

Regulatory Frameworks for Healthcare Professionals

Final Report

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A. Background and Objectives

1. As part of the healthcare reform agenda, the HKSAR Government has formed a *Steering Committee on Strategic Review on Healthcare Manpower Planning and Professional Development* to formulate recommendations on how to cope with anticipated demand for healthcare manpower and facilitate professional development and regulation.

2. To assist the Steering Committee in making informed recommendations to the Government on the means and measures to strengthen professional development and regulation of the healthcare professions concerned, the JC School of Public Health and Primary Care of the Chinese University of Hong Kong (CUHK) was commissioned by the Food and Health Bureau (FHB) in March 2012 to conduct a critical, comprehensive and comparative review of the global and local regulatory frameworks for healthcare professionals to identify areas of improvement for healthcare professional development in Hong Kong. The findings and recommendations of the study were used to provide reference for the Steering Committee and subsequently could help inform the FHB's health policy.

3. The agreed **objectives of the 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 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.

4. **Areas of study** included the following:

- (a) Current legislation, regulatory and supervisory structures governing qualifications and conducts of the healthcare professionals;
- (b) Regulation of undergraduate training;
- (c) Professional registration and licensing processes;
- (d) Accreditation systems for medical education and training;

- (e) Existing mechanisms for setting and upholding professional standards and maintaining continuing competence;
- (f) Enforcement mechanisms for detecting and dealing with professional misconduct and poor performance; and
- (g) Regulation for -non-locally trained graduates.

5. The study was conducted in two phases –

- **Phase 1: “Analysis of international and local frameworks for healthcare professional regulation”** which included a review of global and local regulatory structures and processes for regulation of healthcare professionals. The goal was to identify areas in current regulatory frameworks for healthcare professionals in Hong Kong that require attention.
- **Phase 2: “Supplementing and updating the first phase findings”** to receive feedback provided by the HKSAR Government subsequent to the deliverables produced under Phase 1.

6. This report is the Final Report of the whole study. This report provides a summary of key findings under Phase 1 study and Phase 2 study.

B. Methodology and Results

7. In summary, we have conducted the following tasks for Phase 1 and Phase 2 to achieve the objectives (Table 1).

Table 1: Summary of tasks for Phase 1 and Phase 2

Phase	Task	Methodology	Outcomes
Phase 1	1. Global experience review	Desktop review	A comparison of Hong Kong's current regulatory framework for healthcare professionals with 11 selected jurisdictions, recognizing international trends that could shed light on improving current regulation
	2. Local review	Stakeholder analysis and SWOT analysis at a Symposium	Views and perception on existing regulatory framework for healthcare professionals so as to identify areas for improvement
Phase 2	1. A review of statutory and non-statutory approaches to healthcare professional regulation	Desktop review	<ul style="list-style-type: none"> • A review of statutory and non-statutory approaches to healthcare professional regulation • Criteria of selecting the right type of regulation
	2. Further study on medical regulation and supplementary study on global experience review	Telephone survey for general public, Postal self-administered questionnaire survey for doctors and Review Visits to International Interviewees	<ul style="list-style-type: none"> • Knowledge of medical regulation (general public) • Perceived needs for continuous professional development (CPD) (doctors) • Attitudes towards medical regulation (both general public and doctors) • Latest practices/ approaches of healthcare professional regulation

(I) Findings under Phase 1 Study

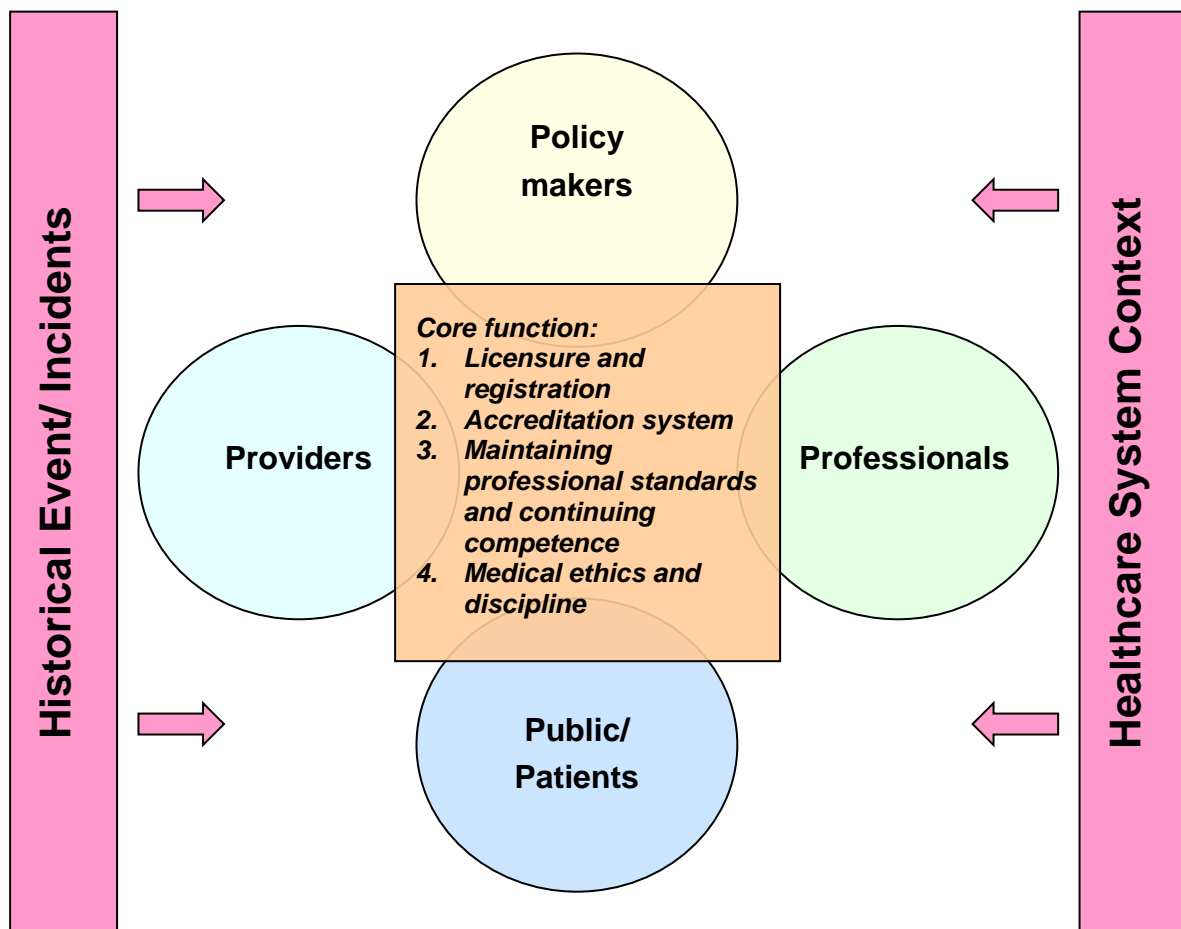
8. In Phase 1, there were two major tasks including (a) global experience review, and (b) local review.

Task 1 of Phase 1: Global experience review

Methodology

9. The “4Ps” analytical framework – Policymakers, Professionals, Providers, Public/Patients – was used for the Phase 1 Study (Figure 1). Using the lens of each of the groups in the **4Ps analytical framework – (Policymakers, Professionals, Providers and Public/Patients)** – we described the current regulatory and supervisory structure governing qualifications and conduct of the healthcare professionals.

Figure 1: Analytical framework for analysis of regulation of healthcare professionals: Policymaker, Professionals, Providers and Public/Patients (4Ps)



10. A **review of the international literature** on regulatory and supervisory frameworks for healthcare professionals (including definition of regulation, role of professional regulation, association with quality improvement, etc.) was conducted by searching relevant policy papers, review papers and authoritative monographs.

11. A **global experience review** were conducted on the regulatory frameworks for (a) doctors, (b) nurses and midwives, (c) dentists and dental hygienists, (d) Chinese Medicine Practitioners, (e) pharmacists, and (f) other healthcare professionals including occupational therapists, physiotherapists, medical laboratory technologists, optometrists, radiographers and chiropractors in 11 jurisdictions: the United Kingdom (UK), Australia, Singapore, Malaysia, the United States (US), Canada, the Mainland China, Taiwan, New Zealand, Germany and Nordic countries - Finland. Desktop-based research were conducted to review information provided by the regulatory/ professional bodies and other relevant organisations and governmental bodies from the internet, legal and government documents and other literature on healthcare professional regulation available online for all jurisdictions. A number of international visits were conducted to interview current and former policymakers who have played roles in developing regulatory frameworks and designated professionals/ managers in-charge of the statutory regulatory bodies/ leading professional bodies in order to supplement the desk-based search information.

Key Findings

Literature Review

12. Table 2 describes the key themes to emerge from the literature review. Self-regulation is commonly used to regulate the healthcare professions; however, self-regulatory arrangements vary considerably in terms of the degree of governmental oversight. To a certain extent, healthcare professional regulation is moving from the premise of self-regulation of the profession, which is to protect its own interests, to one of regulating in partnership between professions and the public (“co-regulation”). Professional regulation is defined by various authors. The main purpose is to ensure minimally acceptable standards of care, provide accountability and improve quality of care. Regulatory bodies are now becoming more accountable to the public, the government and the legislation for the

imperative of quality improvement, and lay involvement is increasing significantly, and adjudication is often an independent function. There are a range of mechanisms including licensure, registration, certification, revalidation and recertification, credentialing and privileging for regulating the healthcare professions. Regulation is a statutory mechanism to ensure that a professional is qualified and has the necessary skills and competencies to practice safely; while professionalism is about behaviours, conducts and attitudes of the professional, not just knowledge and skills. Although the directions and emphases of professionalism and regulation are different, they are complementary with each other in ensuring patient safety and quality of care, not a sanction against medical error. Regulation in the form of certification has been proved to be effective in improving the performance of the healthcare professionals. The US has adopted certification and recertification to ensure the standards of ethics and medical practice, while the UK has started to implement revalidation for doctors since December 2012.

Table 2: Key themes of literature review:

Key themes	
Categorisation of instruments for professional regulation	Self-regulatory arrangements vary considerably in terms of the degree of governmental oversight. Healthcare professional regulation is moving from the premise of self-regulation to one of regulation in partnership between professions and the public (“co-regulation”).
Role of regulation	The main purpose is to ensure minimally acceptable standards of care, provide accountability and improve quality of care.
Regulatory bodies	Regulatory bodies are now becoming more accountable to the public, government and legislation; lay involvement is much increased, and adjudication is often an independent function.
Quality improvement	Regulation of healthcare professionals is central to attempts at quality improvement in healthcare. Certification and recertification, one of the common regulatory tools used in US, is proved to be effective in improving the performance of the healthcare professionals.
Professionalism	Professionalism and regulation are complementary to each other in ensuring patient safety and quality of care, not a sanction against medical error.

Global Experience Review (see *Interim Report on the Global Regulatory and Supervisory Frameworks for Healthcare Professionals*)

13. Regulation of healthcare professionals is a “hot topic” for many jurisdictions for a variety of reasons – political, financial, legal, professional, concern about quality – often tied in with

healthcare reform. The best practice of regulation is culturally defined, and there is no one-size-fits-all solution. There is also a **growing global network** amongst those involved in reviewing and changing regulatory processes. Thus it is a **rapidly changing terrain**. There are many similarities but also differences among professions and also jurisdictions including who is regulated, how they are regulated and by whom. Overall speaking, there is a trend shifting from voluntary regulation to increasing involvement of governments as well as the public.

14. Our ten key messages from the review of global experiences were as follows:

(1) Reform of regulation is to protect patients and improve quality of care:

Many jurisdictions are undergoing regulatory reforms. This is often a continuing evolutionary process affected by (i) changing public expectations in respect of participation in healthcare practice and governance, (ii) an increasing public desire for increased transparency, and (iii) greater accountability - often triggered by scandals and political interests. The main aim of regulation is to protect patients and ensure patient safety.

(2) Legislative change is needed to reform structures:

Legislative change plays an important part in reforming the regulatory frameworks such as creating umbrella legislation, ensuring nationally consistent legislation and, introducing a single legislative act to cover several professions.

(3) Policy and organisation for overarching common principles of governance is emerging:

Ways to enhance common principles of regulation and oversight of regulatory bodies are emerging. Umbrella organisations/ bodies are being created to bring commonality to values and processes among professions, including procedures for registration, administration of the governing body, and complaints resolution and professional discipline processes.

(4) Moving from self-regulation to partnership:

There has been a significant shift from the concept of self-regulation, to more

openness, accountability, and engagement of lay representatives. Healthcare professional regulation is moving from the premise of self-regulation of the profession with an aim to protecting its own interests to one of regulation in partnership between professions and public to protect the public health.

