

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.

2011 Figures at a Glance

<i>Infant Mortality Rate</i>	1.3* per 1 000 registered live births	
<i>Maternal Mortality Ratio</i>	1.0* per 100 000 registered live births	
<i>Life Expectancy 2011</i>	80.5* (Male)	86.7* (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 third lowest in the world in 2009. Hong Kong people's life expectancy has improved notably. In 2011, it was 80.5* years for males and 86.7* years for females (*provisional figures). Male and female expectancy figures were the third and second highest in the world in 2009 respectively.

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 4.8 per cent of Gross Domestic Product (GDP) over the period 1989-90 to 2007-08. As a percentage of total health expenditure, public health spending over the same period rose from 40 per cent to 49 per cent. Public health spending in the 2007-08 financial year amounted to \$38.8 billion, or 2.3 per cent of GDP. In

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.

face of 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 (FHB)'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 19 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.

This first stage of the public consultation 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. However, the public had reservations about the mandatory healthcare supplementary financing options proposed in the consultation documents.

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 more choices with better protection to those who are able and willing to pay for private health insurance and private healthcare services;
- relieve public queues by enabling more people to choose private services and focus public health care on target service areas and population groups;
- better enable people with health insurance to stay insured and make premium payment at older age and meet their healthcare needs through private services; and
- enhance transparency, competition, value-for-money and consumer protection in private health insurance and private healthcare services.

Under the HPS, service providers (i.e. insurers and private healthcare providers) will be subject to government regulation, so as to enhance price transparency, increase competitiveness of service provision and ensure adequate consumer protection. The HPS prohibits providers from turning away subscribers; guarantees subscribers' option to renew their HPS membership; covers subscribers' pre-existing medical conditions subject to waiting period; requires providers to accept high-risk groups through a high-risk pool; requires providers to calculate insurance costs, including claims and expenses, in a transparent manner. These key features are designed to provide better protection and value-for-money services to consumers, as well as a choice for those consumers who are receiving private healthcare services and can afford them. Public subsidies and financial incentives will be considered for

justified causes under the HPS, making use of the \$50 billion set aside from the fiscal reserve in support of healthcare reform.

The second stage public consultation revealed broad-based community support for the Government's healthcare reform direction: a strengthened public healthcare system as the core, complemented by a competitive and vibrant private healthcare sector. Many considered the proposed HPS a positive step forward to enhance the long term sustainability of Hong Kong's healthcare system. They concurred that the proposed HPS could help enhance transparency, competition and efficiency of the private healthcare sector. They supported the introduction of the proposed HPS to provide value-for-money choices to the community, and indirectly provide relief to the public system by better enabling it to focus on serving its target areas.

Some respondents, while supporting strengthened regulation of the private healthcare sector, expressed concerns about the adequacy of supply of healthcare manpower and capacity of private hospitals and healthcare services. They point out that there is a need for the Government to formulate a healthcare manpower strategy to ensure that there would be an adequate supply of healthcare professionals to meet future demands and support the development of the public and private healthcare sectors, and to develop the necessary infrastructure for facilitating the development of healthcare services.

Based on the outcome of the second stage public consultation on healthcare reform, the FHB is adopting a three-pronged approach to take forward the following reform initiatives:

- **Formulate supervisory framework for the proposed HPS:** The FHB will set up a working group on the HPS under the HMDAC to formulate proposals for the HPS, including supervisory and institutional frameworks, implementation arrangements, and the provision of public subsidy making use of the \$50 billion fiscal reserve earmarked to support healthcare reform;
- **Review healthcare manpower strategy:** the FHB will set up a high-level steering committee to conduct a strategic review on healthcare manpower planning and professional development. The steering committee will formulate recommendations on how to cope with anticipated demand for healthcare manpower, strengthen professional training, and facilitate professional manpower and development having regard to the findings of the review; and
- **Facilitate healthcare service development:** the FHB will seek to facilitate the development of the healthcare services industry. This includes developing essential infrastructure, notably the disposal of land for private hospital development, enhancing the transparency of healthcare services and promoting packaged services for common procedures in the private sector.

The FHB expects to complete these three tasks by the first half of 2013, and then proceed with the necessary legislative process.

