

Developing primary care in Hong Kong: evidence into practice and the development of reference frameworks

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Enhancing primary care is one of the proposals put forward in the Healthcare Reform Consultation Document "Your Health, Your Life" issued in March 2008. In 2009, the Working Group on Primary Care, chaired by the Secretary for Food and Health, recommended the development of age-group and disease-specific primary care conceptual models and reference frameworks. Drawing on international experience and best evidence, the Task Force on Conceptual Model and Preventive Protocols of the Working Group on Primary Care has developed two reference frameworks for the management of two common chronic diseases in Hong Kong, namely diabetes and hypertension, in primary care settings. Adopting a population approach for the prevention and control of diabetes and hypertension across the life course, the reference frameworks aim to provide evidence-based and appropriate recommendations for the provision of continuing and comprehensive care for patients with chronic diseases in the community.

Introduction

The most recent health care reforms in Hong Kong, as laid out in the consultation document "Your Health Your Life" in 2008,¹ have focused not only on how health care can be paid for, but also how it can be provided. There is wide agreement that health care reform in Hong Kong is necessary. The population is ageing, the patterns of disease reflect our growing affluence and longevity, while medical techniques and treatments are pushing new boundaries in saving and prolonging lives, and costs are going up. There is also agreement in the international literature that modern health care systems need to be based on primary care.²

The working definition of primary care used by the Government of the Hong Kong SAR Food and Health Bureau (FHB) in its reform process is that: "Primary health care is essential health care made universally accessible to individuals and families in the community by means acceptable to them, through their full participation and at a cost that the community and country can afford". It is also accepted that: "It forms an integral part both of the country's health system of which it is the nucleus, and of the overall social and economic development of the community" and essentially it is the first level of contact for individuals, the family and the community with the national health system. By this means it is expected to bring "health care as close as possible to where people live and work, and constitutes the first element of a continuing health care process".

Indeed, evidence has demonstrated that health systems that rely more on primary care rather than specialist care produce better population health outcomes, reduce avoidable mortality, improve continuity and access to health care, result in higher patient satisfaction, and reduce health-related disparities at a lower overall cost.³⁻⁹ As such, many countries reforming their health systems are doing so by strengthening community-based primary care, focusing on prevention, and quality improvement in disease management.¹⁰⁻¹²

Whilst this is a worthy aspiration, it is not a particularly easy task in Hong Kong where more than 70% of primary care is provided in the private sector.^{13,14} The situation is different from that in the UK where general practitioners are contracted by the publicly funded National Health Service, and their work is monitored and remunerated through the Quality and Outcomes Framework (QOF).¹⁵ The majority of patients in Hong Kong are used to playing the market and shopping around for the episodic care they need, rather than developing ongoing continuous relationships with their doctors.¹⁶ The concept of family doctors remains relatively underutilised and unaccepted, and most primary care exchanges between family doctors and their patients are for the treatment of acute conditions.¹⁷⁻²¹ Prevention remains a low priority. Older people, particularly those with lower incomes, tend to go to the publicly funded general out-patient clinics of the Hospital

Key words

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香港基層醫療發展：制訂參考概覽的實證

2008年3月發表的醫療改革諮詢文件《掌握健康，掌握人生》中，其中一項重點是加強基層醫療服務。由食物及衛生局局長擔任主席的基層醫療工作小組，於2009年建議為指定疾病及人口組別人士制訂基層醫療概念模式和參考概覽。因此，基層醫療概念模式及預防工作常規專責小組以國際經驗和最佳實證為借鑒，編制了兩份有關糖尿病和高血壓在基層醫療護理的參考概覽。此參考概覽採納以人群為本並貫穿各個人生歷程的模式，以預防及控制糖尿病和高血壓，從而為這兩種慢性疾病在社區內提供持續、全面和以實證為本的治療和護理。

Authority (HA) for the primary care for their chronic conditions such as hypertension and diabetes.^{22,23}

However, the package of reforms introduced by the Government is starting to make a difference and progress is being made. The Primary Care Office (PCO) was established in 2010 under the Department of Health (DH). The office aims to support and coordinate the development of primary care in Hong Kong and the implementation of primary care development strategies and activities.²⁴ A strategy document published in 2010 sets out the major strategies and pathway of action which could help deliver high-quality primary care in Hong Kong²⁵ (Box 1).

