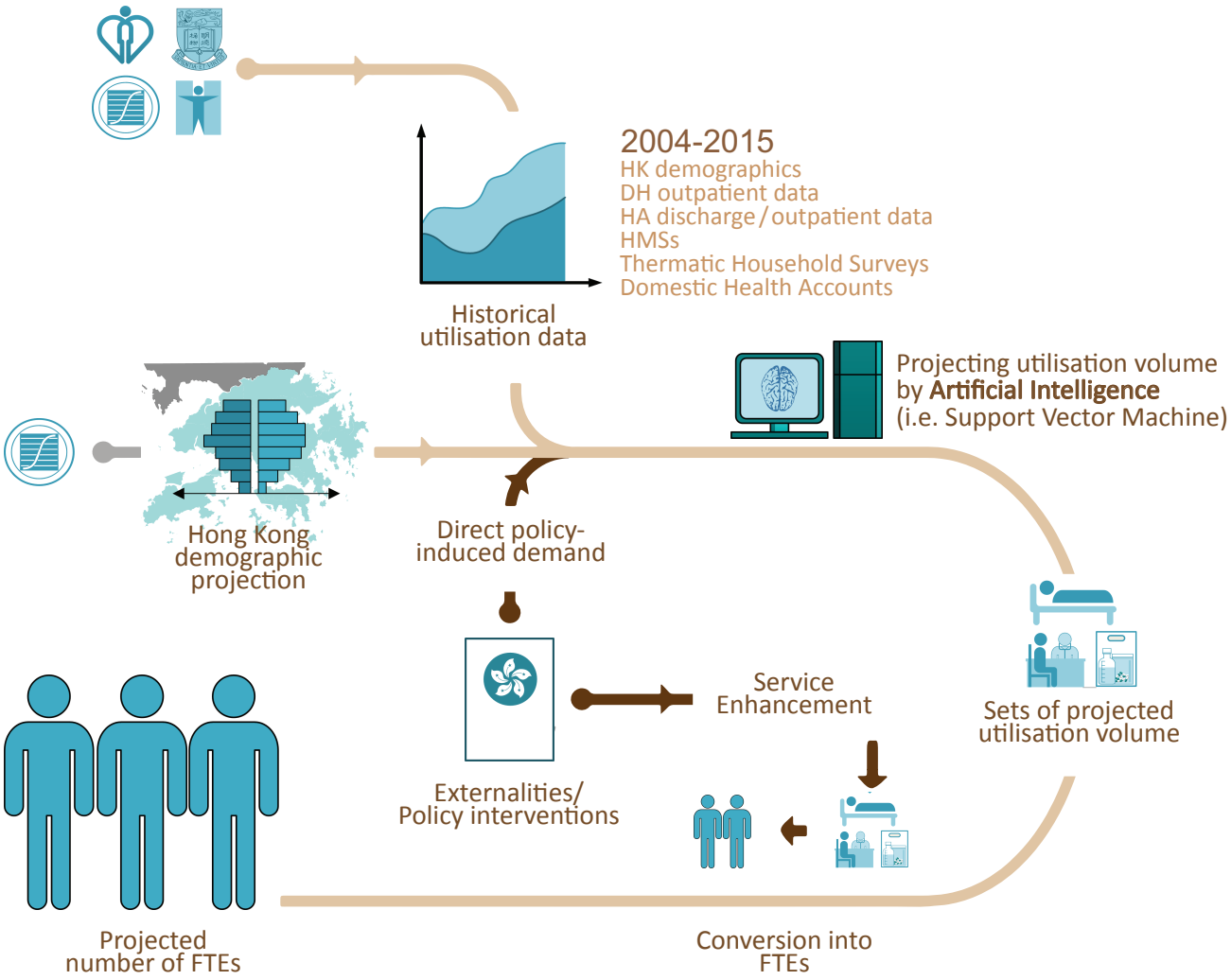
3.4.3 The model has also taken into account requirements of the welfare sector in addition to the medical care sector, as well as the various levels of healthcare (i.e. primary, secondary and tertiary care) and the different sectors/settings where healthcare professionals are engaged.

3.4.4 Under this model, the manpower situation at the base year (i.e. 2015) is assumed to be at an equilibrium and takes into account known shortage in the public and subvented sectors for healthcare professionals as at end 2015.

3.5 Projecting Demand

3.5.1 Figure 3.1 illustrates the demand model process where historical utilisation data and the Hong Kong demographic projections were used to project age-, sex-specific utilisation volumes. These projected volumes were then converted into FTEs and subsequently further adjusted for externalities and policy interventions.

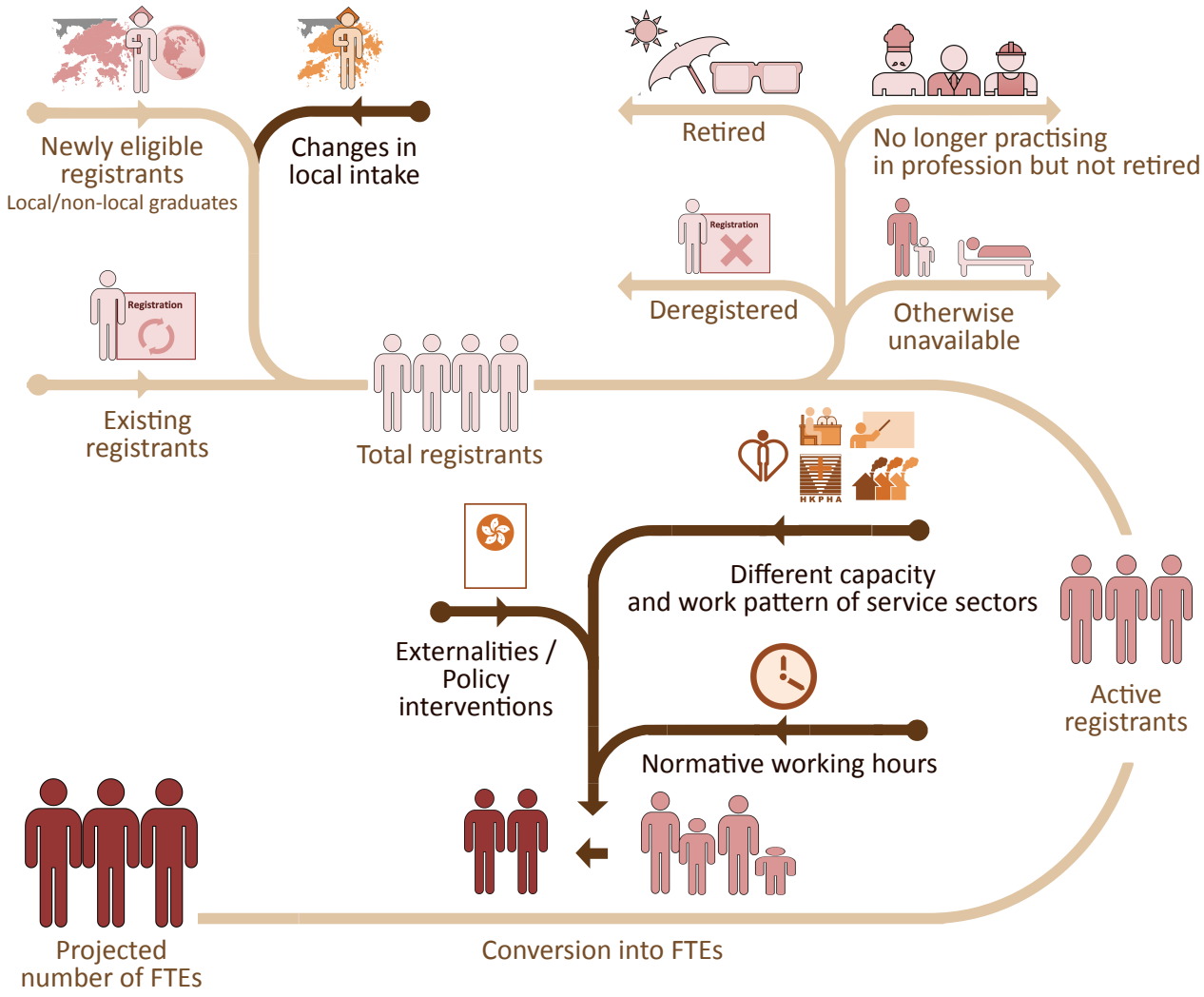
Figure 3.1 HKU's demand model



3.6 Projecting Supply

3.6.1 The supply model is a non-homogenous Markov Chain Model, where workforce systems are represented as "stocks and flows". Figure 3.2 illustrates the supply model process. These projected volumes were then converted into FTEs and subsequently further adjusted for externalities and policy interventions.

Figure 3.2 HKU's supply model

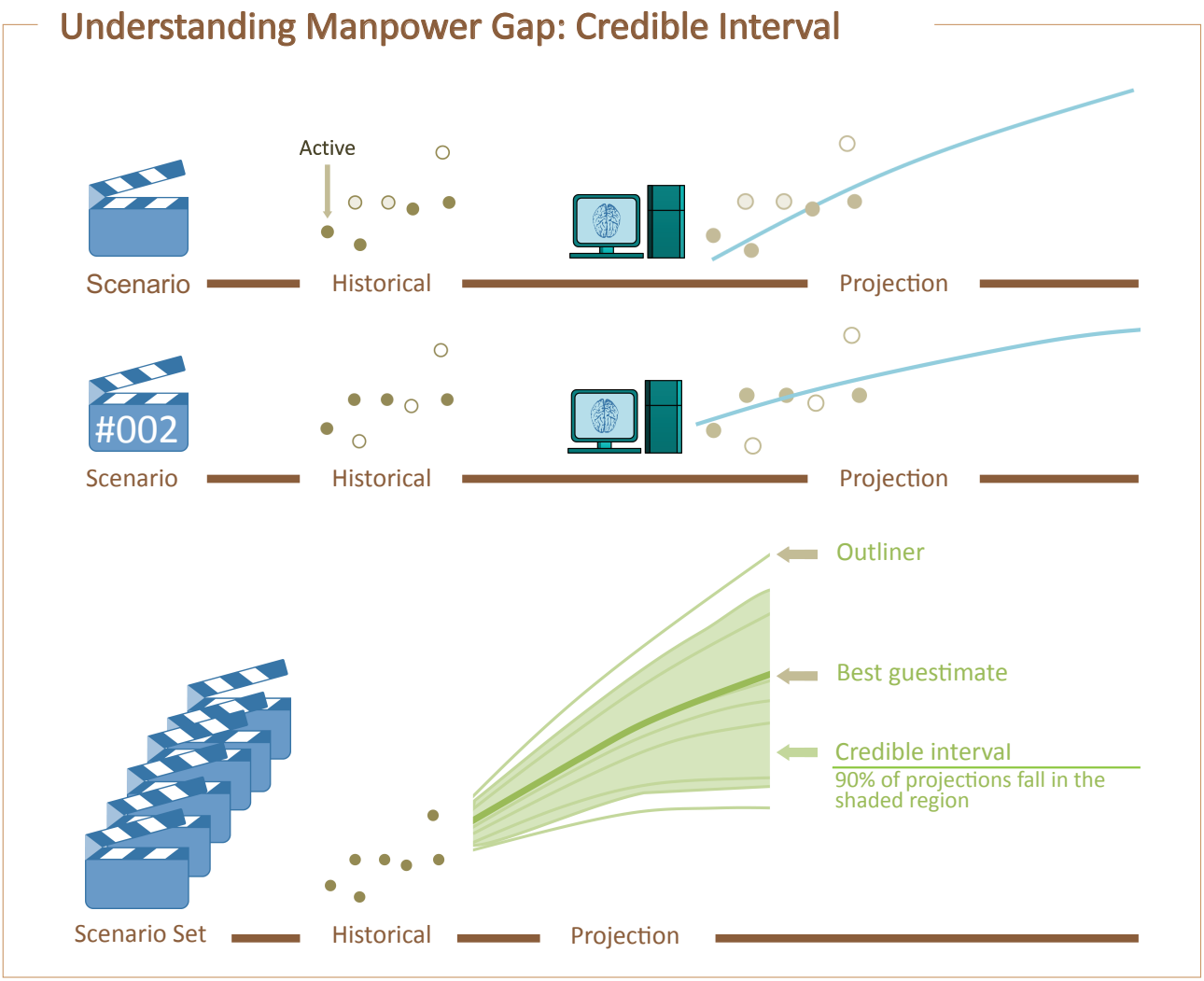


3.7 Manpower Gap

3.7.1 The gap analysis quantifies the difference between the projected demand for and supply of each healthcare profession in FTEs for the base case which accounts for historical trends adjusted for population growth and demographics. Different sensitivity scenarios are also simulated to test alternative results based on different data and derive credible interval and a best guestimate (Figure 3.3).

3.7.2 The manpower projection results for the healthcare professions subject to statutory registration are summarised in part 3.8. Because of the nature of manpower projection and the inherent limitations of the model itself, the projection results should be viewed in perspective. In interpreting the projection results, we should focus on the trend rather than the absolute gap. The medium to long-term projection could change significantly if events unknown now happen in future.

Figure 3.3 Credible interval



3.8 Findings

3.8.1 DOCTORS

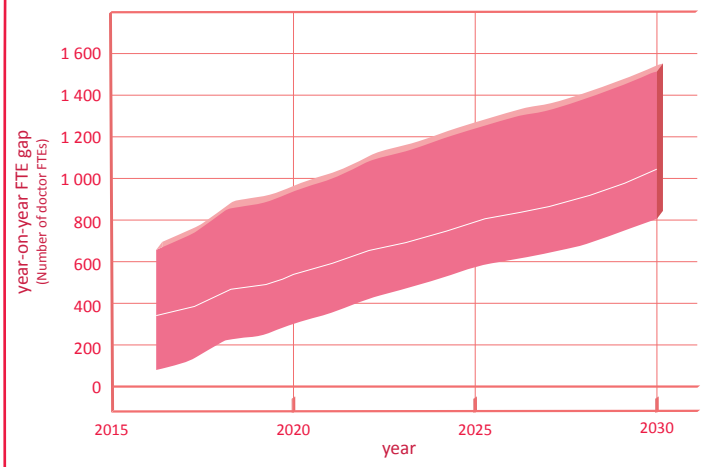
Demand

3.8.1.1 The projection for doctors takes into account the expected utilisation rates of services drawn from HA and DH for the public sector, and those of private hospitals as well as the Thematic Household Survey (THS) conducted by the Census and Statistics Department (C&SD) for the private sector. Demand from the academic, teaching and training sector has also been considered. The projection has been adjusted for the impact of externalities such as the latest development of public and private hospitals and introduction of the Voluntary Health Insurance Scheme.

Supply

3.8.1.2 The supply of doctors includes the registrants who are locally trained graduates, doctors with limited registration as well as registrants passing the Licensing Examination of MCHK and completed the internship assessment. Factors including newly eligible registrants, registrant number of locally and non-locally trained graduates, registration renewal proportion, proportion of clinically active registrants, natural attrition/retirement, workforce participation rate, work capacity and work pattern have been taken into account for the supply projection.

Manpower Gap in FTE



Year	2016	2020	2025	2030
5th percentile	80	320	596	829
	(0.7%)	(2.6%)	(4.4%)	(5.7%)
Best guestimate	285	500	755	1 007
	(2.4%)	(3.9%)	(5.5%)	(6.8%)
95th percentile	690	989	1 296	1 575
	(5.7%)	(7.5%)	(9.0%)	(10.3%)

Note:
1. A positive number indicates shortfall, whereas a negative number indicates sufficient manpower (or surplus under the model).
2. Historical number of vacancies in the public sector, known and planned hospital development and expansion projects in both the public and private sectors, as well as the assumed impact of the Voluntary Health Insurance Scheme, have been taken into account in the projection.
3. Age-, sex-specific parameters are used in the projections.
4. Retirement pattern with reference to HMS.

3.8.2 Dentists

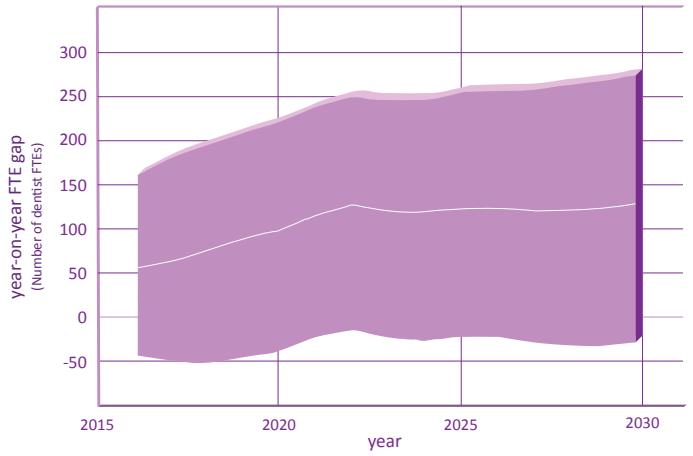
Demand

3.8.2.1 The projection for dentists takes into account the expected utilisation rates of services drawn from HA, DH for the public sector, and THS conducted by C&SD for the private and welfare sectors. Demand from the academic, teaching and training sector has also been considered.

3.8.2.2 As our society ages and with enhanced public awareness of dental care, the private demand for dental services is set to increase. Furthermore, with the introduction of new dental initiatives by the Government, notably the Outreach Dental Care Programme for the Elderly, the Community Care Fund Elderly Dental Assistance Programme and the Pilot Project on Dental Service for People with Intellectual Disability, the demand for subsidised dental services is on the rise with consequential implications for dental manpower. The projection has been adjusted for these factors.

3.8.2.3 The supply of dentists includes locally trained graduates as well as registrants passing the Licensing Examination of DCHK. Factors including newly eligible registrants, registrant number of locally and non-locally trained graduates, registration renewal proportion, proportion of clinically active registrants, natural attrition/retirement, workforce participation rate, work capacity and work pattern have been taken into account for the supply projection.

Manpower Gap in FTE



Year	2016	2020	2025	2030
5th percentile	-46	-42	-24	-31
	(-2.2%)	(-2.0%)	(-1.1%)	(-1.3%)
Best guestimate	53	96	121	127
	(2.5%)	(4.2%)	(5.1%)	(5.1%)
95th percentile	162	223	256	277
	(7.1%)	(9.2%)	(10.1%)	(10.5%)

Note:
1. A positive number indicates shortfall, whereas a negative number indicates sufficient manpower (or surplus under the model).
2. Historical number of vacancies in the public sector and known and planned projects in the public sector have been taken into account in the projection.
3. Age-, sex-specific parameters are used in the projections.
4. Retirement pattern with reference to HMS.

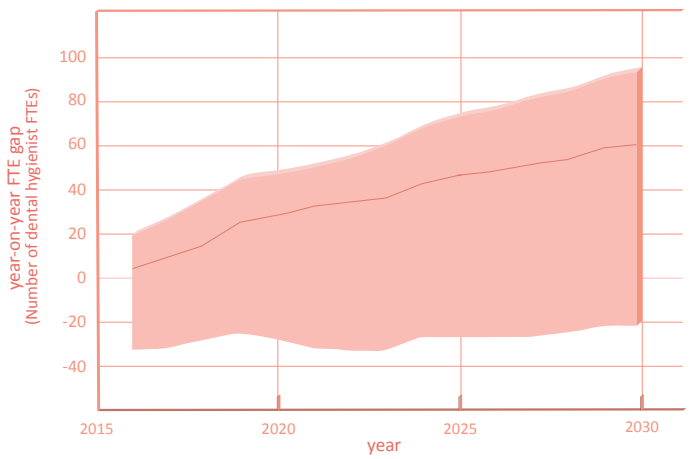
3.8.3 DENTAL HYGIENISTS

3.8.3.1 As the projection for dental hygienists mainly come from the demand from dentists in private practice and partly from DH, the expected utilisation rates of services is derived from the outpatient service utilisation of DH Government Dental Clinics for the public sector and the commercial and NGO visits proxyed by the dentist/dental hygienist ratio.

Supply

3.8.3.2 The supply of dental hygienists is mainly registrants with the qualification of the Higher Diploma in Dental Hygiene of PPDH and HKU SPACE Community College. Factors including newly eligible registrants, registrant number of locally trained graduates, proportion of clinically active registrants, natural attrition/retirement, workforce participation rate, work capacity and work pattern have been taken into account for the supply projection.

Manpower Gap in FTE



Year	2016	2020	2025	2030
5th percentile	-31	-26	-25	-20
	(-11.2%)	(-7.9%)	(-6.5%)	(-4.6%)
Best guestimate	6	30	48	62
	(1.9%)	(7.8%)	(10.7%)	(12.2%)
95th percentile	22	49	75	95
	(6.7%)	(12.1%)	(15.7%)	(17.7%)

Note:
1. A positive number indicates shortfall, whereas a negative number indicates sufficient manpower (or surplus under the model).
2. Age-, sex-specific parameters are used in the projections.
3. Retirement pattern with reference to HMS.

3.8.4 NURSES

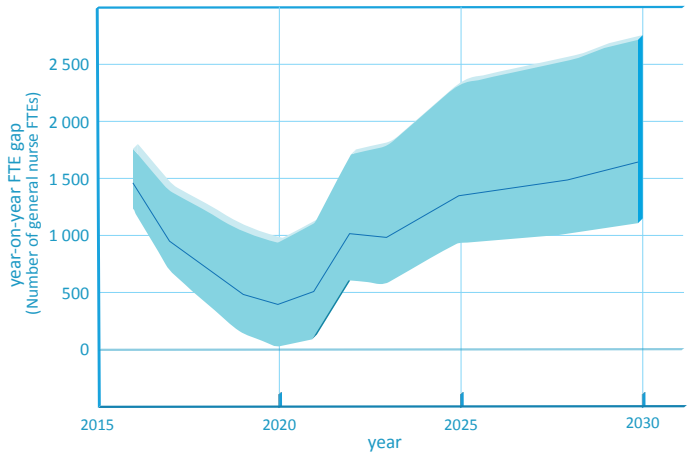
Demand

3.8.4.1 The projection for nurses takes into account the expected utilisation rates of services drawn from HA and DH for the public sector, and those of private hospitals and THS conducted by C&SD for the private and welfare sectors. Demand from the academic, teaching and training sector has also been considered. Besides, known and planned projects in the public and subvented sectors have been taken into account.

Supply

3.8.4.2 The supply of nurses includes graduates from accredited UGC-funded and self-financing local programmes, as well as registrants passing the Licensing Examination of NCHK. Factors including newly eligible registrants, registrant number of locally and non-locally trained graduates, registration renewal proportion, proportion of clinically active registrants, natural attrition/retirement, workforce participation rate, work capacity and work pattern have been taken into account for the supply projection.

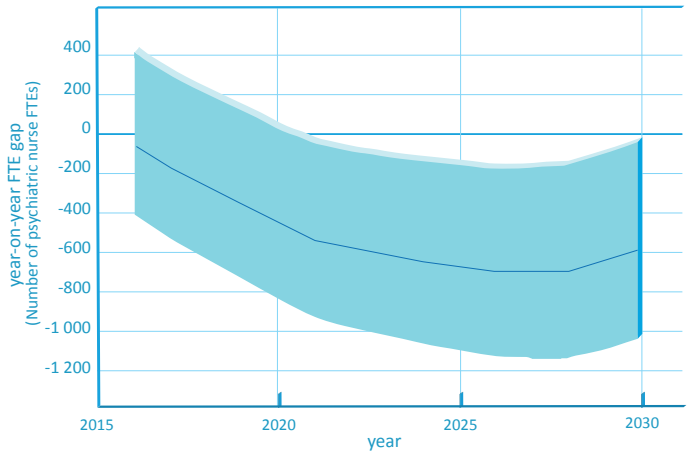
GENERAL NURSES
Manpower Gap in FTE



Year	2016	2020	2025	2030
5th percentile	1 245	83	964	1 131
	(3.6%)	(0.2%)	(2.1%)	(2.3%)
Best guestimate	1 485	455	1 383	1 669
	(4.2%)	(1.2%)	(3.0%)	(3.3%)
95th percentile	1 813	993	2 341	2 727
	(5.1%)	(2.5%)	(5.0%)	(5.3%)

Note:
1. A positive number indicates shortfall, whereas a negative number indicates sufficient manpower (or surplus under the model).
2. Historical number of vacancies in the public sector and known and planned projects in the public and subvented sectors have been taken into account in the projection.
3. Age-, sex-specific parameters are used in the projections.
4. Retirement pattern with reference to HMS.

PSYCHIATRIC NURSES
Manpower Gap in FTE



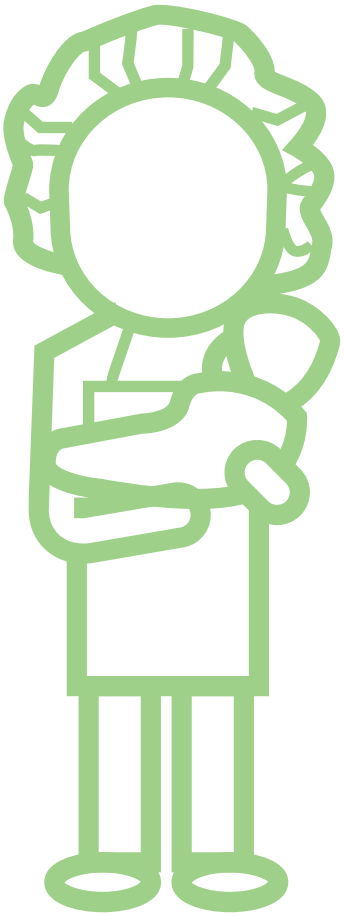
Year	2016	2020	2025	2030
5th percentile	-441	-873	-1 131	-1 078
	(-16.1%)	(-30.1%)	(-35.9%)	(-31.6%)
Best guestimate	-94	-487	-708	-623
	(-3.0%)	(-14.8%)	(19.8%)	(-16.1%)
95th percentile	401	17	-174	-55
	(11.2%)	(0.4%)	(-4.2%)	(-1.2%)

Note:
1. A positive number indicates shortfall, whereas a negative number indicates sufficient manpower (or surplus under the model).
2. Historical number of vacancies in the public sector and known and planned projects in the public and subvented sectors have been taken into account in the projection.
3. Age-, sex-specific parameters are used in the projections.
4. Retirement pattern with reference to HMS.

3.8.5 MIDWIVES

OBSERVATION

3.8.5.1 There were 4 540 midwives as at end 2016. To the best of our understanding, only 40% of them are working in the field of midwifery, obstetrics and gynaecology, due to the low fertility level in Hong Kong. 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 HA and private hospitals, it would not be possible to present a meaningful manpower projection for midwives. Given the persisted low fertility level in Hong Kong and the stable demand for midwives, the supply of midwives should be more or less sufficient to meet the demand.



3.8.6 CHINESE MEDICINE PRACTITIONERS

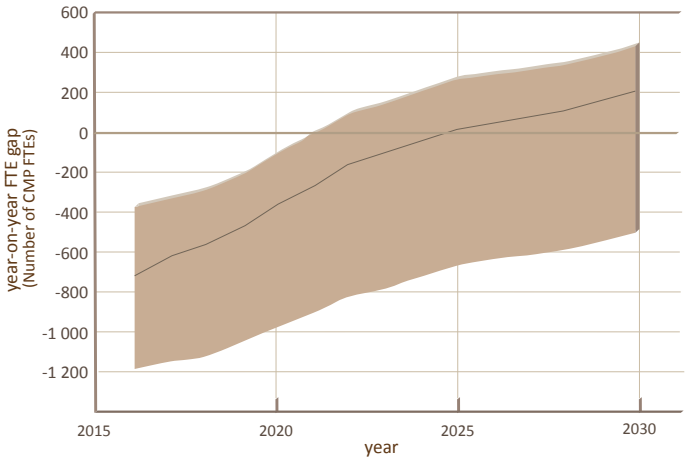
Demand

3.8.6.1 The projection for CMPs takes into account the expected utilisation rates of services in terms of various outpatient services utilisation derived from THS conducted by C&SD and HMS conducted by DH for the Chinese medicine clinics in the private and welfare sectors. Demand from the academic, teaching and training sector has also been considered.

Supply

3.8.6.2 The supply of CMPs are those registered CMPs, passing the Licensing Examination held by CMCHK and listed CMPs. The projection has been adjusted with the estimated availability of practitioners in different outpatient settings. Factors including newly eligible registrants, registrant number of locally and non-locally trained graduates, registration renewal proportion, proportion of clinically active registrants, natural attrition/retirement, workforce participation rate, work capacity and work pattern have been taken into account for the supply projection.