(5) Lay representation is becoming the norm:

There is a general global trend to increase lay involvement on boards, review panels, inquiries – influencing and brokering healthcare professional regulation.

(6) Relationships with governments and regulation of standards by healthcare system (providers) and institutional regulators vary:

The healthcare system and institutional regulators play supplementary roles in health professional regulation. The Government plays a relatively strong role in Asian jurisdictions such as Singapore, Malaysia, Mainland China and Taiwan while providers play a greater role in some western jurisdictions e.g. the UK.

(7) Compulsory CPD is the norm:

There is an increasing trend of compulsory CPD for all healthcare professionals to maintain professional competence, and revalidation as well as recertification is also developing in many jurisdictions.

(8) Emerging emphasis is on detecting and dealing with poor performance and improving quality of care:

There is a trend towards detecting and intervening early with poor performance for the improvement of quality of care. Most jurisdictions have systems for identifying poor performance but methods of detection and intervention differ. However, a set of standards that determines good practice is a starting point for assessing poor performance. It gives a threshold against which poor practice can be assessed. For example “Good Medical Practice” in the UK is used to provide the basis for the principles and values on which

good practice is founded.

(9) Greater separation of roles is occurring:

To reduce conflict of interest, the investigatory and disciplinary functions in the regulators are increasingly being separated and organized independent of each other. Some jurisdictions also have separate accrediting bodies to accredit educational providers and programs of study.

(10) Non-locally trained graduates are admitted in different ways:

There are different criteria for employing international health graduates worldwide. Most jurisdictions have a recognised list of qualified non-local institutions for trained healthcare professionals. These graduates will still need some forms of professional assessment before working in healthcare systems. Although some jurisdictions do not require qualifying or licensing examinations or internships, they require a period of supervised training. Assessment of standards may be set by the professions as well as the regulators. For example, in UK, the Academy/ Medical Royal Colleges play a role in assessing the postgraduate qualifications of non-locally trained graduates and making recommendations to the General Medical Council.

15. These ten key areas highlighted the **emerging challenges for Hong Kong for consideration** (Table 3).

Table 3: Considerations for Hong Kong

	Key areas	Considerations for HK
1	Reform of regulation is to protect patients and improve quality of care	Does regulation need reform in HK?
2	Legislative change is needed to reform structures	Do we need new legislation?
3	Policy and organisation for overarching common principles of governance is emerging	Should we adopt common policies for regulating healthcare professionals? Do we need overarching umbrella body?
4	Moving from self-regulation to partnership	Is there a need for an enhanced role of government and/or lay representatives in health professional self-regulation in Hong Kong?
5	Lay representation is becoming the norm	Do we need more lay representation in the regulatory bodies?
6	Relationships with governments and regulation of standards by healthcare system and institutional regulators (providers) vary	What is the relationships with government and health system regulators?
7	Compulsory CPD is the norm	Should compulsory CPD be introduced?
8	Emerging emphasis is on detecting and dealing with poor performance and improving quality of care	How do we detect and intervene with poor performance for the improvement of quality of care?
9	Greater separation of roles is occurring	Do we need to separate some roles of regulatory bodies out e.g. adjudication, accreditation, etc.?
10	Non-locally trained graduates are admitted in different ways	Do we need to change the way we accept non-locally trained healthcare professionals?

Task 2 of Phase 1: Local review

[See “Final Report (Phase 1)” & “Hong Kong Review – Summary Findings”]

Method

16. The second task was a **local review** by conducting a Stakeholder Analysis under the “**4Ps analytical framework – (Policymakers, Professionals, Providers and Public/Patients)**” including key informant interviews, focus group discussions.

17. For the **local review**, we conducted a Stakeholder Analysis under the “4Ps” analytical framework as follows (Table 4):

Table 4: Methodology for Hong Kong Review (Stakeholder Analysis):

Stakeholders	Objectives	Data collection method
<u>P</u> olicymakers	To study the policy context and regulatory environment, which affects the development of the regulatory frameworks	By interviewing the senior officials in the Government and the chairpersons of the regulatory councils/ boards
<u>P</u> roviders	To explore the roles of healthcare providers in health professional regulation	By conducting interviews with the healthcare providers, such as the Hospital Authority and private hospitals
<u>P</u> rofessionals and <u>P</u> ublic/ <u>P</u> atients	To collect views of healthcare professionals and public/ patients towards health professional regulation	By focus group discussions

18. In addition, a SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis was conducted among healthcare professionals and public/ patients at a half-day Symposium on Regulatory Frameworks for Healthcare Professionals held on 18 March 2013 in Hong Kong to further identify areas for discussion about potential improvement in the current regulatory frameworks for healthcare professionals.

Results

19. The majority of professionals and the public expressed the **urgent need to review the legislation of professional regulation for their professions** due to outdated ordinances. Each profession has its own specific areas to review, but the common objective was to improve the quality of care and patient safety.

20. Nearly all of the professionals **suggested increasing the number and percentage of lay members in their regulatory bodies to ensure greater accountability and bring in voices from the public.** The public/ patient group further emphasised the need of involving “real” lay members, preferably recruited from the patient support groups. However, it is acknowledged that lay members require education/ training to carry out their functions in the regulatory bodies.

21. There were diverse views from the professionals about the **establishment of an overarching body** to ensure consistency among professional regulators. Concerns are mainly about potential confusion of roles, functions and cost-effectiveness of the overarching body. Some of the professionals were also worried that the overarching body might hinder their own professional development by decreasing professional autonomy. **More discussions and research are required in this area.**

22. There was **a large majority of view in favour of compulsory CPD** to maintain professional standards. Already in place for registered Chinese Medicine Practitioners (CMPs), other groups have already piloted or implemented voluntary CPD programmes. However implementation of compulsory CPD needs to take into account manpower and financial resources. The format and content of the CPD courses also need to be re-examined.

23. All professional groups and patients agreed that **an increase in transparency is required for the investigatory and disciplinary processes,** and the process should be strengthened.

24. There were concerns from the public as well as the professionals about lack of professional manpower in Hong Kong. Apart from increasing local training, the importation of non-locally trained healthcare professionals could be a way to address the manpower shortage. However, maintaining the balance between the interests of local healthcare professionals and employment of non-locally trained graduates as well as ensuring the quality of non-locally trained professionals would be needed. There was **general agreement that current processes need to be reviewed,** particularly the criteria used in accepting non-locally trained healthcare professionals to work in Hong Kong. More discussions are required

in this area. Some of the professionals and public were also concerned about the manpower issues and suggested the Government to set up a comprehensive manpower plan for each profession.

25. Table 5 summarises the **key actions that the professions proposed in the SWOT analysis.**

In general, there were three key actions which were common across the professions namely :

- (a) A request for changes/ reform of the current legislation,
- (b) Review of lay membership (in particular “real” lay person as mentioned by the public/ patient groups),
- (c) The introduction of compulsory CPD (except that the CMPs, who have already had compulsory CPD, and requested a review of the content of CPD programmes).

Table 5. Summary of key actions for the professionals

Actions	Doctors	Nurses	Dentists	Pharmacists	CMPs	Other health pros	Public/Patients
Legislative Changes	Yes (Including private clinic regulation)	Yes (Elected members & specialist registration)	Yes (Deemed registration and dental hygienist regulation)	Yes (Pharmacy law)	-	Yes (Empower the professions rather than limiting the development)	Yes (Review of regulation and healthcare reform)
Review of lay membership	Yes	Yes	Yes	-	-	Yes (however, the number should be phased in progressively)	Yes (increases the “real” laymen who are ideally the patient representatives)
Compulsory CPD	Yes	Yes	Yes (with financial support from the government)	Yes	To review the content of the CPD programmes	Yes	-
Profession-specific issues	<ul style="list-style-type: none"> • Increase the public/ patients data as part of the data collection for governance • Government should take up the responsibility of promoting the postgraduate training 	<ul style="list-style-type: none"> • Develop manpower planning mechanism (private & public) to provide a stable manpower supply 	<ul style="list-style-type: none"> • Review exam mechanism for non-locally trained dentists • Strengthen the process of investigation and disciplinary actions 	<ul style="list-style-type: none"> • Establish a Pharmacy Council • Expand the roles of pharmacists in primary care • Branding the profession 	<ul style="list-style-type: none"> • Review manpower plan for CMPs • Review the TCM training in universities 	<ul style="list-style-type: none"> • Review whether there is need to dissolve the SMPC 	<ul style="list-style-type: none"> • Address the manpower issue • Regulate or ensure standard of care via appropriate authority/ body

Note: “ - ” refers to the professions did not touched on this item in the discussion.

26. Key findings for local review included –

- (a) The majority of professionals and the public expressed **the urgent need to review the legislation of professional regulation** for their professions due to the outdated Ordinances;
- (b) Both the professionals and the public requested to **increase the number and percentage of lay members in the regulatory bodies** to ensure greater accountability and bring in voices for the public;
- (c) It was suggested that **an overarching body should be established to ensure consistency among professional regulators**, particularly to improve the definition of roles, functions and cost effectiveness. More discussions and research are required;
- (d) There was **a large majority view in favour of compulsory CPD** to maintain professional standards;
- (e) All the professional groups and patients agreed that **an increase in transparency is required for the investigatory and disciplinary processes**, and the process should be strengthened; and
- (f) In order to cope with the manpower crisis in the healthcare system, general agreement was achieved that **reviews needed to be carried out regarding the local training for healthcare professionals and the employment of non-locally trained graduates.**

Key recommendations of Phase 1 study

27. Guided by the 10 key messages which emerged from the review of global experience together with the local review, there were five recommendations for Hong Kong derived from Phase 1 Study:

- (a) **The law needs reviewing and the Ordinances need updating** as a matter of urgency. Action should be initiated as soon as possible as there have been long delays. For instance, there is no follow up action being taken for the Medical Council's reform proposal submitted in 2002.
- (b) **Professional regulatory processes to maintain professional standards should**

be formally reviewed in the very near future with inputs from all relevant parties including the professions and the public.

- (c) **Compulsory CPD for all healthcare professionals should be implemented** with the support of the professions and the public. Consideration should be given to the content, details and implementation of the CPD schemes and also the resources requirement.
- (d) **Lay membership on regulatory bodies should be reviewed** to ensure that there are appropriate numbers and percentage of lay members in each Council in order to increase the accountability of the professional regulatory bodies so that views from different stakeholders can be taken into account.
- (e) **Profession specific issues** raised in the discussion should be addressed as appropriate for each professional group as an active process.

(II) Findings of Phase 2 Study

28. Phase 2 was a follow-up to Phase 1 including (a) a review of statutory and non-statutory approaches to healthcare professional regulation, and (b) further study on medical regulation and supplementary study on global experience review.

Task 1 of Phase 2: A review of statutory and non-statutory approaches of healthcare professional regulation

[see "1st Interim Report (Phase 2) on a Summary of Approaches to Healthcare Professional Regulation"]

Background and objectives

29. Different models of healthcare professional regulation, in addition to statutory regulation, are emerging worldwide to protect patients and improve quality of care. In the UK, reform of regulation is being implemented through Accredited Voluntary Registration (AVR) which is in charge by the Professional Standards Authority for Health and Social Care (PSA) to hold a voluntary register for health and social care services which are not subject to statutory regulation. In HK, The Ombudsman published a report in October 2013 to point out the urgent need to review the regulatory system for healthcare personnel not under statutory control. The **main purpose of this task** was to **understand different approaches of healthcare professional regulation**.

Method

30. A review of the **international literature and desktop-based researches** on different types of healthcare professional regulation such as statutory and voluntary registration were conducted by searching relevant policy papers, review papers and authoritative monographs. Also, advice was also sought from the PSA on their current practices of AVR.

FINDINGS

Purpose of regulation

31. According to Sutherland and Leatherman (2006), regulation is used to (a) improve performance and quality, (b) provide assurance that minimum standards are to be achieved, and (c) provide accountability with respect to performance levels and value for money.

32. Further from an economic perspective, regulation is also a tool being used to correct market failures relating to (a) information imbalance about quality of care between the supplier of care and the recipient of care, (b) inability or incapacity of individuals to determine their best long run interests, and (c) negative impact that individuals' decision regarding healthcare can have on others (Ball et al., 2012). When these market failures occur, it is likely that sub-optimal quality of care will be resulted.

33. A "good" regulation, as suggested by the Better Regulation Task Force of UK, included five principles (Best Regulation Task Force, 2005) :

- (a) *Proportionality*: Regulators should intervene only when necessary. Remedies should be appropriate to the risk posed, and costs identified and minimised.
- (b) *Accountability*: Regulators should be able to justify decisions and be subject to public scrutiny.
- (c) *Consistency*: Government rules and standards must be joined up and implemented fairly.
- (d) *Transparency*: Regulators should be open, and keep regulations simple and user-friendly.
- (e) *Targeting*: Regulation should be focused on the problem and minimise side effects.

