

Chapter 8

Health

The Government makes every effort to ensure no one in Hong Kong is denied medical care due to lack of means. Both the public and private medical sectors provide a wide range of healthcare services that include a low cost public healthcare 'safety net' for the needy. The Government is pushing ahead with reforms in the delivery and financing of healthcare services to cope with a changing demographic structure and rising medical costs. It also takes measures to protect public health including disease control, health promotion and education, and tobacco control, etc.

2010 Figures at a Glance

<i>Infant Mortality Rate</i>	1.6* per 1 000 registered live births	
<i>Maternal Mortality Ratio</i>	1.1* per 100 000 registered live births	
<i>Life Expectancy 2010</i>	80.0* (Male)	85.9* (Female)
2039	83.7 (Male)	90.1 (Female) <i>projected</i>

(*provisional figures)

Hong Kong has a quality healthcare system supported by a highly professional team of healthcare workers. The infant mortality rate has been falling steadily over the past 20 years and was the second lowest in the world in 2008. Hong Kong people's life expectancy has improved notably. In 2010, it was 80.0* years for males and 85.9* years for females (* provisional figures). Male and female expectancy figures were the fourth and second highest in the world in 2008.

Hong Kong's healthcare system comes at a price, however. Its Domestic Health Accounts (DHA)¹ show that Hong Kong's total health expenditure increased from 3.6 per cent to 5 per cent of Gross Domestic Product (GDP) over the period 1989-90 to 2006-07. As a percentage of total health expenditure, public health spending over the same period rose from 39 per cent to 50 per cent. Public health spending in the 2006-07 financial year amounted to \$37.4 billion, or 2.5 per cent of GDP. In face of

¹ A series of accounts compiled over the years in accordance with the International Classification for Health Accounts (ICHA) Framework developed by the Organisation for Economic Co-operation and Development to keep track of Hong Kong's health spending and to allow for international comparison.

the numerous challenges posed by Hong Kong's ageing population, rising expectations of health care, and soaring medical costs due to advanced technology, the sustainability of the quality of the healthcare system in the long run is a matter of concern to the community.

Organisational Framework

The Food and Health Bureau's responsibilities include formulating policies and allocating resources for running Hong Kong's health services. It also strives to strengthen the healthcare system to ensure these policies are carried out effectively in order to protect and promote public health, provide lifelong holistic health care to every citizen, and ensure that no one is denied adequate medical treatment due to lack of means.

The Department of Health (DH) is the Government's health adviser and agency to execute healthcare policies and statutory functions. It safeguards the community's health through a range of promotional, preventive, curative and rehabilitative services.

The Hospital Authority (HA) is a statutory body established in 1990 under the Hospital Authority Ordinance to provide public hospital and related services. It offers medical treatment and rehabilitation services to patients through hospitals, specialist clinics, general outpatient clinics, and outreaching services that are organised into seven clusters that together serve the whole of Hong Kong.

The Health and Medical Development Advisory Committee (HMDAC), chaired by the Secretary for Food and Health, comprises 14 non-official members drawn from different sectors of the community. Its role is to review regularly the way healthcare services are provided and to draw up a long-term plan to ensure the sustainable development of Hong Kong's healthcare system.

Healthcare Reform

In July 2005, the HMDAC issued a discussion paper on the desired future healthcare service delivery model. This contained proposals that won extensive public support. Its key recommendations include:

- (a) putting more emphasis on primary care services and promoting the family doctor concept;
- (b) strengthening collaboration and co-operation between the public and private sectors with the former focusing more on its priority areas;
- (c) caring for the elderly, chronic disease patients and patients in the rehabilitation stage in the community as far as possible; and
- (d) making use of information technology to establish a territory-wide electronic health record system.

In accordance with the proposals made by the HMDAC, the Government published the healthcare reform consultation document 'Your Health, Your Life' in

March 2008, putting forward a package of inter-connected reform proposals on the following aspects and initiating the first-stage public consultation which lasted for three months:

- (a) enhance primary care services;
- (b) promote public-private partnership in health care;
- (c) develop electronic health record sharing;
- (d) strengthen the public healthcare safety net; and
- (e) reform healthcare financing arrangement.

The first stage public consultation on healthcare reform showed that the community generally recognised an imminent need for healthcare reform; that it had a clear consensus on the service reform proposals and considered the Government should act on them. The public in general agreed that the ageing population and rising medical costs would lead to a significant increase in medical expenditure, and the Government therefore needed to address the financing issue to maintain the sustainability of the healthcare system. However, the public had reservations about the mandatory healthcare supplementary financing options proposed in the consultation documents.

The Government has committed itself to increasing the health budget progressively from 15 per cent to 17 per cent of government's recurrent expenditure. Meanwhile, it has been taking forward healthcare service reform measures which have received wide public support, including enhancing primary care services, promoting public-private partnership in health care and developing a territory-wide electronic health record sharing system. We will also strengthen the public healthcare services safety net to provide better protection for patients requiring costly drugs and treatment.

Based on the first stage public consultation, the Government launched a three-month second stage public consultation on healthcare reform in October 2010. A voluntary and government-regulated Health Protection Scheme (HPS) was proposed with the following main objectives:

- provide government-regulated private service choices for the public;
- encourage greater use of private services so that public resources can be focused on the provision of priority services to take care of low-income families and under-privileged groups;
- enable those who subscribe to health insurance to continue to be able to afford health insurance at older age so that they can stay insured and continue to use private healthcare services; and
- enhance transparency and competition in the private markets for value-for-money services and better consumer protection.

In view of the shortcomings of the current voluntary private health insurance, the Government has proposed that government-regulated health insurance plans under the HPS should have the following key features:

- no turn-away of subscribers and guaranteed renewal for life
- age-banded premiums subject to adjustment guidelines
- covering pre-existing medical conditions subject to waiting period
- high-risk individuals insurable with a cap on premium loading
- risks arising from accepting high-risk groups to be shared out through High-Risk Pool industry reinsurance
- no-claim discount for premiums
- insurance plans renewable on leaving employment and portable between insurers
- insurers required to report all costs, claims and expenses
- standardised health insurance policy terms and definitions
- establishment of a government-regulated health insurance claims arbitration mechanism

Another key feature of the HPS is to promote more transparent medical fees with packaged charging for common procedures. Private hospitals will be encouraged to offer all-inclusive and condition-specific packaged services and charging.

Under the HPS, service providers (i.e. insurance companies and private hospitals) will be subject to government regulation, so as to enhance price transparency, increase competitiveness of service provision and ensure adequate consumer protection. The HPS, when implemented, will require an expansion in the capacity of the private healthcare sector to cope with the potential increase in demand. This will have a positive impact on the long-term overall development of the healthcare industry. The Government will consider making use of the \$50 billion fiscal reserve set aside to provide incentives to HPS subscribers.

The Government looks forward to full engagement with the community through the second stage public consultation on healthcare reform. It will formulate the details of the scheme in the light of public views in order to lay a solid foundation for implementing the scheme and making further progress on healthcare reform.

Primary Healthcare and Medical Services

Primary healthcare covers a wide range of public health services such as health promotion and disease prevention. It is the first step in the healthcare process, comprising general outpatient services, specialised health care, and specialist medical treatment, provided for people in specific age groups who do not require hospital attention.

Figures available to the DHA in 2006-07 show spending on primary healthcare, which includes spending on public general outpatient clinics, private outpatient (general and specialist) and dental care, was about \$22 billion, of which public expenditure accounts for 22 per cent.

In October 2008, the Working Group on Primary Care (WGPC), which comprised healthcare professionals from the public and private sectors, patient representatives and service users, was reconvened under the HMDAC to formulate specific proposals for enhancing and developing primary care services. In September 2009, WGPC and its task forces put forward initial recommendations for the development of better primary care services in Hong Kong through the following three main areas of work:

- developing primary care conceptual models and reference frameworks, especially for the prevention and management of common chronic diseases, starting from diabetes mellitus (DM) and hypertension (HT), the two most common chronic diseases in Hong Kong, with a view to guiding the provision of enhanced primary care;
- setting up a Primary Care Directory with a view to promoting primary care through the family doctor concept and a multi-disciplinary approach, starting from the sub-directories of doctors and dentists; and
- devising feasible service models to deliver enhanced primary care services in the community through pilot projects as appropriate, including the setting up of community health centres (CHCs) and networks.