Manpower Gap in FTE



Year	2016	2020	2025	2030
5th percentile	-1 198	-984	-673	-505
	(-18.7%)	(-14.8%)	(-9.8%)	(-7.2%)
Best guestimate	-716	-354	25	222
	(-10.4%)	(-4.9%)	(0.3%)	(2.9%)
95th percentile	-359	-82	287	451
	(-4.9%)	(-1.1%)	(3.7%)	(5.7%)

Note:

1. A positive number indicates shortfall, whereas a negative number indicates sufficient manpower (or surplus under the model).
2. According to the statistics provided by CMCHK, the average annual number of candidates passing the Licensing Examination and getting registered for the period from 2012 to 2016 is about 200.
3. The number of students studying Chinese Medicine programmes in the Mainland recognised by CMCHK has decreased from the peak from about 470 in 2013/14 to 260 in 2015/16. The potential impact on the supply of CMPs needs further assessment, pending the availability of more data e.g. graduation rate, willingness to practise in HK and their passing rate of the Licensing Examination.
4. Age-, sex-specific parameters are used in the projections.
5. Retirement pattern with reference to HMS.

3.8.7 PHARMACISTS

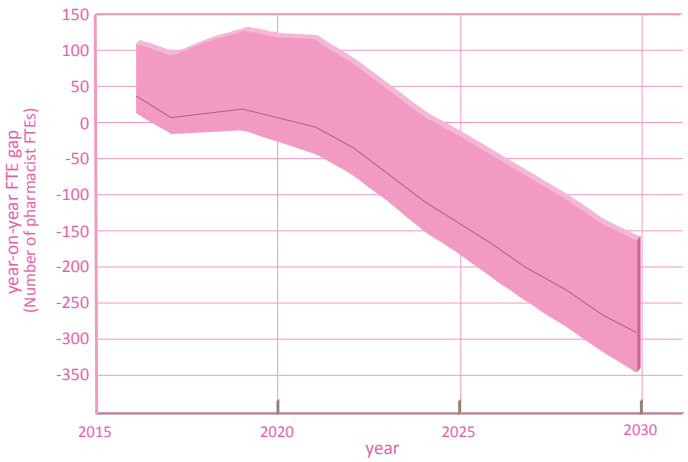
Demand

3.8.7.1 In addition to the demand from the public sector and the academic, teaching and training sector, authorised sellers of poisons (pharmacies), private hospitals and the drug-related business sector (pharmaceutical companies which include pharmaceutical manufacturers, distributors and drug research and development companies) also demand for pharmacists. For that, the demand projection for pharmacists takes into account the expected utilisation of services in HA, DH and private hospitals, and data from THS conducted by C&SD and data from PPBHK. The projection is also adjusted for the impact of externalities including enhancement of HA clinical pharmacy service and role expansion of pharmacists in pharmaceutical companies.

Supply

3.8.7.2 The supply of pharmacists includes locally trained graduates as well as registrants passing the Registration Examination of PPBHK. Factors including newly eligible registrants, registrant number of locally and non-locally trained graduates, registration renewal proportion, proportion of clinically active registrants, natural attrition/retirement, workforce participation rate, work capacity and work pattern have been taken into account for the supply projection.

Manpower Gap in FTE



Year	2016	2020	2025	2030
5th percentile	22	-20	-175	-341
	(1.2%)	(-0.9%)	(-7.4%)	(-13.5%)
Best guestimate	47	16	-129	-283
	(2.5%)	(0.7%)	(-5.4%)	(-11.0%)
95th percentile	123	131	-5	-151
	(6.3%)	(5.7%)	(-0.2%)	(-5.6%)

Note:
1. A positive number indicates shortfall, whereas a negative number indicates sufficient manpower (or surplus under the model).
2. Initiatives in the public sector and development in the private sector have been taken into account in the projection.
3. Age-, sex-specific parameters are used in the projections.
4. Retirement pattern with reference to HMS.

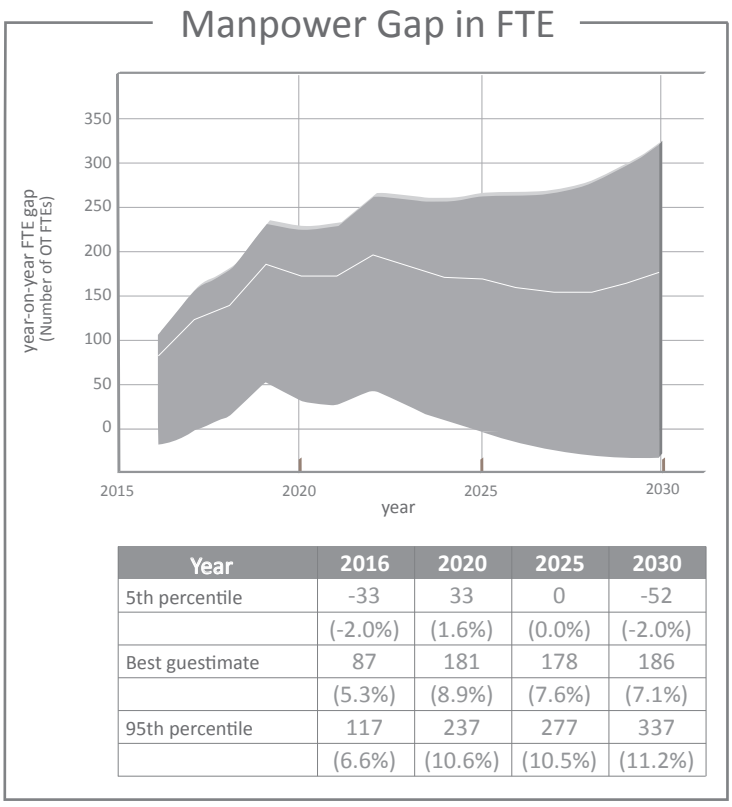
3.8.8 OCCUPATIONAL THERAPISTS

Demand

3.8.8.1 The projection for OTs takes into account the utilisation from healthcare, welfare and education sectors, using utilisation rates of services derived from those of HA, DH, SWD and the Education Bureau (EDB), HMS conducted by DH as well as projected demand from the academic, teaching and training sector. The demand projection was further adjusted for known and planned projects under SWD, welfare sector and EDB.

Supply

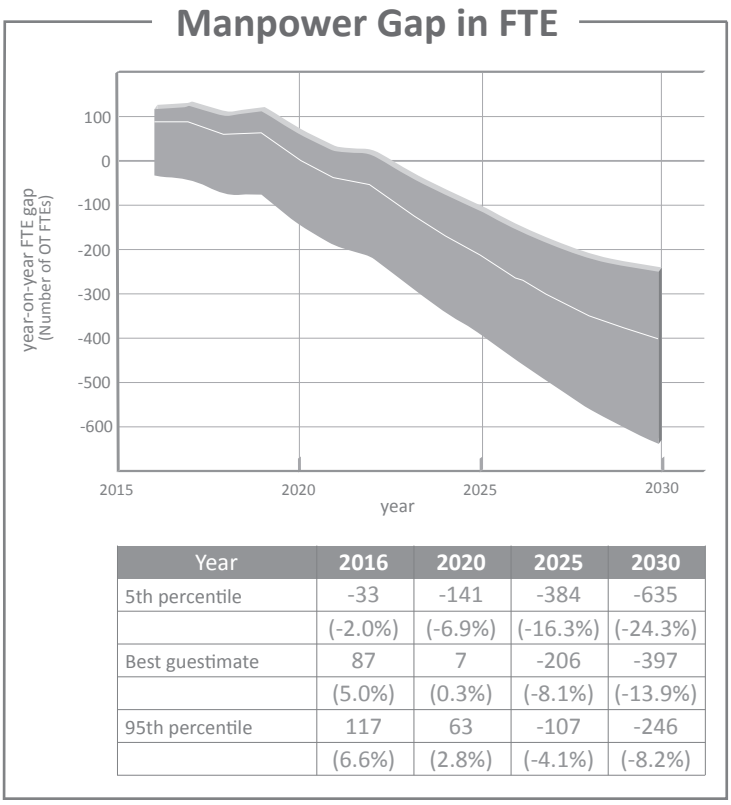
3.8.8.2 The supply of OTs mainly comes from local graduates as well as persons with non-local qualifications recognised by OTs Board. Factors including newly eligible registrants, registrant number of locally and non-locally trained graduates, registration renewal proportion, proportion of clinically active registrants, natural attrition/retirement, workforce participation rate, work capacity and work pattern have been taken into account for the supply projection.



Year	2016	2020	2025	2030
5th percentile	-33	33	0	-52
	(-2.0%)	(1.6%)	(0.0%)	(-2.0%)
Best guestimate	87	181	178	186
	(5.3%)	(8.9%)	(7.6%)	(7.1%)
95th percentile	117	237	277	337
	(6.6%)	(10.6%)	(10.5%)	(11.2%)

Note:
1. A positive number indicates shortfall, whereas a negative number indicates sufficient manpower (or surplus under the model).
2. Manpower requirement ratio set by SWD, known and planned projects in the public and subvented sectors have been taken into account in the projection.
3. Age-, sex-specific parameters are used in the projections.
4. Retirement pattern with reference to HMS.

Scenario Analysis
(Taking into account TWC's graduates of 50)



Year	2016	2020	2025	2030
5th percentile	-33	-141	-384	-635
	(-2.0%)	(-6.9%)	(-16.3%)	(-24.3%)
Best guestimate	87	7	-206	-397
	(5.0%)	(0.3%)	(-8.1%)	(-13.9%)
95th percentile	117	63	-107	-246
	(6.6%)	(2.8%)	(-4.1%)	(-8.2%)

Note:
1. A positive number indicates shortfall, whereas a negative number indicates sufficient manpower (or surplus under the model).
2. Assuming additional supply from the occupational therapy programme offered by TWC.

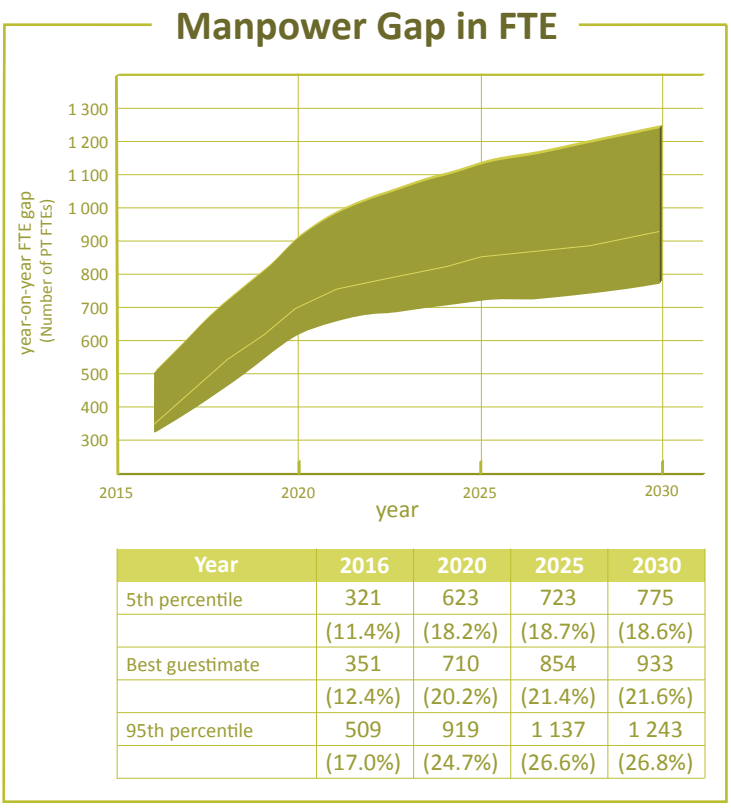
3.8.9 PHYSIOTHERAPISTS

Demand

3.8.9.1 Similar to OTs, the demand projection for PTs takes into account the utilisation from healthcare, welfare and education sectors, using utilisation rates of services derived from those of HA, DH, SWD and EDB, HMS conducted by DH as well as projected demand from the academic, teaching and training sector. The demand projection was further adjusted for known and planned projects under SWD, welfare sector and EDB.

Supply

3.8.9.2 The supply of PTs mainly comes from local graduates as well as persons with non-local qualifications recognised by PTs Board. Factors including newly eligible registrants, registrant number of locally and non-locally trained graduates, registration renewal proportion, proportion of clinically active registrants, natural attrition/retirement, workforce participation rate, work capacity and work pattern have been taken into account for the supply projection.



Year	2016	2020	2025	2030
5th percentile	321	623	723	775
	(11.4%)	(18.2%)	(18.7%)	(18.6%)
Best guestimate	351	710	854	933
	(12.4%)	(20.2%)	(21.4%)	(21.6%)
95th percentile	509	919	1 137	1 243
	(17.0%)	(24.7%)	(26.6%)	(26.8%)

Note:
1. A positive number indicates shortfall, whereas a negative number indicates sufficient manpower (or surplus under the model).
2. Historical manpower shortage in the subvented sector, known and planned projects in the public and subvented sectors have been taken into account in the projection.
3. Age-, sex-specific parameters are used in the projections.
4. Retirement pattern with reference to HMS.

3.8.10 MEDICAL LABORATORY TECHNOLOGISTS

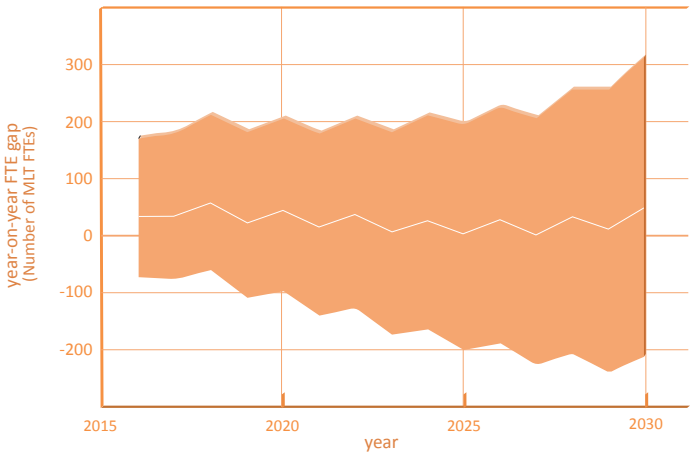
Demand

3.8.10.1 The projection for MLTs takes into account the expected utilisation rates of services derived from the historical data of HA and DH for the public sector. For the private sector, private hospital discharges and private clinic/laboratory examinations from THS conducted by C&SD have been taken into account. Demand from the academic, teaching and training sector has also been considered.

Supply

3.8.10.2 The supply of MLTs comes from local graduates as well as persons with non-local qualifications recognised by MLTs Board. Factors including newly eligible registrants, registrant number of locally and non-locally trained graduates, registration renewal proportion, proportion of clinically active registrants, natural attrition/retirement, workforce participation rate, work capacity and work pattern have been taken into account for the supply projection.

Manpower Gap in FTE



Year	2016	2020	2025	2030
5th percentile	-71	-95	-196	-207
	(-2.6%)	(-3.3%)	(-6.2%)	(-6.0%)
Best guestimate	33	44	3	49
	(1.2%)	(1.4%)	(0.1%)	(1.3%)
95th percentile	167	201	190	309
	(5.7%)	(6.3%)	(5.3%)	(7.8%)

Note:
1. A positive number indicates shortfall, whereas a negative number indicates sufficient manpower (or surplus under the model).
2. Age-, sex-specific parameters are used in the projections.
3. Retirement pattern with reference to HMS.

3.8.11 OPTOMETRISTS

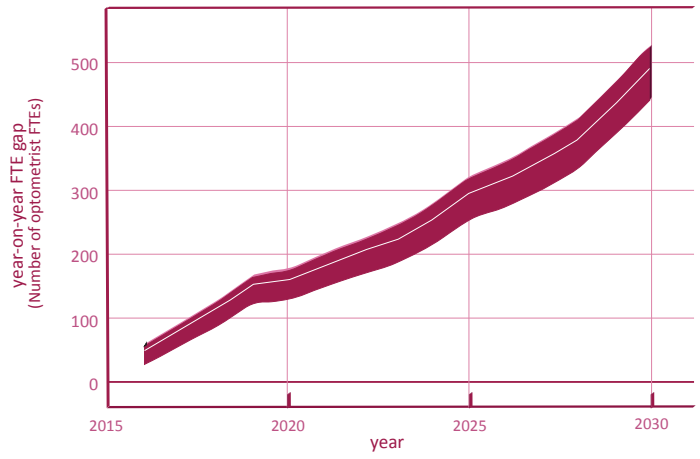
Demand

3.8.11.1 For the public sector, the projection for optometrists takes into account the expected utilisation rates of services in HA and DH. For the private sector, Domestic Health Accounts, THS conducted by C&SD and various local surveys on optometrist-related eye disease and sales of optical shops are used for estimating the service utilisation in the private sector. The demand projection for academic, teaching and training sector has also been considered.

Supply

3.8.11.2 The supply of optometrists mainly comes from local graduates as well as persons with non-local qualifications recognised by the Optometrists Board. Factors including newly eligible registrants, registrant number of locally and non-locally trained graduates, registration renewal proportion, proportion of clinically active registrants, natural attrition/retirement, workforce participation rate, work capacity and work pattern have been taken into account for the supply projection.

Manpower Gap in FTE



Year	2016	2020	2025	2030
5th percentile	31	134	259	446
	(1.7%)	(7.0%)	(13.2%)	(22.2%)
Best guestimate	56	167	302	497
	(3.0%)	(8.6%)	(15.0%)	(24.1%)
95th percentile	63	181	326	533
	(3.3%)	(9.2%)	(16.0%)	(25.4%)

Note:
1. A positive number indicates shortfall, whereas a negative number indicates sufficient manpower (or surplus under the model).
2. Age-, sex-specific parameters are used in the projections.
3. Retirement pattern with reference to HMS.

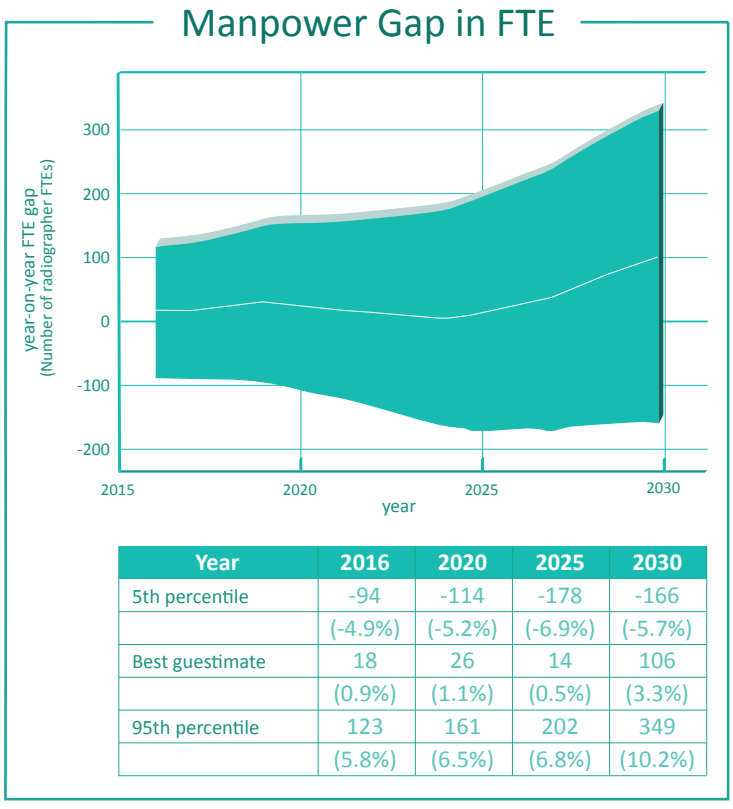
3.8.12 RADIOGRAPHERS

Demand

3.8.12.1 The projection for radiographers takes into account the expected utilisation rates of services provided by HA and DH for the public sector, private hospitals, private clinics and laboratories for the private sector and the estimated manpower requirement by the academic, teaching and training sector.

Supply

3.8.12.2 The supply of radiographers mainly comes from local graduates as well as persons with non-local qualifications recognised by the Radiographers Board. Factors including newly eligible registrants, registrant number of locally and non-locally trained graduates, registration renewal proportion, proportion of clinically active registrants, natural attrition/retirement, workforce participation rate, work capacity and work pattern have been taken into account for the supply projection.



Year	2016	2020	2025	2030
5th percentile	-94	-114	-178	-166
	(-4.9%)	(-5.2%)	(-6.9%)	(-5.7%)
Best guestimate	18	26	14	106
	(0.9%)	(1.1%)	(0.5%)	(3.3%)
95th percentile	123	161	202	349
	(5.8%)	(6.5%)	(6.8%)	(10.2%)

Note:
1. A positive number indicates shortfall, whereas a negative number indicates sufficient manpower (or surplus under the model).
2. Age-, sex-specific parameters are used in the projections.
3. Retirement pattern with reference to HMS.

3.8.13 CHIROPRACTORS

Demand

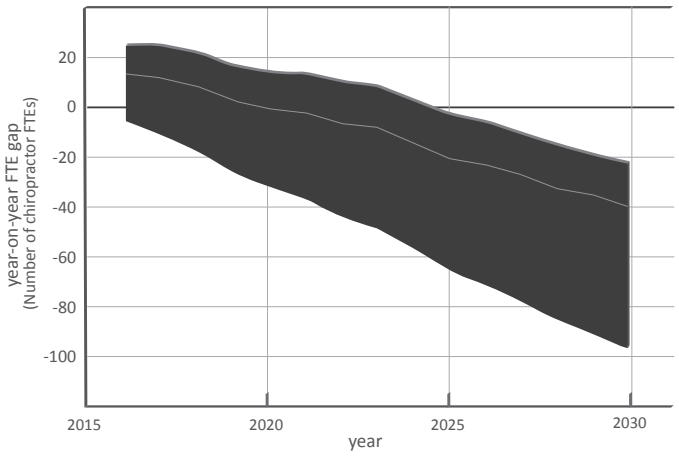
3.8.13.1 The chiropractor demand projection is utilisation-based where the utilisation is proxyed by data from HMS and outpatient visits from THS[17].

[17] As the under-reporting factor for HMS and THS chiropractor visits is not known and the total number of visits is small, the number of chiropractor outpatient visits reported by chiropractors and estimated from HMS is considered more reliable than the data from THS.

Supply

3.8.13.2 The supply of chiropractors comes from non-locally trained chiropractors who mainly hold qualifications granted in the US, Australia, Canada and Europe. Factors including newly eligible registrants, registration renewal proportion, proportion of clinically active registrants, natural attrition/retirement, workforce participation rate, work capacity and work pattern have been taken into account for the supply projection.

Manpower Gap in FTE



Year	2016	2020	2025	2030
5th percentile	-6	-33	-66	-98
	(-3.1%)	(-15.6%)	(-29.0%)	(-41.4%)
Best guestimate	13	-1	-21	-40
	(6.3%)	(-0.4%)	(-7.6%)	(-13.8%)
95th percentile	25	14	-3	-23
	(11.5%)	(5.4%)	(-1.1%)	(-7.3%)

Note:
1. A positive number indicates shortfall, whereas a negative number indicates sufficient manpower (or surplus under the model).
2. Age-, sex-specific parameters are used in the projections.
3. Retirement pattern with reference to HMS.

CHAPTER 4
Commissioned Study: Professional Development and Regulation

4.1 Prevailing Regulatory Framework in Hong Kong

OVERVIEW

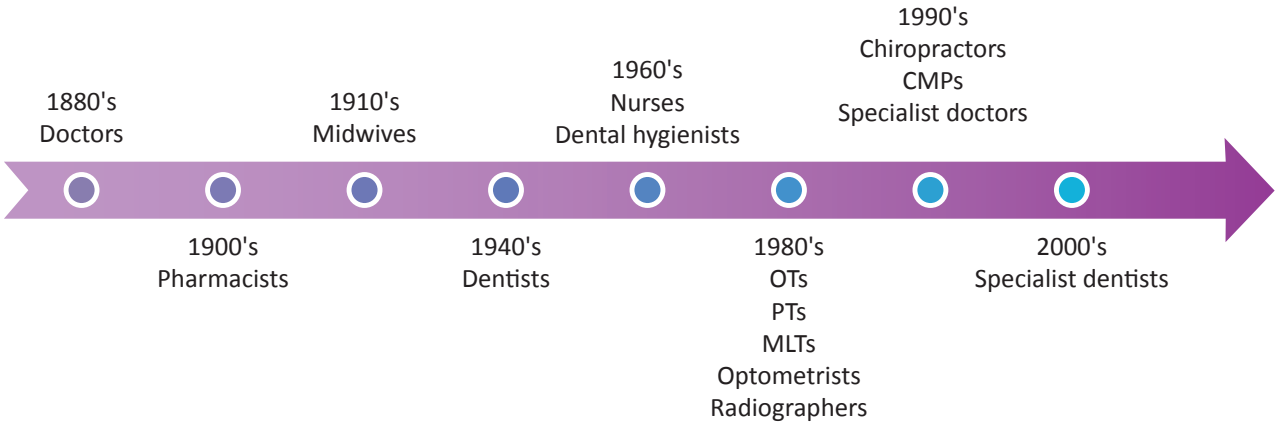
4.1.1 Regulatory system in Hong Kong

4.1.1.1 In Hong Kong, the Government all along adopts a risk-based approach to consider whether a particular healthcare profession should be subject to statutory registration and regulation. The major consideration is the nature and scope of work of the professionals and the risks associated with their practices. Other considerations include patient interface, size of profession, employment distribution in public and private sectors and presence of alternative control (i.e. society-based registration system). In general, healthcare professionals who perform invasive or critical procedures are accorded higher priority for statutory registration and regulation.

Figure 4.1 Risk-based approach

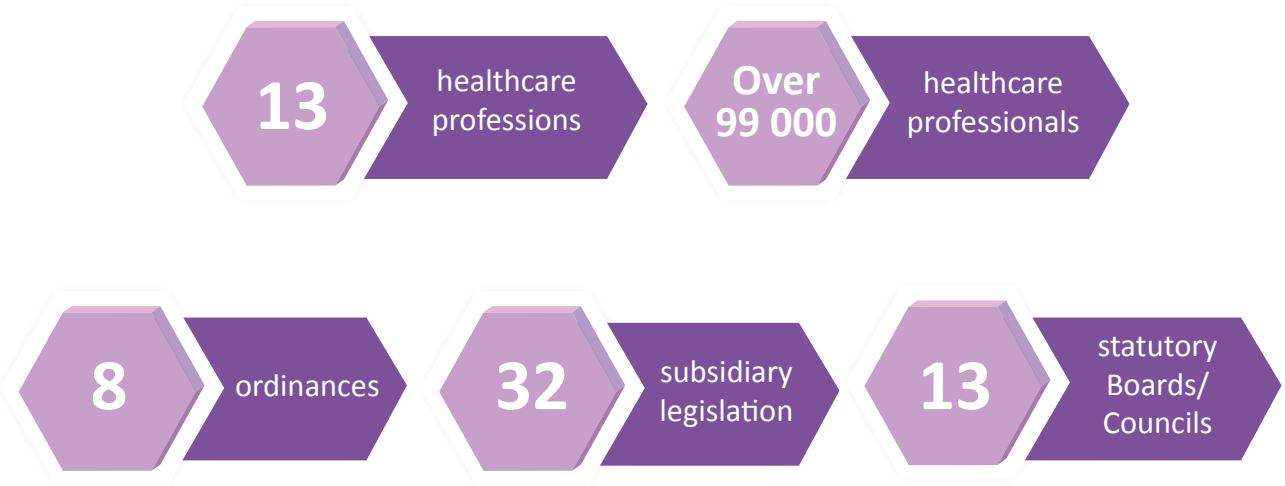
4.1.1.2 Statutory registration and regulation of healthcare professions can be traced back to the 1880's with the enactment of the Medical Registration Ordinance (Cap. 161) in 1884. Registration of pharmacists was first introduced under the Pharmacy Ordinance in 1908. The Midwives Ordinance (Cap. 162) and the Dentists Registration Ordinance (Cap. 156) was enacted in 1910 and 1940 respectively. Nurses and dental hygienists were put under statutory regulation in the 1960's. The Supplementary Medical Professions Ordinance (Cap. 359) was enacted in 1980 to regulate five more disciplines which included OTs, PTs, MLTs, optometrists and radiographers. The practice of chiropractors and CMPs were regulated in 1993 and 1999 respectively. Specialist doctors and dentists were included in the statutory regime in 1997 and 2005 respectively.