(i) Different models of regulation

34. The literature search found that there are different models of healthcare professional regulation worldwide. Statutory regulation plays a key role in ensuring standards of profession by assuring the quality of education, setting standards for the profession and facilitating registration for a profession. In addition to statutory regulation, there are other forms of regulation existing worldwide to protect patients and improve quality of care as well as to correct market failures. Examples of other healthcare professional regulation include a "**buyer-beware**" approach which is supported by improved public information about the risks associated with the practice of particular groups of practitioners or healthcare workers; **voluntary self-regulation**; **employer-led regulation** which emphasises the role of employers/providers; and a **licensing regime** referring to when a licensing body or bodies could hold a list of names of licensed workers who had

met the necessary requirements for their role and signed up to the relevant code of conduct.

35. A *“Buyer Beware” approach (a light touch regulation)* appears to be the less coercive regulation where the individual patient or the public take the primary responsibility for considering the risks of care of a health profession so as to make a decision about approaching a health provider. This approach needs to be supported by good information available to facilitate informed judgements about care and support, and through requirements for professional indemnity or insurance. To a certain extent, individuals are protected by the generic consumer protection legislation and criminal law. However, there is no specific regime targeted on healthcare providers or professionals.

36. *Voluntary self-regulation* is a model through which professionals work together and agree a set of standards and practices as well as the codes of conduct, which is independent of the Government or any statutory framework. The profession itself takes responsibility for registering its members, setting standards, maintaining a register of healthcare professionals and removing members who are considered to have fallen short of those standards. This approach is already widely adopted by many professions, and seen as a preparatory stage prior to statutory regulation.

37. Although this approach tends to be more cost effective, there are some potential weaknesses in this approach as pointed out in a report by Department of Health of UK (2009) including (a) insufficient rigorousness and consistency in its standards and fitness to practise arrangements because of financial, competition or reputational self-interest, (b) a lack of legal impediment to a disbarred registrant from continuing to practise without being voluntarily registered, and (c) rival groupings within an individual profession may set up competing registers with different standards and rules, so it is difficult for the public to distinguish which register is to be preferred. Therefore, UK has recently set up a new accredited voluntary registration scheme since 2013 with a stronger degree of assurance and accreditation of the standards for the voluntary self-regulatory groups.

38. *Employer-led regulation* is another regulation emphasising the role of employers/providers. Employers are responsible for establishing a code of conduct for staff, acting as gatekeeper for ensuring qualified and appropriate individuals to take up the post. The employers also manage training and development and enact fitness to practice and exclusion procedures (North East Education, 2008). It puts the weight of emphasis on organisations in the regulatory matrix of assurance, recognizing the critical role that they play in the day to management of staff, and their ability, through their proximity to the risk, to manage that risk more effectively. Examples included the pilot of employer-led regulation in Scotland for the “Health Support Worker” working under the NHS Scotland in testing the key elements of (i) a set of induction standards that focus on public protection, (ii) a code of conduct for Healthcare Support Workers, (iii) a code of practice for employers, and (iv) a centrally held list of names of those who meet the standards required.

39. A *licensing regime* refers to when a licensing body or bodies could hold a list of names of licensed workers who had met the necessary requirements for their role and signed up to the relevant code of conduct before they can practice. It could be either mandatory, required by statute, or voluntary and dependent upon employers requiring licensure as a condition of employment. Under the licensing regime, the healthcare workers need to secure a license by fulfilling the training and educational qualifications and standards, and adhere to the code of practices in order to practise. On the contrary, “negative licensing” exists and is being implemented in New South Wales and South Australia which does not require probity checking of practitioners before they commence practice. However, they will be barred from practice if they do not abide by the standards set in the Code of Practice. Negative licensing comprise (i) A single national Code of Conduct for unregistered health practitioners to be made by regulation in each state and territory, and statutory powers to enforce the Code by investigating breaches and issuing prohibition orders; (ii) A nationally accessible web based register of prohibition orders; and (iii) Mutual recognition of state and territory issued prohibition orders.

Choices of different types of regulation

40. The choice of selecting the right type of regulation depends on various factors such as **risk, costs and benefits of the regulation**. From an economic perspective, in general, statutory registration is the most effective in addressing all these market failures; however, they are likely to incur the highest costs. In addition, statutory regulation also has a number of impacts such as increasing the status of the profession which in turn aid recruitment and as a lever by professional groups to improve their pay, terms and conditions. This higher status might also mitigate inter-personal rivalries within multi-professional teams by subverting hierarchies of status based on who is a “proper” profession and who is not. Voluntary registration, on the other hand, is thought to be the most cost-effective means of addressing information asymmetry. It can be a more flexible and responsive tool when compared to statutory registration. However, it cannot help much on correcting other market failures such as negative externalities, unless policies are introduced alongside a voluntary register to encourage its use (by professions and consumers). There might be insufficient consistency of standards among voluntary regimes, and a lack of legal impediment to prevent a disbarred registrant from practising without being voluntarily registered.

Risk assessment

41. With reference to the five principles of “good” regulation, regulation should be proportionate to the risk (Best Regulation Task Force, 2005). The key factors in assessing the risk including (Department of Health of UK, 2009)

- (a) the type of intervention;
- (b) where the intervention takes place;
- (c) the level of supervision for the intervention;
- (d) how experienced the worker is at the intervention; and
- (e) the quality of education, training and appraisal of individuals.

42. In addition, external factors such as whether the intervention is carried out by a professional itself or by a professional in a team where assurance systems are in place,

and whether there are systems in place to ensure the professional is regularly and effectively assessed is also important in considering the risks.

Costs and Benefits

43. Benefits of regulations should include the enhancement of effective, high quality, and respectful care provided to patients as well as patient safety being safeguarded during the process. However, as reported in the Department of Health of UK (2009), there exists costs and burdens of regulation including:

- (a) Costs to employers of ensuring that professionals have information and systems in place that are necessary for professional regulation;
- (b) Costs of professional fees from registrants to regulators;
- (c) Transitional costs of establishing new regulatory regimes if needed;
- (d) Relatively high component of legal costs of statutory professional regulation;
- (e) Professional time needed to comply with the requirements of the regulators;
- (f) Unintended constraints on the ability of employers, managers and professionals to adapt to changing patient and public needs; and
- (g) Professions might unnecessarily protect their own interest creating a “closed shops” when enshrining professional roles in statute.

44. Therefore, after assessing the risks, it is necessary to consider if the potential benefits of regulation exceed the costs. In addition to health related concerns, whether or not to regulate the profession also depends on the feasibility and applicability of the regulation.

Comparison between statutory and voluntary registration

45. From an economic perspective, in general, **statutory registration** is most effective at addressing all these market failures, however they are likely to impose the highest costs (Ball et al, 2012). In addition, statutory regulation also has a number of impacts such as increasing the status of the profession which in turn aid recruitment into particular professional groups and as a lever by professional groups to improve their pay, terms and conditions. This higher status might also mitigate inter-personal rivalries within multi-professional teams by subverting hierarchies of status based on who is a “proper” profession and who is not.

46. Health Professions Council in UK has proposed the following four main assessments when considering whether to extend statutory regulation to a group:

- (a) Will statutory regulation improve public safety and will it add benefits that are not achievable by non-statutory means?
- (b) Is the risk associated with practice proportionate to the resulting restrictions and cost associated with introducing statutory regulation?
- (c) How does the proposed regulation fit with other performance standards mechanisms, including revalidation and appraisal, or individual and system governance approaches?
- (d) Is there an alternative model of regulation that would bring the same benefits?

47. **Voluntary registration**, on the other hand, is thought to be the most cost-effective means of addressing information asymmetry. It can be a more flexible and responsive tool when compared to statutory registration. However, it cannot help much on correcting other market failures such as negative externalities, unless if policies are introduced alongside a voluntary register to encourage its use (by workers and consumers). There might also exist insufficient consistency of standards in voluntary regimes, and a lack of legal impediment to a disbarred registrant from continuing to practise without being voluntarily registered.

48. While demand for a voluntary register should be considered on a case-by-case basis, there are some broad criteria to assist in identifying the characteristics of which occupational groups should be included in the voluntary registers as follows:

- (a) whether workers come into direct contact with patients – i.e. whether they are “front-line” staff;
- (b) the type of service being provided – in particular, whether it can be characterised as “one-off experience” or “credence”;
- (c) the vulnerability of the consumer, which may limit their ability to judge the quality of “experience” goods even after the event; and

- (d) the presence (or absence) of other safeguards and quality assuring mechanisms.

49. For a voluntary register to operate effectively, Table 6 shows the conditions that should be taken into account (Ball et al., 2012).

Table 6 Conditions to be considered for a voluntary register to operate effectively

Conditions	Rationale? / factors to be considered?
Ability to measure or judge the quality of workers	Consumers can differentiate between those of high quality and those of low quality
Determination of methods for measuring quality	E.g. specified qualifications, drawing-up of and monitoring of codes of conduct, monitoring of CPD and the operation of complaints procedures depending on the characteristics of the particular staff group
Decision on how much information on worker quality the register will disclose to consumers	E.g. register's minimum quality standard, a coarse category relating to the worker's level of quality, or a precise measurement of the worker's quality
Determination of the criteria for entry onto the register i.e. set the threshold level(s) of quality	By understanding consumers' perceptions on the following: <ul style="list-style-type: none"> - demand for quality and practitioner's ability - willingness to pay - awareness of the nature of the quality deficit present within the profession
Setting an appropriate registration fee	A higher fee makes it unprofitable for lower quality workers to seek registration. However, if the fee is too high, it will be unprofitable even for high quality workers to apply for registration. Such level of fee will decline with a fall in the accuracy of the assessment of quality.
Giving due regard to the register's rate of take-up	The proportion of a particular occupational group who choose to join the register is determined once decisions about the threshold level(s) of quality for entry to the register and the associated fees have been set.
Determination of exit criteria and the management of "exited" workers	It is necessary to determine the criteria e.g. code of conduct, CPD process, consumer complaints process etc. by which a worker is deemed to have breached the register's quality standard and is exited from the register perhaps following a warning or series of warnings.

50. To address the shortcomings of voluntary registration, Ball et al. (2012) suggested an accrediting body is required for the accreditation of voluntary registers so as to help consumers by signaling which occupational groups meet the standards. This accrediting body needs to decide its stance on the supply of voluntary registers. For example, whether to take a passive stance in waiting for registers to be formed or not i.e. to consider accreditation only for those which are brought forward, or whether to adopt a more active policy stance to invite the formation of registers for occupations where there is no statutory regulation but there is concern about lack of quality. The accrediting body is also required to ensure that there is genuine public demand for a register taking into account the risks, quality and perceived economic advantage of registration. It also needs to consider and monitor the cost-effectiveness of voluntary registers. The awareness of the issues relating to monopoly or competition amongst registers should be considered.

(ii) International experience on voluntary registration

51. The assurance of healthcare professionals not under statutory regulation varies widely from country to country. The AVR in UK appears to be a unique model of assured occupational registration not found in other countries. The following paragraphs described the Accredited Voluntary Registers Scheme in the UK, and the Australian National Code of Conduct for healthcare workers in Australia.

United Kingdom

52. Since 2007, the White Paper *“Trust, Assurance and Safety – The Regulation of Health Professionals in the 21st Century”* had already identified the need to continually review the scope of professional regulation to ensure that it secured effective assurance for the public as new forms of health care emerged and as unregulated health workers developed the scale and nature of their interactions with patients.

53. In the 2011 Command Paper – *“Enabling excellence: Autonomy and accountability for health care workers, social workers and social care workers”* – a system of AVR, under the PSA, was proposed for unregulated health and social care workers in the UK. The scheme has been implemented since 2013, and aims to involve organisations that hold

voluntary registers for health and social care services in the UK to be independently assessed, so as to ensure that their registers are well run and up to standard. The criteria used to accredit an organisation included (a) meeting the Standards for Accreditation, (b) risk assessment, and (c) impact assessment. Voluntary registers will be officially recognised if the organisations are able to satisfy the requirements.

54. In order to participate in the scheme, the organisation pays a minimum £12,000 accreditation fee. Before being assessed, the organisation should conduct a self-assessment and participate in several workshops. The organisation will then be assessed by the AVR team via phone calls, documentary reviews, and interviews with the CEO, Chairman and staff of the organisation, site visits and observations. The collected information will then be considered by the internal Accreditation Panel. If the organisation passes all the assessments, then it will be accredited. The granted certificate will be valid for 12 months, and needs to be renewed annually by demonstrating that it continues to meet the established standards.