As at the end of 2010, the progress of the aforesaid three main areas of work was as follows:

- the primary care conceptual models and reference frameworks for DM and HT have been finalised for use as common reference by healthcare professionals;
- the Government has started inviting doctors and dentists to enrol in the sub-directories of doctors and dentists of the Primary Care Directory;
- the Government is continuing to explore different models of CHC pilot projects in consultation with healthcare professionals and providers from the public and private sectors, non-governmental organisations (NGOs) and universities. The Government also continues to take forward, through the DH and HA, a series of pilot projects to enhance primary care, including various healthcare voucher and vaccination subsidy schemes and other pilot projects for enhancing chronic disease management. The aim is to try out different models for enhancing primary care both within the public healthcare system and through public-private partnership.

Based on the recommendations of WGPC, the Food and Health Bureau (FHB) has drawn up the overall strategy for primary care development in Hong Kong in consultation with relevant professions and stakeholders. It also published the Primary Care Development Strategy Document, which set out the benefits of good primary

care and the strategies and pathways of action that would help healthcare providers deliver high quality primary care in Hong Kong, at the end of 2010.

The Primary Care Office (PCO) was set up within the DH in September 2010 to support and co-ordinate the development of primary care in Hong Kong, the implementation of primary care development strategies and actions, and the co-ordination of actions among DH, HA, the private healthcare sector, NGOs and other healthcare providers.

Clinic Services

General outpatient clinic services are mainly provided by the private sector. Public primary care services are offered primarily to low-income families, chronic disease patients and other vulnerable groups. In 2010, some 1.32 million people used these services, with 5.18 million attendances recorded. At present, HA operates 74 general outpatient clinics in Hong Kong with some providing family medicine specialist outpatient services.

The Government supports the development of family medicine, provides specialist training in it and assists the integration of primary and secondary care. Some \$1.6 billion was spent on outpatient and family medicine services during the 2009-10 financial year.

To promote the development of 'evidence-based' Chinese medicine practice and to increase training opportunities for local Chinese medicine degree programmes graduates, HA has set up 14 Chinese medicine outpatient clinics. A Government subvention of \$77 million was provided for running these clinics. A total of 114 289 patients made 658 697 visits to the 14 clinics, and 60 new graduates were recruited into the clinics in 2010. About 28 million outpatient visits are made to Western medicine clinics and seven million to Chinese medicine practitioners' clinics in the private sector each year. The majority of people are able to afford the services provided by these clinics.

Family Health

The DH provides a range of health promotion and disease prevention services through its 31 maternal and child health centres and three women's health centres for children up to five years of age, and women aged 64 or below. These centres offer an integrated child health and development programme for parents and care-givers to promote the holistic health and well-being of children. The core components of the integrated programme are parenting and immunisation, as well as health and developmental surveillance. Antenatal, postnatal, family planning, cervical screening and health education are provided for women. The centres also provide health education including psycho-social health and personal relationships, as well as physical health and healthy lifestyle. Some 26 000 expectant mothers and 67 000 newborn children attended maternal and child health centres in 2010, respectively representing about 29 per cent and 76 per cent of the total.

The Family Planning Association (FPA) of Hong Kong offers services and health information on sexual and reproductive health treatments and counselling at its

clinics, youth healthcare centres, women's clubs, and libraries. These received subsidies amounting to \$36.72 million in the 2009-10 financial year. Over 200 000 people used these services in 2009.

Student Health

The DH provides health checks and individual counselling to primary and secondary school students at its 12 student health service centres and three special assessment centres. A total of 403 592 primary one to secondary one students used the services in the 2009-10 school year.

In addition, school health inspectors pay visits to schools to check on their hygiene standards, while health officers and nurses provide advice on preventing communicable diseases. School Immunisation Teams under the auspices of the department's Centre of Health Protection make annual visits to primary schools to administer vaccinations.

Elderly Health

The DH has 18 elderly health centres and 18 visiting health teams to render primary health care to the elderly, improve their ability to care for themselves and encourage healthy living and their family's support. These centres provide health assessments, physical check-ups, counselling, curative treatment, health education and other healthcare services to people aged 65 and above. The visiting health teams conduct health promotion activities for the elderly and provide training for carers to improve their caring. In 2010, the elderly health centres recorded 39 110 enrolments and 175 315 attendances for health assessment and medical consultation, while the visiting health teams provided service to 288 008 client contacts.

Community Health

In line with the international trend of greater focus on development of ambulatory and community care programmes, the HA has stepped up the development of community healthcare services to reduce reliance on inpatient services and facilitate patients' rehabilitation in the community. In 2009, the HA continued to step up training for family physicians, community paediatricians, community physicians, general practitioners and other community health practitioners in the drive to improve community health care.

The HA spent \$800 million on community health services in the 2009-10 financial year. In 2010, a total of 1 820 100 home visits and outreach care services were conducted, including those for elderly people and mental patients.

Over 80 per cent of those receiving community nursing care are elderly people. Community Geriatric Assessment Teams make regular visits to residential care homes for the elderly (RCHEs) to assess residents' medical needs and to provide them with treatment. They also train RCHE staff to improve their service quality. To strengthen the support for elderly people discharged from hospital, HA launched an Integrated Discharge Support Trial Programme for Elderly Patients in March 2008. The programme aims to reduce the unplanned hospital re-admission rate of high-risk

discharged elderly patients through better discharge planning and 'one-stop' post-discharge support arrangement, and to relieve the stress of carers of discharged elderly patients through carer training and other support services.

Another improvement is the stationing of more community nurses at care centres and NGOs to provide on-site care in helping elderly patients discharged from the hospital to recover at home.

Extended care hospitals provide specialist programmes for the rehabilitation of pulmonary, orthopaedic, geriatric and cardiac patients, while short-term rehabilitation programmes are provided for discharged patients in day and outpatient clinics. Integrated palliative day care centres provide a full range services for reducing the pain or stress of patients with incurable illnesses.

Dental Health

Eight school dental clinics run by the DH provided preventive dental services including annual dental check-ups and basic dental care to about 328 000 primary students in the 2009-10 school year, or about 95.1 per cent of the total number of primary school pupils in Hong Kong.

In addition to the 11 government dental clinics that provide basic dental services to the general public for pain relief and tooth extraction, the department offers specialist oral healthcare services in seven public hospitals to inpatients and others with special oral health needs. The department also monitors the level of fluoridation in water supplied to the public to reduce dental decay.

A Task Force on Primary Dental Care and Oral Health was formed in late 2010 under WGPC. It advises the Government on the strategy and measures for development of primary dental care and promotion of oral health in Hong Kong as well as the formulation and implementation of related specific initiatives including pilot projects and surveys. It also tenders advice on the strategies and measures aiming to enhance the professional development of dentists and other supporting healthcare professionals.

Mental Health

The Government is committed to promoting good mental health in Hong Kong, and supports a dedicated joint approach by the Administration and the whole community to achieve this aim.

The Government intends to provide comprehensive mental health services, including continuous treatment for patients who need it indefinitely, early detection and treatment, rehabilitation and community support.

Resources allocated by the Government to mental health services have been increasing over the years bringing the annual expenditure to \$3.77 billion in 2009-10.

Early discharge of mental patients in stabilised conditions to receive care and rehabilitation outside the confines of hospitals can help reduce the chances of relapses. The international trend nowadays focuses on community and ambulatory

services in the treatment of mental illness. In light of this, the HA has taken steps in recent years to enhance its community support services for mental patients. In 2010-11, it piloted a case management programme in three districts (Kwai Tsing, Kwun Tong and Yuen Long), under which case managers provide intensive, continuous and personalised support to persons with severe mental illness.

To further enhance the support for persons with common mental disorders, the HA has set up Common Mental Disorder Clinics at the psychiatric specialist outpatient clinics based on the service model of the triage clinics to provide patients waiting for appointment at psychiatric specialist outpatient clinics with assessment and treatment services. In addition, the HA introduced an Integrated Mental Health Programme during the year to provide assessment and consultation for patients with common mental disorders in the primary care settings through collaboration between psychiatric and family medicine specialists. Information on other public mental health rehabilitation services is available in Chapter 10.