Figure 4.2 Statutory registration and regulation of healthcare professions in Hong Kong



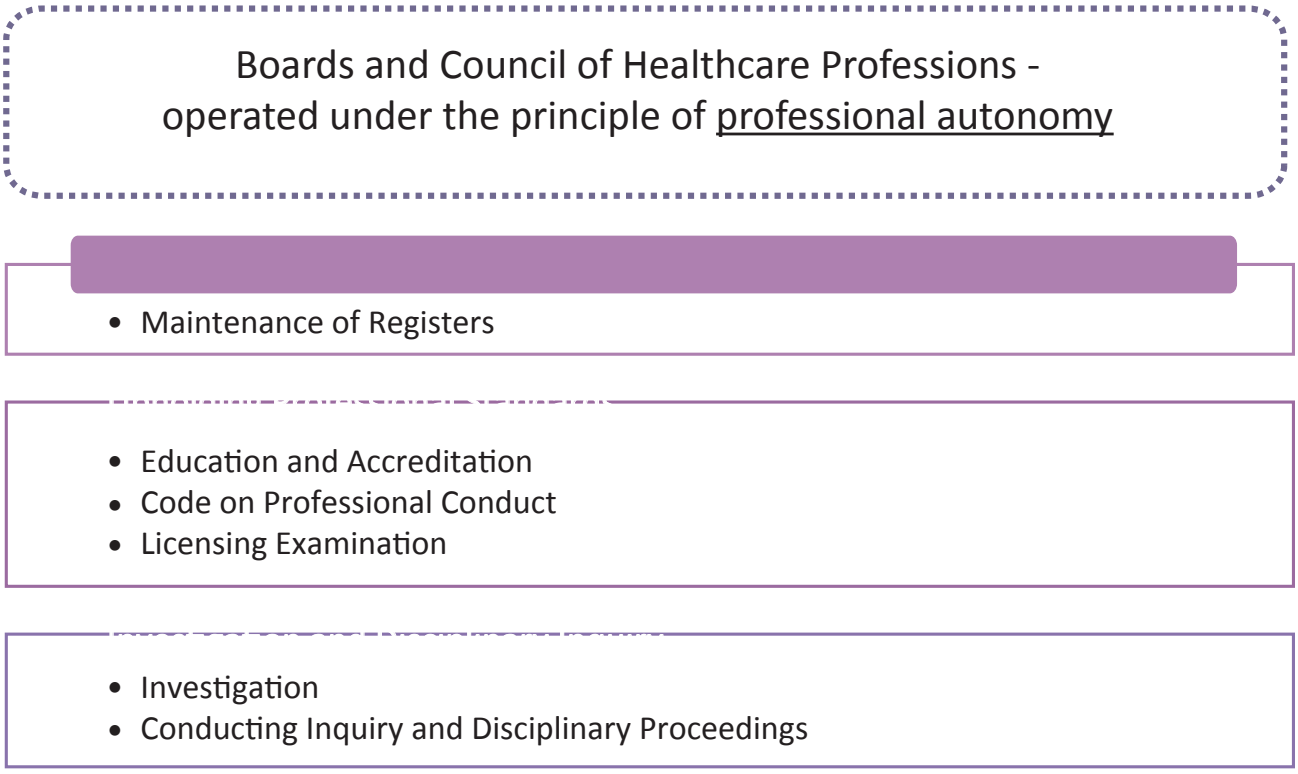
4.1.1.3 As at end 2016, there are over 99 000 healthcare professionals from the 13 professions subject to statutory registration. The governing of these 13 disciplines involves eight ordinances and 32 pieces of subsidiary legislation. There are a total of 13 statutory Boards and Councils (Boards and Councils) established under the law and are given the power to prescribe the registration requirements to handle and investigate complaints and take disciplinary actions as necessary against registered healthcare professionals.

Figure 4.3 Key figures of the 13 professions subject to statutory registration in Hong Kong



4.1.1.4 Compared with jurisdictions elsewhere, healthcare regulation in Hong Kong is operated under the principle of professional autonomy. Boards and Councils of healthcare professions operate independently in discharging their statutory duties, including registration, administration of licensing examinations, setting of qualifications and standards, drawing up of codes of practice / codes of conduct, and handling of complaints and conducting of disciplinary inquiries. They can give disciplinary orders following inquiries, including, for the most serious case, the removal of the name of a registrant from the professional register.

Figure 4.4 Key functions of Boards and Councils



4.1.2 Composition and lay participation of the Boards and Councils of healthcare professions

4.1.2.1 Operating on the premise of professional autonomy, the Boards and Councils comprise members from the healthcare professions, Government representatives and persons who are not members of the professions under regulation. The number of lay members, who are neither post-tied ex-officio members nor members of the profession under regulation, of Boards and Councils is set out in Figure 4.5.

Figure 4.5 Lay participation in Boards and Councils: current situation

	Total no. of members	No. of lay members (percentage)
MCHK	28	4 (14%) [4 lay persons]
DCHK	12	3 (25%) [1 lay person and 2 doctors]
NCHK	15	3[18] - 6 (20% - 40%) [3 lay persons, 1 member nominated by HA, 2 members selected from a pool of persons nominated by each of the tertiary institutions providing accredited nursing programmes]
Midwives Council of Hong Kong	18	4 (22%) [2 lay persons and 2 doctors]
CMCHK	19	6[19] - 8 (32% - 42%) [chairman, 2 public officers, 2 from educational or scientific research institutions in Hong Kong and 3 lay persons]
PPBHK	11	3 (27%) [2 doctors and 1 lawyer]
SMP Council	15-18	6[20] - 13 (33% - 72%)[21] [chairman, deputy chairman, not more than 4 public officers, 4 other persons not being public officers and 3 persons nominated by CUHK, HKU and PolyU]
OTs Board PTs Board MLTs Board Optometrists Board Radiographers Board	8-11	2[22] - 3 (18% - 27%)[23] [chairman, 1 doctor and 1 person specially qualified to advise on professional education]
Chiropractors Council	10	5 (50%) [4 lay persons and 1 public officer]

[18] There will be three fewer lay members if the member nominated by HA and the two members selected from a pool of persons nominated by each of the tertiary institutions providing accredited nursing programmes are not considered so. According to past record, these members are usually registered nurses.

[19] There will be two fewer lay members if the two members from educational or scientific research institutions in Hong Kong are not considered so. According to past record, these two members are usually filled by registered CMPs or persons in the field of Chinese Medicine.

[20] There will be seven fewer lay members if the four other persons not being public officers and three persons nominated by CUHK, HKU and PolyU are not considered so. According to past record, except the person nominated by PolyU, the other six members are usually other registered healthcare practitioners.

[21] In calculating the lay proportion, assuming the total number of members is 18 members.

[22] There will be one fewer lay member if the person specially qualified to advise on professional education is not considered so. According to past record, this member is usually from education institution being registered in that SMP profession.

[23] In calculating the lay proportion, assuming the total number of members is 11 members.

4.1.3 Secretariat, legal and financial support to the Boards and Councils of healthcare professions

4.1.3.1 All Boards and Councils are funded by the public purse with secretariat support provided by DH, and legal services mainly provided by the Department of Justice. The expenses incurred are partially recovered by fees and charges relating to the registration of healthcare professionals (including licensing examination) collected as stipulated under the respective legislation.

4.1.3.2 In 2014, DH has reviewed the statutory fees relating to registration (including licensing examination) of the healthcare professionals[24] . These fees were either last revised between 2000 and 2006 or had not been revised since their introduction, and DH's costing review shows that their current cost recovering levels range from 11% to 116% [25]. In order to achieve full cost recovery gradually and avoid a steep fee increase, 117 fees were proposed to be increased by 7% to 20%, while the remaining fee to be reduced by 14%. With the revised fee levels, the cost recovering rates of these existing statutory fee items are in the range of 13% to 100%.

[24] Except fees under schedule 9 of Pharmacy and Poisons Regulations (Cap. 138A), Pharmacy and Poisons (Pharmacy and Poisons Appeal Tribunal) Regulations (Cap. 138D) and Pharmacists (Disciplinary Procedures) Regulations (Cap. 138E).

[25] The licensing examination for doctors is for providing an avenue for those medical graduates from other jurisdictions who wish to register as doctors with MCHK. Though the licensing examination has all along been run by CUHK and HKU as in the last fee revision exercise in 2006, the cost incurred by the two universities (including setting examination questions, providing examiners and testing candidates in hospital environment with patient participation) has not been factored into the unit cost computation in deriving the fee revision proposal. The existing cost recovering rates are computed based on the cost incurred by MC Secretariat in arranging the examination only. To avoid increasing the fees to a prohibitively high level which would discourage eligible candidates from sitting the licensing examination, DH considered that the existing calculation methodology should remain unchanged for the time being. Nevertheless, the computation methodology would be reviewed in future when these examination fees have all been revised to a level close to the full recovery of the cost incurred by MC Secretariat.

Figure 4.6 Cost recovering rates of the fees stipulated under the relevant legislations

	Cost recovering rates (before 2016)	Cost recovering rates (after 2016)
Medical Registration (Fees) Regulation (Cap. 161C)	11% - 94%	13% - 100%
Dentists (Registration and Disciplinary Procedure) Regulations (Cap. 156A)	44% - 84%	50% - 92%
Ancillary Dental Workers (Dental Hygienists) Regulations (Cap. 156B)	61%	70%
Nurses (Registration and Disciplinary Procedure) Regulations (Cap. 164A)	33% - 52%	40% - 60%
Enrolled Nurses (Enrolment and Disciplinary Procedure) Regulations (Cap. 164B)	36% - 52%	43% - 60%
Midwives Registration (Fees) Regulation (Cap. 162B)	43% - 89%	13% - 98%
Chinese Medicine Practitioners (Fees) Regulation (Cap. 549B)	11% - 116%	14% - 100%
Occupational Therapists (Registration and Disciplinary Procedure) Regulations (Cap. 359B)	26% - 84%	31% - 93%
Medical Laboratory Technologists (Registration and Disciplinary Procedure) Regulations (Cap. 359A)	26% - 84%	31% - 93%
Physiotherapists (Registration and Disciplinary Procedure) Regulation (Cap. 359J)	26% - 84%	31% - 93%
Optometrists (Registration and Disciplinary Procedure) Regulation (Cap. 359F)	26% - 84%	31% - 93%
Radiographers (Registration and Disciplinary Procedure) Regulation (Cap. 359H)	26% - 84%	31% - 93%
Chiropractors Registration (Fees) Regulation (Cap. 428A)	34% - 81%	41% - 89%

4.1.4 Functions of Boards and Councils

4.1.4.1 Some common features applicable to the Boards and Councils in respect of registration, standard-setting and disciplinary matters are set out in the ensuing paragraphs.

Registration

4.1.4.2 The qualifications for registration as healthcare professionals in the 13 professions are prescribed in the relevant legislation. The Boards and Councils are entrusted with the power to determine an applicant's fitness for registration and a registered professional's fitness to practise. Non-locally trained graduates of doctors, dentists, CMPs, nurses, midwives and pharmacists are required to pass a licensing examination administered by the respective Board or Council and, in the case of doctors, complete a specified period of internship assessment in Hong Kong before they are allowed to practise in Hong Kong with full registration. For OTs, PTs, MLTs, optometrists, radiographers and chiropractors, the relevant Board or Council prescribes the accredited programmes and/or core competencies one must obtain in order to be registered.

Figure 4.7 Registration requirement for non-locally trained healthcare professionals

Passage of licensing examination administered by Boards or Councils	Boards or Councils to prescribe accredited programmes and/or core competencies
Doctors (and complete a specified period of internship assessment in Hong Kong)	Dental hygenists
Dentists	OTs
Nurses	PTs
Midwives	MLTs
CMPs	Optometrists
Pharmacists	Radiographers
	Chiropractors

Standards of behaviour and competence

4.1.4.3 The Boards and Councils are also responsible for the upkeep of ethical standards, professional practice and professional conduct which are stipulated by way of codes of practice, and they may order the removal of the name of a registrant from the professional register under prescribed conditions.

4.1.4.4 All healthcare professions value and recognise the importance of CPE/CPD but the practice and legal requirement vary among them (see Figure 4.8). Continuing education in Chinese Medicine is a mandatory requirement for continuing practice of registered CMPs. It is also mandatory for doctors and dentists on the specialist registers. Doctors and dentists not on the specialist registers may on their own volition voluntarily enrol in CPE and CPD administered by MCHK and DCHK respectively, but they do not have an obligation as that of their specialist counterparts to undertake and complete CPE. There are also voluntary CPE/CPD programmes administered by relevant Boards and Councils for nurses, midwives, OTs, PTs, MLTs, optometrists, radiographers and chiropractors. The above-mentioned voluntary CPE/CPD programmes are summarised in Figure 4.9. For dental hygienists and pharmacists, there is no CPE/CPD programme administered by the relevant Board and Council. The CPE/CPD requirements for healthcare professionals in Hong Kong are summarised below.

Figure 4.8 CPE/CPD requirement for healthcare professions

Mandatory for all practitioners	Mandatory for specialists	Voluntary programmes	No voluntary programmes
• Registered CMPs	• Specialist doctors • Specialist dentists	• Non-specialist doctors • Non-specialist dentists • Nurses (registered and enrolled) • Midwives • OTs • PTs • MLTs • Optometrists • Radiographers • Chiropractors	• Dental hygienists • Pharmacists

Figure 4.9 Voluntary CPE / CPD programmes at a glance

	No. of registrants (as at end 2016)	CPE/CPD Programme	Since	Situation as at end 2016
Doctors	14 013 (6 782 who are also on specialist register)	Voluntary "CME Programme for Practising Doctors who are not taking CME Programme for Specialists"	1 Oct 2001	No. of doctors awarded CME certificate: 1 091 No. of doctors holding valid "CME Certified" title: 1 268
Dentists	2 441 (260 who are also on specialist register)	Voluntary "CPD Programme for Practising Dentists"	1 Jul 2002	No. of dentists awarded CPD certificate for the 2015 CPD Cycle: 575
Nurses	Registered nurses: 39 178 enrolled nurses: 13 211	Voluntary Continuous Nursing Education (CNE) System for all Registered/Enrolled Nurses	1 Nov 2006	See Note 1
Midwives	4 540	Post-registration Education in Midwifery (PEM) Pilot Scheme for all Registered Midwives on a voluntary basis	1 Nov 2006	See Note 2
OTs	1 911	Voluntary CPD Scheme for registered OTs	1 Oct 2006	No. of OTs that met the specified CPD requirement in 2015/16: 101
PTs	2 956	Voluntary CPD scheme for registered PTs	1 Jul 2005	No. of PTs that met the specified CPD requirement in 2015/16: 166
MLTs	3 443	Voluntary CPD scheme for registered MLTs	1 Jan 2005	No. of MLTs that met the specified CPD requirement in 2015/16: 72
Optometrists	2 180	Voluntary CPD programme for registered Optometrists	1 Nov 2004	No. of optometrists that met the specified CPD requirement in 2015/16: 138
Radiographers	2 209	Voluntary CPD programme for registered Optometrists	1 Jan 2006	No. of radiographers that met the specified CPD requirement : 38
Chiropractors	209	Voluntary CPD scheme for registered Chiropractors	1 Jan 2010	No. of chiropractors that met the specified CPD requirement: 5

Note 1 There are a total of 123 providers of CNE accredited by NCHK. CNE points and certificates are awarded to the participants of CNE programmes/activities by the providers accredited by NCHK.

Note 2 There are a total of 19 providers of PEM accredited by the Midwives Council of Hong Kong. PEM points and certificates are awarded to the participants of PEM programmes/activities by the providers accredited by the Midwives Council of Hong Kong.

Disciplinary matters

4.1.4.5 If complaints or information relating to healthcare professionals are received by the respective Boards and Councils, they will be referred to the respective preliminary investigation committee[26]/disciplinary committee of the relevant Boards/Councils for investigation. Following investigation, the committee will either dismiss the complaints or refer the complaints to the respective Boards, Councils or inquiry committees for conducting disciplinary inquiries. The Boards, Councils or inquiry committees can give disciplinary orders following the inquiries, with the most serious disciplinary action being having the name of the registrant removed from the Register.

4.1.4.6 Figure 4.10 summarises the number of complaints received by the Boards and Councils of healthcare professions for 2014 to 2016.

Figure 4.10 Number of complaint cases and processing time

Boards and Councils	No. of registrants (as at end 2016)	No. of complaints received			Average time required (months)		
		2014	2015	2016	Pre-PIC stage (if any) and PIC stage	Inquiry stage	Total
MCHK	14 013	624	493	628	36	36	72
DCHK	2 441	173	126	132	22	12	34
NCHK	52 389	38	25	52	12	6	18
Midwives Council of Hong Kong	4 540	2	0	0	12	6	18
CMCHK	9 956	361	186	209	1	8	9
PPBHK	2 659	3	0	0	3 Note 1	6	9
OTs Board	1 911	4	1	2	7	7	14
PTs Board	2 956	9	7	10	7	7	14
MLTs Board	3 443	4	4	1	7	7	14
Optometrists Board	2 180	9	6	12	7	7	14
Radiographers Board	2 209	1	2	2	7	7	14
Chiropractors Council	209	5	8	9	7	7	14

Note 1: There is no PIC established under PPBHK. The complaints received will be brought up to PPBHK for consideration. It takes about 3 months for PPBHK to make decisions on whether to initiate a disciplinary inquiry against the pharmacist concerned.

[26] Under the Nurses (Registration and Disciplinary Procedure) Regulations (Cap. 164A) and the Enrolled Nurse (Enrolment and Disciplinary Procedure) Regulations (Cap. 164B), the "Preliminary Investigation Committee" is referred as「初步調查小組」. In addition, under the Midwives (Registration and Disciplinary Procedure) Regulation (Cap. 162C), the "Preliminary Investigation Committee" is referred as 「初步調查委員會」.

4.1.5 *Society-based Registration*

4.1.5.1 At present, the regulation of most healthcare professions not subject to statutory registration in Hong Kong has been achieved through voluntary, society-based registration. Under society-based registration, a professional body administers a registration system and promulgates a list of its members to which members of the public can make reference when choosing certain type of healthcare services. The professional bodies can also formulate relevant codes of practice to strengthen self-regulation and encourage their members to pursue continuing professional education and/or development, obtain qualifications as well as enhance their professional competency. Some professional bodies also develop quality assurance and disciplinary mechanisms to safeguard the professional standards of their members.

4.1.5.2 While recognising the importance and effectiveness of voluntary society-based registration, the Steering Committee considers that a more structured scheme with enhanced credibility and reliability could be set up to promote good service standards for the professions and provide more information to members of the public who intend to use their services. An accredited registers scheme could provide a means whereby healthcare professionals that meet certain standards can be identified, thus better enabling members of the public and patients to make informed choices of healthcare professionals.

4.1.5.3 The Steering Committee supports the Government's initiative to introduce an accredited registers scheme for healthcare professions not subject to statutory registration in Hong Kong. The scheme could help enhance the current society-based registration arrangement under the principle of professional autonomy, with a view to ensuring the professional competency of healthcare professionals and providing more information to the public so as to facilitate them to make informed decision. This is in line with the international trend to adopt a "right-touch" approach, for regulating healthcare professions in a way commensurate with the level of risks they pose to public health.

4.1.5.4 In end 2016, the Government launched the Pilot Accredited Registers Scheme for Healthcare Professions (Pilot AR Scheme). The Pilot AR Scheme will operate under the principle of "one profession, one professional body, one register". For each profession, the Accreditation Agent appointed by DH will assess and accredit one professional body that has met the prescribed requirements. The accredited professional body shall be responsible for administering the register of its profession. Upon accreditation, members of the public may look up the registers of healthcare professionals through the accredited healthcare professional bodies. The accreditation is valid for 3 years and renewable provided that the professional bodies can demonstrate that they continue to meet the requirements. The Pilot AR Scheme covers the existing 15 non-statutorily registered healthcare professions within the health services functional constituency of the LegCo[27] . These professions may, having regard to their own aspirations and circumstances, opt to join the Pilot AR Scheme.

[27] Including audiologists, audiology technicians, chiropodists/podiatrists, clinical psychologists, dental surgery assistants, dental technicians/technologists, dental therapists, dietitians, dispensers, educational psychologists, mould laboratory technicians, orthoptists, prosthetists/orthotists, scientific officers (medical) and speech therapist.

4.2 Study by The Chinese University of Hong Kong

4.2.1 CUHK was commissioned to conduct a comparative review of the regulatory frameworks with other jurisdictions in areas including registration, licensing, qualifications and professional conduct of the healthcare professions concerned, as well as mechanisms for setting and upholding professional standards and maintaining continuing competence. The review covered 11 jurisdictions, including the UK, Australia, Singapore, Malaysia, the US, Canada, the Mainland China, Taiwan, New Zealand, Germany and Finland.

Objectives of the study

4.2.2 The objectives of CUHK's study were to -

(a) review experiences outside Hong Kong with respect to current legislation, regulatory and supervisory frameworks for healthcare professionals;

(b) review current local regulatory frameworks for upholding professional standards and quality assurance in Hong Kong; and

(c) identify areas of the current regulatory frameworks for the different groups of healthcare professionals in Hong Kong that require attention and to highlight emerging challenges for fostering healthcare professional development for future investigation and discussion.

Methodology of the study

4.2.3 CUHK adopted the "4Ps" analytical framework to analyse regulation of healthcare professions from the perspectives of policymakers, providers, professionals and patients. The study started with a literature review on best practices and a desktop survey of international experience in healthcare regulation. It was supplemented by key informant interviews with policy makers and regulators in a number of countries as well as in Hong Kong, and a local symposium where the healthcare professions under study as well as other stakeholders from the community were invited to discuss their views on the strengths and weaknesses of the regulatory regimes in Hong Kong as well as the opportunities and challenges ahead (SWOT analysis).

Figure 4.11 "4Ps" analytical framework

4.3 Findings

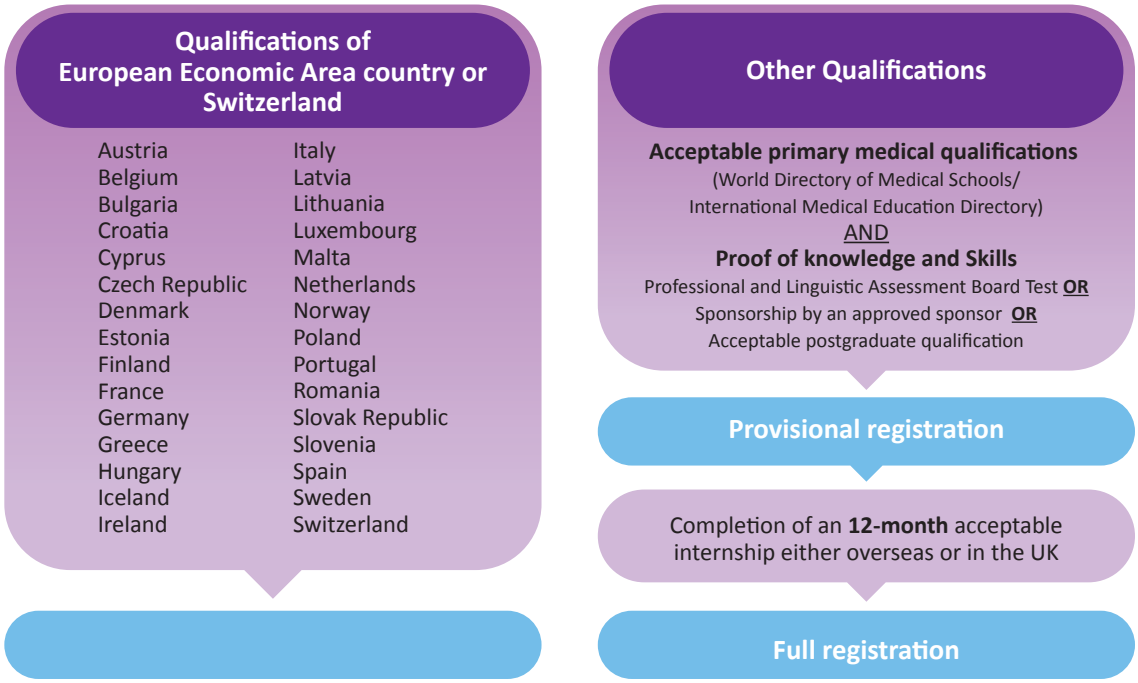
4.3.1 Regulatory frameworks in other jurisdictions

4.3.1.1 The following paragraphs will give an overview of CUHK's findings. Examples of medical profession in the UK, Australia and Singapore will be given as an illustration. Summaries on the current situation of each profession in the jurisdictions under CUHK's study are detailed at **Annex 4**.

4.3.2 Registration arrangement of non-locally trained healthcare professionals

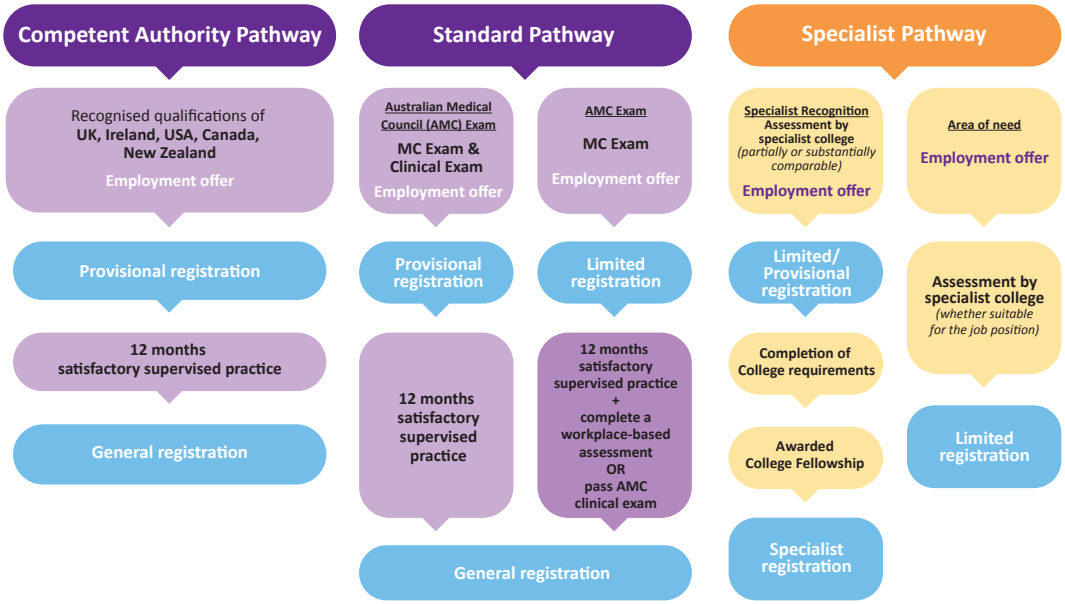
4.3.2.1 CUHK's study suggests that many countries are turning to non-locally trained healthcare graduates from abroad to help address manpower shortages at home. There are different criteria for employing international healthcare graduates. Some jurisdictions (such as certain states of the US and Taiwan) use licensing examination, while some others (including the UK, Germany, Finland, Canada, Australia, New Zealand, Malaysia and Singapore) have a recognised list of qualified overseas institutions for accepting non-locally trained healthcare professionals. These graduates may need some forms of professional assessment before working in healthcare institutions, and some jurisdictions require them to complete a specified period of supervised training in lieu of qualifying or licensing examinations or internships.