Australia

55. Australia uses the term “unregistered health practitioner” to define any person who provides a health service and who is not registered in one of the 14 professions regulated under the Australian “Health Practitioner Regulation National Law”, as in force in each state and territory (the National Law) or registered under another state or territory registration regime in Australia. The New South Wales (NSW) Parliament had enacted legislation to strengthen public protection of health consumers who use the services of unregistered health practitioners in 2007 by establishing an enforceable Code of Conduct for unregistered health practitioners, with powers for the NSW Health Care Complaints Commission to investigate breaches of the Code, and issue prohibition orders whether there is a risk to public health or safety.

56. In 2011, the Australian Health Ministers’ Advisory Council (AHMAC) undertook a national consultation on options for the regulation of unregistered healthcare practitioners, and the final report of this 2011 consultation found that the option of a single national Code of Conduct for unregistered healthcare practitioners, with

enforcement powers for breach of the Code was likely to deliver the greatest net public benefit to the community. In response, the Council of Australian Governments, Standing Council on Health, agreed in principle on 14 June 2013 to strengthen the state and territory health complaints mechanisms via:

- (a) A single national Code of Conduct for unregistered healthcare practitioners to be made by regulation in each state and territory, and statutory powers to enforce the Code by investigating breaches and issuing prohibition orders;
- (b) A nationally accessible web-based register of prohibition orders; and
- (c) Mutual recognition of state and territory for issued prohibition orders.

57. Subsequently, Ministers asked the AHMAC to undertake a public consultation on the terms of the first national Code of Conduct and proposed policy parameters to underpin nationally consistent implementation of the code. The consultation paper “A National Code of Conduct for healthcare workers” was published in March 2014, with consultation forums being conducted in each state and territory. From the feedbacks collected at the forums and the written consultation submissions, a National Code of Conduct for health care workers was supported to be implemented with the statutory powers to enforce the Code by investigating breaches and issuing prohibition orders of the negative licensing regime.

58. The occupations likely to be captured include: allied health assistants, anaesthetic technicians; audiologists and audiometrists; birth attendants; doulas and others who provide labour/birth support; antenatal and post-natal care clinical perfusionists; complementary and alternative medicine (CAM) practitioners; counsellors and psychotherapists; dental technicians and dental assistants; dermal therapists; dietitians; homoeopaths; hypnotherapists; massage therapists; music, art, dance and drama therapists; naturopaths and Western herbalists; nursing assistants and personal care workers; optical dispensers; orthoptists, orthotists and prosthetists paramedics; ambulance officers and other first aid providers; pharmacy assistants; phlebotomists; reiki practitioners; social workers who work in a health setting; sonographers and speech pathologists.

(iii) Hong Kong's situation

Statutory registration

59. Statutory regulation of healthcare professions in Hong Kong can be traced back to the 1950's with the enactment of the Medical Registration Ordinance and the Dentists Registration Ordinance for regulating the practices of medical practitioners and dentists respectively, followed by the regulation of nurses, midwives, pharmacists and dental hygienists in the 1960's. Five more supplementary disciplines which included medical laboratory technologists, occupational therapists, physiotherapists, radiographers and optometrists were regulated under the Supplementary Medical Professions Ordinance (Cap 359) in 1980. Subsequently, the practice of chiropractors and Chinese medicine practitioners were regulated in 1993 and 1999 respectively. Since then, no more healthcare professions have been put under statutory regulation.

60. Thus in Hong Kong only healthcare professionals from the above 13 disciplines are subject to statutory regulation, involving eight ordinances and 32 pieces of subsidiary legislation. Thirteen statutory boards/councils have been established under the law, each entrusted with powers and responsibilities for regulating healthcare disciplines under their aegis. Healthcare professionals must register, enrol or list (as the case may be) with the relevant boards/councils before they can practise in Hong Kong. There were over 80,000 registered healthcare professionals regulated by the respective Councils/Boards as at end-2011.

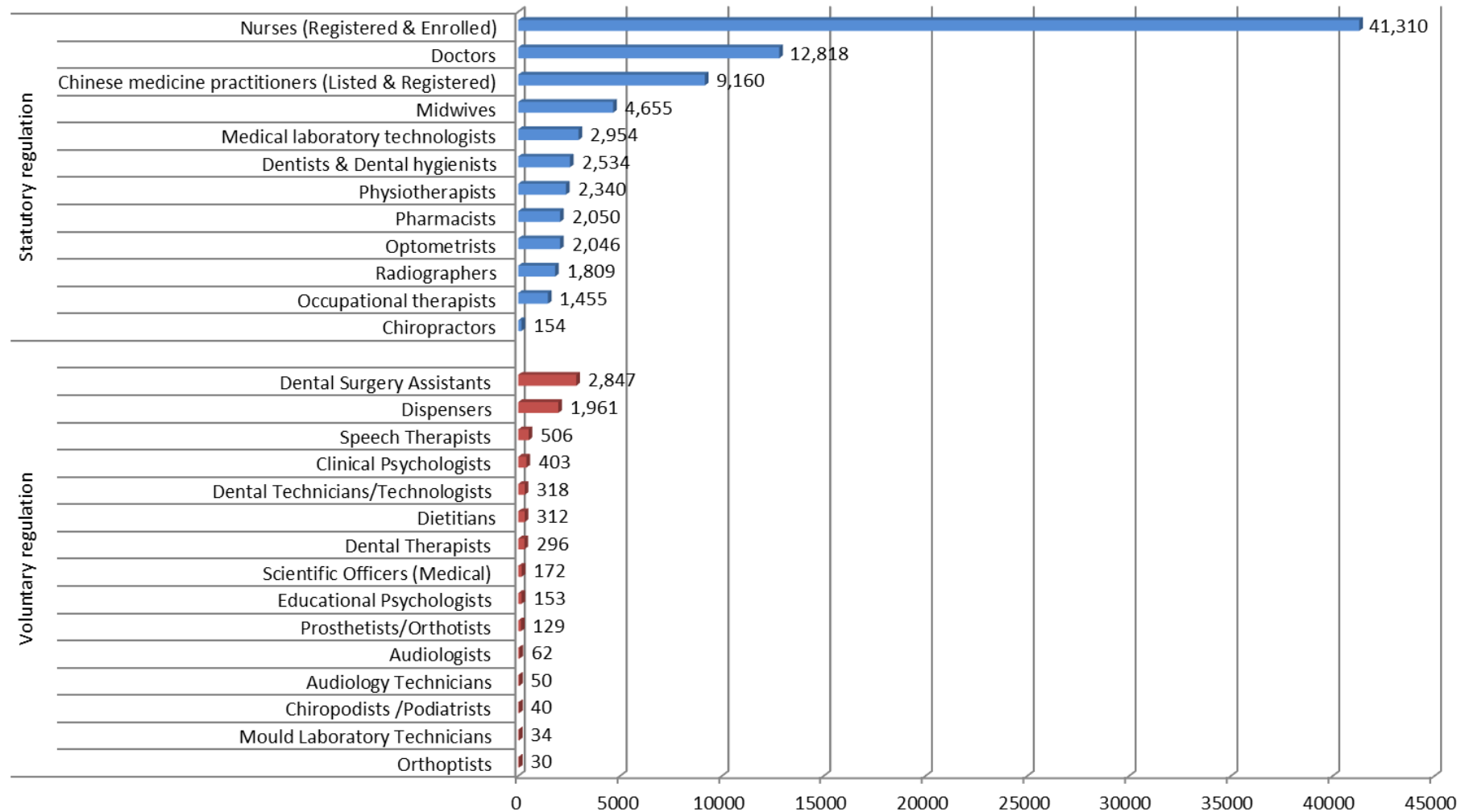
Society-based registration

61. The composition of the health services functional constituency of the Legislative Council includes 15 healthcare disciplines which are not subject to statutory registration and the disciplines who have established society-based registrations. According to the 2009 Health Manpower Survey where respondents were institutions which employed the targeted healthcare personnel, there were over 7,300 practitioners working in these 15 healthcare disciplines. These professional bodies administer an enrollment system, and some of them promulgate a list of qualified members thereby allowing the public to potentially make informed choices regarding healthcare services. In order to uphold the standard and quality of services, some associations develop a professional code of

practice, organise CPD courses and training, and developed quality assurance schemes as well as disciplinary mechanisms to ensure that only qualified personnel can stay on their registration lists.

62. Figure 2 showed the size of healthcare professionals subject to the statutory regulation, and the estimated size and distribution of the 15 healthcare professionals currently not subject to statutory regulation. The size of professions under statutory regulation (n=83,285) is much larger than those currently not under statutory regulation. Among those regulated under the statutory regulation, registered and enrolled nurses accounted for the largest proportion (41,310 out of 83,285 professions), followed by Western medicine doctors (12,818) and Chinese medicine practitioners who are either listed or registered (9,160). Among those professionals currently not under statutory regulation, the estimated size of dental surgery assistants (2,847 out of 7,313 professionals) and dispensers (1,961) are the largest according to the 2009 Health Manpower Survey. There are relatively fewer healthcare personnel working as audiologists (62), audiology technicians (50), chiropodists/ podiatrists (40), mould laboratory technicians (34) and orthoptists (30).

Figure 2. Size of health professions under statutory or voluntary regulation



Source: Department of Health

For data on Statutory Regulation, the total no. of professionals covers only those with full registration. The no. of registrants may include active and non-active health workforce. Healthcare professional to population is based on the provisional estimated total population of 7,103 million as at end-2011.

For data on Voluntary Registration, (1) The number of healthcare personnel (full-time/part-time employment) employed by their working institutions which responded to the survey; (2) DH conducts Health Manpower Survey on the 15 healthcare personnel currently not subject to statutory regulation every four to five years. The previous surveys were conducted in 2005 and 2009 and the next is scheduled for 2014; (3) Public sector includes the Government, Hospital Authority, academic institutions, and subvented organisations.

Challenges in Hong Kong

63. The Ombudsman's report (2013) has highlighted some gaps in voluntary registration which need to be addressed. These included:

- (a) Lack of complaints information;
- (b) Lack of information exchange;
- (c) Lack of monitoring of voluntary registration process and service standards;
- (d) Lack of review mechanisms; and
- (e) Lack of communication with societies.

64. The Ombudsman's report recommended DH to address the above gaps by establishing mechanisms related to monitoring complaint statistics and cases of malpractice, as well as examining the professional qualification and service standard of individual healthcare professions. Furthermore, the report recommended DH to establish review mechanisms to examine the performance of the healthcare professions and long term strategy for regulation.

Model of regulation in different jurisdictions among those 15 professions currently not subject to statutory regulation in Hong Kong

65. Table 7 shows the type of regulation i.e. whether they are under statutory regulation among those 15 healthcare personnel in Hong Kong currently not subject to statutory regulation, in the five jurisdictions we studied including UK, US, Australia, New Zealand and Singapore.

66. The practices of regulation vary across jurisdictions. UK and Singapore have an overarching body to oversee some of the allied health professions under the Health and Care Professions Council (UK) and Allied Health Professions Council (Singapore) respectively. In Australia and New Zealand, there is no overarching body to oversee the allied health professions, however all regulated professions are required to register under a nationally consistent legislation (umbrella legislation) namely Health Practitioner Regulation National Law Act (Australia) and Health Practitioners Competence Assurance Act (New Zealand) respectively. In addition, to ensure consistency of standard and practice across all professions, an overarching body for all professions is formed in UK (Professional Standards

Authority for Health and Social Care) and Australia (Australian Health Practitioner Regulation Agency). In US, the regulation requirement varies by states.

67. Among the 15 professions, dental therapists are under statutory regulation by all five jurisdictions we studied. Dental technicians/ technologists are under statutory regulation in UK, US and New Zealand. The dental profession is commonly regulated together with the dentists under the Dental Council/ Board in the respective jurisdictions.

68. Clinical psychologists and educational psychologists, are under statutory regulation in the Western jurisdictions such as UK and US, and Asian Pacific jurisdictions such as Australia and New Zealand which we studied. The type of/ area of practice of the psychologists registered in other jurisdictions are also boarder including counseling psychologists, community psychologists, sport and exercise psychologists, etc. who are grouped under the name “psychology practitioners”.

69. Regarding other allied health professions in the field of rehabilitation, the findings are mixed - podiatrists are commonly under statutory regulation in all jurisdictions we studied except Singapore. UK, US and New Zealand regulated dietitians statutorily, whereas speech therapists are under statutory regulation in UK, US and Singapore. On the other hand, mould laboratory technicians are under voluntary registration in the five jurisdictions we studied.

70. Among the audio and visual profession such as audiologists, audiology technicians and orthoptists; and other professions such as scientific officers (medical) and dispenser, they are relatively seldom under statutory regulation in the jurisdictions we studied.