Other Special Services

The DH operates a range of specialist clinics and centres for the public. They include 20 methadone clinics, 19 tuberculosis and chest clinics, seven social hygiene clinics, four dermatology clinics, two integrated treatment centres, four clinical genetic clinics, six child assessment centres, and two travel health centres. About 7 million visits to these clinics were recorded in 2010.

Healthcare Services Provided by Private and Non-governmental Organisations

NGOs provide healthcare services at different levels in Hong Kong. Non-profit-making community clinics offering primary healthcare services are operated by a large number of NGOs. They include, for example, the United Christian Nethersole Community Health Service, Hong Kong Sheng Kung Hui Welfare Council, Haven of Hope Christian Service, Hong Kong Christian Service, Christian Family Service Centre, Yan Oi Tong, Sik Sik Yuen, Caritas-Hong Kong, Lok Sin Tong Benevolent Society and Ching Chung Taoist Association, etc. Apart from these organisations, Yan Chai Hospital, Pok Oi Hospital, the Hong Kong Federation of Trade Unions and the Hong Kong Buddhist Association, and others provide Chinese medical services. Two Chinese medicine clinics belonging to the Tung Wah Group of Hospitals offer members of the public free Chinese medicines subsidised by the Government.

In addition, many NGOs organise health promotion, educational and other healthcare related activities. Some NGOs also provide health assessment services for elderly people, and medical check-ups for women. The Hong Kong St. John Ambulance provides first aid training and services, while the Hong Kong Red Cross provides first aid training to promote first aid knowledge and skills. The Hong Kong Cancer Fund boosts public awareness of cancer and encourages people to undertake regular screening for certain cancers to minimise cancer risk.

Secondary, Tertiary and Specialised Healthcare Services

Secondary, tertiary and specialised healthcare services are provided mainly in hospitals and specialist clinics run by the Hospital Authority. At the end of 2010,

there were 26 981 public hospital beds, comprising 20 673 general beds, 2 041 infirmary beds, 3 607 beds for the mentally ill and 660 beds for the mentally handicapped. In addition, there were 3 949 beds in private hospitals, 3 803 in nursing homes and 792 in institutions run by the Correctional Services Department. There are five beds per thousand of population.

According to existing figures, spending on secondary, tertiary and specialised healthcare services, including public specialist outpatient and inpatient services, as well as private inpatient services, amounts to about \$36.4 billion, of which spending on public specialist outpatient and inpatient services accounts for 80 per cent.

Specialist Outpatient Service

Public sector secondary and tertiary ambulatory medical services are provided mainly through HA's specialist clinics. At these clinics, patients' symptoms are diagnosed and treatment is provided. About \$6.6 billion was allocated in the 2009-10 financial year for these services.

Hospital clusters under HA have specialist clinics for a wide range of specialties, including internal medicine surgery, obstetrics and gynaecology, paediatrics, orthopaedics and traumatology, ear, nose and throat, ophthalmology, psychiatry, neurosurgery, oncology and cardio-thoracic surgery.

In 2010, members of the public made close to 6.57 million visits to public hospital specialist outpatient clinics.

Under the HA's triage system, appointments for new patients are made on the basis of the severity of their condition.

Patients in stable condition are referred back to primary care practitioners in the private sector or HA's general outpatient clinics.

Allied Health Service

Allied health professionals working under the HA include audiologists, clinical psychologists, dietitians, occupational therapists, optometrists, orthoptists, physiotherapists, podiatrists, prosthetists and orthotists, speech therapists and medical social workers. They provide rehabilitative and extended care for patients receiving inpatient, outpatient, ambulatory and community care services to help them reintegrate into society. During the year, the HA strengthened the manpower for allied health service, providing support for the chronic disease management programme, mental health service, and integrated discharge support programme for elderly patients and other rehabilitation services, so as to further help patients reintegrate into the society.

In 2010, members of the public made about 2.09 million visits to allied health outpatient departments. Allied health professionals such as medical laboratory technologists, diagnostic radiographers, radiation therapists, medical physicists and medical scientific officers also assist medical practitioners in making diagnoses and monitoring the treatment results.

Inpatient Services

Inpatient services are provided by the HA for people requiring intensive treatment for acute illnesses. In 2009-10, a total of \$23.2 billion was allocated for providing these services by hospitals under HA. Public hospital doctors use internal medicine, surgery and other specialist methods to treat patients with different illnesses.

In 2010, a total of 1.42 million inpatients and day-patients were discharged from public hospitals. In line with the international trend, the HA will continue to strengthen the development of ambulatory and community care programmes to provide patients with rehabilitation services in their respective districts as far as possible. This is a major shift in the provision of healthcare services from a disease treatment model to a holistic healthcare model, and from focusing on episodic acute hospital care to adopting a comprehensive approach centred on preventive, curative and rehabilitative health care.

Accident and Emergency Services

Accident and emergency services are provided at 16 hospitals under the HA. They deliver a high standard of service for critically ill or injured persons who need urgent medical attention. They also provide medical support for victims of disasters. A total of \$1.8 billion was allocated for providing such services in the 2009-10 financial year.

In 2010, a total of 1.25 million people paid 2.22 million visits to the accident and emergency departments of public hospitals, an average of 6 094 attendances per day. Patients attending the accident and emergency departments of public hospitals are classified under five categories according to their clinical conditions: Critical cases are classified under Category 1, emergency cases under Category 2, urgent cases under Category 3, semi-urgent cases under Category 4, and non-urgent cases under Category 5.

The triage system ensures that patients with more urgent needs receive prompt attention. In 2010, all Category 1 patients received immediate treatment while over 95 per cent of Category 2 patients were treated within 15 minutes.

Medical Charges and Waiver

Fees for public hospital and clinic services for the general public are affordable. They are subsidised by up to 95 per cent by the Government, with people receiving assistance under the Comprehensive Social Security Assistance Scheme exempted from paying. Other needy groups are assisted through a medical fee waiver scheme. Recipients of this waiver include low-income patients, the chronically ill, and elderly patients with financial difficulties.

Private Hospitals

Hong Kong's 13 private hospitals served 361 563 inpatients in 2009, representing 21 per cent of the total number of inpatients in the territory. According to existing figures, spending on private inpatient services amounts to \$7.1 billion,

accounting for 25 per cent of overall expenditure on inpatient services in the public and private sectors.

Healthcare Service Development and Infrastructure

Public Hospitals Development Project

A number of public hospital development projects being carried out will help improve healthcare services in different parts of Hong Kong. These include an extension of Prince of Wales Hospital, preparatory work on the redevelopment of Yan Chai Hospital, expansion of Tseung Kwan O Hospital, relocation of Siu Lam Hospital to Block B of Castle Peak Hospital, North Lantau Hospital Phase 1 and redevelopment of Caritas Medical Centre Phase 2.

Public-private Partnership Projects in Healthcare Services

The Government has launched a series of public-private partnership (PPP) pilot projects through the HA to promote the PPP concept in healthcare services. These include a Cataract Surgeries Programme, launched in February 2008, which provide a subsidy for public patients undergoing cataract surgeries performed by private ophthalmologists. By the end of 2010, a total of 95 ophthalmologists had taken part in the programme and 12 500 patients had enrolled, 9 000 of whom underwent cataract surgery.

The HA implemented a Tin Shui Wai Primary Care Partnership Project in Tin Shui Wai in June 2008. Under this programme, healthcare services are purchased from the private sector to treat chronic disease patients living in Tin Shui Wai North who need long-term follow-up treatment at general outpatient clinics. Participating patients receive a Government subsidy and can choose to receive treatment from any participating doctor. As at the end of 2010, ten private doctors and 1 584 patients enrolled in the programme.

The Public-Private Chronic Disease Management Shared Care Programme has been implemented in Sha Tin and Tai Po in the HA's New Territories East Cluster since March 2010 and in Wan Chai and Eastern District in the Hong Kong East Cluster since September 2010. For chronic disease patients currently being followed up in the public healthcare system, this programme provides an additional choice which allows them to have a private doctor to follow up on their conditions with a partial subsidy provided by the Government. It also aims to establish long-term patient-doctor relationships in order to achieve the objective of continuous and holistic care.