The overall direction of the reforms, that is, to improve the provision of more comprehensive and coordinated primary care through collaboration between the public sector, private sector, and non-governmental organisations (NGOs), is being led by the Secretary for Food and Health. To provide oversight, he has reconvened the Working Group on Primary Care (WPGC) in 2008. Four streams of policy development have been identified under the guidance of Task Forces, which are challenged to move the whole health system towards greater engagement in primary care (Box 2). The WPGC and its Task Forces comprise representatives from the public and private health care sectors, academia, patient groups, health administrators, health care professionals of various disciplines and specialties, and other stakeholders.²⁶ The Task Forces meet on a regular basis and are supported by the PCO.

Developing reference frameworks

The strategic approach

The key challenge facing the Task Force on Conceptual Model and Preventive Protocols (Task Force) was to avoid being a talking shop and come up with action-oriented conceptual models to promote good primary care across the whole population. The context for the reference frameworks drew on strategies proposed in "Your Health, Your Life"¹ namely to:

- develop basic models for primary care services with emphasis on preventive care;
- establish a primary care directory to include health care providers providing comprehensive primary care, based on the family doctors principles;
- subsidise patients for preventive care based on the needs of different population groups;

BOX 1. The major strategies to improve primary care in Hong Kong²⁵

The major strategies to improve primary care include:

1. Developing comprehensive care by multidisciplinary teams
2. Improving continuity of care for individuals
3. Improving coordination of care among health care professionals across different sectors
4. Strengthening preventive approach to tackle major disease burden
5. Enhancing inter-sectoral collaboration to improve the availability of quality care, especially care for chronic disease patients
6. Emphasising person-centred care and patient empowerment
7. Supporting professional development and quality improvement
8. Strengthening organisational and infrastructural support for the changes

BOX 2. Four Task Forces established under the Working Group on Primary Care and their main tasks

Task Force on Conceptual Model and Preventive Protocols

To define **WHAT** areas of services should be developed and what models could be used to enhance primary care to meet the needs of different patients and different age-groups; and to develop protocols on management of major diseases and preventive care for different population groups.

Task Force on Primary Care Directory

To develop a Primary Care Directory to provide primary care professionals' background and practice information so that the public can choose providers **WHO** are suitable for them; to facilitate the coordination of multidisciplinary teams to provide more comprehensive services; and to make use of the Directory as a platform to support professional development and quality care.

Task Force on Primary Care Delivery Models

To study **HOW** to put into actions the concepts, basic models and protocols, drawing input from a multidisciplinary workforce; and to examine the principles governing the delivery of better primary care, and the respective roles of different health care professionals in the public, private and non-profit-making sectors for the provision of better coordinated care.

Task Force on Primary Dental Care and Oral Health

To advise on the strategy and measures for development of primary dental care and promotion of oral health in Hong Kong, and the formulation and implementation of related specific initiatives including pilot projects and surveys; and to advise on the strategies and measures aiming to enhance the professional development of dentists and other supporting health care professionals.

- improve public primary care services, particularly to serve low-income and under-privileged groups; and
- strengthen public health functions, healthy lifestyle promotion and disease prevention.

In addition, reference was made to other key strategy documents in Hong Kong, including the Strategic Framework for Prevention and Control of Non-Communicable Disease (SFNCD) [Box 3].²⁷

Having agreed to work within these parameters, the Task Force agreed to adopt a life course approach and develop age-group and disease-specific preventive and basic health service models, and to produce clinical protocols/guidelines now known as reference frameworks.²⁸ This approach made reference to international models, in particular the National Service Frameworks of the UK²⁹ and guidelines developed in Australia.³⁰ Whilst such national protocols or guidelines are common in many other developed economies, national guidance provided by National Institute for Health and Clinical Excellence in the UK is one model used in managing performance in primary care. This approach was new to Hong Kong, where regulation of the profession, particularly in the private sector (where most primary care is delivered), is minimal. Although guidelines existed, they were organisation-specific or for groups of the population, and were not necessarily available to the public and not shared with others involved in the process of providing care. Thus in addition to being evidence-based guidance, the reference frameworks needed to be feasible and acceptable and to apply to all in the health care system or workforce. Moreover, they needed to apply to the public and private sectors, and be based on a multidisciplinary and integrated care approach. The development of the framework was achieved through professional consensus building, with the understanding that the PCO would ensure the promotion of understanding and adoption of the models and frameworks directed at the public. For example, this could be achieved through publicity and promotion, as well as promotion to the professions. This includes giving consideration to developing compliance incentives for private practitioners, for example, adapting models such as the QOF in the UK. The QOF has been very successful in assessing cardiovascular risk and thus prevent both cardiovascular and cerebrovascular disease.³¹ The new directory of professionals in primary care could also potentially be used to support monitoring and evaluation of the acceptance, adherence, effectiveness, and efficiency of the framework. Furthermore, the longer-term development and maintenance of the protocols were also discussed.