While taking forward the HPS, the FHB will continue to strengthen public healthcare services as the cornerstone of the health system and the healthcare safety net for all.

The Government's recurrent funding for health has witnessed substantial year-by-year increases. By 2012, the total growth will amount to over \$13 billion, representing an increase of over 40 per cent. Healthcare expenditure will, in keeping with FHB's pledge, account for 17 per cent of the government's recurrent expenditure. The FHB has also strengthened the public healthcare services safety net to provide better protection for patients requiring costly drugs and treatment, including past fund injections totalling \$1,510 million. The Government will continue to take forward various healthcare service reform measures including enhancing primary care services, promoting public-private partnership in health care and developing a territory-wide electronic health record sharing system.

Primary Healthcare and Medical Services

Primary health care 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 for 2007-08 show spending on primary healthcare, which includes spending on public general outpatient clinics, private outpatient (general and specialist) and dental care, was about \$21.9 billion, of which public expenditure accounted for 23 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.

Based on the recommendations of WGPC, the FHB has drawn up the overall strategy for primary care development in Hong Kong in consultation with relevant professions and stakeholders. It also published a 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 under 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 the DH, the HA, the private healthcare sector, NGOs and other healthcare providers. As at the end of 2011, the major progress was as follows:

- A territory-wide primary care campaign was rolled out in April 2011 to promote to the public the Government's primary care development strategy and initiatives, and the concept of family doctors being long-term healthcare partners;
- Sub-directories of doctors and dentists of the Primary Care Directory were launched in April 2011. The public can search the web-based Directory for family doctors or dentists who suit their needs;
- Reference frameworks for the DM and the HT have been promulgated to provide common reference for healthcare professionals; and
- CHC pilot projects based on different models are being explored in collaboration with healthcare professionals and providers from the public and private sectors, non-governmental organisations (NGOs) and universities. The first purpose-built CHC in Hong Kong will come into operation in Tin Shui Wai in the first half of 2012. The Government also continues to take forward, through the DH and the HA, a series of pilot projects to enhance primary care services, including various healthcare voucher and vaccination subsidy schemes and other pilot projects for strengthening chronic disease management.

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 2011, some 1.35 million people used these services, with 5.46 million attendances recorded. At present, the 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 \$1.7 billion was spent on general outpatient and family medicine services during the 2010-11 financial year.

To promote the development of 'evidence-based' Chinese medicine practice and to increase training opportunities for local Chinese medicine degree programme graduates, 16 Chinese medicine outpatient clinics have been set up through tripartite collaboration among the HA, NGOs and local universities. During the year, a Government subvention of \$86 million was provided for running these clinics. A total of 134 981 patients made 806 385 visits to the 16 clinics, and 68 new graduates were recruited into the clinics. About 29 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 caregivers 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, and cervical screening 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 for women. Some 29 000 expectant mothers and 72 000 newborn children attended maternal and child health centres in 2011, respectively representing about 31 per cent and 74 per cent of the total numbers of expectant mothers and newborn children in Hong Kong.

The Family Health Service also provides information on child care, parenting and health to the general public through various channels such as information leaflets, VCDs, websites, a 24-hour information hotline and electronic parent-child magazines.

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. The FPA received government subsidies amounting to \$39.22 million in the 2010-11 financial year. Over 200 000 people used these services in 2010.

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 690 729 primary one to secondary seven students joined the services in the 2010-11 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 for Health Protection make visits to primary schools every year to administer free vaccinations for students.

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, curative treatment, health education and counselling 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 skills. In 2011, the elderly health centres recorded 38 500 enrolments and 175 000 attendances for health assessment and medical consultation, while the visiting health teams provided service to 296 000 persons.

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. The HA is committed to stepping 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 \$900 million on community health services in the 2010-11 financial year. In 2011, a total of 1 855 400 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 which aims to reduce the unplanned hospital re-admission rate of high-risk discharged elderly patients through better discharge planning and a '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 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 of 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 315 000 primary students in the 2010-11 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 the 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 intends to provide comprehensive mental health services, including continuous treatment for patients who need it on a long-term basis, 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 \$3.92 billion in the 2010-11 financial year.