In addition, the Haemodialysis Public-Private Partnership Programme was launched in March 2010 to utilise spare capacity in the private sector in providing haemodialysis services to eligible patients with end-stage renal disease currently under the care of HA.

To enhance primary care services for the elderly and to encourage continuity of care, in January 2009 the Government implemented a three-year Elderly Health Care Voucher Pilot Scheme under which five \$50 healthcare vouchers are given annually

to the elderly aged 70 or above as partial subsidy for their use of private primary healthcare service in their neighbourhood community.

Up to the end of 2010, a total of 2 736 healthcare service providers with places of practice located in 18 districts of Hong Kong had joined this scheme. More than 300 000 elderly people made voucher claims, constituting 45 per cent of eligible elderly people. Over 2 136 000 vouchers were claimed by eligible elderly people through more than 852 000 medical consultations. The Government reimbursed more than \$100 million in total to the enrolled healthcare service providers for the claims transactions.

The Government has introduced since 2008 a number of vaccination schemes through the PPP. These included a childhood influenza vaccination subsidy scheme, a vaccination subsidy scheme for the elderly and a residential care home vaccination programme to increase the number of vaccination service providers and to give the public more choice of providers. The aim is to extend the service to more target groups to prevent the spread of infectious diseases.

Developing Electronic Health Record (eHR) Sharing

The Government is conducting a Public-Private-Interface Electronic Patient Record Sharing pilot project to test the feasibility and gauge the public's acceptance of eHR sharing. The project enhances continuity of care for patients by enabling participating private healthcare providers and other registered institutions to view their patients' medical records kept at HA, subject to patients' consent.

By the end of 2010, more than 2 060 private doctors and healthcare providers of private healthcare organisations took part in the project. More than 124 700 patients also enrolled in the project. The Government has extended the project to 12 private hospitals and 42 other private or non-governmental organisations providing healthcare-related services (including their 270 residential care homes or centres).

The Government is also working with the public and private healthcare sectors, IT service providers and stakeholders to implement a 10-year programme to develop a territory-wide, patient-oriented, voluntary eHR sharing system. The whole programme is being developed in two stages. The objectives of the first stage development (2009-10 to 2013-14) are:

- (i) to have the eHR sharing platform ready by 2013-14 for connection with public and private hospitals;
- (ii) to have electronic medical/patient record systems and other health information systems available in the market for private doctors, clinics and other healthcare service providers to connect to the eHR sharing platform; and
- (iii) to formulate a legal framework for the eHR sharing system to protect data privacy and security prior to commissioning of the system. The second stage development (2014-15 to 2018-19) aims to expand the coverage of

the eHR sharing system among healthcare providers and the public and to extend further its functionalities in supporting healthcare purposes.

The eHR Office under the FHB co-ordinates and takes forward the development of the system and addresses issues such as policy, legal issues, privacy and security. In October 2009 and November 2010, the eHR Office launched an eHR Engagement Initiative (EEI) and invited the private healthcare and information technology sectors respectively to submit proposals for promoting eHR sharing. Through the EEI, the Government will help the non-governmental healthcare and information technology sectors develop solutions needed to connect their systems to the sharing platform so as to promote eHR sharing.

The eHR Office will consult the relevant professions, stakeholders and the public in 2011 on issues related to the legal issues, privacy and security framework for eHR sharing in preparation for drafting of the necessary legislation. The eHR Office will also conduct a Privacy Impact Assessment for the eHR sharing system to safeguard personal data privacy and ensure integrity of the system.

Development of Private Health Care

One of the healthcare reform initiatives is to encourage the private healthcare sector to play a more active role in the provision of hospital services in order to address the imbalance between public and private hospital services and to increase the overall capacity of the healthcare system to cope with growing demand. Promoting private hospital development is also a major government policy announced by the Chief Executive in his 2009-10 Policy Address.

Hong Kong is renowned for its high standard of professional health care as well as its up-to-date medical technology and equipment. Coupled with its excellent communication facilities and marketing skills, it has the advantages and potential for further developing its medical services, particularly in the provision of highly professional services requiring technology and multi-disciplinary skills.

The Government aims to develop medical services as one of the six industries crucial to the growth of Hong Kong's economy. The development of private healthcare services can also enhance and consolidate Hong Kong's position as a prime medical centre in the region.

Four sites (respectively located at Wong Chuk Hang, Tseung Kwan O, Tai Po and Lantau) have been reserved for private hospital development. The Government, from the end of 2009 to March 2010, invited the market to express its interest in developing private hospitals at the reserved sites and 30 development proposals have been received from local and overseas institutions. Feedback is being considered with a view to formulating suitable arrangements to dispose of the sites in phases from late 2011 or 2012. The Government and the HA will at the same time continue to enhance the training and development of local medical professionals, and encourage exchange of local and overseas medical professionals, with a view to further raising the service standards of our healthcare sector.

Health Promotion

Healthy Lifestyle

The department's Central Health Education Unit is responsible for formulating and implementing the direction of public health education.

In 2010, the unit continued to carry out a number of activities, including the healthy eating campaigns, 'EatSmart@school.hk' and 'EatSmart@restaurant.hk', and introduced a pilot scheme to promote healthy lifestyle at pre-school organisations and workplaces. In addition, for prevention of communicable diseases, the unit provided the public with updated information and health advice on communicable diseases through the media, web-pages, promotional leaflets, posters, and telephone hotlines, etc. It also produced health education leaflets in various languages, catering for the demand of different ethnic groups in this international city. The unit also introduced a health promotion van known as HEALTH Direct in September 2010, visiting the community and enhancing the public's interest in acquiring health knowledge.

In the 2009-10 school year, over 400 primary schools (including special schools) participated in the major activities of the 'EatSmart@school.hk' Campaign, representing about 65 per cent of all primary schools in the territory, and more than 84 million hits were recorded at the campaign's website. The 'EatSmart@restaurant.hk' Campaign also received a favourable response with more than 600 restaurants taking part.

In addition, the DH improved the psychosocial health of secondary school students through the Adolescent Health Programme. Some 321 secondary schools, 94 000 students and 2 300 parents and teachers enrolled in and received services under the programme during the 2009-10 school year.

In the 2009-10 financial year, the DH spent \$220 million on health promotion.

Oral Health Education

In addition to various target-oriented activities carried out in schools, educational and other activities were organised throughout the year by the department's Oral Health Education Unit to promote oral health. These included the 'Bright Smiles Mobile Classroom' which provides more extensive outreach activities on oral health education for primary school pupils. Information on oral health is also provided through the department's oral health education website, www.toothclub.gov.hk, and a 24-hour interactive telephone hotline.

In October 2010, a 'Love Teeth' Campaign was launched by the department urging people to take proper care of their teeth, with emphasis on seeking dentists' advice on gum condition to prevent periodontal disease.

AIDS Counselling and Education

Human immunodeficiency virus (HIV) prevention and health promotion programmes in Hong Kong are underpinned by the concerted efforts of the Government and NGOs. The department's 'Red Ribbon Centre' collaborates with its

community partners to promote public awareness and prevention of HIV and to promote caring and acceptance of HIV patients. In 2010, the centre organised 23 major activities and 101 special programmes, from which some 81 889 participants benefited. The number of new and active HIV patients reported in 2010 was 389, compared with 396 in 2009.

A 24-hour, trilingual (Cantonese, Putonghua and English) AIDS hotline, 2780 2211, provides information on AIDS (Acquired Immune Deficiency Syndrome), sexually transmitted diseases and HIV testing. Appointments for a counselling service and HIV antibody/rapid tests may be made on the hotline. In 2010, about 14 178 calls were made to nurse counsellors on the hotline by people seeking AIDS counselling. About 0.98 million condoms were distributed to promote safer sex. There is also a telephone hotline called The Gay Men HIV Testing Hotline, 2117 1069, and a website, www.21171069.com, to advise men who have sex with men. In 2010, the Gay Men HIV Testing Hotline received a total of 254 calls for counselling and HIV antibody/rapid testing.

Organ Donation

The DH launched a Centralised Organ Donation Register (CODR) in 2008 and joined the HA, the Hong Kong Medical Association, the Hong Kong Society of Transplantation and various NGOs in the continuous promotion of organ donation as a charitable life-saving act.