Example: Types of registration for non-locally trained doctors in the UK



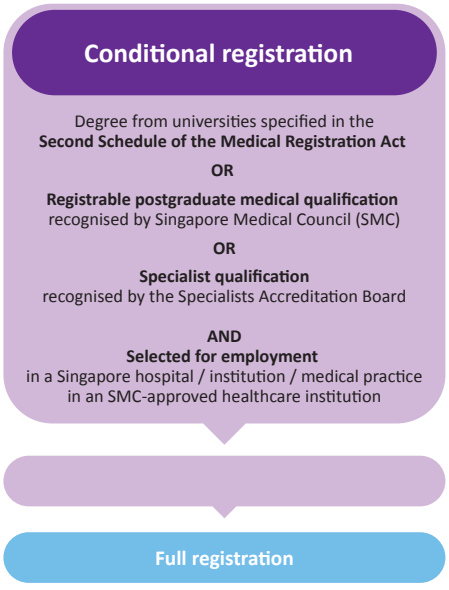
-- Licensing Examination is not a mandatory requirement --

Example: Types of registration for non-locally trained doctors in Australia



-- Licensing Examination is not a mandatory requirement --

Example: Types of registration for non-locally trained doctors in Singapore



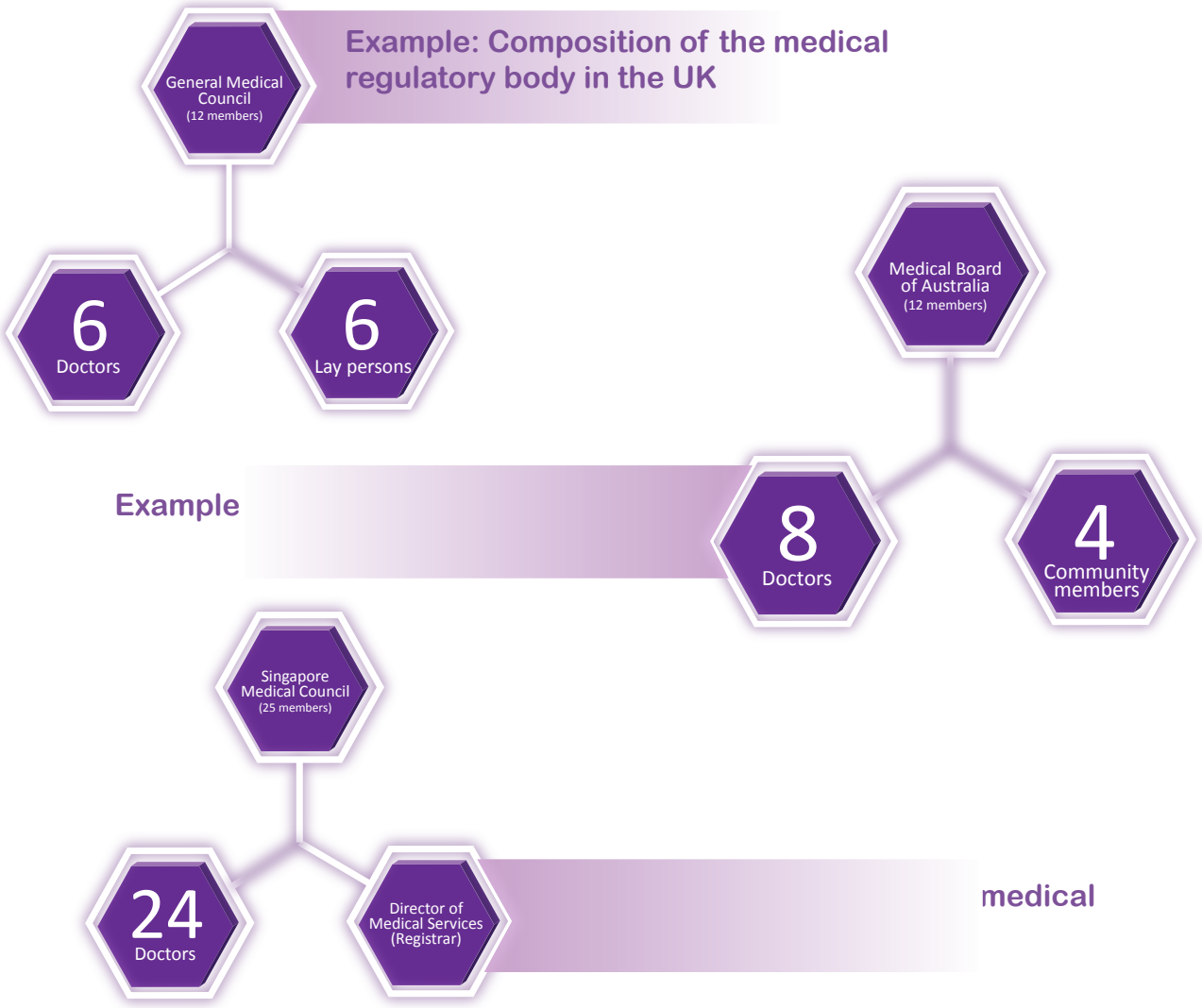
158 qualifications from jurisdictions specified in the Second Schedule of the Medical Registration Act

Australia	11	Malaysia	2
Austria	2	Netherlands	4
Belgium	1	New Zealand	2
Canada	14	Norway	1
Denmark	1	Pakistan	1
Finland	1	Mainland China	8
France	2	South Korea	3
Germany	4	Spain	2
Hong Kong	2	Sri Lanka	1
India	9	Sweden	3
Ireland	5	Switzerland	5
Israel	2	Taiwan	2
Italy	2	UK	22
Japan	8	USA	38

-- There is no licensing examination in Singapore--

4.3.3 Lay representation in regulatory bodies

4.3.3.1 There is a global trend for more openness and accountability, including greater involvement of lay persons in regulatory bodies. In the UK, half of membership of the regulatory bodies are made up of lay persons, and in Canada, Australia and New Zealand, lay persons comprise one-third of the membership in regulatory bodies. In Singapore and Malaysia where strong government oversight is in place, there is no lay membership in the regulatory bodies.



4.3.4 Continuing professional development

4.3.4.1 Continuing professional education and development is essential to ensure the continuing competency of healthcare professionals amidst advancement in medicine and medical technologies. It has become an international norm for continuing professional development requirements to be made compulsory for healthcare professionals in order to maintain professional competence. Further measures to help uphold professional standards such as revalidation and recertification are also developing in some jurisdictions such as the US, the UK, Canada and New Zealand.

Example: Revalidation and credentialing in the UK

Revalidation

- Revalidation is the process by which all licensed doctors are required to demonstrate on a regular bais that they are up to date and fit to practice in their chosen field and able to provide a good level of care. Revalidation aims to give extra confidence to patients that their doctor is being regularly checked by their employer and the General Medical Council (GMC).

- Revalidation started on 3 December 2012. All licensed doctors must revalidate, usually every five years.

- GMC revalidates licensed doctors based on a recommendation received from the Responsible Officer who is usually the medical director or their deputy, of that organisation. A Responsible Officer can make one off three recommendations. They can:
  - make a recommendation that the doctor is up to date, fit to practice and should be revalidated.
  - make a deferral recommendation because they need more information to make a recommendation about the doctor. This might happen where there is insufficient evidence to support a recommendation about the doctor's fitness to practise or where the doctor is participating in an ongoing process locally.
  - make a non-engagement recommendation because the doctor has failed to engage with any of the local systems or processes (such as appraisal) that support revalidation.

- Between 3 December 2012 and 30 November 2016, GMC has withdrawn 3 413 licences from doctors who have failed to engage with revalidation.

Credentialing

- GMC in considering a new process called credentialing to recognise doctors' capabilities in particular those that are not currently covered by specialty training. The main purpose of this new framework will be to protect patients and make sure that future healthcare developments are safe and effective.

- The purpose of credentialing is to enhance medical regulation and patient protection by:
  - Providing a framework of standards and accreditation in areas where regulation is limited or absent.
  - Providing patients with information about doctors' particular capabilities and current areas of competence.
  - Providing recognition of the capabilities of doctors to assure the public, service providers, commissioners and employers that they have met and are maintaining UK standards in their field.
  - Providing better recognition of doctors' capabilities to support improvements in workforce flexibility and professional mobility as well as any new architecture for postgraduate medical education arising from the Shape of Training review.

Example: Continuing professional development and revalidation in Australia

Continuing Professional Development (CPD) and Revalidation

- All registered medical practitioners (excludes practitioners with non-practising registration) are required to participate regularly in CPD that is relevant to their scope of practice.
- All medical practitioners will be required to make a declaration that they have met the standard and have completed the necessary CPD when they apply for renewal of registration.
- The Medical Board of Australia is cosidering how best to ensure medical practitioners maintain and enhance their professional skills and knowledge and remain fit to practise medicine through revalidation. It is seeking expert advice, as well as feedback from the profession and the community, about the best way to do this in a way that is practical, effective and tailored to the Australian healthcare environment.

Example: Continuing medical education in Singapore

Compulsory Continuing Medical Education (CME)

- Since 1 January 2005, all fully and conditionally registered doctors renewing their practising certificates (PCs) are required to meet the compulsory CME requirements for their CME qualifying period(s) before their PCs are renewed.

4.3.5 Disciplinary mechanism

4.3.5.1 The investigatory and disciplinary functions in a regulatory body are separated and organised independent of each other in some jurisdictions (such as the UK and Australia), so as to reduce possible conflict of interests in detecting and dealing with poor performance and enhance impartiality with the ultimate aim of increasing public accountability.

Example: Complaint investigation and disciplinary inquiry mechanism of the UK

General Medical Council (GMC) and Medical Practitioners Tribunal Service (MPTS)

GMC

- Investigates and acts on concem about doctors, refer cases requiring inquiry to MPTS

MPTS

- Adjudication function
- Managing-
  1. Medical practitioners tribunal hearings
  2. Interim orders tribunal hearings
     (suspend or restrict a doctor's practice while the investigation continues, if it is necessary for the protection of the public)
- Though accountable to GMC, fully independent in its decision making and separate from the investigatory role of GMC
- Annual report to the Parliament

Example: Complaint investigation and disciplinary inquiry mechanism of Australia

Australian Health Practitioner Regulation Agency (AHPRA), Medical Board of Australia (MBA), Tribunals

AHPRA

- AHPRA receives complaints (notifications) about doctors on behalf of the National Boards (including MBA)
- MBA will appoint an investigator via AHPRA to conduct investigation into the complaint

MBA

- As a result of an investigation, MBA may, among others, conduct panel hearings and refer serious matters to Tribunal for hearings

Tribunals

- There are tribunals in each state and territory and the Board must refer a matter to the tribunal in the state or territory where the behaviour occurred

STATE/TERRITORY	TRIBUNALS
New South Wales	Civil and Admininistrative Tribunal
Australian Capital Territory	Civil and Admininistrative Tribunal
Northern Territory	Civil and Admininistrative Tribunal
Queensland	Civil and Admininistrative Tribunal
South Australia	Health Practitioners Tribunal
Tasmania	Health Practitioners Tribunal
Victoria	Civil and Admininistrative Tribunal
Westem Australia	State Admininistrative Tribunal

Example: Complaint investigation and disciplinary inquiry mechanism of Singapore

Singapore Medical Council (SMC) and its Complaint Investigation and Disciplinary Inquiry Mechanism

SMC receives a compliant

↓

Refer to Chairman of the Complaints Panel

↓

Chairman of Complaints Panel appoints a Complaints Committee to inquire into the complaint

↓

Complaints Committee to appoint investigator to investigate the complaint

↓

Complaints Committee's deliberation and decision

→

Decisions of Complaints Committee

- Dismiss the matter
- No investigation is neccessary
  - issue a letter of advice / letter of warning
  - make order (training, report on physical/mental fitness/seek and take advice from specifiedd person)
  - by agreement with doctors: remove from register, suspend the registration/ change registration status/impose conditions on registration
- Refer the matter for mediation
- Refer to formal inquiry by a Disciplinary Tribunal or Health Committee

↓

If Complaints Committee considers that a format inquiry held by a Disciplinary Tribunal is neccessary

↓

SMC to appoint a Disciplinary Tribunal for conducting formal inquiry

Composition

- > 10 members of SMC ("Council member Panelist")
- > 10 and ≤ 100 doctors of at least 10 years' standing ("Doctor Panelist")
- > 6 and ≤ 50 lay persons nominated by Minister ("Lay Panelist")
- Chairman and Deputy Chairman are SMC members

Complaints Committee
(appointed by Chairman of Complaints Panel)

Composition

- 3 members (drawn from Complaints Panel)
- 1 Chairman: Council member Panelist
- 1 Member: Doctor Panelist
- 1 Member: Lay Panelist

Disciplinary Tribunal
(appointed by SMC)

Composition

- **Chairman (from a panel appointed by Minister) who is a/an**
  - Doctor with ≥ 20 years experience; or
  - Judge/Judicial Commissioner of Supreme Court; or
  - Advocate/Solicitor with ≥15 years experience; or
  - Officer in Singapore Legal Services
- **2 Doctor Panelists**
- **1 Lay observer/1 non-doctor chairman canadiate** as a member (if the tribunal chairman is a doctor)

4.3.6 Source of funding

4.3.6.1 Regulatory bodies in some jurisdictions (such as the UK, the US, Canada, Australia and New Zealand) covered by the study operate on a self-financing basis through fees and charges paid by professionals. Others are funded by the government.

4.3.7 Regulatory reform

4.3.7.1 The CUHK study finds that many jurisdictions are undergoing regulatory reforms with an aim to better protect patients' rights, ensure patient safety and improve quality of care. This is often a continuing evolutionary process affected by –

(a) changing public expectations in respect of participation in healthcare practice and governance;

(b) an increasing public desire for increased transparency; and

(c) call for greater accountability triggered by incidents.

4.3.7.2 In reforming the regulatory frameworks, legislative change often plays an important part. For example, in Australia, umbrella legislation is created to ensure consistency in the regulation of different professions. Umbrella organisations e.g. AHPRA are being created to bring commonality to values and processes among professions.

AUSTRALIAN HEALTH PRACTITIONER REGULATION AGENCY (AHPRA)

AHRPA

- Governed by the Health Practitioner Regulation National Law, as in force in each state and territory
- 14 health professions are regulated by nationally consistent legislation under the National Registration and Accreditation Scheme
- AHPRA supports the 14 National Boards that are responsible for regulating the health professions
- Each Board has entered into a health profession agreement with AHPRA which sets out the fees payable by health practitioners, the annual budget of the Board and the services provided by AHPRA

4.3.7.3 There are different types of regulation in the jurisdictions under study, including self-regulation, co-regulation with public and regulation with strong government oversight. The government plays a relatively stronger role in Asian jurisdictions such as Singapore and Malaysia while institutional regulators play a greater role in regulating the healthcare professions in some western jurisdictions such as the UK, Australia and New Zealand.

It is observed that increasingly healthcare professional regulation is moving away from the premise of self-regulation of the profession to protect its own interests to one of co-regulation in partnership with the public to better protect the public interest. In addition, jurisdictions are looking for ways to enhance oversight of regulatory bodies. A comparison of the regulatory framework in Hong Kong and that in other jurisdictions is set out in **Annex 4.**

Figure 4.12 Regulation of Healthcare Professions

	Hong Kong	International Trend
Admission of non-locally trained healthcare professionals	Passage of licensing examinations (as the case may be), with internship requirement for medical profession	Availability of a recognised list of qualified overseas institutions
Lay representation in regulatory bodies	Relatively low proportion of lay members in regulatory bodies	Increasing proportion of lay members in regulatory bodies
Mechanism for ensuring continuing competency	Voluntary CPE/CPD (except in the cases of CMPs, medical and dental specialists)	Compulsory CPE/CPD for most professionals; revalidation/re-certification being introduced in some jurisdictions as an additional safeguard
Complaints investigation and disciplinary inquiry mechanism	Investigatory and disciplinary functions performed by regulatory bodies	Investigatory and disciplinary functions independent of the regulatory body
Source of funding	Government-funded	Funded by professionals themselves

4.4 Profession-specific Issues

4.4.1 The study commissioned to CUHK, in particular the SWOT analysis conducted with the participation of healthcare professionals, has brought to light issues and concerns pertaining to regulation and development of each profession. It is noted that there is call for changes from healthcare professionals, in particular, nurses, CMPs, pharmacists and other allied health professionals, to enhance their functions and make better use of their expertise in order to better serve the need of the society and advance their professional development. Some healthcare professionals are making efforts to develop specialist education and accreditation on a voluntary and administrative basis, with the vision that this would eventually result in a well-established framework for the training, recognition, and practice of specialists. These issues and views of the professions are summarised below.

DOCTORS

Urgency to Improve the Complaint Handling and Disciplinary Inquiry Mechanism of MCHK

- Strong and almost unanimous call for improving the complaint investigation and disciplinary inquiry mechanism so that cases could be concluded within a reasonable period
- Clear call for increasing lay participation in MCHK
- Strong and divergent views over the proposed change to the composition of MCHK during the deliberations and debates on the Medical Registration (Amendment) Bill 2016. More engagement and communication to promote understanding and hopefully narrow differences among parties with different views
- Mediation has long been made use of outside the context of MCHK for resolving medical disputes. Exploration of the feasibility of introducing mediation as part and parcel of MCHK's complaint investigation and disciplinary inquiry mechanism

Manpower Projection for Specialist Doctors

- Suggestion for conducting manpower projection for doctors in different specialities for better manpower planning

DENTISTS

Non-locally Trained Dentists

- Introduction of a limited registration mechanism similar to that for doctors to facilitate qualified non-locally trained professional to practise dentistry in Hong Kong for teaching, research and hospital work under prescribed conditions, and abolishment of the "deemed-to-register" arrangement upon the introduction of limited registration[28]

- Introduction of temporary registration for persons employed/invited for clinical teaching, research or academic exchange

Specialist Training

- Ensuring continuous provision of quality specialist training for dentists in Hong Kong so that our dental profession can acquire core competencies to deliver professional dental healthcare

Manpower Projection for Specialist Dentists

- Suggestion for conducting manpower projection for dentists in different specialities for better manpower planning

DENTAL HYGIENISTS

Review of Relevant Regulation

- Consideration of amending the legislation[29] regulating dental hygienists to, among others, establish a statutory registration system for dental hygienists and a statutory disciplinary framework in order to safeguard professional conduct of dental hygienists and protect patients' interests

Role of Dental Hygienists

- Review on the scope of work of dentral hygienists

- Exploration of the possibility of enhancing the role of dental hygienists

Regulation of Other Ancillary Dental Workers

- Views that other ancillary dental workers including dental therapists and dental surgery assistants under the Dentists Registration Ordinance (Cap. 156) should be regulated

[28] Under Dentists Registration Ordinance (Cap. 156), there is a "deemed-to-register" arrangement for dentists recruited from overseas for the purpose of teaching and performing hospital work in the Faculty of Dentistry of HKU. These registrants are not subject to disciplinary action under the Dentists Registration Ordinance.

[29] The subsidiary legislation, Ancillary Dental workers (Dental Hygienists) Regulations, of the Dentists Registration Ordinance (Cap. 156) empowers DCHK to provide enrolment and regulation of dental hygienists. A roll of enrolled dental hygienists is maintained by the Council.

NURSES

Elected Members of NCHK

- Strong call to introduce elected members in NCHK as provided by the Nurses Registration (Amendment) Ordinance 1997 as soon as possible

Development of Nursing Practice Specialisation

- Recognition of the pivotal role played by nurses in revitalising healthcare systems through advanced nursing practice and enhanced clinical specialties. Specialisation in nursing is an important milestone in the professionalisation of the nursing profession. The Hong Kong Academy of Nursing was established in 2011 to provide structured training and promote professional development of nurse specialists and advanced practice. The Government has set up a task force with wide participation from the nursing profession to look into the critical issues concerning specialisation of nursing practice in order to map out the way forward, with the ultimate goal of putting in place a legal framework on nursing specialisation in the long term

CHINESE MEDICINE PRACTITIONERS

Non-locally Trained CMPs

- Views over the increasing number of Hong Kong people studying Chinese Medicine in the Mainland, with consequential implication for the supply of CMPs in future

- Views that the rigour and adequacy of licensing examination as well as the need for local internship (which is not required as of now) should be critically reviewed, in order to ensure the quality and standard of non-locally trained CMPs

Development of Practice Specialisation and Specialist Registration

- Establishment of a statutory specialist registration system for CMPs, and credentialing of the specialist qualification. The Chinese Medicine Development Committee (CMDC) was established in February 2013 to focus on the study of four major areas, namely the development of Chinese Medicine services, personnel training and professional development, development of scientific research and development of the Chinese Medicine industry (including Chinese Medicine testing). To tie in with the development of the Chinese Medicine hospital and enhance the level of Chinese Medicine services, the Government has started to explore with CMDC on the way forward of the development of Chinese Medicine specialisation. The Chinese Medicine Practice Sub-committee, set up under CMDC, is studying the issue and will maintain communication with the profession, and make recommendations to the Government in due course

Separation of Regulation of CMPs and Chinese Medicine

- Views that CMPs, who are now regulated under the same roof as Chinese Medicine, should be regulated separately as a profession under another piece of legislation

Roles and Functions of CMPs

- In the course of studying on how to strengthen the cooperation of Chinese and Western medicine, comments from different parties should be considered, including views that CMPs should be empowered to prescribe common imaging and laboratory tests such as x-ray for their patients, and also to make direct referrals to allied health professionals

PHARMACISTS

Non-locally Trained Pharmacists

- Views that the rigour and adequacy of licensing examination as well as the need for local internship (which is not required as of now) should be critically reviewed

Regulation of Pharmacists

- Differing views on establishment of a separate regulatory body -
  - Pharmacists should be regulated as a profession on par with the statutory arrangement for other healthcare professions such as doctors, dentists and nurses, and that a separate Pharmacy Council should be set up as a long-term goal rather than having pharmacists regulated as of now under the same statutory umbrella for pharmaceutical trade, drugs and poisons. Establishment of a separate regulatory body would contribute positively towards branding of the profession and promoting the use of pharmacy service by the general public
  - It is not necessary to set up a Pharmacy Council as PPBHK is effective in regulating the profession and setting up a separate regulatory body is merely one of the many measures to enhance the role and contribution of pharmacists
  - Some small and medium enterprise community pharmacists are worried that their interests might not be well looked after if a separate regulatory body is set up

Seperation of Regulation of Pharmacists and Drugs

- Views that pharmacists, who are now regulated under the same roof as drugs, should be regulated separately as a profession under another piece of legislation

Enhanced Roles for Pharmacists

- In view of the expansion of local supply of pharmacists and having regard to overseas experience, pharmacists should take up an enhanced role in the provision of healthcare services, particularly in HA. For instance, clinical pharmacists should gradually be integrated into the clinical care team and to provide outpatient consultations along the patient care path in various clinical areas e.g. oncology, pediatrics and chronic diseases management in HA. In addition, HA may enhance its provision of drug refill services through deploying more pharmacists to provide medication advice to high risk patients with long duration of prescriptions. This can help enhance medication safety and reduce drug wastage

ALLIED HEALTH PROFESSIONALS

OCCUPATIONAL THERAPISTS

PHYSIOTHERAPISTS

MEDICAL LABORATORY TECHNOLOGISTS

OPTOMETRISTS

RADIOGRAPHERS

Functions of Supplementary Medical Professions Council and its Boards

- Views that the set-up of SMP Council and its statutory Boards, which currently overseeing the five professions including OTs, PTs, MLTs, radiographers and optometrists, should be reviewed

- There is no perfect model of the set-up of statutory regulatory body and each model has its merits

Composition of SMP Council and its Statutory Boards

- Views that allied health professionals should be given a presiding role in their own regulatory Boards[30]

Non-locally Trained Allied Health Professionals

- Views that the current assessment[31] system should be reviewed and the feasibility of introducing a universal registration examination for assessing a person's

[30] Currently, the chairmanship of SMP council and five Boards are taken up by persons who are not a member of its respective professions.

[31] Currently, the individual Boards under SMP Council set the requirement for non-locally trained healthcare professionals, taking into account the circumstances of each discipline.

qualification for registration should be explored

Enhanced Role in Primary Care

- Enhancement of the role of the five professions in the provision of primary care, including increasing the multi-disciplinary element in the healthcare service delivery model

- Views that there should be stream/specialty in the registration of MLTs

CHIROPRACTORS

Request for Provision of Local Training Programme and Public Chiropractic Services

- Views that there should be local chiropractic training programme in Hong Kong

- Views that HA should introduce chiropractic service

Introduction of Universal Registration Examination

- Views that there should be a universal registration examination

CHAPTER 5
Strengthening the Healthcare Workforce: Recommendations and Implementation

5.1 General Observations - Healthcare Manpower

5.1.1 As our society ages, there is more demand for healthcare services. Technological advancement and higher expectation for healthcare services have added to the ever-increasing demand. There is a need for more healthcare professionals to cope with the challenges. However, healthcare training is costly and takes years to complete while demand, in particular those of the private sector, could fluctuate for reasons that could not have been fully and accurately captured by a projection model no matter how sophisticated it is.

5.1.2 Furthermore, for a dual-track healthcare system with a vibrant private sector, demand fluctuation in the short to medium term could be met, partly if not fully, through increased productivity among healthcare professionals in private practice. Innovation in healthcare practices would also have the effect of changing the demand on healthcare professionals in general or a particular type of healthcare professional.

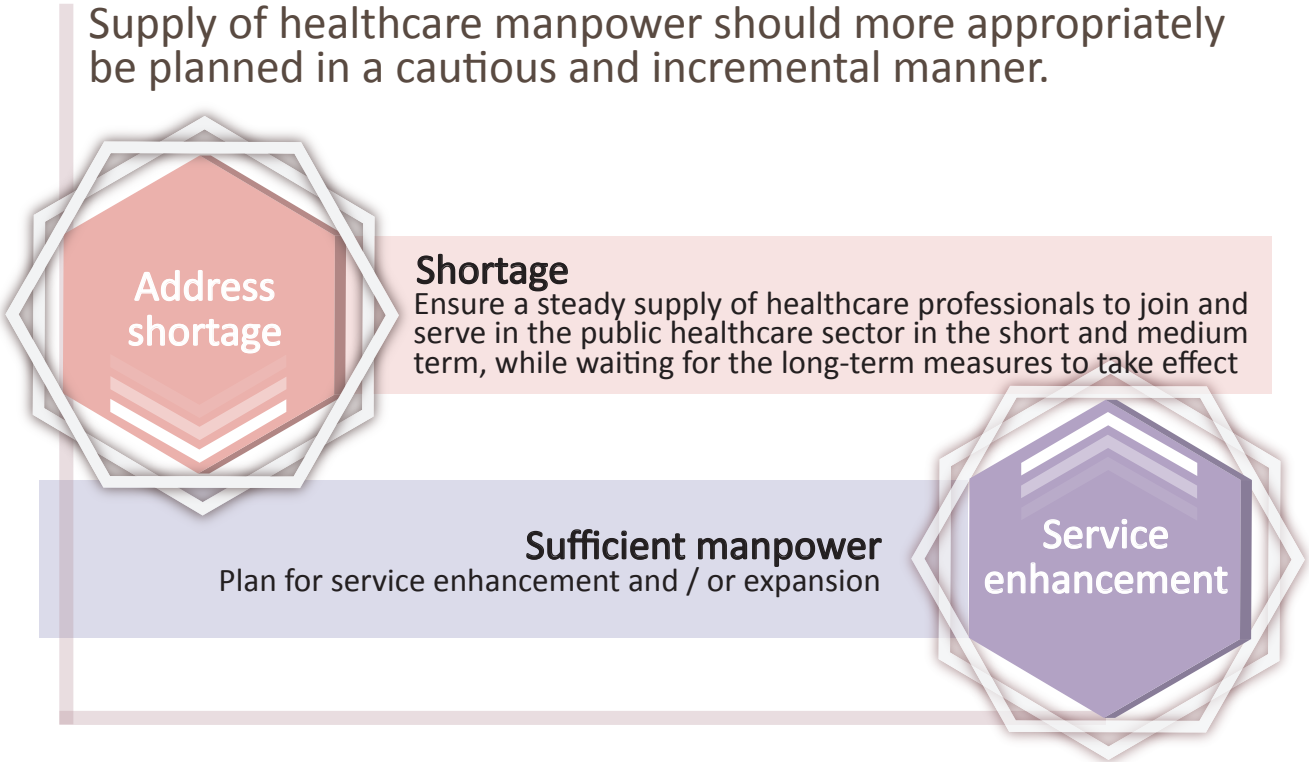
Figure 5.1 Factors affecting manpower projections

5.1.3 In the light of the complex dynamism between supply and demand, the Steering Committee considers that the supply of healthcare manpower should more appropriately be planned in a cautious and incremental manner.

5.1.4 The provision of healthcare services depends on the supply of healthcare professionals. If a shortage is likely to persist for a prolonged period, it is necessary to ensure a steady supply of healthcare professionals to join and serve in the public healthcare sector in the short and medium term, while waiting for the long-term measures to take effect.

5.1.5 If sufficient manpower is expected for a particular profession, this may not necessarily call for supply adjustment. It may instead enable us to plan for service enhancement and/or expansion. With a more accommodating manpower supply situation in various professions, the public healthcare system and social welfare sector would have greater room and flexibility to make service plans and implement new or improved delivery models to cope with the needs and challenge of our ageing society.

Figure 5.2 Manpower gap: interpretation



Efforts in meeting healthcare manpower demand

5.1.6 In light of a growing and ageing population, the provision of healthcare services has been expanding and it is noted that there is a general shortage of healthcare manpower to meet the service demand.

Increasing training places over the past ten years

5.1.7 The Government has already increased UGC-funded training places for doctors, nurses, pharmacists, and allied health professionals since the 2009/10 triennium. Details are as follows.