With the increasing importance of mental health services in community settings, in recent years various initiatives have been implemented to enhance the community support services for mental patients to facilitate their recovery and reintegration into the community. In 2010-11, the HA 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. In 2011-12, the HA is extending the programme to five more districts (Eastern, Sham Shui Po, Sha Tin, Tuen Mun and Wan Chai) to benefit more patients.

To strengthen its support for very high-risk patients and to provide rapid and prompt response to emergency referrals in the community, the HA is setting up crisis intervention teams in all of its seven clusters in 2011-12.

In 2010-11, the HA set up common mental disorder clinics at the psychiatric specialist outpatient clinics to enhance the assessment and consultation services for patients with common mental disorders. An Integrated Mental Health Programme (IMHP) was also launched starting from October 2010 at selected general outpatient clinics of five HA clusters (Hong Kong East, Hong Kong West, Kowloon East, Kowloon West and New Territories East) to provide better support to these patients

in the primary care settings. In 2011-12, this programme is being expanded to cover all clusters to tackle more effectively cases of mild mental illness in the community.

In 2001, the HA implemented a programme for the early assessment and detection of psychosis in young persons (EASY). This targets young people aged between 15 and 25 with first episodic psychosis. The specialised teams under the EASY programme offer one-stop, phase-specific and on-going support for these target patients for the first two years of illness.

In 2011-12 the HA is expanding the service target of the EASY programme to include adults and extending the duration of intensive care to the first three critical years of illness for further provision of ongoing support to these patients.

The psychogeriatric outreach service of HA provides consultation to elders in RCHes with varying degrees of mental health problems, such as dementia, depression and chronic psychosis. It also provides training and support to carers and staff of RCHes. In 2011-12, this service is being extended to about 80 more private RCHes to provide consultation to more patients in RCHes.

The HA attaches great importance to providing adequate support to children suffering from autism and hyperactivity disorder to ensure that they receive appropriate care during their development. To this end, in 2011-12, the HA will expand the professional team comprising healthcare practitioners in various disciplines to provide early identification, assessment and treatment services for children suffering from these mental diseases. The team will also share their knowledge of the two diseases with the parents and caregivers to enhance their understanding of the condition and treatment needs of these children.

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 seven million visits to these clinics were recorded in 2011.

Healthcare Services Provided by Private and Non-governmental Organisations

The private healthcare sector is the main provider of primary care, and complements the public sector by providing a range of specialist and hospital services. Currently, through private hospitals and Western medical practitioners' offices and clinics in the private sector, the public are provided with various choices of health care, including individual aspects of care such as choice of doctors and preference of amenities. Apart from doctors of Western medicine, other healthcare professionals (including Chinese medicine practitioners, dentists, nurses, chiropractors, physiotherapists, occupational therapists, pharmacists, optometrists, etc.) also provide health care in the private sector. In general, private healthcare services are not subsidised (except for certain institutional or day-time long-term medical and nursing care) and patients have to bear the full-cost for using them.

NGOs also 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. Apart from these organisations, Yan Chai Hospital, Pok Oi Hospital, the Hong Kong Federation of Trade Unions, 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 HA. At the end of 2011, there were 27 041 public hospital beds, comprising 20 733 general beds, 2 041 infirmary beds, 3 607 beds for the mentally ill and 660 beds for the mentally handicapped. In addition, there were 4 098 beds in private hospitals, 4 190 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 \$38.9 billion, of which spending on public specialist outpatient and inpatient services accounts for 79 per cent.

Specialist Outpatient Service

Public sector secondary and tertiary ambulatory medical services are provided mainly through the HA's specialist clinics. About \$7.1 billion was allocated in the 2010-11 financial year for these services.

Hospital clusters under the 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 2011, members of the public made close to 6.68 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 in order to ensure that patients with acute conditions will be given priority in the allocation of services.

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

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 services, 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 society.

In 2011, members of the public made about 2.13 million visits to allied health outpatient departments.

Inpatient Services

Inpatient services are provided by the HA for patients in need. In the 2010-11 financial year, a total of \$23.8 billion was allocated for providing inpatient services by hospitals under the HA.