Potential donors are encouraged to record their names in the register, expressing their wish to donate their organs after death and to make their wish known to their families. As at the end of 2010, the CODR recorded the wish of over 69 000 people.

For the statistics on cadaveric organ donations, there were 42 liver, 74 renal, 13 heart, 2 double-lung and 250 cornea donations from the deceased in Hong Kong's public hospitals in 2010. However, the number of patients waiting for kidney, liver, heart and double-lung transplants stood at 1 621, 91, 8 and 12 respectively as at the end of 2010.

Smoking and Health

China is a state party to the Framework Convention on Tobacco Control (FCTC) of the World Health Organisation (WHO), rendering provisions of the convention to be applicable to Hong Kong. The tobacco control policy of the Hong Kong Special Administrative Region Government aims, through a step-by-step approach, to discourage smoking, contain the proliferation of tobacco use and protect the public from passive smoking to the maximum extent possible.

The Government adopts a multi-pronged approach to the issue, including publicity, education, legislation, enforcement, encouragement to stop smoking, and taxation.

Legislation

The Smoking (Public Health) Ordinance stipulates statutory no-smoking areas and enforcement arrangements, and regulates the advertisement, promotion, packaging and labelling of tobacco products.

Since January 1, 2007, smoking has been banned in all indoor areas of restaurants, theatres, malls, karaoke establishments, other workplaces and indoor public places, child care centres, universities, schools, hospitals, escalators, parks, stadiums, swimming pools and bathing beaches. The prohibition of smoking in public areas was extended to bars, clubs, nightclubs, bathhouses, massage establishments, mahjong-tin kau premises and designated mahjong rooms in clubs with effect from July 1, 2009.

From September 1, 2009, smoking was prohibited in all public transport interchanges with superstructures to reduce the adverse impact of second-hand smoke on public transport users. On December 1, 2010 the smoking ban was extended to open-air public transport interchanges.

With the enactment of the Fixed Penalty (Smoking Offences) Ordinance on September 1, 2009, persons smoking in statutory no smoking areas and on public transport carriers are liable to a fixed penalty of \$1,500. In addition to the Police and tobacco control inspectors, authorised staff of the Leisure and Cultural Services Department, the Food and Environmental Hygiene Department and the Housing Department are empowered to serve fixed penalty notices on offenders.

With the ending of the two-year grace period granted under the Smoking (Public Health) Ordinance to licensed hawker stalls selling goods including tobacco products on November 1, 2009, all advertisements and promotions on tobacco products were prohibited in Hong Kong.

Taxation

For public health reasons, the Government increased tobacco duty by 50 per cent with immediate effect in the Budget Speech on February 25, 2009. The duty on cigarettes increased from around \$0.8 to about \$1.2 per stick. This duty together with other tobacco control measures aims to reduce the harmful effects of tobacco use on members of the public. To strengthen further the effectiveness of tobacco duty as a measure to discourage tobacco consumption, duty-free concessions on tobacco products for incoming passengers (except for small quantity for self-consumption) at border entries were abolished on August 1, 2010.

Implementation and Enforcement

A main task of the Tobacco Control Office (TCO), set up in 2001, is to enforce the smoking ban at statutory no smoking areas. It conducted over 23 600 inspections and issued over 90 summonses and 7 950 fixed penalty notices for smoking offences in 2010. Another of its key tasks is to assist managers and staff of establishments in statutory no smoking areas to enforce the Smoking (Public Health) Ordinance. In 2010, the TCO organised 17 seminars on tobacco control and prevention. Some 440 people attended these seminars. They included venue

managers of no smoking areas and the public. The TCO also distributed health education materials (including guidelines, posters, no smoking signs and pamphlets) to venue managers of statutory no smoking areas and the public. It will continue to provide training and support to relevant stakeholders and the public.

Publicity and Education

The Hong Kong Council on Smoking and Health (COSH) is an independent statutory body charged with advising the Government on matters relating to smoking, passive smoking and health, and with publicising the hazards of smoking. The COSH has conducted a number of publicity and community involvement campaigns to nurture a smoke-free culture and encourage smokers to stop smoking. It also conducts education and publicity campaigns at kindergartens and primary and secondary schools through health talks and theatre programmes. The aim is to encourage students to say 'no' to smoking and to support a smoke-free environment. The COSH's publicity and educational programmes attracted an attendance of about 81 000 people in 2010.

The COSH also launched a territory-wide publicity drive called 'Smoke-Free Hong Kong' which included broadcasts on TV and radio and it operates a website, www.smokefree.hk, and a telephone hotline to receive enquiries and suggestions from the public on smoking and health.

Smoking Cessation

The DH provides service users with advice on how to stop smoking, a counselling service and pharmaceutical treatment through various smoking cessation services, including a hotline, clinics and an interactive online cessation centre.

It also broadcasts announcements on TV and radio, conducts seminars and issues health education materials to increase public awareness of the harmful effects of smoking and second-hand smoke, and solicits public support for a smoke-free environment and the anti-smoking law. In 2010, the TCO organised 46 seminars on smoking cessation. Some 1 200 people attended the seminars.

The DH also strives to enrol the support of local organisations in promoting smoking cessation services through their established networks in order to enhance the cost-effectiveness and sustainability of those services. In 2009, the department, in collaboration with the Tung Wah Group of Hospitals (TWGHs), launched a pilot community-based smoking cessation programme covering clinical cessation services, training for smoking cessation personnel, and relevant clinical researches as well as publicity. The centres on smoking cessation under the TWGHs provide the public with free smoking cessation services. It is hoped that through this programme, assessments can be made of the effectiveness of various cessation methods in helping to develop a robust standard for smoking cessation services in the Chinese community.

In April 2010, the department collaborated with Pok Oi Hospital in the provision of a smoking cessation pilot programme using traditional Chinese medicine. This programme covers smoking cessation services, education for the public and research

projects. Free smoking cessation services are provided by Chinese medicine mobile clinics which serve different locations of the territory.

The department granted funding to the United Christian Nethersole Community Health Service in 2010 for the launch of a pilot outreach programme on smoking prevention and cessation. The target groups are new immigrants and ethnic minorities. The programme covers assessment of their needs for cessation services, outreach activities and referral of interested parties to smoking cessation clinics or services.

The HA also provides smoking counselling and cessation services through its two full-time and 30 part-time centres in public hospitals and outpatient clinics. The centres are manned by trained nurses and pharmacists who provide counselling and nicotine replacement therapy to help people stop smoking. The HA also operates a telephone hotline providing booking and enquiry services for smokers who wish to quit smoking.

Disease Prevention and Control

The Prevention and Control of Disease Ordinance and its subsidiary legislation, the Prevention and Control of Disease Regulation, came into effect on July 14, 2008. This ordinance ensures that the laws of Hong Kong are in line with the requirements of the International Health Regulations (2005) of the WHO and strengthens Hong Kong's infectious disease control structure so that the territory can tackle infectious diseases in a more effective manner and cope with public health emergencies.

The DH spent \$1.97 billion on disease prevention and control at its maternal, child health and elderly health centres and similar facilities in the 2009-10 financial year.

Centre for Health Protection

The Centre for Health Protection has been in operation since June 1, 2004. It collaborates with its local and international counterparts to prevent and control outbreaks of disease. It works on three principles: real-time surveillance, rapid intervention and responsive risk communication.

The centre constantly strengthens its infection surveillance and data analyses on epidemiology and health care. By setting up an effective reporting and monitoring system as well as upgrading facilities for conducting diagnosis and clinical tests, the centre has kept track of communicable diseases effectively. The centre issues surveillance reports on a regular basis, as well as reports on laboratory safety and quality assurance.

Prevention and control of, and education on known diseases such as tuberculosis, HIV/AIDS and sexually transmitted diseases were also strengthened. A board of scientific advisers, comprising experts from different disciplines, and seven scientific committees meet periodically to assist the centre in formulating effective policies to improve the local health protection system. Regular training and research programmes are also conducted.

The centre also uses health education campaigns and publicity programmes run in association with district councils to provide information and guidelines on diseases, alerting the public to health threats and facilitating rapid implementation of preventive measures. In addition, links with other health authorities and agencies on the Mainland, in Macao and at the WHO have been reinforced to share professional knowledge and experience in combating diseases.