Figure 5.3. Number of first-year-first-degree UGC-funded training places

Healthcare Professions	2005 / 06 - 2008 / 09	2009 / 10 - 2011 / 12	2012 / 13 - 2015 / 16	2016 / 17 - 2018 / 19
Doctors	250	320	420	470
Dentists	50	53	53	73
Registered Nurses (General)	518 - 550 for both streams	560	560	560
Registered Nurses (Psychiatric)		30	70	70
Registered CMPs	79	79	79	79
Pharmacists	30	50	80	90
OTs	40	46	90	100
PTs	60	70	110	130
MLTs	35	32	44	54
Optometrists	35	35	34	40
Radiographers	35	48	98	110

5.1.8 The increase in UGC-funded training places has boosted the supply of healthcare professionals and met part of the manpower demand. Particularly, the increase in the number of UGC-funded pharmacy training places provides relief to pharmacists manpower, in which we have resorted to non-local source in the past. Other professions including doctors, dentists, nurses, OTs, PTs, MLTs, optometrists and radiographers are facing manpower shortage as the increase in manpower supply falls behind demand growth. For CMPs, the number of UGC-funded training place remains stable for the past ten years given our stable supply of listed and registered CMPs.

5.1.9 As it takes time to train healthcare professionals and there is also limitation to the UGC-funded tertiary institutions to increase its training capacity in the short-to-medium term because of infrastructure constraints, the existing manpower gaps in various healthcare professions cannot be addressed simply through increasing publicly-funded training places.

Figure 5.4 Training period of healthcare professionals

Healthcare Professions	Years of Study (Year of Internship before getting registration)
Doctors[32]	6(1)
Dentists[32]	6
Dental Hygienists	2
Registered Nurses	5
Enrolled Nurses	2
Registered CMPs	6
Pharmacists	4(1)
OTs	4
PTs	4
MLTs	4
Optometrists	5
Radiographers	4

[32] It takes at least another six years to obtain a specialist qualification.

Self-financing sector

5.1.10 To meet the manpower shortage, the self-financing sector has taken on a bigger role over the years.

5.1.11 For example, there was a substantial increase in the training capacity in the self-financing sector for nurses, including -

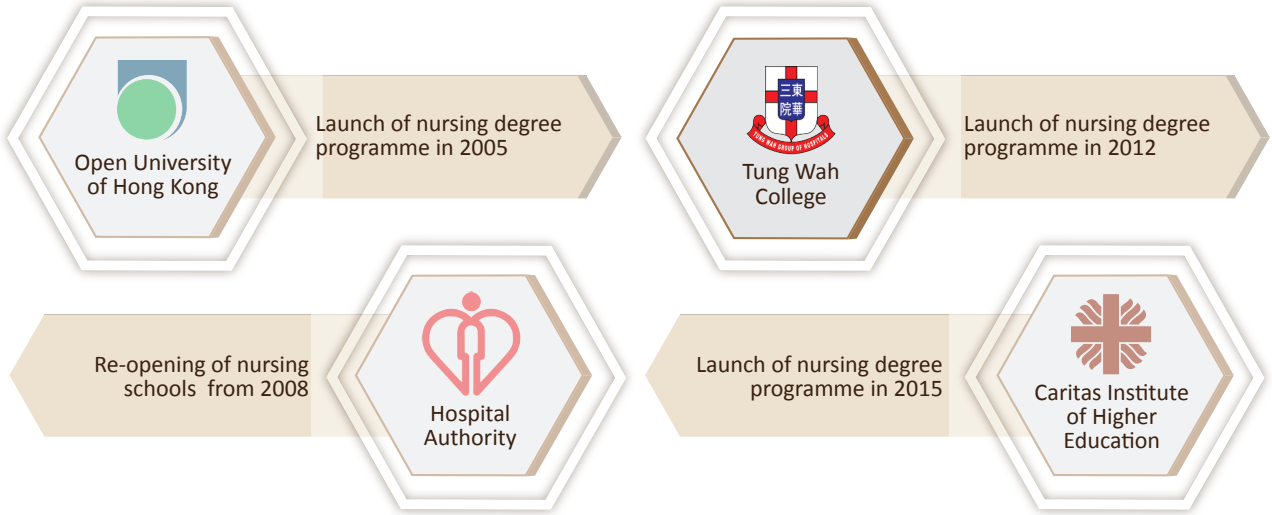
(a) Launch of nursing degree programme offered by OUHK in 2005;

(b) HA's re-opening of its own nursing schools in 2008;

(c) Launch of nursing degree programme offered by TWC in 2012; and

(d) Launch of nursing degree programme offered by Caritas in 2015.

Figure 5.5 Increase in the training capacity for nurses in self-financing sector

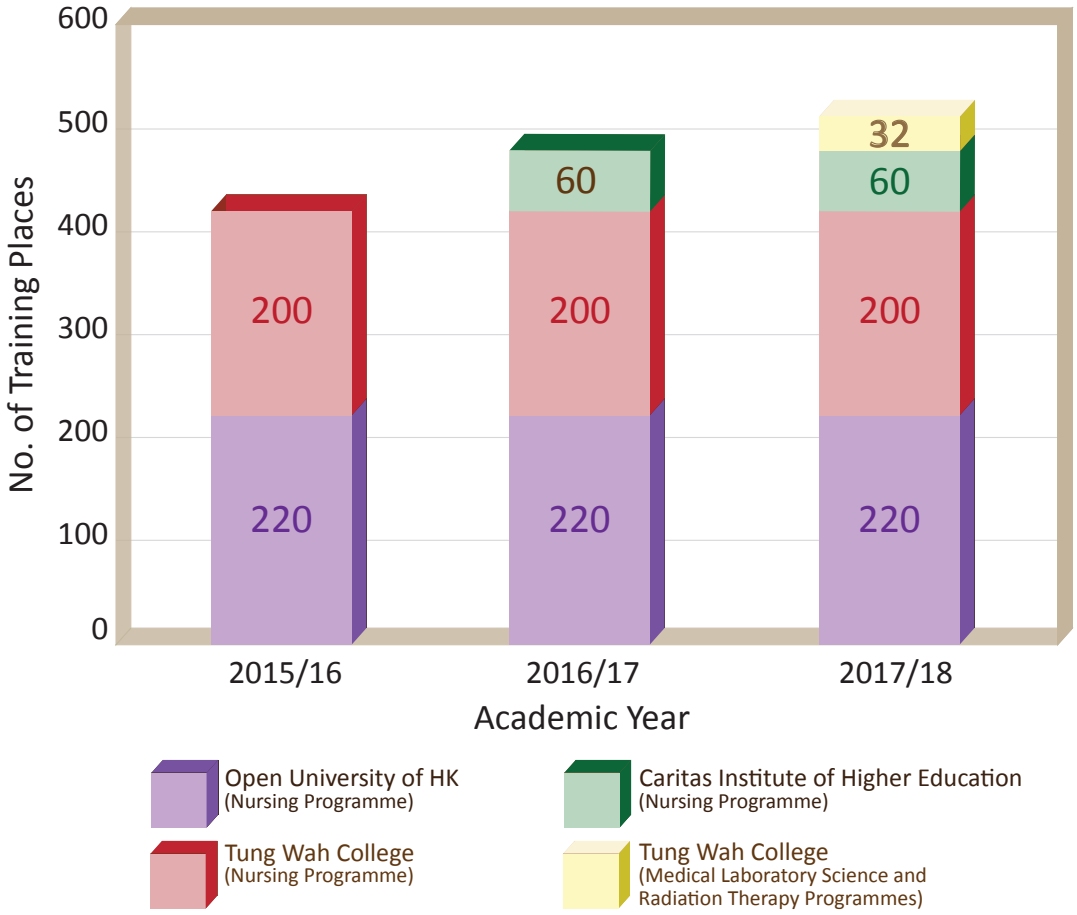


5.1.12 SSSDP[33] subsidised a total of 420 nursing training places for the 2015/16 cohort; and the number of subsidised places further increased to 480 for the 2016/17 and 2017/18 cohorts, leveraging on the supply of the self-financing sector to help ease the shortage of nurses in the market.

5.1.13 The self-financing sector has also started to offer courses in some of the allied health professions (such as occupational therapy, medical laboratory science and radiation therapy). SSSDP subsidises another 32 places of the medical laboratory science and radiation therapy programmes offered by TWC for the 2017/18 cohort. The trend of a growing self-financing sector complementing the public-funded institutions in providing local healthcare training is becoming more prevalent and mature.

[33] SSSDP was a pilot scheme announced in the 2014 Policy Address to subsidise about 1 000 students per cohort to pursue designated full-time locally-accredited self-financing undergraduate programmes in selected disciplines for three cohorts of students admitted in the 2015/16 to 2017/18 academic years.

Figure 5.6 Number of subsidised healthcare training places under SSSDP



5.1.14 Healthcare professions with demand mainly coming from the private sector are more susceptible to the fluctuation of economic cycle. The Steering Committee considers that providing **a steady stream of locally trained graduates with a mix between UGC-funded and, where applicable, self-financing training places would be the most effective way of maintaining the supply for these professionals. Locally trained graduates should be the primary source of supply, supplemented as necessary by qualified non-locally trained ones through established mechanism in the short term.**

5.2 Recommendations - Healthcare Manpower

RECOMMENDATION 1

LOCAL SOURCE -
PUBLICLY-FUNDED HEALTHCARE TRAINING

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

5.2.1 The Steering Committee considers that locally trained healthcare professionals should continue to be the bedrock of our healthcare workforce. To meet the increasing demand for healthcare services, the Steering Committee recommends that the Government should consider increasing the number of UGC-funded training places for those professions which will still be facing manpower shortage in the medium to long term.

RECOMMENDATION 2

LOCAL SOURCE –
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, notably nurses, OTs, PTs, MLTs, optometrists and radiographers and provide the necessary support to the self-financing sector in terms of infrastructural and funding support.

The Government should continue to subsidise the pursuit of study in those healthcare disciplines facing manpower shortage as appropriate, in particular, in the allied health disciplines, under SSSDP with a view to sustaining the healthy development of the self-financing tertiary education sector to complement the UGC-funded sector in broadening and diversifying study opportunities.

5.2.2 At present, there are two medical schools (i.e. HKU and CUHK), one dental school (i.e. HKU), and one UGC-funded university for training allied health professionals (i.e. PolyU). UGC-funded places are costly and usually require a long planning horizon. There is also limitation to their capacity for expansion in the short-to-medium term because of infrastructural constraints.

5.2.3 Tertiary institutions should and could help meet part of our healthcare manpower needs through a wider and greater provision of self-financing training programmes. The Steering Committee notes that OUHK, TWC, PolyU, Caritas and HKU SPACE are heading towards this direction.

5.2.4 The Steering Committee recommends that the Government should make better use of

the self-financing sector to help meet part of the increasing demand for healthcare professionals, in particular **nurses, OTs, PTs, MLTs, optometrists and radiographers**, and provide necessary support to the self-financing sector in terms of infrastructural and funding support.

5.2.5 The availability of self-financing programmes for nurses and allied health professionals could provide more flexibility to meet changes in demand. These programmes produce graduates who may have greater incentive to work in sectors, such as social welfare organisations, which have hitherto experienced difficulties in recruitment. The nursing profession is the first healthcare profession with a strong and vibrant self-financing training capacity. Its experience shows that with the active participation of the self-financing sector, shortage in nurses could be addressed effectively within a reasonable period of time.

5.2.6 In order to nurture talents to meet our social and economic needs, the Government has decided to regularise SSSDP from the 2018/19 academic year to subsidise students to undertake designated self-financing undergraduate programmes. The number of subsidised places will be increased from about 1 000 per cohort to 3 000. Current students of the designated programmes will also receive the subsidy from the 2018/19 academic year. It is expected that about 13 000 students will benefit from the scheme each academic year.

5.2.7 The Steering Committee recommends that the Government should continue to subsidise the pursuit of study in those healthcare professions facing manpower shortage as appropriate, in particular, in the allied health professions, with a view to sustaining the healthy development of the self-financing tertiary education sector to complement the UGC-funded sector in broadening and diversifying study opportunities.

RECOMMENDATION 3

HEALTHCARE MANPOWER IN THE PUBLIC SECTOR

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 through limited registration more proactively.

Retaining doctors to work in HA

5.2.8 The Steering Committee recommends that to address manpower shortage in the short to medium term, more proactive measures should be adopted by HA to attract and retain healthcare professionals including doctors in the public sector. This would provide relief to the shortage of doctors in HA.

Recruiting non-locally trained doctors through limited registration

5.2.9 In a bid to alleviating manpower shortage, HA should continue to recruit non-locally trained doctors through limited registration. The Government introduced an amendment bill into LegCo to amend MRO to extend the validity period and renewal period of limited registration from not exceeding one year to not exceeding three years. Subject to the passage of the Bill, this will help HA recruit more non-locally trained doctors through limited registration to ease its doctor shortage problem in the short term.

5.2.10 The Steering Committee considers that while measures should be taken to facilitate experienced non-locally trained doctors to come and practise in Hong Kong, the quality and competency level of these doctors should not be compromised. MCHK should continue to be entrusted to uphold the professional standards of doctors in order to safeguard patient safety and interest in Hong Kong.

RECOMMENDATION 4

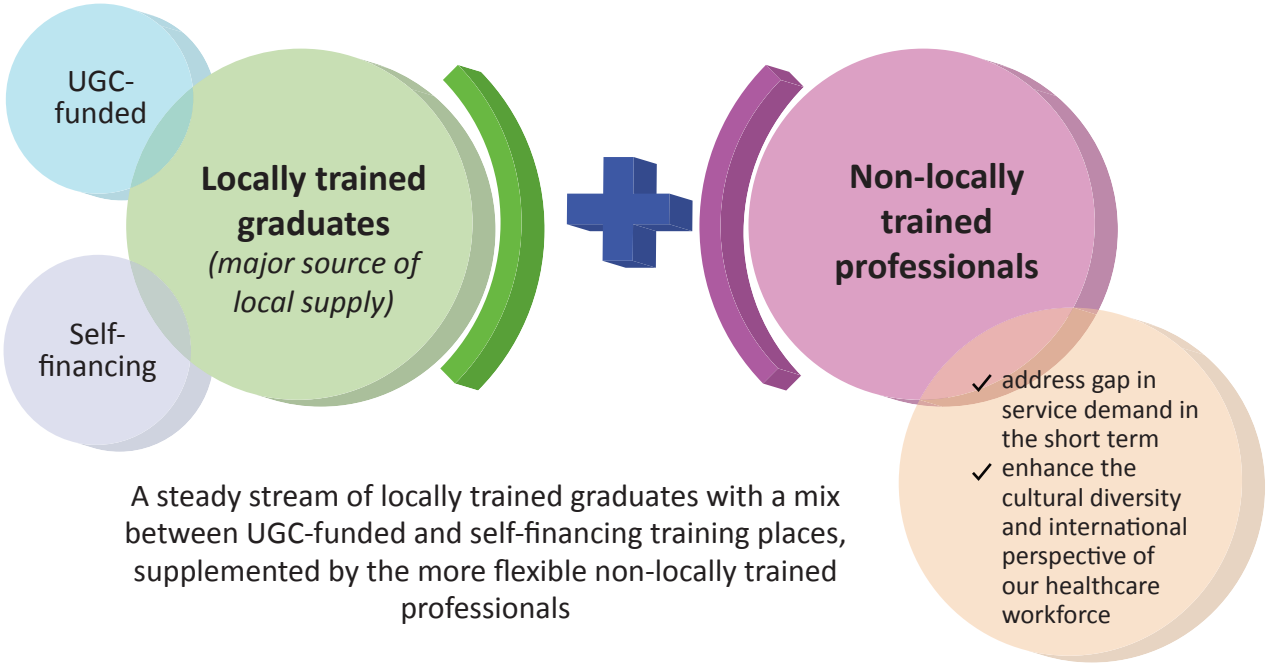
NON-LOCALLY TRAINED HEALTHCARE PROFESSIONALS

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 publicise the registration arrangements overseas with targeted and proactive recruitment drive to facilitate non-locally trained healthcare professionals, many of whom are Hong Kong citizens or have deep roots here, to come to Hong Kong to practise.

5.2.11 While locally trained healthcare professionals should be the primary source of supply, they should be supplemented as necessary by qualified, non-locally trained ones through established mechanism in the short term.

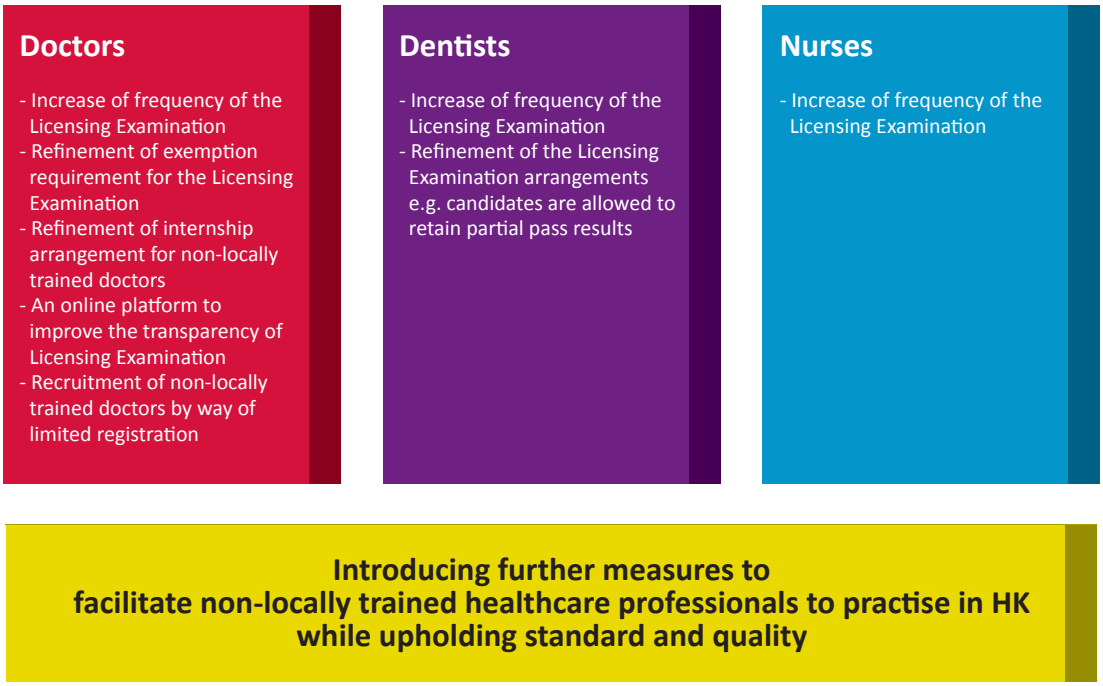
Figure 5.7 Sources of manpower supply in Hong Kong



A steady stream of locally trained graduates with a mix between UGC-funded and self-financing training places, supplemented by the more flexible non-locally trained professionals

5.2.12 There are avenues for non-locally trained healthcare professionals to practise in Hong Kong. For those professions where full registration is granted to non-locally trained professionals through licensing examinations, the Steering Committee notes that MCHK, DCHK and NCHK have increased their frequency of licensing examinations and, where appropriate, introduced more flexibility for internship arrangement.

Figure 5.8 Measures taken to facilitate non-locally trained healthcare professionals to practise in Hong Kong



5.2.13 As for allied health professions, non-locally trained professionals could gain full registration without licensing examination through recognised qualifications in general. There is, thus, no need to increase the frequency of the relevant licensing examinations which often attract a small number of candidates.

5.2.14 However, where there is shortage of local supply, the Steering Committee recommends that more efforts should be made to publicise 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. For instance, it is noted that the Government led a delegation, with the participation of various social welfare institutions in Hong Kong, to the UK in November 2016 to attract and recruit healthcare professionals (in particular OTs and PTs) to work in Hong Kong. More efforts should be put on attracting non-locally trained professionals through the Government's economic and trade offices overseas.

5.2.15 For pharmacists and chiropractors, it is noted that non-locally trained healthcare professionals account for an important source of manpower supply in Hong Kong. As for CMPs, the trend of HK students studying Chinese Medicine in the Mainland needs attention and close monitoring of its consequential impact on the overall supply of CMPs in Hong Kong in the years to come.

RECOMMENDATION 5

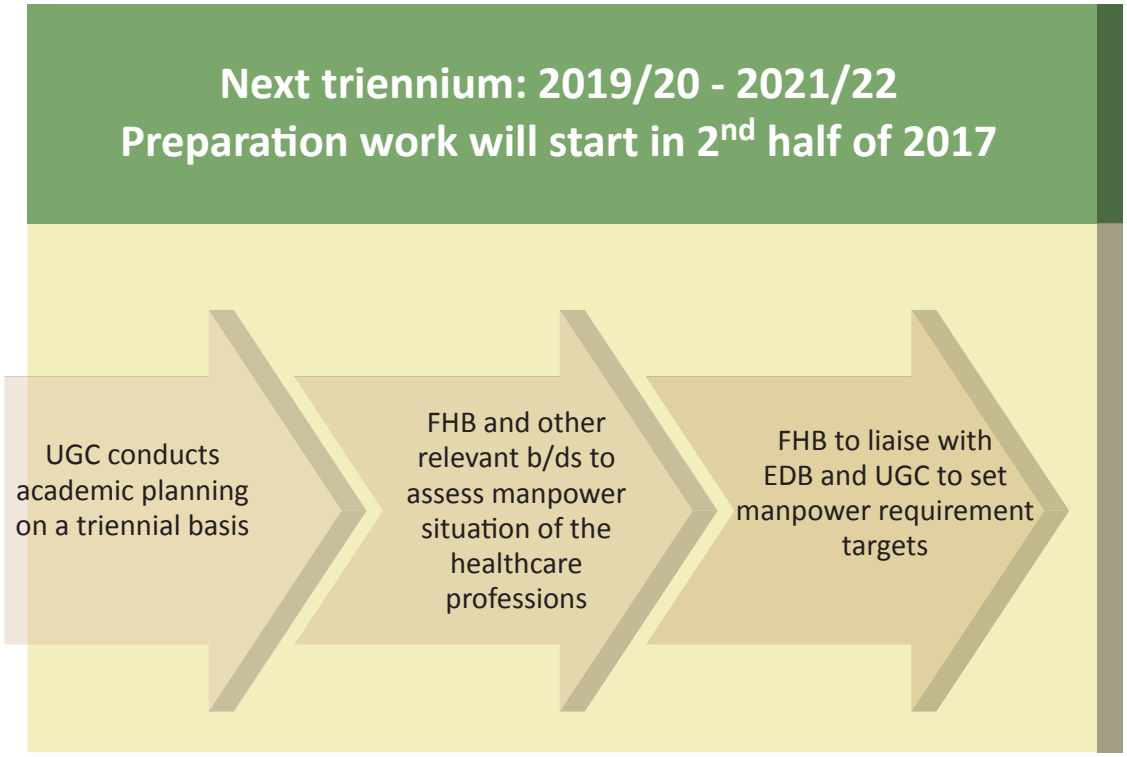
MANPOWER PLANNING AND PROJECTIONS

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

5.2.16 The current manpower projection exercise and the manpower projection model designed by HKU have provided a starting point and good basis for the Government to conduct healthcare manpower planning regularly. To keep in view the manpower situation of the healthcare professions, the Steering Committee recommends that the Government should conduct manpower planning and projections for healthcare professionals once every three years in step with the triennial planning cycle of UGC. The next projection exercise will start in the second half of 2017 for the 2019/20 - 2021/22 triennium.

5.2.17 The Steering Committee recommends that the Government should devise a more sophisticated data collection mechanism so as to facilitate manpower projections in the future. The Government should also continue its engagement with the healthcare professions so as to keep abreast of the latest manpower situation of healthcare professionals.

Figure 5.9 Conducting manpower planning and projections once every three years



5.3 Recommendations - Manpower Planning for Each Profession

5.3.1 DOCTORS

Locally trained doctors

The Steering Committee notes that ...

With ageing population and increasing demand for healthcare services, it is projected that there will be manpower shortage of doctors in the short to medium term. Local graduates are the predominant source of doctors serving in the public sector.

The Steering Committee recommends that ...

The Government should consider further increases in medical training places having regard to the supply of and demand for doctors.

Doctor manpower in the public sector

The Steering Committee considers that ...

In considering ways to address the doctor shortage, the Steering Committee is mindful that the private sector is more flexible in adjusting productivity in response to market demand. The Steering Committee also notes the observations of some that there remains spare capacity in the private sector and thus considers that the Government's priority should be focused on filling the manpower gap in HA, which provides nearly 90% of all in-patient services and around 30% of primary care services in Hong Kong.

Retaining doctors to work in HA

The Steering Committee welcomes ...

HA's adoption of a higher retirement age of 65 for new recruits commencing employment on or after 1 June 2015.

HA's initiative to rehire retired healthcare professionals for two years up to 62 on a pilot basis. Through the re-hiring scheme in 2015/16 and 2016/17, HA has recruited 63 doctors, 48 nurses, nine allied health professionals and 884 healthcare support staff. The Steering Committee supports that HA should continue to re-employ suitable retirees through the Special Retired and Rehire Scheme in 2017/18.

Recruiting non-locally trained doctors through limited registration

The Steering Committee recommends that ...

In a bid to alleviating manpower shortage, HA should continue to recruit non-locally trained doctors through limited registration. It is noted that the Government introduced an amendment bill into LegCo to amend MRO to extend the validity period and renewal period of limited registration from not exceeding one year to not exceeding three years. Subject to the passage of the Bill, this will help HA recruit more non-locally trained doctors through limited registration to ease its doctor shortage problem in the short term.

Non-locally trained doctors

The Steering Committee welcomes MCHK's initiatives to ...

- increase the frequency of its Licensing Examination
- refine the exemption requirements for the examination
- refine requirement of internship assessment

Around 70 candidates passed the Part III Clinical Examination of the Licensing Examination in 2014 and another 40 in 2015 and 41 in 2016, which was significantly higher than the five-year average of 30 from 2009 to 2013.

The Steering Committee notes that ...

The Government has provided additional resources to MCHK to set up an online platform for candidates sitting the Licensing Examination in order to increase the transparency of the Licensing Examination.

5.3.2 DENTISTS

Locally trained dentists

The Steering Committee notes that …
It is projected that there will be manpower shortage of dentists in the short to medium term.

As our society ages and with enhanced public awareness of dental care, the private demand for dental services is set to increase. Furthermore, with the introduction of new dental initiatives by the Government, notably the Outreach Dental Care Programme for the Elderly, the Community Care Fund Elderly Dental Assistance Programme and the Pilot Project on Dental Service for People with Intellectual Disability, the demand for subsidised dental services is on the rise with consequential implications for dental manpower.

The Steering Committee recommends that …
The Government should keep in view the manpower supply of dentists and consider increasing the number of publicly-funded training places as appropriate.

Non-locally trained dentists

The Steering Committee welcomes …
DCHK's initiatives to hold two Licensing Examinations for non-locally trained dentists every year starting from 2015. DCHK has further improved the arrangement of certain parts of the Licensing Examination starting from 2015, including allowing candidates to re-sit those unsuccessful part(s) for certain papers of the Licensing Examination, while retaining partial pass results for the successful ones. DCHK has also updated its result retention policy and examination admission arrangement.

The Steering Committee recommends that …
A limited registration mechanism be put in place for the dentist profession so as to supplement the local manpower in the short term when necessary.

5.3.3 DENTAL HYGIENISTS

Manpower projection for dental hygienists

The Steering Committee notes that …
It is projected that there will be manpower shortage of dental hygienists in the short to medium term.

The Steering Committee considers that …
The Government should consider devising a more robust mechanism with updated registration status of dental hygienists, as dental hygienists, once enrolled, will stay on the list without the need for annual renewal.

5.3.4 NURSES

Locally trained nurses

The Steering Committee notes that …

There is a strong and vibrant self-financing sector dedicated to nurse training, in addition to nurse programmes offered by UGC-funded institutions. CUHK, HKU and PolyU providing a total of 630 UGC-funded first-year-first-degree places and 125 senior-year intake each year. HA, private hospitals and other tertiary institutions operate in parallel a variety of self-financed nursing programmes, which add up to about 2 200 places annually. All in all, there are some 3 000 nursing training places offered each year.

The Government has also provided sizable subsidy to nursing programmes meeting the criteria and selected under the mechanism of SSSDP. A total of 420 self-financing nursing places were subsidised for the 2015/16 cohort and the number of subsidised self-financing nursing places was increased to 480 for the 2016/17 and 2017/18 cohorts.

Manpower projection - General Nurses

The Steering Committee notes that …

It is projected that there will be manpower shortage of general nurses in the short to medium term. There is also increasing demand for general nurses from the welfare sector with the implementation of enhancement initiatives to strengthen the nursing support in terms of elderly and rehabilitation services.