The guiding principles adopted by the Task Force included commitment to the life course

BOX 3. The Strategic Framework for Prevention and Control of Non-Communicable Diseases²⁷

The Framework is based on six strategic directions:

1. Supporting new and strengthening existing health promotion and non-communicable diseases (NCD) prevention initiatives or activities that are in line with the strategy;
2. Generating an effective information base and system to guide action across the disease pathway;
3. Strengthening partnership and fostering engagement of all relevant stakeholders;
4. Building capacity and capability to combat NCD;
5. Ensuring a health sector that is responsive to the NCD challenges and to improve the system of care; and
6. Strengthening and developing supportive health promoting legislation.

approach, the need to think through the pathway of care, to consider the different levels of prevention as well as the approaches recommended in the SFNCD.²⁷ This approach helped identify key priorities for the first tranche of work. Review of the epidemiology of non-communicable disease in Hong Kong shows that, along with many other developed nations, we are facing an epidemic of lifestyle-related diseases, many related to obesity, which predisposes to hypertension and diabetes. For example, a recent survey showed that more than one quarter of the population aged 15 years or more suffered from hypertension, and about one tenth of the adult population had diabetes.³²

Developing population-wide reference frameworks for prevention and management for these diseases that are appropriate for different population groups was the starting point. Evidence (epidemiological and psychosocial), ethics, social acceptability, equity, feasibility, and resource availability were all taken into consideration in order to develop realistic frameworks suitable for Hong Kong's culture. Stakeholder views were an important consideration in planning services which were primary care-led, based on individual needs and choice, local, and easy to access. The Task Force was aware of the challenges posed in Hong Kong by aspirations to meet essential primary care principles, such as providing seamless care through partnerships across sectors and utilising skills from multidisciplinary teams. Whilst such aspirations are possible within the public sector of the HA and new models of care could and have been developed, developing this approach in the disparate private sector poses a greater challenge and a system re-engineering/re-gearing will be needed. Another challenge is integration across the public sector and coordinating cooperation between the DH, HA and the private sector, as well as achieving an alignment with other government strategies. The development of primary care frameworks also needs to fit other government initiatives, such as the development of Electronic Health Records (e-Health Records).

Putting theory into practice

Evidence shows that guidelines produced by end-users or by consensus methods increase clinician ownership, with improvements in compliance of up to 40%.^{33,34} Therefore, the first step to support the development of the reference frameworks was to organise brainstorming sessions with experts in the field, including patient representatives, to identify issues and define their scope. After discussion with stakeholders, a basic conceptual model for the management of diabetes and hypertension using a population approach across the entire life course was developed (Fig 1²⁸). The model recognised that a comprehensive and continuous approach to care is needed, and had to focus on the person to meet his/her needs and risks. The two frameworks were created with reference to this conceptual model as well as international evidence and examples. Since clinical practice and patient engagement need to keep pace with scientific advancements, two ongoing Clinical Advisory Groups (CAGs) under the Task Force have been established to ensure the latest medical developments and evidence continue to be reflected in the frameworks. The CAGs will continually review

and update the reference frameworks to provide reference for best practice. The membership of the CAGs was drawn from academia, professional organisations, private and public primary care professionals, and patient groups (Fig 2).

Reference frameworks for diabetes and hypertension were published in spring 2011. They consist of a core document and a series of different modules addressing various aspects of diabetes and hypertension management (Box 4).

In addition to the HA and DH, major stakeholders including the universities, relevant Colleges of the Hong Kong Academy of Medicine, and a number of professional organisations. Furthermore, NGOs have shown their full support in developing and promulgating the reference frameworks. A web-based version of the core document was published in early January 2011 and modules of the two frameworks were published in May 2011. A corresponding abridged patient version was also published to facilitate the promulgation of the frameworks to the public. These documents are now available at FHB (www.fhb.gov.hk) and PCO websites (www.pco.gov.hk).