Contingency Planning for Infectious Disease Outbreaks

The Centre for Health Protection continually reviews and updates its strategies for coping with major outbreaks of infectious diseases, ensuring both the Government and the community are prepared to deal with them. A plan for mobilising volunteers in the event of an outbreak is also in place.

The centre organises drills every year to test Hong Kong's preparedness. In June 2010, in conjunction with the Airport Authority and the Port Health Office, the centre organised an exercise named 'Hua Shan' to test co-ordination of various parties in responding to a public health emergency originating at the Hong Kong International Airport and their surge capacity in such an occurrence. In October 2010, the centre organised another exercise code-named 'Nephrite' in collaboration with relevant departments, with the aim of testing the departments' response to an imported case of plague.

Human Swine Influenza and Communicable Diseases

The total number of statutory notifiable infectious diseases in Hong Kong is 47. During the year, about 21 400 cases were reported, of which about 5 100 and 2 700 were diagnosed as tuberculosis and human swine influenza respectively.

In April 2009, confirmed cases of human swine influenza were reported in Mexico and the United States and continued to emerge in other parts of the world. On May 1, 2009, Hong Kong confirmed its first imported case of the disease. During the containment phase at the early stage of the outbreak, the Government strengthened its control efforts on all fronts. As the human swine influenza virus circulated widely in the local community and around the globe, the Government's strategy moved from the containment phase into mitigation. The aim was to relieve the burden of the disease on the community and public health services.

Major measures included vaccination programmes, antiviral stockpiling, provision of a sustainable medical service, promotion of basic measures such as personal and environmental hygiene, enhanced epidemic surveillance, and risk communication. Human swine influenza activity in Hong Kong has been steadily declining since its peak in September 2009 and has remained low. The clinical severity of human swine influenza also has not changed during the past year. Hence, the Government lowered the influenza response level under the Framework of Government's Preparedness Plan for Influenza Pandemic from 'Emergency' to 'Alert' Response Level with effect from May 24, 2010 and amended the Prevention and Control of Disease Ordinance to delete swine influenza from the list of statutory notifiable infectious diseases on October 8, 2010. Our influenza surveillance efforts will continue.

Vaccination Programmes

Children in Hong Kong are protected against communicable diseases such as tuberculosis, hepatitis B, poliomyelitis, diphtheria, tetanus, pertussis, measles, mumps and rubella under a 'Childhood Immunisation Programme'. To minimise the adverse effects of vaccination, the oral poliovirus vaccine (OPV) and whole-cell pertussis (wP) vaccine were replaced by the inactivated poliovirus vaccine (IPV) and acellular pertussis (aP) respectively from February 2007. On the advice of experts and the Centre for Health Protection, the Government included pneumococcal conjugate vaccine in the Childhood Immunisation Programme from September 1, 2009. At the same time, the Government launched a one-off catch-up programme to provide pneumococcal vaccinations to children born between September 1, 2007 and June 30, 2009.

Since 1998, the Government has been providing target groups with free seasonal influenza vaccinations each year at public hospitals and clinics. On the recommendation of the Scientific Committee on Vaccine Preventable Diseases, in 2009-10 the Government extended the scope of the influenza vaccination programme to provide free seasonal influenza and pneumococcal vaccinations to all elderly persons living in residential care homes for the elderly or the disabled, those aged 65 years or above with chronic illness attending public clinics, and those aged 65 years or above receiving Comprehensive Social Security Assistance.

To reflect its increased scope, the scheme was renamed the 'Government Vaccination Programme'. On October 19, 2009, the Government introduced two new vaccination subsidy schemes to provide subsidies for elderly people and young children receiving vaccinations at private clinics. The Elderly Vaccination Subsidy Scheme applies to persons aged 65 years or above, while the Childhood Influenza Vaccination Subsidy Scheme caters to children aged between six months and less than six years. Two vaccination subsidy schemes, with a total of about 1 500 participating private doctors, were launched on November 1, 2010.

The Government also continues to provide free seasonal influenza vaccination and pneumococcal vaccination for all eligible residents living in residential care homes for the elderly or the disabled through over 300 visiting registered doctors under the Residential Care Home Vaccination Programme in the form of PPP.

These vaccination programmes help to protect high risk groups and prevent them against related complications, hospitalisation and mortality.

Non-communicable Diseases

The biggest killers in Hong Kong are cancer, heart and cerebrovascular diseases, which together accounted for about 54.2 per cent of all registered deaths in 2010. Elderly people are the biggest victims of these chronic non-communicable diseases which will continue to cause increasing number of deaths in Hong Kong as the population ages. To combat this problem, in 2008 DH drew up 'Promoting Health in Hong Kong: A Strategic Framework for Prevention and Control of Non-communicable Diseases', and formed a steering committee comprising representatives from the Government, public and private sectors, academia,

professional bodies, industry and other key partners to oversee the framework's implementation. Common chronic non-communicable diseases are mostly associated with lifestyle. In this connection, working groups were set up under the steering committee to put forward recommendations on issues of diet and physical activity as well as alcohol misuse and injuries.

After careful review and in-depth discussion regarding the local situation on non-communicable diseases and the behavioural risk factors including unhealthy dietary habits, physical inactivity and overweight/obesity, and having regard to the health promotion activities conducted by various government departments, public bodies and NGOs, the Working Group on Diet and Physical Activity has drawn up an Action Plan to Promote Healthy Diet and Physical Activity Participation in Hong Kong (Action Plan). The official launch of the Action Plan was marked by a ceremony under the title 'Eat and Play Smart for Better Health – Get Set, GO!' on September 27, 2010. Relevant information is available on the websites of the DH and the Centre for Health Protection.

Meanwhile, the Centre for Health Protection continues to step up surveillance, prevention and control of non-communicable diseases through a scheme called the 'Behavioural Risk Factor Surveillance System' and other health surveys.

A Cancer Co-ordinating Committee regularly makes recommendations for prevention and control of cancer, which claimed more than 13 000 lives in Hong Kong in 2010. The committee assigned the Cancer Expert Working Group on Cancer Prevention and Screening to conduct discussions on the latest developments concerning breast cancer, prostate cancer, and colon and colorectal cancer. The relevant recommendations on prevention and screening were made available on the website of the Centre for Health Protection in September 2010.

To reduce the mortality rate of cervical cancer victims, in 2004 the DH, together with other healthcare providers, launched a cervical screening programme to provide screening for women aged between 25 and 64. It also introduced a cervical screening information system to collect and analyse data on cervical smears. In 2010, about 108 000 women registered under the programme underwent cervical screening.

In order to enhance care for chronic disease patients, the HA launched a chronic disease management programme in selected HA general outpatient clinics in 2009. Services provided include risk assessment and management, with diabetes mellitus and hypertension patients as the major target groups. The HA also introduced six multi-disciplinary services on wound care, fall prevention, support of mental wellness, drug compliance, continence care and handling of chronic respiratory problems.

Health Regulatory Activities

Healthcare Professionals

As at December 31, 2010, the registered healthcare professionals who, under existing legislation, need to be registered with their respective boards or councils

before being allowed to practise in Hong Kong numbered 12 620 doctors, 2 179 dentists, 6 307 Chinese medicine practitioners, 40 011 nurses (including registered and enrolled nurses), 4 595 midwives, 1 954 pharmacists, 132 chiropractors, 2 262 physiotherapists, 1 400 occupational therapists, 2 847 medical laboratory technologists, 2 020 optometrists, 1 742 radiographers and 298 dental hygienists.

Any person wishing to register and practise in Hong Kong as a registered Chinese medicine practitioner (CMP) is required to have satisfactorily completed a recognised undergraduate degree training course in Chinese medicine practice or its equivalent approved by the Chinese Medicine Practitioners Board of the Chinese Medicine Council of Hong Kong, and have passed the licensing examination. As a transitional arrangement for the registration of CMPs, persons who were practising Chinese medicine in Hong Kong before January 3, 2000 were eligible to become listed CMPs.

Depending on their practising experience and academic qualifications, listed CMPs may register through direct registration, undergoing the Registration Assessment or taking the licensing examination. The Chinese Medicine Council of Hong Kong conducted Part I and Part II of the 2010 Chinese Medicine Practitioners Licensing Examination in June and August respectively. By year-end, 6 307 and 2 772 Chinese medicine practitioners were registered (including 66 Chinese medicine practitioners with limited registration) and listed respectively with the Chinese Medicine Council of Hong Kong.