The Steering Committee considers that ...

When considering whether to increase the annual UGC-funded nursing places, the Government should take into account, among others, the training cycle of nurses and the fact that the self-financing market is flexible and responsive in adapting to market demand.

Manpower projection - Psychiatric Nurses

The Steering Committee notes that …

It is projected that 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. This is based on the model assumption that the existing service level and model will remain unchanged throughout the projection period and no new services will be provided. In reality, service provision and planning are dependent on the availability and sufficiency of the necessary healthcare manpower. Knowing that there is an increasing supply of psychiatric nurses in relation to existing service level and model, various service providers such as HA and social welfare institutions should capture this opportunity to plan ahead to make better and fuller use of psychiatric nurses in the provision of existing and new healthcare services. Furthermore, given the adaptability and flexibility of the self-financing sector, there would be natural adjustment in response to the need and demand for nurses.

Non-locally trained nurses

The Steering Committee welcomes …

NCHK's initiative to increase the frequency of Licensing Examination for non-locally trained nurses from once to twice a year from 2016.

5.3.5 MIDWIVES

There were 4 540 midwives as at end 2016. To the best of our understanding, only 40% of them are working in the field of midwifery, obstetrics and gynaecology, due to the low fertility level in Hong Kong. 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 HA and private hospitals, it would not be possible to present a meaningful manpower projection for midwives. Given the low fertility level in Hong Kong and the stable demand for midwives, the supply of midwives should be more or less sufficient to meet the demand.

5.3.6 CHINESE MEDICINE PRACTITIONERS

Manpower projection of CMPs

The Steering Committee notes that...

It is projected that there will be sufficient manpower of CMPs in the short term and manpower shortage in the medium term.

The Steering Committee considers that ...

There is no urgent need to adjust the training places for CMPs considering that there will be sufficient manpower before 2025 in the profession.

HK students studying Chinese Medicine in the Mainland

The Steering Committee notes that ...

During the deliberation of the CMP Sub-group, there was concern over the substantial increase of HK students studying Chinese Medicine in the Mainland.

According to the statistics provided by CMCHK, the average number of candidates passing the Licensing Examination and getting registered for the period from 2012 to 2016 is about 200 each year.

2012	2013	2014	2015	2016
189	203	190	204	233

It is observed that the number of students studying Chinese Medicine programmes in the Mainland recognised by CMCHK has decreased from the peak from about 470 in 2013/14 to 260 in 2015/16. The potential impact on the supply of CMPs needs further assessment, pending the availability of more data e.g. graduation rate, willingness to practise in HK and their passing rate of the Licensing Examination.

The Steering Committee considers that the

Government should continue to keep in view the trend of HK students studying Chinese Medicine in the Mainland and the number of candidates passing the Licensing Examination. Assessment should also be conducted regarding the impact of HK students studying in the Mainland on the overall manpower supply of CMPs.

5.3.7 PHARMACISTS

Manpower projection of pharmacists

The Steering Committee notes that …

It is projected that the supply of pharmacists is in slight shortage or close to equilibrium in the short term and there will be sufficient manpower in the medium term under the existing service level and model.

Enhancement of pharmacy services

The Steering Committee considers that …

With a steady local supply of pharmacists in the tune of 90 every year, healthcare service providers including HA should make full use of the manpower resources to plan for new and enhanced initiatives, e.g. clinical pharmacy services, in response to the challenges of ageing population.

Demand for community pharmacists in the private sector

The Steering Committee notes that …

The demand for community pharmacists in the private sector is contingent on the economic situation and the condition of the retail market. The demand-supply dynamics could shift swiftly in the face of economic fluctuations with consequential impact on the retail market. During an economic boom, the supply of community pharmacists would be tight or even in shortage whereas an economic downturn could cause short-term sufficient manpower of community pharmacists.

Next manpower projection exercise for pharmacists

The Steering Committee recommends that …

The Government should make use of the next projection exercise (which will start in the second half of 2017 for the 2019/20 - 2021/22 triennium) to re-assess the supply and demand projection having regard to the latest changes in the retail market, in particular local community pharmacies.

5.3.8 OCCUPATIONAL THERAPISTS

Manpower projection of OTs

The Steering Committee notes that …
It is projected that there will be manpower shortage of OTs in the short to medium term.

Manpower shortage in the welfare sector

The Steering Committee notes that …
The social welfare sector has expressed concerns over the manpower shortage of OTs due to ageing population and increasing service provision. However, there is only one UGC-funded institution i.e. PolyU providing OT programme in HK.

To alleviate the shortage of OTs in the welfare sector, PolyU launched a two-year entry level MOT programme in January 2012 on a self-financing basis. To encourage graduates of the MOT programme to join the welfare sector, SWD has introduced a Training Sponsorship Scheme to provide funding support for the non-governmental organisations (NGOs) to offer tuition fee sponsorship to students whom they recruited. Students obtaining the sponsorship have to work for NGOs concerned for not less than two years. The first and second cohorts of around 30 students graduated in January 2014 and January 2016 respectively. PolyU cooperated with SWD again to implement the third batch of MOT programme in 2016/17, providing a total capacity of around 24 places. The graduates need to undertake to work in the welfare sector for not less than three years.

Self-financing training

The Steering Committee notes that …
TWC has started to operate a self-financing programme in occupational therapy, providing about 50 training places in 2013/14. The programme is undergoing accreditation by SMP Council. The first cohort of students will graduate in 2017. There will be sufficient manpower in the medium term after taking into account the graduates from TWC.

The Steering Committee considers that …
Increased graduates from the self-financing sector would better enable healthcare providers in particular social welfare organisations to plan for new and/or improved services.

Demand in the welfare sector

The Steering Committee notes that …
The manpower of OTs might be insufficient as the demand for OTs in the welfare sector has long been suppressed because of manpower shortage.

Next manpower projection exercise for OTs

The Steering Committee recommends that …
The Government should make use of the next projection exercise (which will start in the second half of 2017 for the 2019/20 - 2021/22 triennium) to re-assess the supply and demand projection, in particular when the new and increased demand for OTs in the welfare sector is fully captured.

5.3.9 PHYSIOTHERAPISTS

Manpower projection of PTs

The Steering Committee notes that …
It is projected that there will be manpower shortage of PTs in the short to medium term.

Manpower shortage in the welfare sector

The Steering Committee notes that …
The social welfare sector has expressed concerns over the manpower shortage due to ageing population and increasing service provision. However, there is only one UGC-funded institution i.e. PolyU providing PT programme in HK.

To alleviate the shortage of PTs in the welfare sector, PolyU launched a two-year entry level MPT programme in January 2012 on a self-financing basis. To encourage graduates of MPT programme to join the welfare sector, SWD has introduced a Training Sponsorship Scheme to provide funding support for NGOs to offer tuition fee sponsorship to students whom they recruited. Students obtaining the sponsorship have to work for NGOs concerned for not less than two years. The first and second cohorts of around 30 students graduated in January 2014 and January 2016 respectively. PolyU cooperated with SWD again to implement the third batch of MPT programme in 2016/17, providing a total capacity of around 48 places. The graduates need to undertake to work in the welfare sector for not less than three years.

Self-financing training

The Steering Committee recommends that …
The Government should encourage the self-financing sector to offer physiotherapy programmes as in the case of OTs, in addition to increasing publicly-funded training places.

5.3.10 MEDICAL LABORATORY TECHNOLOGISTS

Manpower projection of MLTs

The Steering Committee notes that …
It is projected that there will be slight shortage (close to equilibrium) of MLTs in the short to medium term.

The Steering Committee considers that …
The Government should keep in view the manpower situation of MLTs in the market.

Self-financing training

The Steering Committee notes that …
There is an increasing demand for MLTs in both public and private sectors. The increased training places and provision of self-financing programmes could help meet such increasing demand.

Considering that there is a sustained demand for MLTs in Hong Kong and the programme of TWC has obtained professional accreditation from SMP Council, the Government has decided to subsidise 20 training places of the medical laboratory science programme operated by TWC under SSSDP for the 2017/18 cohort.

5.3.11 OPTOMETRISTS

Manpower projection of optometrists

The Steering Committee notes that …
It is projected that there will be manpower shortage of optometrists in the short to medium term.

The Steering Committee recommends that …
The Government should encourage self-financing sector to offer optometry programmes, in addition to increasing publicly-funded training places.

Optometrists in the private sector

The Steering Committee notes that …
Similar to the pharmacists profession, the demand for optometrists in the private sector is contingent on the economic situation and the condition of the retail market.

The Steering Committee notes that …
As the vast majority (over 90%) of optometrists are in private practice, the quality and availability of data for the purpose of manpower projection may not be as robust and reliable as those where there is a significant proportion of public service. The shortage in the short to medium term could be mitigated by market adjustments and behavioral change of practising private optometrists. The projected manpower shortage would be reduced if optometrists in private practice opt to work well beyond the retirement age commonly observed in public organisations.

Next manpower projection exercise for optometrists

The Steering Committee recommends that …
The Government should make use of the next projection exercise (which will start in the second half of 2017 for the 2019/20 - 2021/22 triennium) to re-assess the supply and demand projection, having regard to the latest changes in the retail market and other relevant factors.

5.3.12 RADIOGRAPHERS

Manpower projection of radiographers

The Steering Committee notes that …
It is projected that there will be slight shortage (close to equilibrium) of radiographers in the short to medium term.

The Steering Committee considers that …
The Government should keep in view the manpower situation of radiographers in the market.

Self-financing training

The Steering Committee notes that …
Considering that there is a sustained demand for radiographers in Hong Kong and the programme of TWC has obtained professional accreditation from SMP Council, the Government has decided to subsidise 12 training places of the radiation therapy programme operated by TWC under SSSDP for the 2017/18 cohort.

Next manpower planning exercise for radiographers

The Steering Committee considers that …
Registered radiographers in Hong Kong are divided into two categories: diagnostic and therapeutic. While the manpower projection conducted by HKU is for the whole radiography profession, the two streams of radiographers have different skill sets and are specialised in different types of work. For the current exercise, radiographers are treated as one for the purpose of manpower projections. The Government would consider whether and, if so, how separate projections could be made in the next round of projection exercise.

5.3.13 CHIROPRACTORS

Manpower projection of chiropractors

The Steering Committee notes that …
It is projected that the manpower supply of chiropractors is close to equilibrium in the short term and there will be sufficient manpower in the medium term.

For chiropractors, given the current demand situation, the supply of non-locally trained graduates should be adequate to meet the local demand in the short to medium term.

The Steering Committee considers that …
Over 90% of chiropractors are working in the private sector. As in the case of optometrists, the current projection should be viewed in context. Concerted efforts should be made in the next round of exercise to improve the quality and reliability of data from the private sector.

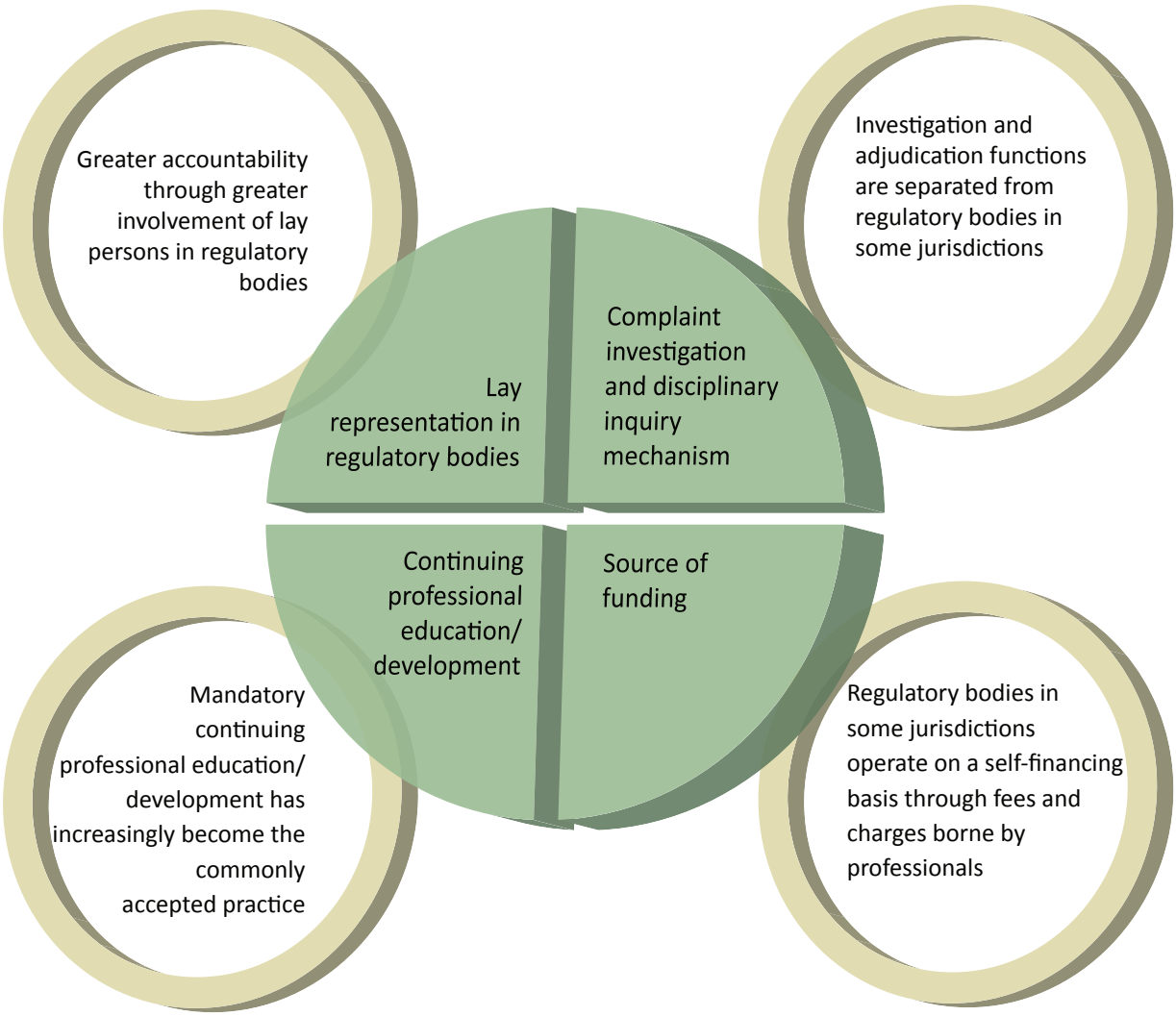
5.4 General Observations - Professional Development and Regulation

5.4.1 The healthcare system of Hong Kong is renowned for its quality, efficiency and cost-effectiveness. The achievements we have made on the front of healthcare owe much to the competence, dedication and commitment of our healthcare professionals. Their good and hard work has earned the trust and respect of the community over the years. Public trust is a crucial element for professional self-regulation which has been accepted here without much dispute for decades while professional regulation elsewhere undergoes substantive changes. However, professional self-regulation must evolve and improve itself in keeping with the prevailing rules and values of our open and cosmopolitan society.

5.4.2 The findings and observations of the study commissioned to CUHK offer a comprehensive view of the latest regulatory framework for healthcare professionals in different parts of the world. There is no one-size-fits-all solution, and differences in regulatory regimes are inevitable because of differences in circumstances. The regulatory regimes among developed economies in the west are converging towards a more modern mechanism with more openness, greater accountability, a more independent and separate complaint investigation and disciplinary inquiry mechanism, and increased emphasis on continuing professional education and development (see Figure 5.10). While Asian jurisdictions tend to follow a more traditional mode of professional self-regulation with strong government oversight, there are signs that efforts are being made to build a more modern regulatory framework.

5.4.3 In its deliberations, the Steering Committee has adopted a holistic and balanced approach, taking into account both the views and concerns of healthcare professionals and other stakeholders in the community as well as the findings and observations of CUHK's study. We fully recognise the importance of ensuring stability in professional regulation. Any change proposed must be based on solid grounds that would advance professionalism and are in the interest of maintaining public trust in our healthcare professionals. We appreciate the contribution of our healthcare professionals, and would strive to ensure that the hard-earned trust remains as strong as it is through measures that strike a balance between upholding professional autonomy and responding to legitimate calls for more credibility and greater accountability.

Figure 5.10 Global trends in regulatory regime of healthcare professionls



5.5 Recommendations - Professional Development and Regulation

RECOMMENDATION 6

LAY INVOLVEMENT IN BOARDS AND COUNCILS

Boards and Councils should ensure meaningful lay involvement by, among others, setting a minimum lay membership of 25%.

5.5.1 The Steering Committee considers that there is a need to ensure meaningful lay involvement in Boards and Councils. Having an appropriate proportion of lay members, who are neither post-tied ex-officio members nor members of the profession under regulation, could help bring in fresh views and offer wider perspectives. A meaningful presence of lay members provides an institutional assurance for enhanced public accountability while preserving professional self-regulation.

5.5.2 The Steering Committee believes that lay members should generally make up at least 25% of the membership of Boards and Councils. A survey of the current situation shows that 11 Boards and Councils have already had a lay ratio equal to or larger than 25%. There are two, namely MCHK and Midwives Council of Hong Kong, which have less than 25% of lay members.

5.5.3 Lay participation in MCHK was discussed at the Tripartite Platform on Amendments to the MRO[34]. The Government has weighed all relevant considerations, including the recommendation of the Steering Committee and deliberations at the Tripartite Platform, and made a decision that has balanced the interest of the community as a whole. The Government introduced an amendment bill into LegCo on 7 June 2017 to -

(a) improve the complaint handling and disciplinary inquiry mechanism of MCHK for greater efficiency, accountability and credibility;

(b) increase lay membership in MCHK for enhanced accountability and credibility; and

(c) enable MCHK to approve applications for limited registration from not exceeding one year to not exceeding three years.

5.5.4 As regards the Midwives Council of Hong Kong, the Steering Committee considers that it should deliberate and advise the Government whether the present lay involvement is adequate and, if not, what changes should be made in further increasing lay participation.

5.5.5 As for other Boards and Councils, the Steering Committee notes that there are seats where the law provides latitude for them to be filled by persons either within the profession or outside. Taking NCHK as an example, the actual involvement of lay persons varies year from year depending on whether such seats (three in total) are filled up by nurses or lay members as they are open to both. There are also seats to be filled by public officers - either (ad-personam or post-tied) or another professional members such as doctors and lawyers. Boards and Councils may deliberate on their own and, where necessary and justified, make suggestions on refinement to their respective composition, with a view to better ensuring a meaningful involvement of lay persons to enhance public accountability.

[34] A tripartite platform comprising doctors, representatives of patients' interests and consumers' interests, and LegCo Members was set up to promote understanding and communication, as well as provide views and deliberate on amendment proposals to the MRO.

RECOMMENDATION 7

CONTINUING PROFESSIONAL EDUCATION AND/OR DEVELOPMENT

Boards and Councils should continue to upkeep the strong professional competency of healthcare professionals through, among others, making continuing professional education and/or continuing professional development a mandatory requirement.

5.5.6 CPE/CPD is an integral element of professionalism. Maintaining and developing skills, expertise and professional practice are the core aspects of good healthcare practice. This requires participation in professional development, practice improvement and any other activities that would help ensure professional capabilities.

5.5.7 The Steering Committee is pleased to note that all healthcare professions value and recognise the importance of CPE/CPD but the practice and legal requirement vary among them. Continuing education is a mandatory requirement for continuing practice of registered CMPs[35]. It is also mandatory for doctors and dentists on the specialist registers[36]. Non-specialist doctors and non-specialist dentists may on their own volition voluntarily enrol in CPE/CPD administered by MCHK and DCHK respectively, but they do not have an obligation as that of their specialist counterparts to undertake and complete continuing professional education. There are also voluntary CPE/CPD programmes administered by relevant Boards and Councils for nurses, midwives, OTs, PTs, MLTs, optometrists, radiographers and chiropractors. The above-mentioned voluntary CPE/CPD programmes are summarised in Figure 5.11. For dental hygienists and pharmacists, there is no CPE/CPD programme administered by the relevant Council and Board.

[35] Under section 82(2) of the Chinese Medicine Ordinance (Cap. 549), the Chinese Medicine Practitioners Board shall determine the requirements relating to continuing education in Chinese medicine which are to be compiled with before a practising certicate may be remewed under section 76 or 77 (of the Ordinance).

[36] Under the Medical Registration Ordinance (Cap.161) and the Dentists Registration Ordiance (Cap.156), a registrated doctor and a registrated dentist who wishes to have his name included in the Specialist Register must satisfy the continuing education requirements.

Figure 5.11 CPE/CPD requirement for the 13 healthcare professions concerned

Mandatory for all practitioners	Mandatory for specialists	Voluntary programmes	No voluntary programmes
• Registered CMPs	• Specialist doctors • Specialist dentists	• Non-specialist doctors • Non-specialist dentists • Nurses (Registered & Enrolled) • Midwives • OTs • PTs • MLTs • Optometrists • Radiographers • Chiropractors	• Dental hygienists • Pharmacists

5.5.8 The Steering Committee considers that CPE/CPD should not be just an option or confined to specialists, but should be widely promoted and ultimately become a mandatory requirement for healthcare professionals under statutory registration. The process should be carefully planned with due consideration to the current situation, readiness of the profession as well as the legal and resource implication to achieve smooth progression over time. Respecting the principle of professional self-regulation, the Steering Committee considers that, subject to deliberations at the relevant Board and Council, a possible route for implementing mandatory CPE/CPD – as an alternative to legislative amendments – is that Boards and Councils may determine and set out the CPE/CPD requirements as part and parcel of their professional standard requirements e.g. the code of professional conduct and establish a mechanism to oversee whether the healthcare professionals have satisfied the CPE/CPD requirement. Once the relevant Board and Council has reached a view on how mandatory CPE/CPD should be achieved, it should draw up an implementation plan in consultation with the profession, having regard to all relevant considerations, including legal feasibility, practicality, sustainability and enforceability. All relevant Boards and Councils should also ensure that there is sufficient training capacity before CPE/CPD is made mandatory.

RECOMMENDATION 8

COMPLAINT INVESTIGATION AND DISCIPLINARY INQUIRY MECHANISM

Boards and Councils should review and, where necessary, improve the mechanism for complaint investigation and disciplinary inquiry by –

- Boards and Councils concerned should review and, where necessary, improve the mechanism for complaint investigation and disciplinary inquiry, with a view to minimising potential conflict of interest and shortening the duration in processing complaints against malpractice or misconduct;

- The Secretariats of Boards and Councils should, where appropriate, strive to provide more user-friendly services by, among others, streamlining the existing administrative procedures; and

- Boards and Councils concerned should, where appropriate, explore the feasibility of using mediation in handling complaints not involving professional misconduct.

Reviewing and improving the mechanism for complaint investigation and disciplinary inquiry for profession(s) where there is long delay with caseload far exceeding capacity

5.5.9 The number of complaint cases and the time required for concluding them through investigation and where necessary, disciplinary hearings vary greatly across the 13 professions.

5.5.10 The majority of complaint cases are lodged with MCHK, which alone received 580 cases a year on average in the past three years (i.e. 2014-2016). The Steering Committee understands that this reflects the paramount importance of doctors in our healthcare system and the nature of their profession where they are often considered to bear the ultimate responsibility for the life and death of patients

under their care. As a result, the caseload, together with increased complexities, has far exceeded the current capacity of MCHK, resulting in prolonged delay. MCHK Secretariat estimates that the delay would be aggravated to 72 months in the years ahead.

5.5.11 CMCHK and DCHK received, on average, about 250 and 140 cases respectively per year in the past three years (i.e. 2014-2016). The number of complaints lodged with other Boards and Councils is limited, ranging from zero to 52 each year. Because of the small number of complaints, these Boards and Councils are able to complete investigation and conclude cases, where necessary, through disciplinary hearings within a reasonable time. Even for DCHK, the average time required for concluding cases requiring disciplinary hearings is around 34 months, whereas that for CMCHK is around nine months.

5.5.12 It is vital for Boards and Councils to handle complaint cases in a timely manner for the interest of both the public and the healthcare professionals concerned. The Steering Committee considers that all Boards and Councils should spare no efforts in looking for ways to improve the efficiency of its complaint investigation and disciplinary inquiry mechanism through administrative or, if necessary, legislative means.

5.5.13 The Steering Committee notes that a bill i.e. the Medical Registration (Amendment) Bill was introduced in March 2016 to amend MRO with a view to, among others, improving the efficiency of the complaint investigation and disciplinary inquiry mechanism under MRO. This bill was unable to complete the legislative process before prorogation of the fifth term (2012-2016) of LegCo in July 2016. The Steering Committee further notes that this issue was discussed at the Tripartite Platform on Amendments to the MRO. The Steering Committee looks forward to a viable and practical proposal that could not only improve efficiency by addressing bottlenecks inherent in the present mechanism, but also respond to the strong call for separating the investigative and disciplinary function from the main council but under the auspices of MCHK, in keeping with the international trend.

5.5.14 As regards CMCHK and DCHK, the Steering Committee considers that each should review and deliberate among its respective council as to whether the present mechanism is adequate and efficient enough to deal with existing caseload and also estimated caseload in the coming years. If changes are considered necessary, the relevant council should advise the Government what amendments should be made to their respective ordinances.

5.5.15 As for other Boards and Councils, the Steering Committee considers that they should review their respective mechanism for complaint investigation and disciplinary inquiry as appropriate. Each Board and Council, however, should keep in view the situation and start deliberations among its council if there is indication that changes are called for.

5.5.16 It has become an international norm that the complaint investigation and adjudication functions are separated under or outside the healthcare regulatory bodies. Participation of Council/Board members is limited, or none in some jurisdictions. Such separation of functions aims to increase public confidence in the disciplinary inquiry process. The Steering Committee considers that, in their deliberations, Boards and Councils should have due regard to the international trend for separation and consider whether or not, and if so, how their respective complaint handling and discipline inquiry mechanism should be devised.

5.5.17 Enabling parties to communicate, negotiate and eventually resolve their dispute amicably and efficiently through a trained neutral third party, mediation is generally used and promoted in Hong Kong as a cooperative and consensus-oriented dispute resolution

method which can be used in diverse practice areas, including both public and private spheres. The Steering Committee considers that Boards and Councils with a significant number of complaint cases, where appropriate, should explore the feasibility of using mediation in handling complaints not involving professional misconduct. As far as cases involving professional misconduct are concerned, mediation is not a solution by itself and cannot replace in total an efficient complaint handling mechanism.

RECOMMENDATION 9

COST RECOVERY OF BOARDS AND COUNCILS

The Government should improve cost recovery of the operation of Boards and Councils.

5.5.18 The Government is currently funding the operation of Boards and Councils and meeting in full, including secretariat expenses and all legal costs associated with their actions and decisions. Such cost involved are partially recovered by fees and charges collected from the professionals under the relevant legislation.

5.5.19 The Steering Committee notes that the existing funding arrangement of Boards and Councils is different from the norm of the developed economies that CUHK has surveyed, where regulatory bodies in the UK, the US, Canada, Australia and New Zealand operate on a self-financing basis through fees and charges borne by professionals.

5.5.20 It is also different from how professional self-regulated regulatory bodies outside the healthcare sector are being funded. For instance, the Hong Kong Institute of Certified Public Accountants operates on a self-financing basis and fixes fees and charges to cover its operating expenses including costs and expenses related to disciplinary proceedings. The Law Society of Hong Kong (the Law Society) and the Bar Association of Hong Kong (thr Bar Association) are also financially independent from the Government, but the relevant Ordinance provides for the costs of legal proceedings to be funded by the Government[37].

5.5.21 In line with the "cost recovery" and "user pays" principle, it is the Government's policy that fees charged by the Government should in general be set at levels adequate to recover the full cost of providing the services[38]. The Steering Committee considers that DH should conduct a comprehensive review of the full costs of each Board and Council, including the legal costs. The Steering Committee considers that DH should also review the level of existing fees and charges stipulated in the legislations. For those fees which have not yet attained the relevant full cost level, adjustment of the fees should be made so as to improve the cost recovery of the operations of the Boards and Councils.

[37] Under the Legal Practitioners Ordinance, disciplinary proceedings of solicitors and barristers are conducted by the respective Disciplinary Tribunal, independent from the Law Society and the Bar Association. Disciplinary cases are referred by the Law Society and the Bar Association to the respective tribunal for adjudication.