Table 7: Comparison table on the regulation of the following society-based registration in Hong Kong

Type of Health Professions	Whether under statutory regulation				
	UK	US*	Australia	New Zealand	Singapore
Audio and Visual Profession					
1. Audiologists	x	√ ⁽⁴⁾	x	x	x
2. Audiology Technicians	x	x	x	x	x
3. Orthoptists	√ ⁽¹⁾	x	x	x	x
Dental Profession					
4. Dental Surgery Assistants	x	√ ⁽⁵⁾	x	x	x
5. Dental Technicians/Technologists	√ ⁽²⁾	√ ⁽⁵⁾	x	√ ⁽¹³⁾	x
6. Dental Therapists	√ ⁽²⁾	√ ⁽⁵⁾	√ ⁽¹⁰⁾	√ ⁽¹³⁾	√ ⁽¹⁷⁾
Psychologist					
7. Clinical Psychologists	√ ⁽¹⁾	√ ⁽⁶⁾	√ ⁽¹¹⁾	√ ⁽¹⁴⁾	x
8. Educational Psychologists	√ ⁽¹⁾	√ ⁽⁶⁾	√ ⁽¹¹⁾	√ ⁽¹⁴⁾	x
Rehabilitation					
9. Mould Laboratory Technicians	x	x	x	x	x
10. Chiropodists/Podiatrists	√ ⁽¹⁾	√ ⁽⁷⁾	√ ⁽¹²⁾	√ ⁽¹⁵⁾	x
11. Prosthetists/Orthotists	√ ⁽¹⁾	√ ⁽⁸⁾	x	x	x
12. Speech Therapists	√ ⁽¹⁾	√ ⁽⁴⁾	x	x	√ ⁽¹⁸⁾
13. Dietitians	√ ⁽¹⁾	√ ⁽⁹⁾	x	√ ⁽¹⁶⁾	x
Others					
14. Scientific Officers (Medical)	√ ⁽³⁾	x	x	x	x
15. Dispensers	x	x	x	x	x

Notes:

* Model of regulation varies by states in US

- (1) Regulated by Health and Care Professions Council, UK
- (2) Regulated by General Dental Council, UK
- (3) Similar to clinical scientists who are regulated by the Health and Care Profession Council, UK
- (4) Regulated by the Board of Registration in Speech-Language Pathology and Audiology, US
- (5) Regulated by the respective State Dental Board, US
- (6) Regulated by Association of State & Provincial Psychology Boards, US
- (7) Regulated by Federation of Podiatric Medical Boards, US
- (8) Regulated by American Board for Certification in Orthotics & Prosthetics, US
- (9) Regulated by Commission on Dietetic Registration, US
- (10) Regulated by Dental Board of Australia
- (11) Regulated by Psychology Board of Australia, Australia
- (12) Regulated by Podiatry Board of Australia
- (13) Regulated by Dental Council of New Zealand
- (14) Regulated by New Zealand Psychologists Board
- (15) Regulated by New Zealand Podiatrists Board
- (16) Regulated by Dietitians Board in New Zealand
- (17) Regulated by Singapore Dental Council, Singapore
- (18) Regulated by Allied Health Professions Council, Singapore

OBSERVATIONS

71. This review has demonstrated that there is a need to review the voluntary registration of professionals currently outside the scope of the regulatory regime in addressing the gaps identified by the Ombudsman's report so that the public in Hong Kong can be reassured that clinical standards are carefully monitored and their health is protected.

72. The practice of regulation varies across jurisdictions. The choices/ types of regulation of a particular profession depend on risk assessment, and a balance between costs, burden and benefits of regulation. A profession not currently under statutory regulation might partly due to the reason of its low level of risk of harm, being working with or under the supervision of a regulated profession; the employment arrangements might provide an appropriate form of regulation to minimize risk of harm to the public (system regulation); and the professional self-regulation can provide an appropriate form of regulation. Subsequently, a study is commissioned by the Department of Health for the setting up of a voluntary Accredited Registers Scheme for healthcare professionals who are not currently under statutory regulation in Hong Kong.

Task 2 of Phase 2: Further in-depth study on medical regulation

[see "A Summary of Supplementary Findings on a Questionnaire Survey among General Public"]

Background and objectives

73. Phase 1 study identified an urgent need to improve the healthcare professional regulatory system. There were diverse views for CPD among medical doctors as compared to other healthcare professions. Since medical doctors is a relatively well-established profession, and it is a specialised profession with specialists and non-specialists, we choose to have a more thorough understanding of the public and medical doctors' views on medical regulation. The **objectives of this task** were to (a) assess the **knowledge and attitudes of the general public towards medical regulation**; and (b) explore **doctors' perceived needs for CPD**, and their **attitudes towards medical regulation**.

Method

74. For the public opinion survey, this was a **cross-sectional study using telephone survey among the general public** aged 18 or above in Hong Kong. A minimum sample size of 1,000 was targeted to yield a precision level of plus/minus 3 percentages from the true values at 95% confidence level. The telephone numbers were randomly drawn from up-to-date residential telephone directories. The person answering the call was asked to provide information on whether there was any eligible person in the household to join the study. If there were more than one eligible person within a household, one was randomly selected using the "last-birthday rule" i.e. household member whose birthday is closer to the date of interview was asked to complete the interview. Verbally informed consent was obtained before conducting the interview.

75. For the **survey among doctors**, a **postal self-administered questionnaire survey** was conducted. A random sample of all medical practitioners listed in the up-to-date registration obtained from the Medical Council of Hong Kong (MCHK) was used. The target sample size was 737 to achieve precision level of plus/minus 5% from the true value at 5% significant level and 80% power with the conservative assumption of 50% of respondents perceive the importance of CPD. For the postal survey, an accompanying cover letter on university letterhead explaining the purpose of the study and an assurance of confidentiality was

enclosed with the questionnaire, together with a prepaid, self-addressed envelope. Incentives of HK\$50 supermarket coupon was given to each respondent. Up to three reminders were arranged for initial non-respondents.

Results

(a) Enumeration results

76. The main fieldwork of the telephone survey was conducted from June to July 2014 from 18:00 to 22:00 for Monday-Friday. A total of 1,557 phone calls were successfully made and 1,000 (64.2%) respondents met the selection criteria and completed the telephone survey.

77. For the postal survey among doctors, a total of 2,459 questionnaires were mailed out in March 2015 to a pool of randomly selected doctors whose names were on the MCHK's list of full registration in 2014. After three rounds of mailing, 870 questionnaires were returned in July 2015 with a response rate of 35.4%.

(b) Characteristics of the study population

78. Socio-demographic data of the respondents from the public opinion survey were shown in *Appendix A*. There were 482 (48.2%) male respondents and the largest age group was 31 to 50 years (37.6%).

79. The profile of doctors was in *Appendix B*. Among the doctors, 62.2% were specialists whereas 37.8% were non-specialists. The non-specialists were relatively younger (55.3% aged 21-40) compared to specialists (34.6%). The specialists were more likely to work in the Hospital Authority (56.4%) as compared to non-specialists (41.6%) and in private hospitals (7.6%) as compared to non-specialists (3.6%). On the other hand, there were relatively more non-specialists working in group private practice (14.3%) as compared to 7.0% for specialists, and in Government (8.5%) as compared to 5.0% for specialists.

(c) Key findings

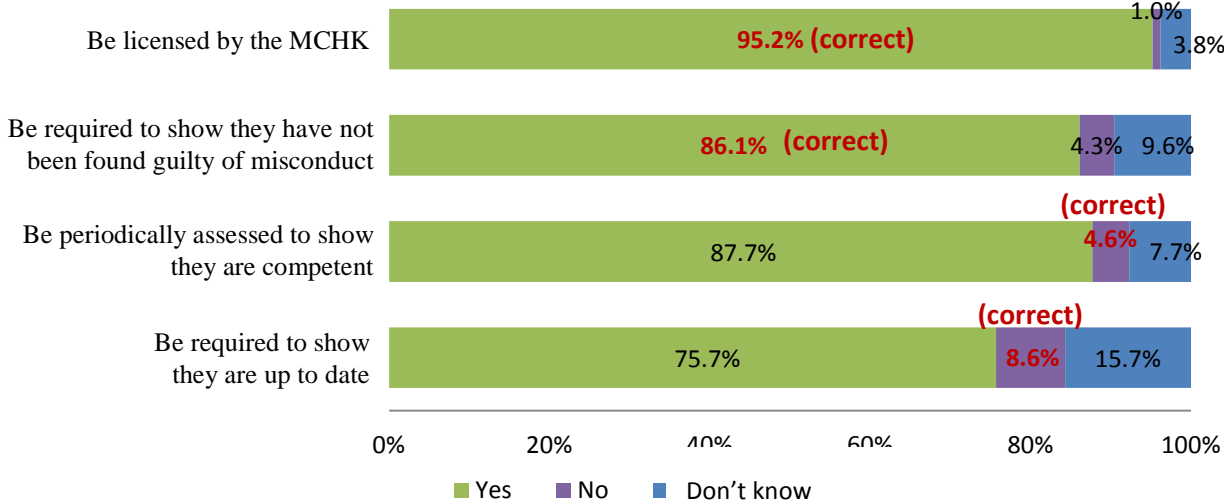
80. The key findings were divided into three sections including (i) knowledge of medical regulation from the general public perspective, (ii) perceived needs and attitudes towards

CPD from the doctors’ perspective, and (iii) attitudes towards medical regulation from both public and doctors’ perspectives.

(i) Knowledge of medical regulation (General Public)

81. The general public had a relatively low perceived knowledge on the way doctors are being assessed to ensure that they are doing a good job. A large proportion of respondents self-reported to know little (67.3%) or nothing (8.9%) on the way doctors are being assessed, while only 12.5% reported to know some amount/a great deal. The public seemed to be more knowledgeable of the basic requirements for licensing by the MCHK (with 95.2% knowing that doctors are required to be licensed by MCHK) rather than the knowledge of the requirements in keeping doctors’ knowledge updated and the requirements for periodic assessment (87.7% incorrectly answer that doctors are required to periodically assessed to show they are currently competent to practise safely, and 75.7% incorrectly answer that the doctors are required to show that they have the updated knowledge and skills needed to provide quality care as a condition of renewing their licence) (Figure 3).

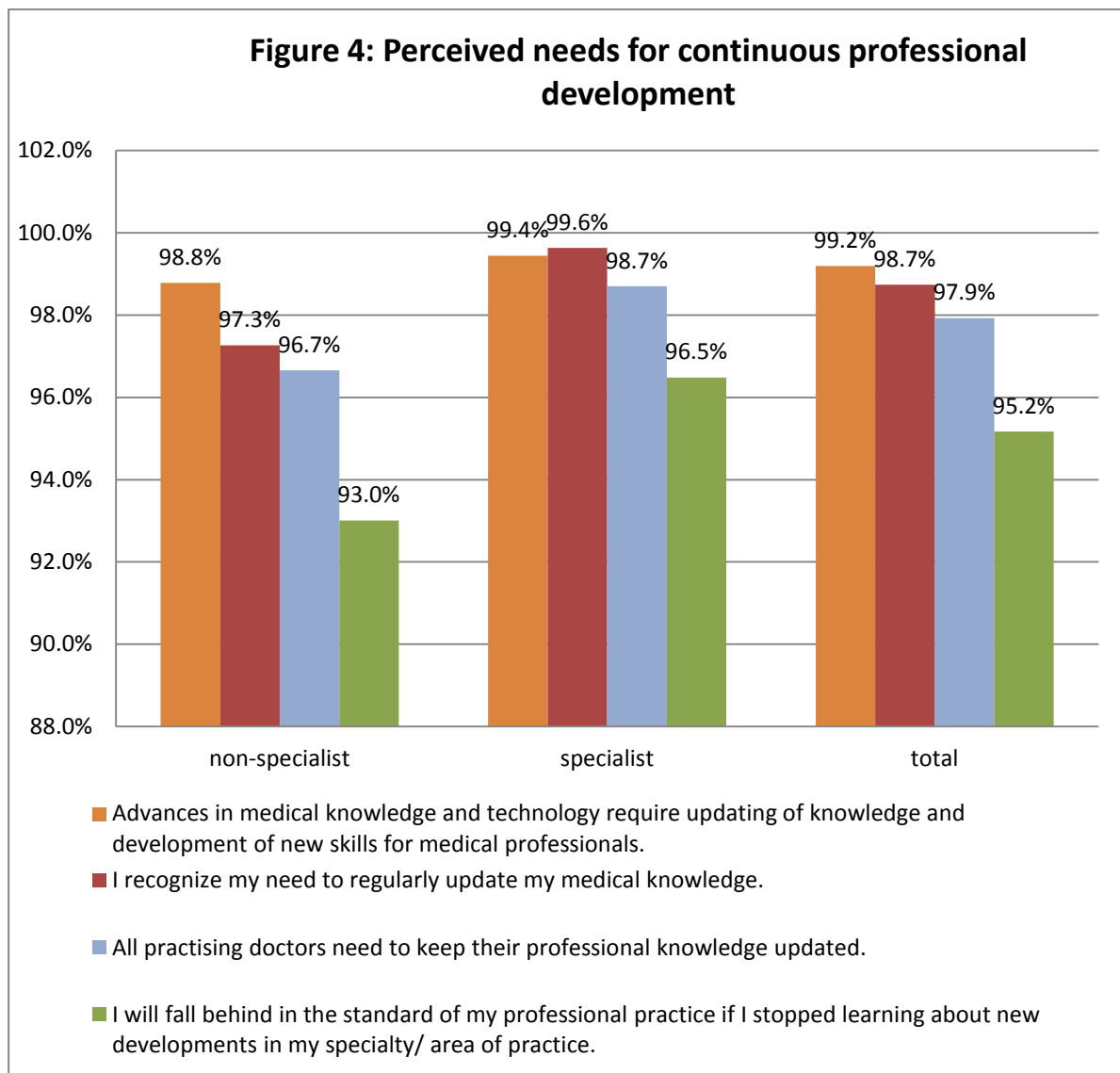
Figure 3: To the best of your knowledge, are medical doctors practising in Hong Kong required to...