In 2011, a total of 1.47 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 2010-11 financial year.

In 2011, a total of 1.25 million people paid 2.2 million visits to the accident and emergency departments of public hospitals, an average of 6 034 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 2011, 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 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 private hospitals served 381 554 inpatients in 2010, representing 21 per cent of the total number of inpatients in the territory. As at end 2011, there were 12 private hospitals in operation in Hong Kong. According to existing figures, spending on private inpatient services amounts to \$8.2 billion, accounting for 27 per cent of overall expenditure on inpatient services in the public and private sectors.

Healthcare Service Development and Infrastructure

Public Hospital Development Projects

A number of public hospital development projects are underway to help improve healthcare services in different parts of Hong Kong. These include ongoing expansion of Tseung Kwan O Hospital, North Lantau Hospital Phase 1, redevelopment of Caritas Medical Centre Phase 2 and redevelopment of Yan Chai Hospital. In addition, development projects under active preparation include the Centre of Excellence in Paediatrics, Tin Shui Wai Hospital, preparatory work on the expansion of United Christian Hospital and reprovisioning of Yaumatei Specialist Clinic at Queen Elizabeth Hospital.

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 pilots include a cataract surgeries programme, launched in February 2008, under which participating patients receive subsidies for cataract surgery performed by private ophthalmologists. By the end of 2011, a total of 101 ophthalmologists had participated in the programme. Of the 16 458 patients enrolled in the programme, 12 736 had received cataract surgery.

The HA implemented the Tin Shui Wai Primary Care Partnership Project in June 2008. Under this programme, healthcare services are purchased from the private sector to treat chronic disease patients living in Tin Shui Wai who need long-term follow-up treatment at general outpatient clinics. Participating patients receive

subsidised treatment from private doctors enrolled under the Project. As at end 2011, ten private doctors and 1 618 patients had enrolled in the programme.

The Public-Private Chronic Disease Management Shared Care Programme was first piloted in the Sha Tin and Tai Po districts of the HA's New Territories East Cluster in March 2010 and subsequently extended to the Hong Kong East Cluster in September 2010. This programme provides an additional choice for chronic disease patients being followed up in the public healthcare system to receive treatment in the private sector with a partial subsidy provided by the Government. The programme aims to establish long-term patient-doctor relationships with a view to providing sustainable and holistic care for patients.

In addition, the Haemodialysis Public-Private Partnership Programme was launched in March 2010 to collaborate with eligible private haemodialysis services providers in providing haemodialysis services to eligible patients with end-stage renal disease currently under the care of HA. A total of 108 patients are expected to take part in the programme in 2012-13.

An Elderly Health Care Voucher Pilot Scheme introduced by the Government since January 2009 continues to work well. Under it, five \$50 healthcare vouchers are given annually to the elderly aged 70 or above as a subsidy for their use of private primary healthcare services within their neighbourhood community. Up to the end of 2011, a total of 3 066 healthcare service providers had joined this scheme with voucher claims made by more than 387 000 or 57 per cent of eligible elderly people, and the amount of subsidy involved totalled about \$200 million. To further test the effectiveness of the scheme in enhancing primary care services for the elderly and for the betterment of their health and well-being, the Government has extended the pilot scheme for three more years, up to 2014 and doubled the annual voucher amount to \$500 for each eligible elderly person.

The Government has also introduced a number of vaccination schemes through PPP. These include vaccination subsidy schemes for children and 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 its feasibility and gauge public acceptance of eHR sharing. The project aims to enhance continuity of care for patients by enabling participating private healthcare providers and other registered institutions to view the HA's records, subject to patients' consent.

By the end of 2011, more than 196 200 patients, 2 510 private doctors and healthcare providers, 12 private hospitals and 63 other private organisations or NGOs providing healthcare-related services (including their 376 residential care homes or centres) had participated in the project.

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 system 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 further extend its functionalities in supporting healthcare purposes.

The eHR Office under the FHB consulted relevant professions, stakeholders and the public in December 2011 on the proposed Legal, Privacy and Security Framework for eHR sharing in preparation for drafting of the necessary legislation. The eHR Office will conduct a Privacy Impact Assessment for the eHR sharing system to safeguard personal data privacy and ensure integrity of the system. The eHR Office has also engaged the private healthcare and information technology sectors to develop eHR solutions through the eHR Engagement Initiatives and other partnership projects.