[38] In the 2013-14 Budget Speech, the Financial Secretary emphasised the need to review fees and charges systematically for upholding the "user pays" principle, with priority given to those fees that had not been revised for years and did not directly affect people's livelihood, as well as items which had low cost recovery rates. In 2014, DH has reviewed the statutory fees relating to registration (including licensing examination) of the healthcare professionals (except fees under schedule 9 of Pharmacy and Poisons Regulations (Cap. 138A), Pharmacy and Poisons (Pharmacy and Poison Appeal Tribunal Regulations (Cap.138D) and Pharmacists (Disciplinary Procedures) Regualtions (Cap.138E)). These fees were either last revised between 2000 and 2006 or had not been revised since their introduction, and DH's costing review shows that their current cost recovering levels range from 11% to 116%. In order to achieve full cost recovery gradually and avoid a steep fee increase, 117 fees were proposed to be increased by 7% to 20%, while the remaining fee to be reduced by 14%. With the revised fee levels, the cost recovering rates of these existing statutory fee items are in the range of 13% to 100%.

RECOMMENDATION 10

REGULATION OF HEALTHCARE PROFESSIONS NOT SUBJECT TO STATUTORY REGISTRATION

The Government should introduce an accreditation scheme for healthcare professionals which are not subject to statutory registration.

5.5.22 The Steering Committee notes that at present, the regulation of most healthcare professions which are not subject to statutory registration has been achieved through voluntary, society-based registration. While recognising the importance and effectiveness of voluntary society-based registration, the Steering Committee considers that a more structured scheme with enhanced credibility could be set up to promote good service standards for the professions and provide more information to members of the public who intend to use their services.

5.5.23 The Steering Committee supports the Government's initiative to introduce an accredited registers pilot scheme for healthcare professions not subject to statutory registration in Hong Kong. The Scheme could help enhance the current society-based registration arrangement under the principle of professional autonomy, with a view to ensuring the professional competency of healthcare professionals and providing more information to the public so as to facilitate them to make informed decision. This is in line with the international trend to adopt a "right-touch" approach, for regulating healthcare professions in a way commensurate with the level of risks they pose to public health.

5.5.24 In end 2016, the Government launched the Pilot Accredited Registers Scheme (Pilot AR Scheme). The Pilot AR Scheme covers the existing 15 non-statutorily regulated healthcare professions within the health services functional constituency of LegCo. These professions may, having regard to their own aspirations and circumstances, opt to join the Pilot AR Scheme. If healthcare professions other than the above-mentioned are interested in joining the Pilot AR Scheme, their applications would be considered on a case-by-case basis. The result of the Pilot AR Scheme is expected to be announced by end 2017.

5.6 Recommendations & Implementation

5.6.1 The ten recommendations of the Steering Committee are summarised as follows and implementation of the recommendations requires the concerted efforts among the Government, HA, regulatory bodies concerned, healthcare professionals and other relevant stakeholders.

A. HEALTHCARE MANPOWER

RECOMMENDATION 1

LOCAL SOURCE – PUBLICLY-FUNDED HEALTHCARE TRAINING

RECOMMENDATION

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

IMPLEMENTATION

The Government should …

For healthcare professions with manpower shortage

- Consider increasing publicly-funded degree places for healthcare professions facing manpower shortage for the 2019/20 – 2021/22 UGC triennium. Consideration should be given to the capacity constraints of UGC-funded universities and the need to preserve their flexibility to allocate first-year first-degree (FYFD) places to non-healthcare disciplines which also face manpower shortage if the total number of UGC-funded FYFD places should remain unchanged at 15 000 per annum, as well as availability of self-financing programmes; and

- Engage relevant stakeholders in the professions in the UGC triennial planning process.

For healthcare professions with sufficient manpower

- Encourage healthcare services providers to consider and, where appropriate, plan for service enhancement and/or expansion.

RECOMMENDATION 2

LOCAL SOURCE – SELF-FINANCING HEALTHCARE TRAINING

RECOMMENDATION

- The Government should make better use of the self-financing sector to help meet part of the increasing demand for healthcare professionals, notably nurses, OTs, PTs, MLTs, optometrists and radiographers and provide the necessary support to the self-financing sector in terms of infrastructural and funding support.

- The Government should continue to subsidise the pursuit of study in those healthcare disciplines facing manpower shortage as appropriate, in particular, in the allied health disciplines, under SSSDP with a view to sustaining the healthy development of the self-financing tertiary education sector to complement the UGC-funded sector in broadening and diversifying study opportunities.

IMPLEMENTATION

The Government should …

- Encourage tertiary institutions to continue to provide self-financing training courses for nurses and allied healthcare professions to meet the demand in a flexible and responsive manner;

- Facilitate more tertiary institutions to introduce, where appropriate, more healthcare training courses on a self-financing basis to better cope with the rising demand for healthcare professionals in various sectors ranging from healthcare, social welfare to

education;

- Consider and vet proposals submitted by interested and ready tertiary education institutions on the introduction of healthcare training courses; and

- Subsidise self-financing programme(s) which provide training for healthcare professions facing manpower shortage under SSSDP as appropriate.

RECOMMENDATION 3

HEALTHCARE MANPOWER IN THE PUBLIC SECTOR

RECOMMENDATION

- 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 through limited registration more proactively.

IMPLEMENTATION

HA should ...

- Draw up plans and advise the Government on the progress made over retention of retired healthcare professionals and recruitment of non-locally trained doctors by limited registration; and

- Recruit non-locally trained doctors with limited registration more proactively.

The Government should ...

- Provide funding support for HA to retain existing healthcare professionals, attract retired doctors and other healthcare professionals and recruit non-locally trained doctors under limited registration.

RECOMMENDATION 4

NON-LOCALLY TRAINED HEALTHCARE PROFESSIONALS

RECOMMENDATION

- 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 publicise the registration arrangements overseas with targeted and proactive recruitment drive to facilitate non-locally trained healthcare professionals, many of whom are Hong Kong citizens or have deep roots here, to come to Hong Kong to practise.

IMPLEMENTATION

The Government should ...

For healthcare professions facing local manpower shortage

- Provide necessary support to organisations concerned to proactively recruit healthcare professionals from overseas, including doctors, dentists and allied health professionals, to fill supply gaps in the healthcare, welfare and education sectors in the short term, while awaiting increase in local supply to catch up with demand in the long term;

- Amend MRO to extend the validity period and renewal period of limited registration for non-locally trained doctors from not exceeding one year to not exceeding three years; and

- Make more efforts to publicise the registration arrangements overseas with targeted and proactive recruitment drive to facilitate non-locally trained healthcare

professionals; and many of whom are HK citizens or have deep roots here, to come to Hong Kong to practise.

For healthcare professions which depend significantly on non-local sources

- Closely monitor whether the existing manpower supply is sufficient to meet manpower demand.

For CMP Profession

- Closely monitor the impact of HK students studying Chinese Medicine in the Mainland on the overall supply of CMPs in HK.

Boards and Councils should …

- On the premise of preserving professional standards, review the existing administrative arrangements of facilitating non-locally trained healthcare professionals, in particular, those originally from Hong Kong, to practise in Hong Kong.

RECOMMENDATION 5

MANPOWER PLANNING AND PROJECTIONS

RECOMMENDATION

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

IMPLEMENTATION

The Government should …

- The Food and Health Bureau should continue to engage relevant stakeholders in future manpower planning and projections exercise; and

- Devise a more sophisticated data collection mechanism so as to facilitate manpower projections in the future.

B. PROFESSIONAL DEVELOPMENT AND REGULATION

RECOMMENDATION 6

LAY INVOLVEMENT IN BOARDS AND COUNCILS

RECOMMENDATION

- Boards and Councils should ensure meaningful lay involvement by, among others, setting a minimum lay membership of 25%.

IMPLEMENTATION

The Government should …

- Weigh all relevant considerations, including the recommendation of the Steering Committee and deliberations at the Tripartite Platform, and make a decision on lay participation in MCHK that has balanced interest of the community as a whole.

Boards and Councils should …

Midwives Council of Hong Kong

- Deliberate and advise the Government whether the present lay involvement is adequate and, if not, what changes should be made in further increasing lay participation.

Other Boards and Councils

- Noting that there are seats where the law provides latitude for them to be filled by persons either within the profession or outside, deliberate on their own and, where necessary and justified, make suggestions on refinement to their respective composition, with a view to better ensuring a meaningful involvement of lay persons to enhance public accountability.

RECOMMENDATION 7

CONTINUING PROFESSIONAL EDUCATION AND/OR DEVELOPMENT

RECOMMENDATION

- Boards and Councils should continue to upkeep the strong professional competency of healthcare professionals through, among others, making continuing professional education and/or continuing professional development a mandatory requirement.

IMPLEMENTATION

Boards and Councils should …

- Deliberate on the implementation for mandatory CPE/CPD with due consideration to the current situation, readiness of the profession as well as the legal and resource implication to achieve smooth progression over time. Subject to deliberations at the relevant Board and Council, a possible route for implementing mandatory CPE/CPD – as an alternative to legislative amendments – is that Boards and Councils may determine and set out the CPE/CPD requirements as part and parcel of their professional standard requirements and establish a mechanism to oversee whether the healthcare professionals have satisfied the CPE/CPD requirement;

- Draw up an implementation plan in consultation with the profession, having regard to all relevant considerations, including legal feasibility, practicality, sustainability and enforceability; and

- Ensure that there is sufficient training capacity before CPE/CPD is made mandatory.

RECOMMENDATION 8

COMPLAINT INVESTIGATION AND DISCIPLINARY INQUIRY MECHANISM

RECOMMENDATION

- Boards and Councils should review and, where necessary, improve the mechanism for complaint investigation and disciplinary inquiry by –

  - Boards and Councils concerned should review and, where necessary, improve the mechanism for complaint investigation and disciplinary inquiry, with a view to minimising potential conflict of interest and shortening the duration in processing complaints against malpractice or misconduct;

  - The Secretariats of Boards and Councils should strive to provide more user-friendly services by, among others, streamlining the existing administrative procedures; and

  - Boards and Councils concerned should, where appropriate, explore the feasibility of using mediation in handling complaints not involving professional misconduct.

IMPLEMENTATION

The Government should…

- Introduce necessary legislative amendments to enable MCHK to speed up its complaint handling process having regard to, among others, the discussion at the Tripartite Platform on Amendments to the MRO.

Boards and Councils should …

All Boards and Councils

- Proactively look for ways to improve the efficiency of its complaint investigation and disciplinary inquiry mechanism through administrative or, if necessary, legislative means; and

- Deliberate and consider whether or not, and if so, how their respective complaint handling and discipline inquiry mechanism should be devised, having due regard to the international trend for separation of complaint investigation and adjudication functions under or outside the healthcare regulatory bodies.

Boards and Councils with a significant number of complaint cases should...

- Explore the feasibility of using mediation in handling complaints not involving professional misconduct where appropriate.

Dental Council of Hong Kong and Chinese Medicine Council of Hong Kong

- Review and deliberate as to whether the present mechanism is adequate and efficient enough to deal with existing caseload and also estimated caseload in the coming years. If changes are considered necessary, advising the Government what amendments should be made to their respective ordinances.

Other Boards and Councils

- Review the respective mechanism for complaint investigation and disciplinary inquiry as appropriate and start deliberations among its Board/Council if there are indications that changes are called for.

RECOMMENDATION 9

COST RECOVERY OF BOARDS AND COUNCILS

RECOMMENDATION

- The Government should improve cost recovery of the operations of Boards and Councils.

IMPLEMENTATION

The Government should …

- Conduct a comprehensive review of the full costs of each Board/Council, including the legal costs; and

- Review the level of existing fees and charges stipulated in the legislations. For those fees which have not yet attained the relevant full cost level, adjustment of the fees should be made so as to improve the cost recovery of the operations of the Boards and Councils.

RECOMMENDATION 10

REGULATION OF HEALTHCARE PROFESSIONS NOT SUBJECT TO STATUTORY REGISTRATION

RECOMMENDATION

- The Government should introduce an accreditation scheme for healthcare professionals which are not subject to statutory registration.

IMPLEMENTATION

The Government should …

- Monitor the implementation of the Pilot Accredited Registers Scheme, and review and improve the scheme taking into account the experience of the pilot scheme;
- Strengthen communication with healthcare professionals which are not subject to statutory registration; and
- Consider formulating a regulatory framework for healthcare professions which are not subject to statutory registration in the long term.

WAY FORWARD

5.6.2 In order to take forward recommendations 4, 6, 7 and 8 in an effective and efficient manner, the Government should invite Boards and Councils to submit proposals within **6 – 12 months** on how they would implement the recommendations in their respective professions, and that the Government should conduct a comprehensive review of the existing legislations governing healthcare professions after taking into account profession-specific issues, present-day circumstances, international practices, and possible legislative amendments required arising from the proposals of relevant regulatory bodies.

VOTE OF THANKS

We would like to take the opportunity to express our gratitude to all members of the Steering Committee, Coordinating Committee, six consultative Sub-groups for their insight, contribution and dedication throughout the Review. The efforts by HKU and CUHK in providing professional input and technical support to the Review are also deeply appreciated. Our thanks also go to all the healthcare professionals and other relevant stakeholders of the community for their valuable comments and suggestions, in particular the Subcommittee on Health Protection Scheme of LegCo Panel on Health Services, LegCo Members, HA, DH, SWD, EDB and representatives of healthcare service providers.

For details on HKU's projection models and projections for individual professions and CUHK's findings on the regulatory frameworks for healthcare professions elsewhere and in Hong Kong, please refer to the reports prepared by HKU and CUHK which are supplementary to this report. Soft copies of the reports are available online at www.hpdo.gov.hk.

Annex 1

Steering Committee on Strategic Review on Healthcare Manpower Planning and Professional Development

Terms of Reference

1. To advise and make recommendations to the Government on –

   (a) the means and measures to ensure an adequate supply of healthcare professionals that could meet the current and projected demands for various healthcare services on a sustainable basis; and

   (b) an overall plan for strengthening the professional standards and qualities of the various healthcare professions, including necessary and justified changes to the relevant regulator regime, improvement to training and development arrangements, and introduction of measures that could better align the operation and regulation of our healthcare professions with global best practices.

2. When projecting the demands for healthcare services in its review, the Steering Committee should take into account all possible and likely factors, including, but not limited to, demands arising from an ageing population such as an increasing need for long-term care and mental health services, changes in the delivery models for healthcare services, new and additional demands brought about by service reforms, potential increase in demand for private services in view of the impending implementation of the Health Protection Scheme, known and planned private hospital developments, as well as potential increase in demand for private services of clienteles outside Hong Kong.

3. A Co-ordinating Committee and suitable number of sub-groups should be set up under the Steering Committee to tender views and provide advice to the Steering Committee to facilitate deliberation and formulation of recommendations.

4. The Secretary for Food and Health shall appoint members he deems fit and suitable to the Steering Committee, Co-ordinating Committee, and its sub-groups.

Co-ordinating Committee on Strategic Review on Healthcare Manpower Planning and Professional Development

Terms of Reference

1. To assist the Steering Committee in steering discussions at sub-groups by providing the necessary support and guidance, including setting broad agenda, defining scope and parameters of discussions, and providing background materials of relevance to facilitate discussion at sub-groups.

2. To examine and consolidate views, comments and suggestions from sub-groups in a systematic and structured manner, including, but not limited to, identifying commonalities, highlighting differences and assessing implications having regard to financial, legislative, practical and any other relevant considerations.

3. To provide advice to the Steering Committee on issues of a technical nature (e.g. manpower projection exercise).

4. To facilitate deliberation of the Steering Committee by formulating preliminary proposals on how best to ensure an adequate and sustainable supply of healthcare professionals and strengthen development of the relevant healthcare professions, having regard to the consolidated views, comments and suggestions from all sub-groups as well as the opinions of members on the Co-ordinating Committee, outcome of the manpower projection exercise and global best practices.

Sub-groups under the Steering Committee on Strategic Reviewon Healthcare Manpower Planning and Professional Development

Terms of Reference

1. To provide views, comments and suggestions to the Steering Committee via the Co-ordinating Committee on Strategic Review on Healthcare Manpower Planning and Professional Development on matters concerning –

   (a) the supply and demand of healthcare professionals, including the conduct of a manpower projection exercise, possible means and measures for ensuring an adequate supply of healthcare professionals that could meet the current and projected demands for healthcare services on a sustainable basis; and

   (b) the professional standards and qualities of healthcare professionals, including proposals on possible changes to the relevant regulatory regime, possible improvement to training and development arrangements, and possible introduction of measures that aim to better align the operation and regulation of healthcare professionals with global best practices.

2. The Sub-groups need not reach a consensual view on matters put to it for discussion. Where there are differences in view among its members, all views, comments and suggestions should be submitted to the Steering Committee via the Co-ordinating Committee for consideration.

Annex 2

Membership of the Steering Committee on Strategic Review on Healthcare Manpower Planning and Professional Development

Chairman

Dr. KO Wing-man, B.B.S., J.P.
Secretary for Food and Health

Members

Prof. Francis CHAN Ka-leung, J.P.
Dr. Moses CHENG Mo-chi, G.B.M., G.B.S., J.P.
Prof. Stephen CHEUNG Yan-leung, B.B.S., J.P.
Mr. Ambrose HO, S.B.S., J.P.
Mr. LAM Woon-kwong, G.B.S., J.P.
Prof. Gabriel M LEUNG, G.B.S., J.P.
Mrs. Margaret LEUNG KO May-yee, S.B.S., J.P.
Dr. Donald LI Kwok-tung, S.B.S., J.P.
Prof. Raymond LIANG Hin-suen, S.B.S., J.P.
Prof. Felice LIEH-MAK, G.B.S., J.P.
Mr. PANG Yiu-kai, G.B.S., J.P.
Mr. Philip TSAI Wing-chung, J.P.
Prof. Maurice YAP Keng-hung, J.P.
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Dr. LEUNG Pak-yin, J.P.
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Ex-officio Members

Permanent Secretary for Food and Health (Health)
Permanent Secretary for Labour and Welfare (or representative)
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Director of Health
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Overseas Experts

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Prof. Desmond Francis Gorman

Members who have retired or resigned

Prof. Alfred CHAN Cheung-ming, S.B.S., J.P.
Prof. Anthony CHEUNG Bing-leung, G.B.S., J.P.
Prof. FOK Tai-fai, S.B.S., J.P.
Prof. LEE Sum-ping
Prof. Harvey V Fineberg (overseas expert)

IN MEMORIAM

The Steering Committee is very saddened that one of its Members, Mr. Andy LAU Kwok-fai passed away in April 2015. Mr. LAU had participated actively in the meetings of the Steering Committee and had contributed many useful and constructive ideas to the formulation of pertinent and pragmatic recommendations. The Chairman and all Members of the Consultative Group would like to express their deepest condolences to Mr. LAU's family.

Membership of the Co-ordinating Committee on Strategic Review on Healthcare Manpower Planning and Professional Development

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Mr. LAM Woon-kwong, G.B.S., J.P.
Mr. Philip TSAI Wing-chung, J.P.
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Prof. Alfred CHAN Cheung-ming, S.B.S., J.P.
Prof. Anthony CHEUNG Bing-leung, G.B.S., J.P.

Membership of the Medical Sub-group

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Alternate Chairman

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Mr. LAM Chi-yau
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Ex-officio Member

Director of Health (or representative)

Member who has retired or resigned

Prof. Anthony CHEUNG Bing-leung, G.B.S., J.P.

IN MEMORIAM

The Medical Sub-group is very saddened that one of its Members, Mr. CHEUNG Tak-hai passed away in May 2012. The Chairman and all Members of the Sub-group would like to express their deepest condolences to Mr. CHEUNG's family.

Membership of the Dental Sub-group

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Prof. Geoffrey CHENG Wai-Chak
(Representing The Hong Kong Association of Private Practice Optometrists)
Dr. Eric CHU Chun-pu
(Representing Chiropractic Doctors' Association of Hong Kong)
Ms. Ivis CHUNG Wai-yee
(Representing Hospital Authority)
Dr. DO Chi-wai
(Representing Optometrists Board, Supplementary Medical Professions Council)
Dr. FONG Hang
(Representing Hong Kong Association of Professional Chiropractors)
Ms. Eleanor Chantel KOO Wai-fan
(Representing Hong Kong Biomedical Scientists Association)
Mr. KWOK Chi-lim
(Representing Hong Kong Institute of Medical Laboratory Sciences)
Mr. Charles LAI Wai-kin
(Representing Physiotherapists Board, Supplementary Medical Professions Council)

Prof. Carly LAM
(Representing School of Optometry, The Hong Kong Polytechnic University)
Dr. David LAM Tat-yin
(Representing Supplementary Medical Professions Council)
Dr. Mazy LAM YIP Chin-may
(Representing Chiropractors Council of Hong Kong)
Miss Victoria LAW
(Representing The Hong Kong Society of Professional Optometrists)
Dr. Polly LEUNG Hang-mei
(Representing Medical Laboratory Technologists Board, Supplementary Medical Professions Council)
Ms. Christina LEUNG Siu-Mui
(Representing Institute of Biomedical Science (Hong Kong Branch))
Mr. Alex LI Wai-chun
(Representing Hong Kong Association of Medical Laboratories Limited)
Mr. Dragon LIU Hong-lung
(Representing Hong Kong Association of Radiation Therapists)
Dr. Bacon NG Fung-leung
(Representing Occupational Therapists Board, Supplementary Medical Professions Council)
Ms. Priscilla POON Yee-hung
(Representing Hong Kong Physiotherapy Association Limited)
Ms. Daisy SIU Wing-pik
(Representing Radiographers Board, Supplementary Medical Professions Council)
Ms. Grand TSANG Ka-lok
(Representing Medical Technicians and Technologists Branch, The Hong Kong Chinese Civil Servants Association)
Mr. Apollo WONG Pak-leung
(Representing The Hong Kong Radiological Technologists' Association)
Dr. Matty WONG Fung-yan
(Representing China Hong Kong Macao Chiropractic Association)
Mr. Edward WONG Ting-hei
(Representing Hong Kong Radiographers' Association)
Mr. Alex YIM Kwok-bun
(Representing The Hong Kong Optometric Association)
Prof. YIP Shea-ping
(Representing Department of Health Technology and Informatics, The Hong Kong Polytechnic University)

Ex-officio Member
Director of Health (or representative)

Members who have retired or resigned
Prof. Alfred CHAN Cheung-ming, B.B.S., J.P.
Ms. Angela NG

Annex 3

Common Approaches for Healthcare Workforce Planning

Need-based Models

1. Need-based models allow 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 behaviour, and self-perceived health. These models project healthcare deficits as well as healthcare service need and can avoid perpetuating existing inequity and inefficiency within the healthcare delivery system. As need-based approaches have greater data demand than those based on supply or utilisation, the availability of epidemiological data is an important limiting factor. For these models, detailed information on the efficacy of individual medical services for specific medical conditions is required. The assumption of these models that healthcare resources will be used in accordance with relative levels of need is also not verified.

Demand/Utilisation-based Models

2. Demand/utilisation models project healthcare service need based on service utilisation data, under the assumption that healthcare workload remains constant over time, and that population growth directly leads to increased workload. These models commonly include (a) estimates of healthcare demand or historical utilisation patterns, (b) anticipated change in practice patterns, (c) impact of current and emerging technologies, and (d) policy change. The projections are often limited to age and sex, although other characteristics of the population, market conditions, institutional arrangements and patterns of morbidity may be included. Previous demand models often assumed that doctors were required for all demanded service, current demand was appropriate, age and sex specific resources requirements were constant, and that demographic change was predictable over time.

Benchmarking

3. Benchmarks refer to a current best estimate of a reasonable workforce. By way of benchmarking, manpower requirements are estimated on the basis of healthcare worker-to-population ratios and current healthcare services. Estimates by benchmarking are valid for comparison only if communities and healthcare planning parameters are comparable. Adjustments for differences in population demography, population health, health insurance, productivity and health system organisation are important for such models to be relevant.

Trend Analysis

4. Trend analysis uses observed historical population growth and ageing trends for predicting future trends based on aggregate level and time series historical data. It is a macro simulation based on the extrapolation of past trends, assuming (a) a causal relationship between economic growth and the number of doctors per capita, (b) that future requirements will reflect current requirements (e.g. the current level, mix, and distribution of providers are sufficient), (c) productivity remains constant, and (d) demographic profiles (such as population growth) are consistent with observed trends. Trend analysis is often useful for projecting likely growth particularly in the private sector. These models, however, do not consider the evolution of the demand for care, doctor productivity, and elasticity of labour supply for different provider groups.

Annex 4

Comparison of Regulatory Frameworks for Healthcare Professionals in Other Jurisdictions

I. Doctors

Area of Comparison	Jurisdictions											
	Hong Kong	UK	Germany	Finland	US	Canada	Australia	New Zealand	China	Taiwan	Malaysia	Singapore
Nature of Regulation												
Self-regulation	✓		✓									
Co-regulation with public		✓ Note 1			✓		✓					
Strong government oversight		✓		✓					✓	✓	✓	
Regulatory Body												
Regulators	Medical Council of Hong Kong	General Medical Council	(i) German Medical Association (ii) State Chambers of Physicians	National Supervisory Authority for Welfare and Health	(i) Federation of State Medical Board (ii) State Medical Boards	(i) Federation of Medical Regulatory Authorities of Canada (ii) 13 Provincial and Territorial Medical Regulatory Authorities (iii) Medical Council of Canada	Medical Board of Australia	Medical Council of New Zealand	(i) Ministry of Health (ii) Administrative departments of health under local people's governments at or above county level	(i) Ministry of Health and Welfare (ii) Department of Medical Affairs, Ministry of Health and Welfare	The Malaysian Medica Council	The Singapore Medica Council
Composition of Regulatory Body												
Lay member	4 (14%)	6 (50%)	N/A	N/A	2 (8%)	5 (33%)	4 (33%)	4 (33%)	N/A	N/A	* Strong government oversight	
Professional member (elected)	14 (50%)	0 (0%)	N/A	N/A	0 (0%)	10 (67%)	0 (0%)	4 (33%)	N/A	N/A	11 (33%)	12 (50%)
Professional member (appointed)	10 (36%)	6 (50%)	N/A	N/A	22 (92%)	0 (0%)	8 (67%)	4 (34%)	N/A	N/A	22 (67%)	12 (50%)
Total number of members	28	12	N/A	N/A	24	15	12	12	N/A	N/A	33	24
					(New York State)	(British Columbia)						
Sources of Funding in Regulatory Bodies												
By the professional		✓			✓	✓	✓	✓				
By the government	✓		✓	✓					✓	✓		
Accreditation System for Education and Training												
Accrediting body different from regulatory body	×	×	×	×	✓	✓	✓	×	×	✓	×	
Requirements on Overseas Graduates												
(a) Recognised list / area of overseas eductaion institutions	×	✓	✓	✓	×	✓	✓	✓	N/A	×	✓	
(b) Compulsory licensing examinations	✓	×	×	×	✓	×	×	×	N/A	✓	×	
(c) Language proficiency assessment	✓	✓	✓	✓	✓	✓	✓	✓	N/A	N/A	N/A	
(d) Specified period of supervised work before full registration	✓	×	×	✓ Note 2	✓	✓	✓	✓	N/A	N/A	✓	
Continuing Professional Development (CPD) Requirements												
Mandatory CPD	For Specialists Only	✓	✓	×	✓	✓	✓	✓	✓	✓	×	
Revalidation / Recertification												
Revalidation / Recertification	×	✓	×	×	✓	✓	×	✓	×	×	×	
Disciplinary Mechanisms												
Independent complaint body	×	×	×	✓	×	×	✓	✓	×	×	×	
Independent adjudication body	×	✓	×	×	×	×	N/A	✓	×	×	×	

Note 1 Recently moving towards co-regulation

Note 2 For overseas graduates from outside the EU or European Economic Area (EEA)

* The Director of the General of Health Malaysia is the ex-officio President of the Malaysian Medical Council. In Singapore, the Director of Medical Services is the Registrar of the Singapore Medical Council