(ii) Perceived needs and attitudes towards CPD (Doctors)

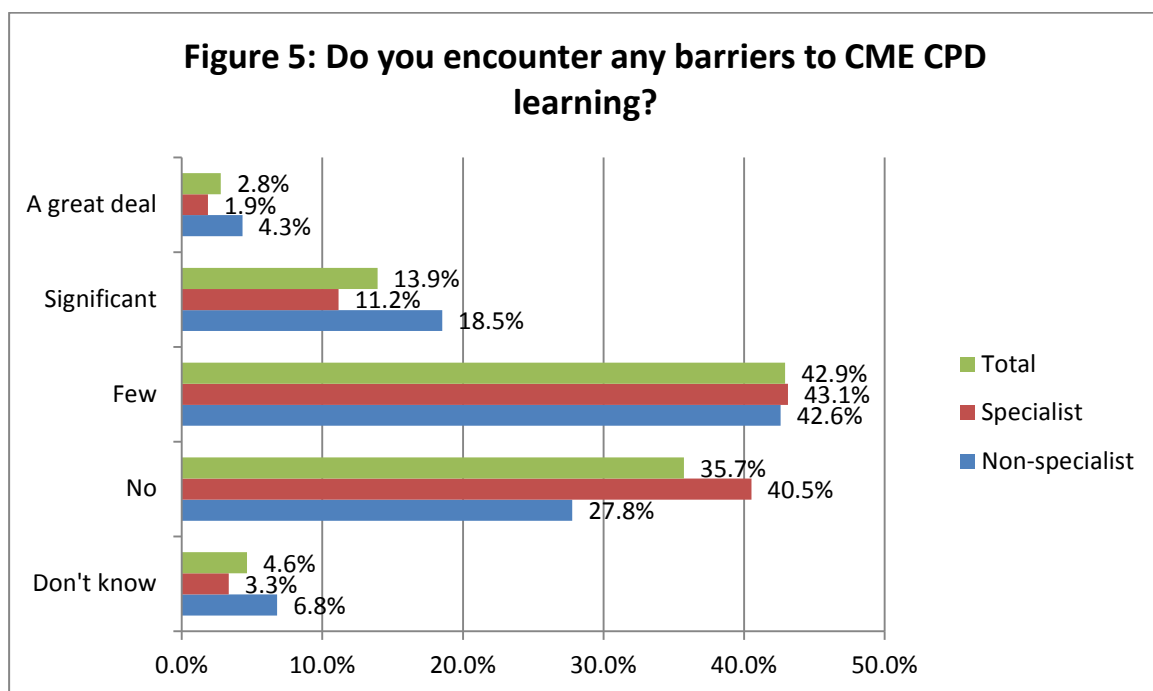
Perceived needs for CPD

82. There was a high degree of perceived needs for CPD (over 90% agreed on the needs for CPD) (Figure 4). For example, the majority (99.2%) expressed a need to be update of knowledge and development of new skills for medical professionals due to advances in medical knowledge and technology. 98.7% recognised their own need to regularly update medical knowledge, and 97.9% agreed that all practising doctors need to keep their professional knowledge updated. A relatively fewer but significant proportion (95.2%) agreed that “I will fall behind in standard of my professional practice if I stopped learning about new developments”. In general, agreement was higher for specialists.



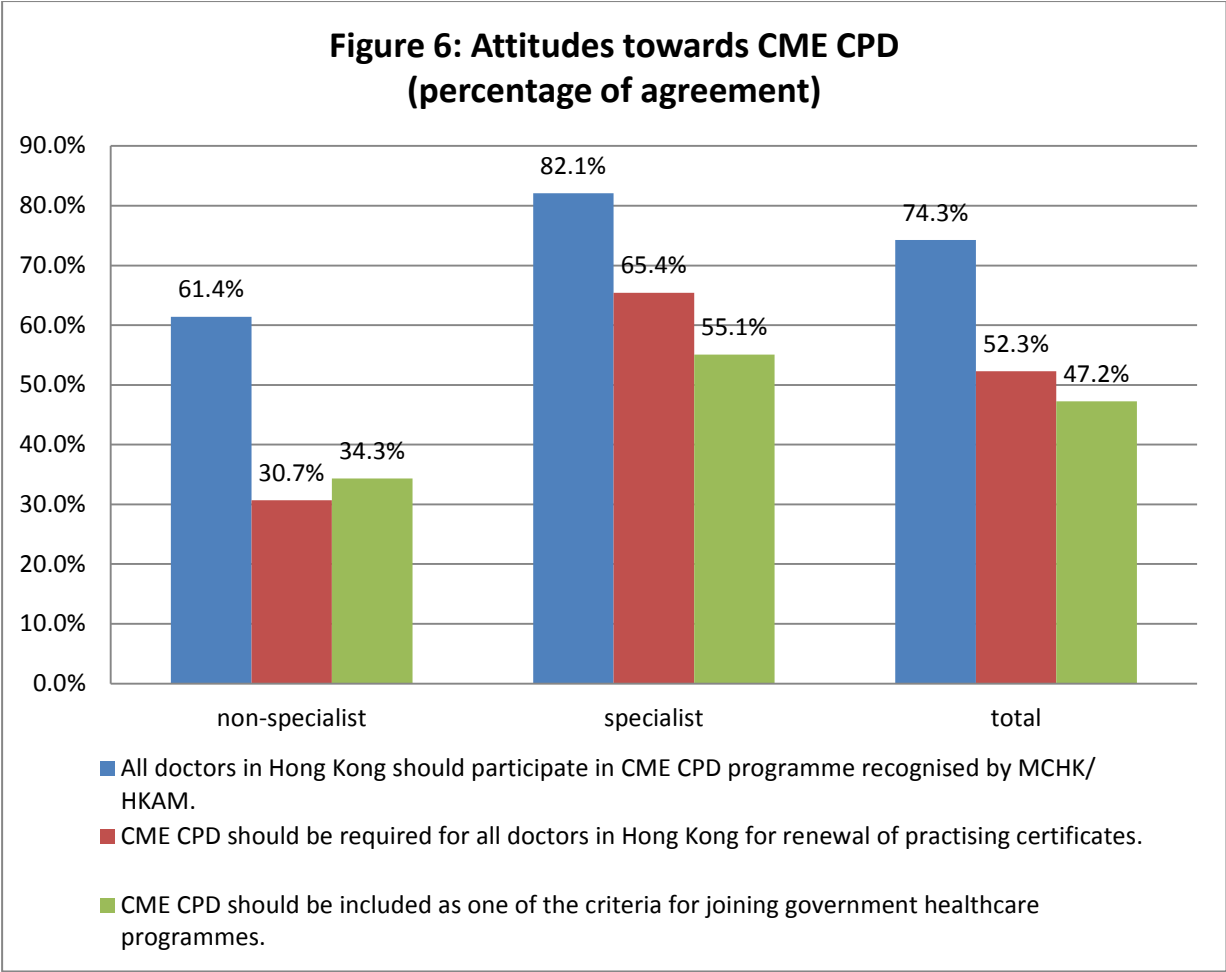
Barriers to Continuous Medical Education (CME)/CPD learning

83. 35.7% of doctors expressed that they did not encounter any barriers to CME/CPD learning (Figure 5). 42.9% encountered “few” barriers whereas 16.7% expressed that they encountered significant/a great deal of barriers to CME/CPD learning. The non-specialists were more likely to encounter barriers as compared with specialists. Among the barriers encountered, it was mainly related to time (62.5%), followed by work-life balance (45.1%), inconvenience of the CME/CPD activities (34.8%), cost (17.3%) and unavailability of suitable activities (10.5%).



Attitudes towards CPD

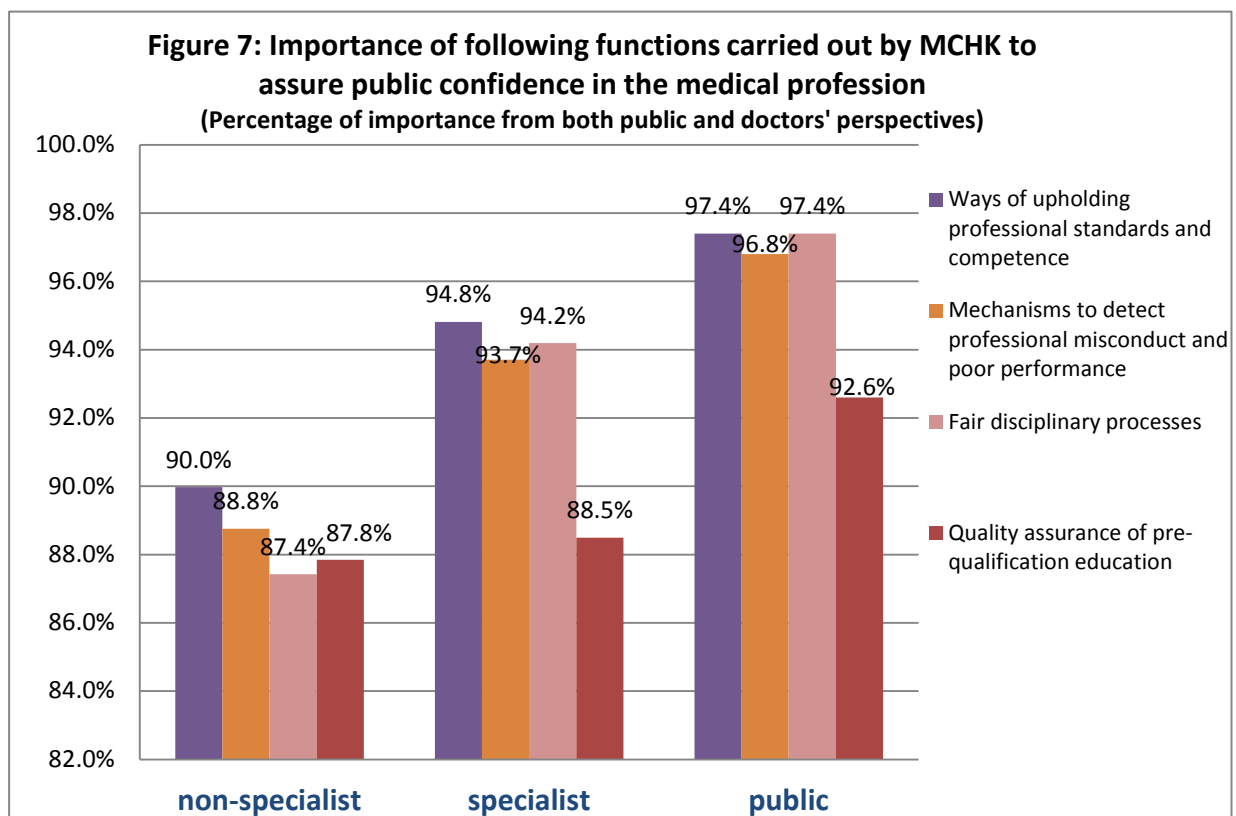
84. 74.3% of doctors agreed that “All doctors are required to participate in CME/CPD programmes recognised by MCHK/Hong Kong Academy of Medicine (HKAM)” (Figure 6). However, only around half (52.3%) thought it should be required for renewal of practising certificates. Non-specialists were more likely to disagree with the requirement of CME/CPD for renewal of practising certificates (only 30.7% agreeing) as compared to specialists (65.4% agreeing). Slightly less than half (47.2%) thought it should be included as one of the criteria for joining the government healthcare programmes.