Western Medicines

The regulation of western medicines in Hong Kong is stipulated under the Pharmacy and Poisons Ordinance. Acting on the authority of the Pharmacy and Poisons Board, the DH registers and approves the marketing of pharmaceutical products, issues licences to drug manufacturers, importers, wholesalers and retailers, and takes action against illegal sale of controlled drugs in collaboration with the Hong Kong Police Force. Legislative controls are also enforced on poisons, antibiotics and dangerous drugs.

During 2010, 4 383 applications for registration of pharmaceutical products were approved. At year-end, 19 189 pharmaceutical products were registered in Hong Kong.

In light of incidents concerning pharmaceutical products in the first quarter of 2009, the Government set up the Review Committee on the Regulation of Pharmaceutical Products on March 24, 2009 to conduct a comprehensive review on the existing regime for the regulation and control of pharmaceutical products.

The committee completed the review and submitted a report at the end of 2009, putting forward 75 recommendations on all aspects of the current drug regulatory regime, including manufacturing, distribution, import and re-export, sale, supply and procurement of drugs in the public and private sectors, control of pharmaceutical products, pharmacovigilance, and penalties for non-compliance as well as risk communication, education and training. The report was accepted by the Legislative Council Panel on Health Services in January 2010. The DH set up a

steering committee at the beginning of 2010 for co-ordination and implementation of the committee's recommendations.

Chinese Medicines

The regulation of Chinese medicines is subject to the Chinese Medicine Ordinance. Any person engaged in the retailing or wholesale of Chinese medicines or the manufacture or wholesale of proprietary Chinese medicines (pCm), is required to obtain a licence. Any pCm sold, imported or possessed in Hong Kong must be registered. The Chinese Medicine Council of Hong Kong is now the responsible body for devising and implementing regulatory measures for Chinese medicine. Applications for Chinese medicine trader licences and for registration of proprietary Chinese medicines have been accepted since April and December 2003 respectively.

As a transitional arrangement, pCm that are manufactured or sold on March 1, 1999 are eligible for a transitional registration status upon submission of acceptable basic test reports. By the end of 2010, there were 6 596 licensed Chinese medicine traders (including 227 holding transitional licences), and 9 202 pCm have obtained the transitional registration status.

The mandatory registration requirement for pCm was formally introduced on December 3, 2010. All pCm must be registered before they can be imported or sold in Hong Kong. Products which have obtained registration status must also be stamped with the relevant registration number. The import, sale or possession of unregistered pCm is an offence.

Human Organ Transplantation

Under the Human Organ Transplant Ordinance, transplant of human organs and importation of human organs for transplant purposes are regulated, and commercial dealings in human organs intended for transplant are prohibited. Approval from the statutory Human Organ Transplant Board is required for transplantation of human organs between living persons who are not genetically related or a couple whose marriage has subsisted for not more than three years. The board also collects certain information about transplant operations in prescribed statutory forms.

In 2010, the Board received a total of 31 applications for organ transplants between living non-related persons. In total, five organs were imported into Hong Kong for transplant purposes during the same year.

Human Reproductive Technology

Human reproductive technology activities are regulated to ensure the procedures are conducted in a safe and informed manner, and to safeguard the welfare of children born through the technology. The Human Reproductive Technology Ordinance² and its regulations came into full effect on August 1, 2007. Reproductive technology service providers and embryo researchers who wish to conduct relevant activities as regulated by the ordinance must obtain a licence issued by the Council on Human Reproductive Technology. Up to December 31, 2010, the council had

² Except section 33(4)(a) of the Ordinance.

issued a total of 56 licences, including 14 treatment licences, 40 artificial insemination by husband licences and two research licences.

The ordinance confines the application of reproductive technology procedures to infertile married couples, regulates surrogacy arrangements and the use of embryos and gametes for research and other purposes, and prohibits commercial dealings in embryos or gametes and the use of donated gametes in surrogacy arrangements. With reference to international practice and in consultation with the reproductive technology profession, social workers, legal practitioners, academia and ethical groups, the council has established a code of practice setting out the requirements, standards and good practices for embryo researchers and reproductive technology practitioners.

Port Health

To prevent and control cross-boundary spread of infectious and other serious diseases into Hong Kong, the DH's Port Health Office enforces quarantine measures according to the International Health Regulations and the Prevention and Control of Disease Ordinance. Travellers arriving in Hong Kong at immigration control points are required to undergo temperature screening as a precautionary measure. The Port Health Office also provides Hong Kong residents with preventive services including medical consultation, vaccination, prophylactic medication and advice on travel-related risks before they travel. The office has a close working relationship with the travel industry. Travel health information is available via the website at www.travelhealth.gov.hk.

Radiation Health

The Radiation Board was set up under the Radiation Ordinance to control the import, export, possession and use of radioactive substances and irradiating apparatus. As the executive arm of the Radiation Board, the Radiation Health Unit of the DH safeguards the public against ionising radiation by means of licensing controls and inspection of premises where radioactive substances or irradiating apparatus are present or in use.

It also provides health checks and radiation monitoring for radiological practitioners, maintains the radiation dosimetry metrology standards for environmental and occupational protection level radiation dosimetry measurements, and provides the related standard calibration services. The Radiation Health Unit advises the Government on the health effects of radiation fields and protection of public health with regard to nuclear incidents and management of radioactive materials and wastes.

In 2010, the unit assessed and issued 10 016 and 512 licences/permits according to the Radiation Ordinance and the Import (Radiation) (Prohibition) Regulations respectively. It provided monitoring services to 9 825 occupationally exposed persons. The average radiation exposure of occupationally exposed persons was 0.11 mSv against an annual statutory limit of 20 mSv.

Medical Device Control

Currently, there is no specific legislation to regulate the import, sale or use of medical devices in Hong Kong except for those devices which contain pharmaceutical products, radioactive substance or that emit ionising radiation. A voluntary Medical Device Administrative Control System was established by the DH in 2004 to raise public awareness of the importance of medical device safety and pave the way to implementing the long-term statutory control.

Under this administrative control system, medical devices are classified by the DH into four classes based on their risk levels. Products that conform to requirements on safety and are effective as declared will be listed. The manufacturers and the traders must comply with the relevant listing requirements and regulatory measures, as well as report adverse incidents. The listing of high-risk and medium-risk devices, as well as high-risk vitro diagnostic medical devices is maintained by the DH. In 2010, the DH approved a total of 475 applications for listing medical devices, screened 1 749 safety alerts and processed 59 adverse incident reports.

To prepare for the statutory regulation of medical devices, the DH organised a series of seminars between August and September 2010 to gauge the views of the trade concerning the latest proposed regulatory framework. This framework was accepted by the majority of the stakeholders. The DH reported to the Legislative Council Panel on Health Services on the progress of the preparation of legislation in November 2010 and plans to carry out a business impact assessment on the regulatory proposal in 2011.

Training of Medical and Health Personnel

Doctors

Degree courses in medicine and surgery are offered at the University of Hong Kong and the Chinese University of Hong Kong, which enrolled 162 and 170 medical students respectively in 2010. During the year, 21 medical graduates with professional qualifications obtained outside Hong Kong passed the licensing examination conducted by the Medical Council of Hong Kong. Doctors are also encouraged to pursue continuing education and upgrade their professional skills and expertise in order to meet the present needs of professional practice.

The Hong Kong Academy of Medicine is an independent statutory body with the authority to approve, assess and accredit specialist training within the medical and dental professions. Its 15 colleges conduct training and examinations to award specialist qualifications to qualifying candidates.

Apart from providing the public with healthcare services, the HA also undertakes training of specialist doctors. Each year, the majority of medical graduates of the two local universities are offered appointment to the HA to receive specialist training while working in the HA. The HA recruited about 300 doctors for specialist training in 2010. To improve the remuneration package of doctors under training and to ensure they have sufficient time to complete their training, the HA

introduced a new career structure for doctors in 2007. Some 200 doctors completed training at the HA and obtained specialist qualification in 2010.

Dentists

Training in dentistry is available at the University of Hong Kong, which enrolled 52 dental students in 2010. During the year, six candidates who completed their dental training outside Hong Kong passed the licensing examination conducted by the Dental Council of Hong Kong. Dentists are also encouraged to study further to enhance their professional competence.