N/A = information not available

II. Dentists

Area of Comparison	Jurisdictions [Note 1]									
	Hong Kong	UK	US	Canada	Australia	New Zealand	China	Taiwan	Malaysia	Singapore
Nature of Regulation										
Self-regulation	✓									
Co-regulation with public		✓ [Note 2]	✓		✓					
Strong government oversight		✓					✓	✓	✓	
Regulatory Body										
Regulators	Dental Council of Hong Kong	General Dental Council	(i) American Association of Dental Board (ii) State / Dental Boards	(i)Dental Regulatory Authorities & Provincial/ Territorial Associations (ii) Canadian Dental Regulatory Authorities Federation	Dental Board of Australia	Dental Council of New Zealand	(i)Ministry of Health (ii) Administrative departments of health under local people's governments at or above the county level	(i)Ministry of Health and Welfare (ii)Department of Medical Affairs, Ministry of Health and Welfare	The Malaysian Dental Council	The Singapore Dental Council
Composition of the Regulatory Body										
Lay member	3 (25%)	12 (50%)	1 (6%)	6 (33%)	4 (33%)	3 (30%)	N/A	N/A	* Strong government oversight	
Professional member (elected)	0 (0%)	0 (0%)	0 (0%)	12 (67%)	0 (0%)	0 (0%)	N/A	N/A	10 (42%)	4 (36%)
Professional member (appointed)	9 (75%)	12 (50%)	17 (94%)	0 (0%)	8 (67%)	7 (70%)	N/A	N/A	12 (50%)	7 (64%)
ex-officio member	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	N/A	N/A	2 (8%)	0 (0%)
Total number of members	12	24	18	18	12	10	N/A	N/A	24	11
			(New York State)	(British Columbia)						
Sources of Funding in Regulatory Bodies										
By the professional		✓	✓	✓	✓	✓				✓
By the government	✓						✓	✓		
Accreditation System for Education and Training										
Accrediting body different from regulatory body	×	×	✓	✓	✓	×	×	✓	×	
Requirements on Overseas Graduates										
(a) Recognised list / area of overseas education institutions	×	✓	varied across states	✓	✓	✓	N/A	×	✓	
(b) Compulsory licensing examinations	✓	×		×	×	×	N/A	✓	×	
(c) Language proficiency assessment	×	✓	N/A	varied across provinces	✓	✓	N/A	N/A	N/A	N/A
(d) Specified period of supervised work before full registration	×	✓	N/A	N/A	✓	×	N/A	N/A	N/A	N/A
Continuing Professional Development (CPD) Requirements										
Mandatory CPD	For Dental Specialists Only	✓	✓	✓	✓	✓	✓	✓	✓	
Revalidation / Recertification										
Revalidation / Recertification	×	×	✓	×	×	✓	×	×	×	
Disciplinary Mechanisms										
Independent complaint body	×	×	×	×	✓	✓	×	×	×	
Independent adjudication body	×	×	×	×	N/A	✓	×	×	×	

Note 1 For Finland & Germany, information is not available

Note 2 Recently moving towards co-regulation

* In Malaysia, the Director General of Health is the ex-officio President of the Malaysian Dental Council

N/A = Information not available

III. Nurses and Midwives

Area of Comparison	Jurisdictions [Note 1]									
	Hong Kong	UK	US	Canada	Australia	New Zealand	China	Taiwan	Malaysia	Singapore
Nature of Regulation										
Self-regulation	✓									
Co-regulation with public		✓ [Note 4]	✓		✓					
Strong government oversight		✓					✓	✓	✓	
Regulatory Body										
Regulators	(i) Nursing Council of Hong Kong (ii) Midwives Council of Hong Kong	Nursing & Midwives Council	(i) National Council of State Boards of Nursing (ii) State Boards of Nursing (iii) State Boards of Midwifery	(i) Provincial & Territorial Regulatory Bodies for Nurses / Midwives (ii) Canadian Council of Registered Nurse Regulators (iii) Canadian Council for Practical Nurse Regulators (iv) Registered Psychiatric Nurses of Canada (v) Canadian Midwifery Regulators Consortium	Nursing and Midwifery Board of Australia	(i) Nursing Council of New Zealand (ii) Midwifery Council of New Zealand	(i) Ministry of Health (ii) Administrative departments of health under local people's governments at or above county level	(i) Ministry of Health and Welfare (ii) Department of Medical Affairs, Ministry of Health and Welfare (iii) Bureau of Nursing and Health Services	(i) Malaysian Nursing Board (ii) Malaysian Midwives Board	Singapore Nursing Board
Composition of the Regulatory Body										
Lay member	(i) 3-6 (20%-40%) Note 2 (ii) 4 (22%)	7 (50%)	(ii) 2 (12%) (iii) 1 (8%)	CRNBC 3 (25%) CMBC 3 (33%)	4 (33%)	(i) 3 (33%) (ii) 1 (13%)	N/A	N/A	* Strong government oversight	
Professional member (elected)	(i) 0 (0%) (ii) 0 (0%)	0 (0%)	0 (0%)	CRNBC 9 (75%) CMBC 6 (67%)	0 (0%)	(i) 6 (67%) (appointed & elected) (ii) 7 (87%) (appointed)	N/A	N/A	0 (0%)	0 (0%)
Professional member (appointed)	(i) 8 - 11 (53% - 73%) (ii) 12 (67%)	7 (50%)	(ii)15 (88%) (iii)12 (92%)	0 (0%)	8 (67%)		N/A	N/A	(i) 15 (71%) (ii) 13 (76%)	15 (88%)
ex-officio member	(i) 1 (7%) (ii) 2 (11%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	N/A	N/A	(i) 6 (29%) (ii) 4 (24%)	2 (12%)
Total number of members	(i) 15 (ii) 18	14	(i) 17 (ii) 13	CRNBC 12 CMBC 9	12	(i) 9 (ii) 8	N/A	N/A	(i) 21 (ii) 17	17
			(New York State)	CRNBC - College of Registered Nurses in BC CMBC - College of Midwives of BC (British Columbia)						
Sources of Funding in Regulatory Bodies										
By the professional		✓	✓	✓	✓	✓				
By the government	✓						✓	✓		
Accreditation System for Education and Training										
Accrediting body different from regulatory body	×	×	✓	✓	✓	×	×	✓	×	
Requirements on Overseas Graduates										
(a) Recognised list / area of overseas education institutions	×	✓	varied across states	✓	✓	✓	N/A	×	✓	
(b) Compulsory licensing examinations	✓	×		×	×	×	N/A	✓	×	
(c) Language proficiency assessment	✓ [Note 3]	✓	✓	✓	✓	✓	N/A	N/A	✓	N/A
(d) Specified period of supervised work before full registration	×	✓	varied across states	×	×	×	N/A	N/A	×	N/A
				(Ontario)						
Continuing Professional Development (CPD) Requirements										
Mandatory CPD	×	✓	✓	✓	✓	✓	✓	✓	✓	
Revalidation / Recertification										
Revalidation / Recertification	×	×	✓	×	×	✓	×	×	×	
Disciplinary Mechanisms										
Independent complaint body	×	×	×	×	✓	✓	×	×	×	
Independent adjudication body	×	×	×	×	N/A	✓	×	×	×	

Note 1 For Finland & Germany, information is not available

Note 2 There will be three fewer lay members if the member nominated by HA and the two members selected from a pool of persons nominated by each of the tertiary institutions providing accredited nursing programmes are not considered so. According to past record, these members are usually registered nurses

Note 3 For Registered Nurse only

Note 4 Recently moving towards co-regulation

* In Malaysia, the Director General of Health is the ex-officio President of the Malaysian Nursing Board and Malaysian Midwives Board

N/A = information not available

IV. Chinese Medicine Practitioners

Area of Comparison	Jurisdictions [Note 1]									
	Hong Kong	UK	US	Canada [Note 3] (British Columbia)	Australia	New Zealand	China	Taiwan	Malaysia	Singapore
Nature of Regulation										
Self-regulation	✓	Not statutorily regulated	Not statutorily regulated			Not statutorily regulated				
Co-regulation with public										
Strong government oversight							✓	✓	✓	
Regulatory Body										
Regulators	Chinese Medicine Council of HongKong			College of Traditional Chinese Medicine Practitioners and Acupuncturists of British Columbia	Chinese Medicine Board of Australia		State Administration of Traditional Chinese Medicine	Committee on Chinese Medicine and Pharmacy under the Ministry of Health and Welfare	Traditional & Complementary Medicine Division of MOH	Traditional Chinese Medicine Practitioners Board
Composition of the Regulatory Body										
Lay member	6-8 (32% -42%) [Note 2]			3 (33%)	at least 50% but no more than 2/3 must be professional, others are lay members		N/A	N/A	NA	Strong government oversight
Professional member (elected)	0 (0%)			6(67%)			N/A	N/A	N/A	N/A
Professional member (appointed)	10-12 (53% -63%)						N/A	N/A	N/A	N/A
ex-officio member	1 (5%)			0 (0%)			N/A	N/A	N/A	1
Total number of members	19			9	N/A		N/A	N/A	N/A	not less than 5 and not more than 9 members
Sources of Funding in Regulatory Bodies										
By the professional				N/A	N/A					N/A
By the government	✓			N/A	N/A		✓	✓	✓	N/A
Accreditation System for Education and Training										
Accrediting body different from regulatory body	×			N/A	×		N/A	N/A	N/A	
Requirements on Overseas Graduates										
(a) Recognised list / area of overseas education institutions	×			N/A	N/A		✓	×	N/A	✓
(b) Compulsory licensing examinations	✓			N/A	N/A		×	✓	N/A	×
(c) Language proficiency assessment	×			N/A	✓		N/A	N/A	N/A	N/A
(d) Specified period of supervised work before full registration	×			N/A	N/A		✓	N/A	N/A	✓
Continuing Professional Development (CPD) Requirements										
Mandatory CPD	✓			✓	✓		✓	✓	×	N/A
Revalidation / Recertification										
Revalidation / Recertification	×			N/A	N/A		×	N/A	N/A	N/A
Disciplinary Mechanisms										
Independent complaint body	×			N/A	✓		N/A	N/A	N/A	×
Independent adjudication body	×			N/A	N/A		N/A	N/A	N/A	×

Note 1 For Finland & Germany, information is not available

Note 2 There will be two fewer lay members if the two members from educational or scientific research institutions in Hong Kong are not considered so. According to past record, these two members are usually filled by registered CMPs

Note 3 In Canada, only British Columbia and Ontario regulate Traditional Chinese Medicine Practitioners

N/A = information not available

V. Pharmacists

Area of Comparison	Jurisdictions [Note1]									
	Hong Kong	UK	US	Canada	Australia	New Zealand	China	Taiwan	Malaysia	Singapore
Nature of Regulation										
Self-regulation	✓									
Co-regulation with public		✓ [Note 2]	✓		✓					
Strong government oversight		✓					✓	✓	✓	
Regulatory Body										
Regulators	Pharmacy and Poisons Board of Hong Kong	(i) General Pharmaceutical Council (ii) Pharmaceutical Society of Northern Ireland (regulatory body in Northern Ireland)	(i) National Association of Boards of Pharmacy (ii) State Boards of Pharmacy	National Association of Pharmacy Regulatory Authorities	Pharmacy Board of Australia	Pharmacy Council of New Zealand	(i) Ministry of Health (ii) Administrative departments of health under local people's governments at or above the county level (iii) State Food and Drug Administration (國家食品藥品監督管理局)	Ministry of Health and Welfare	Pharmacy Board Malaysia	Singapore Pharmacy Council
Composition of the Regulatory Body										
Lay member	3 (27%)	7 (50%)	2 (18%)	4 (33%)	4 (33%)	2 (25%)	N/A	N/A	* Strong government oversight	
Professional member (elected)	0 (0%)	0 (0%)	0 (0%)	8 (67%)	0 (0%)	0 (0%)	N/A	N/A	0 (0%)	0 (0%)
Professional member (appointed)	5 (46%)	7 (50%)	9 (82%)	0 (0%)	8 (67%)	6 (75%)	N/A	N/A	16 (89%)	9 (82%)
ex-officio member	3 (27%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	N/A	N/A	2 (11%)	2 (18%)
Total number of members	11	14	11	12	12	8	N/A	N/A	18	11
			(New York State)	(British Columbia)						
Sources of Funding in Regulatory Bodies										
By the professional		✓	✓	✓	✓	✓				
By the government	✓						✓	✓		
Accreditation System for Education and Training										
Accrediting body different from regulatory body	×	×	✓	✓	✓	×	×	✓	×	
Requirements on Overseas Graduates										
(a) Recognised list / area of overseas education institutions	×	✓	varied across states	×	✓	✓	N/A	×	✓	
(b) Compulsory licensing examinations	✓	×		✓ (except QuebeC)	×	×	N/A	✓	×	
(c) Language proficiency assessment	×	✓	✓	✓	✓	✓	N/A	N/A	N/A	
(d) Specified period of supervised work before full registration	×	✓	varied across states	varied across provinces	✓	✓	N/A	N/A	N/A	
Continuing Professional Development (CPD) Requirements										
Mandatory CPD	×	✓	✓	✓	✓	✓	✓	✓	✓	
Revalidation / Recertification										
Revalidation / Recertification	×	×	✓	N/A	×	✓	N/A	N/A	N/A	N/A
Disciplinary Mechanisms										
Independent complaint body	×	×	×	×	✓	✓	×	×	×	
Independent adjudication body	×	×	×	×	N/A	✓	×	×	×	

Note 1 For Finland & Germany, information is not available

Note 2 Recently moving towards co-regulation

* In Malaysia, the Director General of Health is the ex-officio President of the Pharmacy Board Malaysia

N/A = information not available

VI. Occupational Therapists

Area of Comparison	Jurisdictions [Note 1 and Note 2]						
	Hong Kong	UK	Australia	New Zealand	Taiwan	Malaysia	Singapore
Nature of Regulation							
Self-regulation	✓					Not statutorily regulated	
Co-regulation with public		✓[Note 6]	✓				
Strong government oversight		✓			✓		
Regulatory Body							
Regulators	(i) Supplementary Medical Professions Council (ii) Occupational Therapists Board	Health and Care Professions Council[Note 7]	Occupational Therapy Board	Occupational Therapy Board of New Zealand	Ministry of Health and Welfare		The Allied Health Professions Council
Composition of the Regulatory Body							
Lay member	(i) 6-13 (33%-72%)[Note 3] (ii) 2-3 (18%-27%)[Note 4]	10(50%)	at least 50% but no more than 2/3 must be professional, others are lay members	2 (29%)	N/A		N/A
Professional member (elected)	(i) 0 (0%) (ii) 0 (0%)	10(50%)		5 (71%)	N/A		N/A
Professional member (appointed)	(i) 5-12 (28%-67%) (ii) 8-9 (73%-82%)				N/A		N/A
Total number of members	(i) 15-18 (ii) 8-11	20		7	N/A		N/A
Sources of Funding in Regulatory Bodies							
By the professional		✓	✓	✓			
By the government	✓						
Accreditation System for Education and Training							
Accrediting body different from regulatory body	×	×	×	×	N/A		
Requirements on Overseas Graduates							
(a) Recognised list / area of overseas education institutions	✓	N/A	N/A	N/A	N/A		
(b) Compulsory licensing examinations	[Note 5]	N/A	N/A	N/A	N/A		
(c) Language proficiency assessment	×	N/A	N/A	N/A	N/A		N/A
(d) Specified period of supervised work before full registration	×	N/A	N/A	N/A	N/A		N/A
Continuing Professional Development (CPD) Requirements							
Mandatory CPD	×	✓	✓	✓	N/A		
Revalidation / Recertification							
Revalidation / Recertification	×	×	N/A	✓	N/A		N/A
Disciplinary Mechanisms							
Independent complaint body	×	×	✓	✓	N/A		
Independent adjudication body	×	×	N/A	✓	N/A		

Note 1 For China, Finland & Germany, information is not available

Note 2 For US and Canada, information on the areas of comparison is not available

Note 3 There will be seven fewer lay members if the four other persons not being public officers and three persons nominated by CUHK, HKU and PolyU are not considered so. According to past record, except the person nominated by PolyU, the other six members are usually other registered healthcare practitioners. In calculating the lay proportion, assuming the total number of members is 18 members

Note 4 There will be one fewer lay member if the person specially qualified to advise on professional education is not considered so. According to past record, this member is usually from education institution being registered in that SMP profession. In calculating the lay proportion, assuming the total number of members is 11 members

Note 5 Applicants holding qualifications other than those recognised by the Board will need to take the licensing examination

Note 6 Recently moving towards co-regulation

Note 7 Health and Care Professions Council also regulate 15 other health professions

N/A = information not available

VII. Physiotherapists

Area of Comparison	Jurisdictions Note 1 and Note 2					
	Hong Kong	UK	Australia	New Zealand	Malaysia	Singapore
Nature of Regulation						
Self-regulation	✓				Not statutorily regulated	
Co-regulation with public		✓ Note 6	✓			
Strong government oversight		✓				
Regulatory Body						
Regulators	(i) Supplementary Medical Professions Council (ii) Physiotherapists Board	Health and Care Professions Council Note 7	Physiotherapy Board	Physiotherapists Board		Allied Health Professions Council
Composition of the Regulatory Body						
Lay member	(i) 6-13 (33% -72%) Note 3 (ii) 2-3 (18% -27%) Note 4	10(50 %)	at least 50% but no more than 2/3 must be professional, others are lay members	2 (25 %)		N/A
Professional member (elected)	(i) 0 (0%) (ii) 0 (0%)	10(50 %)		8(75 %)		N/A
Professional member (appointed)	(i) 5-12 (28% -67%) (ii) 8-9 (73 % -82%)					N/A
Total number of members	(i) 15-18 (ii) 8-11	20		8		N/A
Sources of Funding in Regulatory Bodies						
By the professional		✓	✓	✓		
By the government						
Accreditation System for Education and Training						
Accrediting body different from regulatory body	×	×	×	N/A		
Requirements on Overseas Graduates						
(a) Recognised list / area of overseas education institutions	✓	N/A	N/A	N/A		
(b) Compulsory licensing examinations	Note 5	N/A	N/A	N/A		
(c) Language proficiency assessment	×	N/A	N/A	N/A		N/A
(d) Specified period of supervised work before full registration	×	N/A	N/A	N/A		N/A
Continuing Professional Development (CPD) Requirements						
Mandatory CPD	×	✓	✓	✓		
Revalidation / Recertification						
Revalidation / Recertification	×	×	N/A	✓		N/A
Disciplinary Mechanisms						
Independent complaint body	×	×	✓	✓		
Independent adjudication body	×	×	N/A	✓		

Note 1 For China, Taiwan, Finland & Germany, information is not available

Note 2 For US and Canada, information on the areas of comparison is not available

Note 3 There will be seven fewer lay members if the four other persons not being public officers and three persons nominated by CUHK, HKU and PolyU are not considered so. According to past record, except the person nominated by PolyU, the other six members are usually other registered healthcare practitioners. In calculating the lay proportion, assuming the total number of members is 18 members

Note 4 There will be one fewer lay member if the person specially qualified to advise on professional education is not considered so. According to past record, this member is usually from education institution being registered in that SMP profession. In calculating the lay proportion, assuming the total number of members is 11 members

Note 5 The Board may ask applicants holding qualifications other than those recognised by the Board to take registration examination

Note 6 Recently moving towards co-regulation

Note 7 Health and Care Professions Council also regulate 15 other health professions.

N/A = information not available

VIII. Medical Laboratory Technologists

Area of Comparison	Jurisdictions Note 1 and Note 2			
	Hong Kong	New Zealand	Malaysia	Singapore
Nature of Regulation				
Self-regulation	✓		Not statutorily regulated	Not statutorily regulated
Co-regulation with public				
Strong government oversight				
Regulatory Body				
Regulators	(i) Supplementary Medical Professions Council (ii) Medical Laboratory Technologists Board	The Medical Science Council of New Zealand		
Composition of the Regulatory Body				
Lay member	(i) 6-13 (33% -72%) Note 3 (ii) 2-3 (18% -27%) Note 4	3 (30%)		
Professional member (elected)	(i) 0 (0%) (ii) 0 (0%)	7 (70%)		
Professional member (appointed)	(i) 5-12 (28% -67%) (ii) 8-9 (73% -82%)			
Total number of members	(i) 15-18 (ii) 8-11	10		
Sources of Funding in Regulatory Bodies				
By the professional		✓		
By the government				
Accreditation System for Education and Training				
Accrediting body different fromregulatory body	×	N/A		
Requirements on Overseas Graduates				
(a) Recognised list / area of overseas education institutions	Assess on individual merits	N/A		
(b) Compulsory licensing examinations	Note 5	N/A		
(c) Language proficiency assessment	×	N/A		
(d) Specified period of supervised work before full registration	×	N/A		
Continuing Professional Development (CPD) Requirements				
Mandatory CPD	×	✓		
Revalidation / Recertification				
Revalidation / Recertification	×	✓		
Disciplinary Mechanisms				
Independent complaint body	×	✓		
Independent adjudication body	×			

Note 1 For UK, Australia, China, Taiwan, Finland & Germany, information is not available

Note 2 For US and Canada, information on the areas of comparison is not available

Note 3 There will be seven fewer lay members if the four other persons not being public officers and three persons nominated by CUHK, HKU and PolyU are not considered so. According to past record, except the person nominated by PolyU, the other six members are usually other registered healthcare practitioners. In calculating the lay proportion, assuming the total number of members is 18 members

Note 4 There will be one fewer lay member if the person specially qualified to advise on professional education is not considered so. According to past record, this member is usually from education institution being registered in that SMP profession. In calculating the lay proportion, assuming the total number of members is 11 members

Note 5 The Board may ask applicants holding qualifications other than those recognised by the Board to take the registration examination

N/A = information not available

IX. Optometrists

Area of Comparison	Jurisdictions [Note 1 and Note 2]					
	Hong Kong	UK	Australia	New Zealand	Malaysia	Singapore
Nature of Regulation						
Self-regulation						
Co-regulation with public		✓ [Note 6]	✓			
Strong government oversight		✓			✓	
Regulatory Body						
Regulators	(i) Supplementary Medical Professions Council (ii) Optometrists Board	General Optical Council	Optometry Board	The Optometrists and Dispensing Opticians Board	The Malaysian Optical Council	Optometrists and Opticians Board
Composition of the Regulatory Body						
Lay member	(i) 6-13 (33% -72%) [Note 3] (ii) 2-3 (18% -27%) [Note 4]	6 (50%)	at least 50% but no more than 2/3 must be professional, others are lay members	1 (13%)	N/A	N/A
Professional member (elected)	(i) 0 (0%) (ii) 0 (0%)	0 (0%)		7 (87%)	N/A	N/A
Professional member (appointed)	(i) 5-12 (28% -67%) (ii) 8-9 (73% -82%)	6 (50%)			N/A	N/A
Total number of members	(i) 15-18 (ii) 8-11	12		8	N/A	N/A
Sources of Funding in Regulatory Bodies						
By the professional		✓	✓	✓		
By the government	✓					
Accreditation System for Education and Training						
Accrediting body different from regulatory body	×	×	×	N/A	N/A	
Requirements on Overseas Graduates						
(a) Recognised list / area of overseas education institutions	✓	✓	N/A	N/A	N/A	N/A
(b) Compulsory licensing examinations	Note 5	×	N/A	N/A	N/A	N/A
(c) Language proficiency assessment	×	N/A	N/A	N/A	N/A	N/A
(d) Specified period of supervised work before full registration	×	N/A	N/A	N/A	N/A	N/A
Continuing Professional Development (CPD) Requirements						
Mandatory CPD	×	✓	✓	✓	N/A	
Revalidation / Recertification						
Revalidation / Recertification	×	×	N/A	✓	N/A	N/A
Disciplinary Mechanisms						
Independent complaint body	×	×	✓	✓	×	
Independent adjudication body	×	×	N/A	✓	×	

Note 1 For China, Taiwan, Finland & Germany, information is not available

Note 2 For US and Canada, information on the areas of comparison is not available

Note 3 There will be one fewer lay member if the person specially qualified to advise on professional education is not considered so. According to past record, this member is usually from education institution being registered in that SMP profession. In calculating the lay proportion, assuming the total number of members is 11 members

Note 4 There will be one fewer lay member if the person specially qualified to advise on professional education is not considered so. According to past record, this member is usually from education institution being registered in that SMP profession. In calculating the lay proportion, assuming the total number of members is 11 members

Note 5 There is no registration examination held for the optometrists

Note 6 Recently moving towards co-regulation

N/A = information not available

X. Radiographers

Area of Comparison	Jurisdictions Note 1 and Note 2					
	Hong Kong	UK	Australia	New Zealand	Malaysia	Singapore
Nature of Regulation						
Self-regulation					Not statutorily regulated	Not statutorily regulated
Co-regulation with public		✓Note 6	✓			
Strong government oversight						
Regulatory Body						
Regulators	(i) Supplementary Medical Professions Council (ii) Radiographers Board	Health and Care Professions Council Note 7	Medical Radiation Practice Board	Medical Radiation Technologists Board		
Composition of the Regulatory Body						
Lay member	(i) 6-13 (33% -72%) Note 3 (ii) 2-3 (18% -27%) Note 4	10(50 %)	at least 50% but no more than 2/3 must be professional, others are lay members	3(30 %)		
Professional member (elected)	(i) 0 (0%) (ii) 0 (0%)	10(50 %)		7(70 %)		
Professional member (appointed)	(i) 5 - 12 (28% -67%) (ii) 8-9 (73 % -82%)					
Total number of members	(i) 15 -18 (ii) 8 -11	20		10		
Sources of Funding in Regulatory Bodies						
By the professional		✓	✓	✓		
By the government						
Accreditation System for Education and Training						
Accrediting body different from regulatory body	×	×	×	N/A		
Requirements on Overseas Graduates						
(a) Recognised list / area of overseas education institutions	✓	N/A	N/A	N/A		
(b) Compulsory licensing examinations	Note 5	N/A	N/A	N/A		
(c) Language proficiency assessment	×	N/A	N/A	N/A		
(d) Specified period of supervised work before full registration	×	N/A	N/A	N/A		
Continuing Professional Development (CPD) Requirements						
Mandatory CPD	×	✓	✓			
Revalidation / Recertification						
Revalidation / Recertification	×	×	N/A			
Disciplinary Mechanisms						
Independent complaint body	×	×	✓			
Independent adjudication body	×	×	N/A			

Note 1 For China, Taiwan, Finland & Germany, information is not available

Note 2 For US and Canada, information on the areas of comparison is not available

Note 3 There will be seven fewer lay members if the four other persons not being public officers and three persons nominated by CUHK, HKU and PolyU are not considered so. According to past record, except the person nominated by PolyU, the other six members are usually other registered healthcare practitioners. In calculating the lay proportion, assuming the total number of members is 18 members

Note 4 There will be one fewer lay member if the person specially qualified to advise on professional education is not considered so. According to past record, this member is usually from education institution being registered in that SMP profession. In calculating the lay proportion, assuming the total number of members is 11 members

Note 5 The Board may ask applicants holding qualifications other than those recognised by the Board to take the registration examination (only for applicants for the Diagnostic stream)

Note 6 Recently moving towards co-regulation

Note 7 Health and Care Professions Council also regulate 15 other health professions

N/A = information not available

XI. Chiropractors

Area of Comparison	Jurisdictions[Note1]								
	Hong Kong	UK	US	Canada	Australia	New Zealand	Taiwan	Malaysia	Singapore
Nature of Regulation									
Self-regulation	✓			✓			Not statutorily regulated	Not statutorily regulated	Not statutorily regulated
Co-regulation with public		✓[Note 3]	✓		✓				
Strong government oversight									
Regulatory Body									
Regulators	Chiropractors Council of Hong Kong	General Chiropractic Council	Federation of Chiropractic Licensing Boards	Canadian Chiropractic Association	Chiropractic Board	New Zealand Chiropractic Board			
Composition of the Regulatory Body									
Lay member	5 (50%)	7 (50%)	N/A	N/A	at least 50% but no more than 2/3 must be professional, others are lay members	2 (29%)			
Professional member (elected)	0 (0%)	0 (0%)	N/A	N/A		5 (71%)			
Professional member (appointed)	5 (50%)	7 (50%)	N/A	N/A					
Total number of members	10	14	N/A	N/A		7			
Sources of Funding in Regulatory Bodies									
By the professional		✓	✓	✓	✓	✓			
By the government									
Accreditation System for Education and Training									
Accrediting body different from regulatory body	Note 2	×	✓	N/A	×	N/A			
Requirements on Overseas Graduates									
(a) Recognised list / area of overseas education institutions	✓	N/A	N/A	N/A	N/A				
(b) Compulsory licensing examinations	×	N/A	N/A	N/A	N/A				
(c) Language proficiency assessment	×	N/A	N/A	N/A	N/A	N/A			
(d) Specified period of supervised work before full registration	×	N/A	N/A	N/A	N/A	N/A			
Continuing Professional Development (CPD) Requirements									
Mandatory CPD	×	✓	varied across states	varied across provinces	✓				
Revalidation / Recertification									
Revalidation / Recertification	×	×	N/A	N/A	N/A	N/A			
Disciplinary Mechanisms									
Independent complaint body	×	N/A	N/A	N/A	✓				
Independent adjudication body	×	N/A	N/A	N/A	N/A				

Note 1 For China, Finland & Germany, information is not available

Note 2 There is no chiropractic education in Hong Kong

Note 3 Recently moving towards co-regulation

N/A = information not available

Source: The Chinese University of Hong Kong