(iii) Attitudes towards medical regulation (Public and doctors)

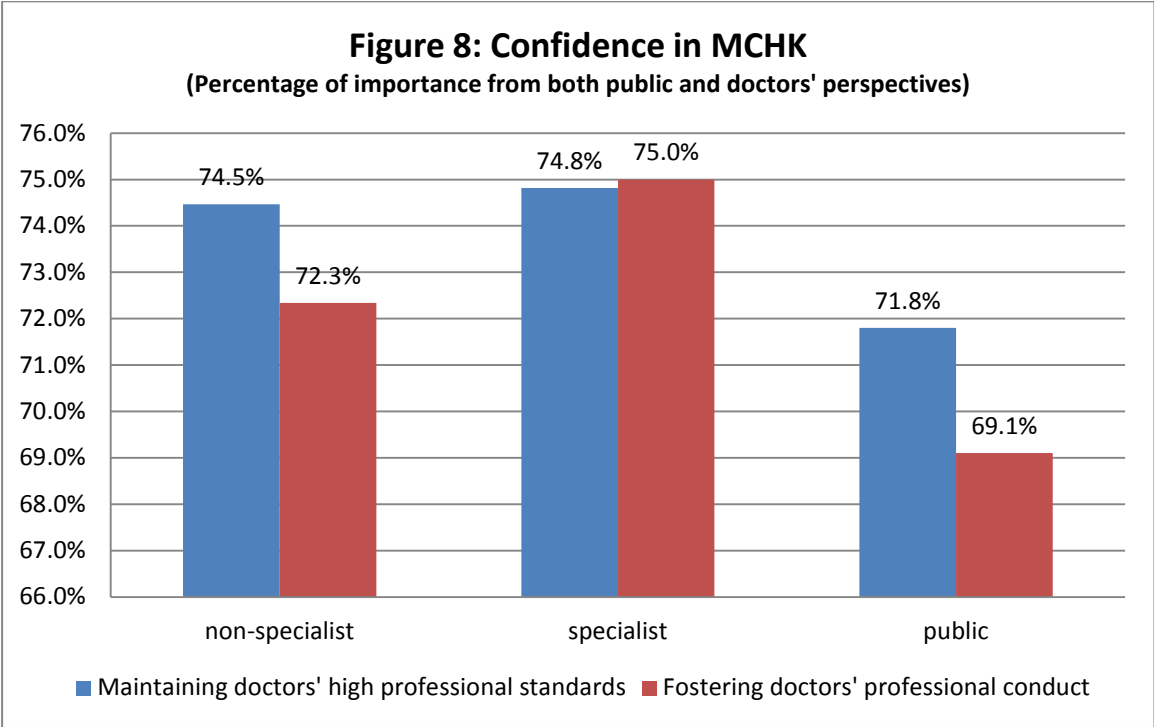
Importance of functions carried out by MCHK

85. We asked the general public and doctors about the degree of importance of the four functions carried out by MCHK in order to assure public confidence in medical profession, including (i) quality assurance of pre-qualification education, (ii) ways of upholding professional standards and competence, (iii) mechanisms to detect professional misconduct and poor performance, and (iv) fair disciplinary processes (Figure 7). In general, the general public (over 90%) and doctors (over 85%) both perceived these four functions important. Importance of the three functions i.e. “ways of upholding professional standards and competence” (97.4% for public, 94.8% for specialists and 90.0% for non-specialists), “fair disciplinary process” (97.4% for public, 94.2% for specialists and 87.4% for non-specialists) and “mechanisms to detect professional misconduct and poor performance” (96.8% for public, 93.7% for specialists and 88.8% for non-specialists) were relatively higher than the function “quality assurance of pre-qualification education” (92.6% for public, 88.5% for specialists and 87.8% for non-specialists). Relatively, the general public perceived a higher level of importance towards the above four functions (over 90%) as compared with the doctors. Furthermore, specialists perceived a higher importance over the non-specialists.

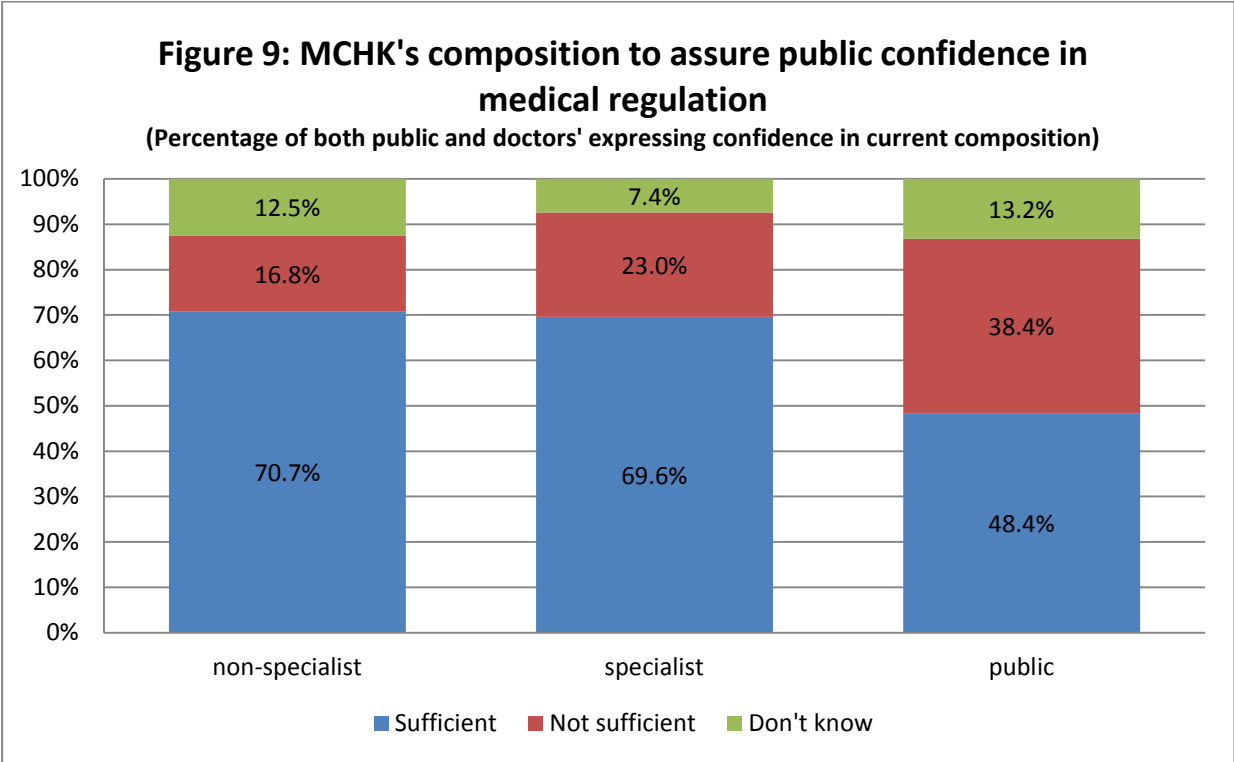


Confidence towards MCHK

86. The general public and doctors were both asked about their confidence in MCHK on (i) maintaining doctors’ high professional standards and (ii) fostering doctors’ professional conduct (Figure 8). The confidence in MCHK on maintaining doctors’ high professional standards was relatively higher for specialists (74.8%) and non-specialists (74.5%), as compared with the public (71.8%). The public had a relatively lower confidence in MCHK, as compared with non-specialists (72.3%) and specialists (75.0%). However, there was still a significant proportion of public who had confidence in MCHK in fostering doctors’ professional conduct (69.1%).

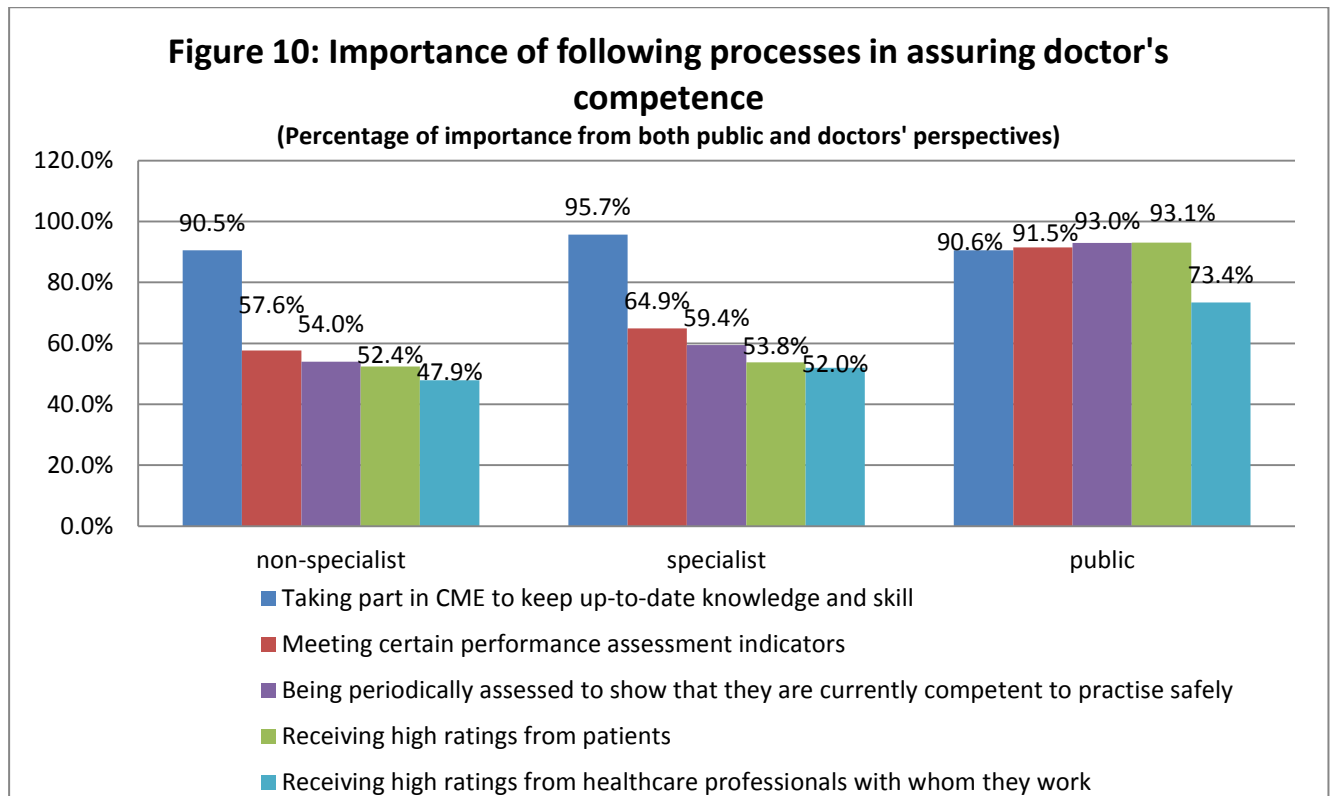


87. The general public and doctors were also asked about whether the current MCHK's composition was sufficient to assure public confidence in medical regulation (Figure 9). Most of the specialists (69.6%) and non-specialists (70.7%) thought that it was sufficient. However, only around half of the general public (48.4%) felt sufficient. The reasons given by doctors who did not think it was sufficient included (i) too few lay members (46.9%); (ii) not enough elected medical professionals (44.7%), and (iii) no public/patient representatives (36.9%). Some other doctors thought that there were too many medical practitioners (14.0%). Most of the general public considered that the composition was not sufficient due to the reasons that (i) doctors were protecting their own interests (55.2%); (ii) doctors self-regulated themselves (54.2%); (iii) there was no public/patient representative (50.8%); (iv) there were too many medical practitioners (49.2%); and (v) there were too few lay members (40.1%).



Importance of monitoring processes in assuring a doctor's competence

88. The general public and doctors were asked about the importance of different monitoring processes including (i) taking part in the CME to keep knowledge and skill up-to-date, (ii) meeting certain performance assessment indicators, (iii) receiving high ratings from healthcare professionals with whom they work, (iv) receiving high ratings from their patients, and (v) being periodically assessed to show that they were currently competent to practise safely (Figure 10). There were differences in the perceived importance on a list of monitoring processes that could be used to assure a doctor's competence. Among the doctors, "taking part in CME" ranked the highest importance in assuring doctors' competence (90.5% for non-specialists and 95.7% for specialists), followed by "meeting certain performance assessment indicators" (57.6% for non-specialists and 64.9% for specialists), "being periodically assessed" (54.0% for non-specialists and 59.4% for specialists), "receiving high ratings from patients" (52.4% for non-specialists and 53.8% for specialists) and "receiving high ratings from healthcare professionals with whom they work" (47.9% for non-specialists and 52.0% for specialists). On the contrary, public ranked a relatively higher importance on all aspects, in particular, the highest on "receiving high ratings from patients" (93.1%) and the lowest on "receiving high ratings from healthcare professionals with whom they work" (73.4%).