Chinese Medicine Practitioners (CMPs)

The University of Hong Kong, the Chinese University of Hong Kong and the Hong Kong Baptist University offer full-time undergraduate degree courses in Chinese medicine. The HA also assists the Hong Kong Baptist University in providing western medicine training and clinical practice for undergraduate degree courses in Chinese medicine. In 2010, 68 full-time local Chinese medicine bachelor's degree graduates who passed the licensing examination were registered as CMPs.

Currently, the Chinese medicine outpatient clinics under the HA are required to employ new graduates of degree courses in Chinese medicine as junior CMPs and to provide them with up to three years of training, including pre-employment training and clinical practice of western medicine, as well as inviting renowned experts and professors on a regular basis to give lectures in Hong Kong and provide specialist clinical guidance to trainees. As at the end of 2010, 60 graduates in their first year training and 133 trainees in their second and third year training were employed in 14 Chinese medicine outpatient clinics of the HA.

To cater for the future development of the Chinese medicine speciality, the HA will arrange for CMPs to receive specialist training in Chinese medicine hospitals in the Mainland. After completing their training, the CMPs will have to return to Hong Kong to assist in the development of the Chinese medicine specialist service and the establishment of a Chinese medicine specialist team.

Allied Health Professionals

Hong Kong Polytechnic University offers degree programmes for allied health professionals in the fields of medical laboratory science, physiotherapy, occupational therapy, optometry and radiography. In 2010, enrolments in these courses numbered 33, 73, 47, 38 and 51 respectively.

To address the service demand and tie in with the new model of professional development, the Institute of Advanced Allied Health Studies under the HA devises structured long-term training plan for allied health staff and runs courses on specialist and multi-disciplinary training and personal development. These include a three-year in-service training course organised for new recruits of allied health grades. In 2010, a total of 50 training courses and a number of overseas scholarships were offered.

Nurses

The University of Hong Kong, the Chinese University of Hong Kong, the Hong Kong Polytechnic University and the Open University of Hong Kong provide basic registered nurse training. The four universities recruited 887 nursing students into their four-year general nursing degree programmes in 2010, while the Hong Kong Polytechnic University and the Chinese University of Hong Kong enrolled another 98 nursing students into their three-year Master Degree of Nursing programmes. In addition, the Hong Kong Polytechnic University enrolled 167 students into its three-year higher diploma nursing programme.

The Hong Kong Sanatorium and Hospital, St Teresa's Hospital and the Hong Kong Baptist Hospital Nursing School also provide basic enrolled nurse training. Between them they recruited 163 nursing pupils into their two-year Diploma in General Nursing (Enrolled Nurse) programmes. In addition, the Open University of Hong Kong enrolled 88 students and 61 students into their two-year Higher Diploma in Nursing programme and Higher Diploma in Mental Health Nursing programme respectively. During the year, 70 nurses with professional nursing qualifications obtained outside Hong Kong passed the licensing examinations conducted by the Nursing Council of Hong Kong and were awarded practising certificates for registered nurses or enrolled nurses.

The HA provides basic registered nurse training through its three-year higher diploma programme. A total of 300 registered nurse students were recruited in 2010. The Authority also runs a two-year enrolled nurse basic training programme and recruited a total of 350 pupil nurses in 2010. During the year, it also recruited 220 pupil nurses into its two-year enrolled nurse basic training programme for the social welfare sector.

The HA is committed to strengthening the core competence of nurses and enhancing the quality of nursing care. In line with its overall strategies on healthcare services, its Institute of Advanced Nursing Studies seeks to strengthen the training of nurses in the community and speciality care services to encourage nurses to improve their professional standards through continuous learning. The institute provides simulation skills training for new nursing graduates to strengthen their skills in clinical care and management of medical emergencies, and offers new overseas scholarships to experienced nurses to enable them to attend overseas training for increased international exposure. Courses offered by the institute include speciality nursing certificate courses, professional competence enhancement programmes and e-learning programmes. The HA also promotes exchanges between nurses in Hong Kong and the Mainland, Macao and other countries.

Laboratory Services

Government Laboratory

The Government Laboratory offers a comprehensive range of analytical and advisory services to support the Government in upholding its various commitments to the protection of public health. In the financial year 2009-10, it spent \$137.17 million on providing analytical services for the protection of public health.

In 2010, a total of 209 214 tests were carried out on a wide range of foods to ensure they were safe for consumption and that they met statutory standards. The laboratory also provided testing services for investigations into food complaints. A total of 17 089 such tests were conducted in 2010. The laboratory continues to outsource some of its routine testing work to commercial laboratories enabling it to better use its existing resources for developing new food testing methods and conducting additional food tests resulting from the broadened scope in food surveillance operations.

The laboratory also continues to provide services for analysing the quality and safety of western and Chinese medicines. In 2010, it carried out a total of 45 203 tests on western pharmaceutical products and 95 890 on Chinese medicines to ensure they met recognised quality and safety standards, including tests on proprietary Chinese medicines to ensure they were not adulterated with western drugs, controlled substances, and other harmful ingredients. The laboratory provided support for investigations into cases involving undeclared western drug ingredients and incidents of intoxication suspected to have been caused by misused, or contaminated herbs in Chinese medicines. The laboratory continues to assist the Department of Health in the development of Hong Kong Chinese Materia Medica Standards (HKCMMS). It also continued its year-round surveillance of tar and nicotine yields in cigarettes, carrying out 13 716 checks on data declared by tobacco traders, the results of which were released to the public regularly.

Public Health Laboratory Services

The Public Health Laboratory Services Branch of the DH provides clinical diagnostic and public health laboratory services to the public and private health sectors for patient care and for other public health uses. The branch also processes surveillance specimens to see if they contain infectious substances. The branch conducted more than 2.5 million such tests in 2010.

The Public Health Laboratory Centre under the Public Health Laboratory Services Branch has been designated by the WHO as the National Influenza Centre, the National Poliovirus Laboratory, the National Measles Laboratory, Regional Measles Reference Laboratory, Avian (H5) Influenza Reference Laboratory, SARS Reference Laboratory and a Supranational TB Reference Laboratory.

Hospital Laboratory Services

Hospital laboratories located in regional hospitals under the HA provide a wide range of laboratory services in anatomical pathology, chemical pathology, haematology, blood bank, microbiology, immunology and tissue typing to ensure that all public hospitals, including those without on-site laboratories, have access to comprehensive laboratory services. These laboratories are supported by advanced information technology systems and automated devices to achieve operational efficiency. They are also accredited by a number of local and international accreditation bodies. These hospital laboratories carried out more than 210 million tests in 2010.

Auxiliary Medical Service

The Auxiliary Medical Service (AMS) is a government department under the Security Bureau with an establishment of 93 civil servants. It manages a government-financed auxiliary service comprising 4 418 volunteers. In addition to doctors and nurses, all of its members are qualified Disaster Medical Assistants. Its main role is to reinforce regular medical, health and ambulance services during emergencies and to provide backup during ordinary times. The Director of Health is the AMS's Commissioner and is responsible to the Chief Executive for the efficient running of the service.

AMS is prepared at all times to deal with unexpected and urgent situations affecting public health. About 2 500 of its members are qualified inoculators ready to provide a public vaccination service for prevention of seasonal and infectious diseases. A Psychosocial Response Team has also been set up with about 40 members possessing psychosocial first aid knowledge and skills to render initial treatment to people suffering emotional shock from disasters and calamities while awaiting fuller professional treatment.

The AMS also gives talks to the public on cardiopulmonary resuscitation, drug abuse and other such matters. It has received the 'Caring Organisation' award from the Hong Kong Council of Social Service for five consecutive years in recognition of its community work.

Websites

Food and Health Bureau: www.fhb.gov.hk

eHealth Record Office: www.eHealth.gov.hk

Department of Health: www.dh.gov.hk

Centre for Health Protection: www.chp.gov.hk

Hospital Authority: www.ha.org.hk

Auxiliary Medical Service: www.ams.gov.hk

Health and Medical Development Advisory Committee: www.fhb.gov.hk/hmdac

Healthcare Reform: www.myhealthmychoice.gov.hk