BOX 4. The aims of reference frameworks

- Provide a common reference and evidence-based recommendations to guide and coordinate care to patients from all health care professionals across different sectors in Hong Kong for the provision of continuous, comprehensive and evidence-based care for diabetes and hypertension in the community
- Empower patients and their carers
- Raise public awareness on the importance of preventing and properly managing these two major chronic diseases

Promulgation and adoption of the reference frameworks

Whilst it is relatively easy to produce frameworks, it is much more difficult to implement them across all sectors in the community. Strategies to increase awareness among the professions and the public to enhance implementation and uptake will take time, as will mechanisms to monitoring their impact on population health. The promulgation of the reference

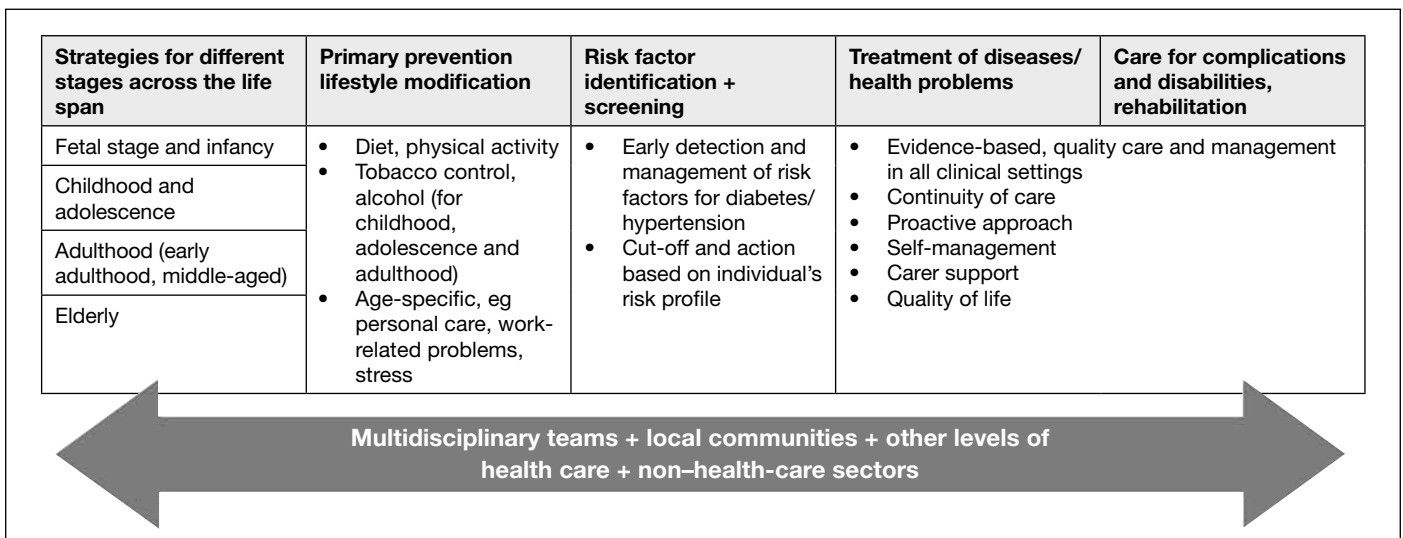


FIG 1. Conceptual model: population- and risk-based approach for the prevention and control of hypertension/diabetes across life course
Adapted from the Hong Kong reference frameworks for diabetes/hypertension care for adults in primary care settings, 2010²⁸