Discussion

89. The results showed that there was little public knowledge of how doctors in Hong Kong were regulated, in particular, on the requirements in keeping doctors' knowledge updated and the requirements for periodic assessment. Most of the public assumed that the monitoring processes of periodic assessment and requirement for CME were already practised, although only compulsory CME is mandatory for specialists in Hong Kong. This showed a significant gap in the public understanding and the actual practice. The public thought that it was important to have a monitoring and assessment mechanism to assure a doctor's competence.

90. Regarding the perceived needs for CPD, majority of doctors perceived the need for CME/CPD to update knowledge due to the advanced technologies and bio-medical knowledge. In general, they agreed that all doctors were required to participate in CME/CPD. However, a relatively smaller percentage agreed with CME/CPD as a requirement for renewal of practising certificates, in particular among the non-specialists. Major barriers to participating in CME/CPD included time and work-life balance. Concerns were also made on the format, content and quality of CME/CPD courses which were variable. In order to encourage doctors to take part in CME/CPD, there should be flexibility in facilitating doctors to participate CME/CPD courses, such as a convenient location of CME/CPD courses and education discussions in clinical practice. Financial incentives such as making CME/CPD a criterion to join government-initiated healthcare programme(s) could be an alternative as well.

91. There was a discrepancy between public' and doctors' attitudes towards medical regulation. The confidence towards MCHK in carrying out its function in upholding doctors' standards and fostering doctors' professional conduct was relatively lower for the public as compared to doctors. In particular, there were concerns in the transparency of the investigatory and disciplinary processes, and the delay in the disciplinary inquiries as reported in Phase 1 study. In addition, a high proportion of the public were also of the view of insufficiency of lay representation in the composition of MCHK. They also felt that doctors were protecting their own interest. On the contrary, many doctors felt that there was not

enough elected medical professionals in MCHK, in addition to other doctors' concern of too few lay members.

92. Regarding the ways to monitor doctors' competence, doctors emphasised the importance of taking part in CME. Fewer doctors saw the need for evaluation through periodic assessment. Ratings from patients or other healthcare professionals were also not considered as important as they thought it might be subjective. However, from the public perspectives, they felt that it was important to have monitoring process such as taking part in CME, periodic assessment, meeting performance assessment indicators, and receiving high ratings from them. They thought receiving high ratings from healthcare professionals were relatively less important.

Limitation of Task 2 of Phase 2

93. For the public telephone survey, we drew sample from the non-institutionalised population with landlines. Findings may not apply to those who are institutionalised or those who do not own a telephone landline, including those with only mobile devices. However, as the fixed line telephone coverage in households in Hong Kong still exceeds 90%¹, a household telephone survey should only exclude a relatively small proportion of households.

94. For the postal self-administered questionnaire survey for doctors, it was conducted among a random sample of all registered medicine doctors in Hong Kong. There might be an over-representation of specialists in our sample. However, the lack of publicly available data on the detailed breakdown of doctors' characteristics does not permit us to conduct weighting on our sample. Instead, we have presented the results by specialists and non-specialists. In addition, doctors who had more knowledge or felt more strongly (whether positive or negative) about the topic might be more likely to return the questionnaire.

¹ From "Hong Kong Monthly Digest of Statistics Sept 2015" by the Census and Statistics Department, stock of permanent living quarters in 2015 is 2,695,600 while residential telephone lines is 2,446,000, implying an over 90% coverage of residential telephone lines over the permanent living quarters.

Review Visits to International Interviewees

95. There is a global trend of enhancing the healthcare professional regulation. Therefore, in addition to the above two tasks carried out in Phase 2, three review visits have been made to Singapore (May 2015), Australia (June 2015), and Malaysia (August 2015) to understand their latest practices/ approaches of healthcare professional regulation so as to supplement Phase 1 findings on global experience review.

96. Interviewees of these three visits included:

- (a) Prof K. Satku, former Director of Medical Services of Ministry of Health (Singapore);
- (b) Mr Martin Fletcher, Chief Executive Officer of Australian Health Practitioner Regulation Agency (Australia); and
- (c) Representatives from Ministry of Health, chaired by Dr Ahmad Razid who is the Director of Medical Practice Division including representatives from the Malaysian Medical Council, Allied Health Sciences Division (Malaysia).

97. Summary of findings for these three additional international visits was as follows:

Regulatory Framework/ Structure

98. To ensure national and cross-profession consistency in healthcare professional regulation, Australian Health Practitioner Regulation Agency continues to play an important role in regulation. Currently, it is responsible for the national registration of 14 healthcare professions and provides executive function for the respective 14 National Boards as an agency in managing investigations into the professional conduct and performance of healthcare professionals, and prosecuting a person who pretends to be a registered healthcare professional. Singapore, on the other hand, emphasises the institutional regulation i.e. healthcare institutions such as hospitals, clinics, day centres to play an indirect role in the medical regulation. To recognise the importance of lay representation, Singapore Medical Council has also included lay person in the Complaint Panel to sit in the Complaints Committees once a complaint is lodged. In Malaysia, corporatisation of Malaysian Medical

Council (MMC) was discussed since 2012, aiming to make MMC more efficient in its daily administrative work and free from government bureaucracy.

Professional Standards

99. To uphold professional standards and competence, CPD is a common tool to keep knowledge up-to-date. In addition to compulsory CPD, Australia is examining the feasibility of revalidation for medical doctors which was a hot debate among the profession. Malaysia is the only jurisdiction who did not have compulsory CPD. However, with the law being passed in 2012 which link CPD with annual practising certificates of doctors, MMC targets to launch compulsory CPD for all doctors in Malaysia in 2016. On the other hand, credentialing in both the public and private sectors is being in place in Singapore to verify doctors' professional qualifications. A one-year trial is being conducted to examine the use of peer review as a criterion for credentialing. Apart from Singapore, Malaysia is also developing credentialing of doctors in the public and private sectors.

Allied healthcare professionals

100. For the regulation of allied healthcare professions, Singapore is applying Schedule on the existing Ordinance i.e. Supplementary Health Professions Ordinance which allows the flexibility to add new healthcare professionals under regulation if required. In Malaysia, the Allied Health Sciences Division is responsible for planning and formulating policies for the development of allied healthcare services. A new Act is still being drafted to regulate the allied healthcare professions concerned statutorily. Australia is examining the proposal of setting up a single board for the allied healthcare professions.

C. Conclusion

101. From the analysis of similarities and differences in the healthcare professional regulation worldwide and the existing mechanisms in Hong Kong, taking into account the views of different stakeholders in Hong Kong, 10 key messages from the review of global experiences regarding healthcare professional regulations are identified –

- (1) Reform of regulation is to protect patients and improve quality of care;
- (2) Legislative change is needed to reform structures;
- (3) Policy and organisation for overarching common principles of governance is emerging;
- (4) Moving from self-regulation to partnership;
- (5) Lay representation is becoming the norm;
- (6) Relationships with governments and regulation of standards by healthcare system and institutional regulators (providers) vary;
- (7) Compulsory CPD is the norm;
- (8) Emerging emphasis on detecting and dealing with poor performance and improving quality of care;
- (9) Greater separation of roles is occurring; and
- (10) Non-locally trained graduates are admitted in different ways.

102. From the findings of the Phase 1 study, the following key areas for improvement are recommended -

- (a) review of the existing legislation governing the healthcare professions,
- (b) review of professional regulatory processes to maintain professional standards;
- (c) review of lay membership in regulatory bodies
- (d) introduction of compulsory CPD for all healthcare professionals.
- (e) Profession specific issues raised in the discussion should be addressed as appropriate for each professional group as an active process.

103. In addition to statutory regulation, we have also examined different approaches of regulation for allied healthcare professions in Phase 2. The choice of selecting the right type of regulation depends on various factors such as risk, costs and benefits of the regulation.

We have been commissioned by the Department of Health to develop a system of voluntary accredited registers for healthcare professionals who are not under statutory regulation, with the aims to protecting the public through quality assurance, and upholding standards of the registered professionals.

104. Medical regulation in Hong Kong is characterised by a high degree of professional autonomy. Hong Kong's medical regulatory framework does not have a structured ongoing assessment and monitoring systems for performance of all doctors. However, Phase 2 study found that the public expected that monitoring processes are already in place to protect the public. Although doctors perceived the importance of CPD to keep their knowledge and skills up-to-date, just above half of the doctors in the survey agreed to introduce a compulsory CPD which is linked to the renewal of practising certificates, probably due to anxiety of doctors towards such licensing control. The barriers to participating in CME/CPD included time, convenience, workload issues as well as the concerns on the variable content, format and quality of CME/CPD courses. Given the rapid advance in medical practice and the demand for higher transparency and accountability from the public, there is a need to enhance CPD in Hong Kong for all the healthcare professionals. Barriers expressed by doctors to participating in CME/CPD needs to be addressed. Incentives might also be considered for encouraging doctors to acquire up-to-date knowledge to keep abreast of international trend.

105. In addition, there is a gap between the general public and doctors on medical regulation, including their views on the MCHK. The public considered MCHK's function on detecting misconduct and poor performance as well as fair disciplinary processes were important. However, their confidence in MCHK in fostering doctors' professional conduct is relatively lower than that of the doctors. There are also concerns on the delayed process in the investigation and disciplinary process as revealed in Phase 1 study. The public also thought that the current composition of MCHK is not sufficient to protect them. The public wants more lay representation in the composition of MCHK. In early 2015, MCHK has pledged to reform its body to improve its accountability and assessment procedures. The views of the public and doctors in this study provide an important insight for MCHK in considering the reform of its structure and process, in particular, the investigation and

disciplinary mechanisms in order to meet public expectation and address their desire for accountability and transparency in the process.

106. The review visits to international interviewees echo the global trend of enhancing healthcare professional regulations.

D. Appendix: Respondent profile of Phase 2 survey

Appendix A: Profile of respondents (Public Survey)

	Number	%
Male	482	48.2%
Age (years)		
18-30	191	19.1%
31-50	376	37.6%
51-70	316	31.6%
≥71	117	11.7%
Working status (N=997)*		
Retired	227	22.8%
Unemployed	35	3.5%
Full-time student	79	7.9%
Home-maker	237	23.8%
Full-time worker	376	37.7%
Part-time worker	43	4.3%
Household family income (HKD)** (N=819)		
≤\$4,999	100	12.2%
\$5,000-9,999	49	6.0%
\$10,000-19,999	202	24.7%
≥\$20,000	468	57.1%
Received government allowance	156	15.6%
Presence of chronic disease(s)	285	28.5%
Perceived health status as compared with other people of same age (N=995)		
Better	272	27.3%
Similar	622	62.5%
Worse	101	10.2%
Has a regular/ usually visited doctor (N=999)*	699	70.0%
Doctor consultation in the past one month		
No	617	61.7%
Private sector only	185	18.5%
Public sector only	167	16.7%
Both public and private sector	31	3.1%
Has been hospitalised in the past one year	103	10.3%
Has health insurance coverage (N=990)*	418	42.2%

*Total number less than 1,000 because of missing data, **HKD1=USD0.128

Appendix B: Profile of respondents (Doctors)

	Specialist (n=541)	Non-specialist (n=329)	All doctors (N=870)	P-value*
Gender (Male) %	71.3	64.1	68.6	0.026
Age %				
21-40	34.6	55.3	42.4	0.000
41-60	49.2	24.0	39.7	
61 or above	16.3	20.7	17.9	
Places of first degree %				
Hong Kong	86.3	76.6	82.6	0.000
Overseas	13.7	23.4	17.4	
Main setting of current practice % (multiple options allowed)				
Hospital Authority	56.4	41.6	50.8	0.000
Government	5.0	8.5	6.3	0.039
Private Hospital	7.6	3.6	6.1	0.019
Academic Institution	5.7	4.0	5.1	0.246
Solo private practice	21.1	25.5	22.8	0.128
Group private practice	7.0	14.3	9.8	0.000
College(s) registered (among Specialists) (multiple options allowed)				
Anaesthesiologists	6.3	-	-	-
Community Medicine	3.0	-	-	-
Emergency Medicine	5.0	-	-	-
Family Physicians	10.0	-	-	-
Obstetricians and Gynaecologists	9.1	-	-	-
Ophthalmologists	3.7	-	-	-
Orthopaedic Surgeons	5.5	-	-	-
Otorhinolaryngologists	1.7	-	-	-
Paediatricians	7.4	-	-	-
Pathologists	4.3	-	-	-
Physicians	24.2	-	-	-
Psychiatrists	5.2	-	-	-
Radiologists	5.9	-	-	-
Surgeons	9.1	-	-	-

* P-value for the difference between specialists and non-specialists.