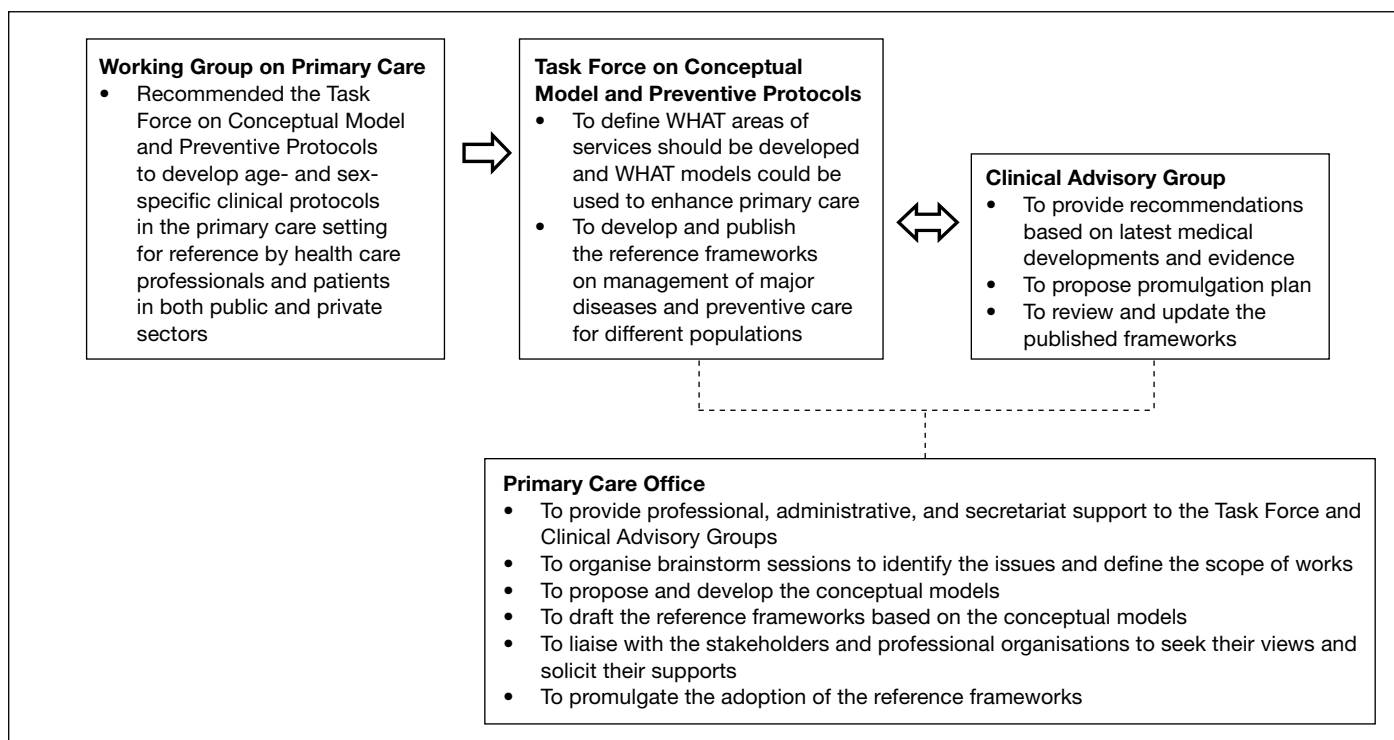


FIG 2. Process for the conceptual model and reference framework development

frameworks is therefore a long-term and continuous process that will entail multi-party collaboration and multi-pronged strategies. To promote the adoption and implementation, we are working with local health care providers in the private sector, professional organisations, NGOs, and social service agencies in the community. This will entail developing and implementing pilot projects to identify service gaps and provide affordable services as appropriate. In addition, primary care-related continuing medical education programmes for doctors will be organised with input from professional organisations. An evaluation system to monitor the adoption of the frameworks will be put in place. It is envisaged that eventually e-Health Records will allow the flow of patient-based data and record sharing, and help to maintain registries/lists of patients with chronic conditions. Potentially, this could enable links to reminder systems for both patients and the care providers to support recommendations for best practice as per frameworks and provide decision support. Furthermore, information collected from e-Health Records might support a system to allow feedback, monitoring, evaluation, and care planning for future health service development. New service delivery models of care, including the concept of a 'Community Health Centre', will be explored to foster the provision of more comprehensive and multidisciplinary primary care services. The latter could evaluate the need for more allied health and nursing support services for the management of patients with chronic disease, such as diabetes and hypertension.

Patient education and empowerment are crucial for the adoption of the Reference Framework. The PCO must work with stakeholders to organise health-promotional activities for patients, so that they can better understand each framework and how it can help their condition.

The effectiveness of the reference frameworks will depend on support and endorsement from health care professionals across different sectors in Hong Kong. To date, this has been forthcoming and new frameworks for children and older people are now being developed. Our aspiration is that the adoption of the reference frameworks will improve patient care by strengthening the implementation of evidence-based best practice. We believe that the best way to provide care for patients in Hong Kong is to provide a common platform of knowledge, which can be translated into best practice care for all. With the aim of providing effective and efficient care in our community, this platform should integrate care across all sectors and involve patients, the public, and the professions, as well as policymakers.

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