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 increase the overall capacity of the healthcare system to cope with growing demand.

Meanwhile, 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 hopes 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 (located at Wong Chuk Hang, Tseung Kwan O, Tai Po and Lantau) have been reserved for private hospital development. The Government is formulating

arrangements to dispose of these four reserved hospital sites in phases from the first half of 2012.

Health Promotion

Healthy Lifestyle

The DH's Central Health Education Unit is responsible for formulating and implementing health promotion strategies.

In 2011, the unit continued to promote the healthy eating campaigns, 'EatSmart@school.hk' and 'EatSmart@restaurant.hk', and introduced pilot schemes to promote a healthy lifestyle at pre-primary institutions and workplaces. In addition, for prevention of communicable diseases, the unit provided the public with updated information and health advice on infectious diseases through the media, web-pages, promotional leaflets, posters, and telephone hotlines. It also organised health promotion activities by producing health education materials in various languages, including leaflets, posters, handbooks and souvenirs to raise awareness of personal and environmental hygiene among ethnic minorities.

In the 2010-11 school year, over 400 primary schools (including special schools) representing about 65 per cent of all primary schools in the territory, participated in the major activities of the 'EatSmart@school.hk' Campaign, and more than 24 million hits were recorded at the campaign's website. The 'EatSmart@restaurant.hk' Campaign also received a favourable response with more than 660 restaurants taking part.

In addition, the Department of Health improved the psychosocial health care of secondary school students through the Adolescent Health Programme. Some 324 secondary schools, 91 000 students and 2 000 parents and teachers enrolled in and received services under the programme during the 2010-11 school year.

In the 2010-11 financial year, the DH spent \$240 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 2011, a 'Love Teeth' Campaign was launched by the DH urging people to take proper care of their teeth by flossing daily, and to take the initiative to seek 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 DH's 'Red Ribbon Centre' collaborates with its community partners to enhance public awareness and prevention of HIV and to promote caring and acceptance of HIV patients. In 2011, the centre organised 24 major activities and 83 special programmes, from which some 80 892 participants benefited. The number of new HIV infected persons reported in 2011 was 438, compared with 389 in 2010.

Information on Acquired Immune Deficiency Syndrome (AIDS) and sexually transmitted infections is available on the following 24-hour multilingual AIDS hotlines provided by the DH:

AIDS Hotline (Cantonese, Putonghua and English)	2780 2211
AIDS Hotline (Tagalog, Vietnamese, Thai)	2359 9112
AIDS Hotline (Hindi, Indonesian, Nepali and Urdu)	2112 9980

Appointments for a counselling service and HIV antibody/rapid tests may be made on the hotline 2780 2211. In 2011, a total of 21 947 calls were made to the hotline, of which 14 615 calls sought AIDS counselling from nurse counsellors. About one million condoms were distributed to promote safer sex. There are also a The Gay Men HIV Testing telephone hotline, 2117 1069, and a website, www.21171069.com, to provide information to men who have sex with men. In 2011, the Gay Men HIV Testing Hotline received a total of 263 calls for counselling and HIV antibody/rapid testing.

Organ Donation

The DH promotes organ donation in various ways together with the HA, healthcare professional bodies and voluntary organisations. It launched a Centralised Organ Donation Register (CODR) in 2008 to facilitate the general public in registering their wish to donate their organs after death. As at end 2011, there were over 90 000 registrations at the CODR.

In 2011, a 'Garden of Life' was established in Kowloon Park to give recognition to the charitable acts of organ donation. The DH also launched a dedicated page on Facebook to increase public awareness of and support for organ donation, particularly among young people.

The number of patients waiting for kidney, liver, heart and double-lung transplants stood at 1 781, 109, 20 and 17 respectively as at end 2011, whereas there were 30 liver, 59 renal, 9 heart, 1 double-lung and 238 cornea donations from the deceased in Hong Kong's public hospitals in 2011.

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 to discourage smoking, contain the proliferation of tobacco use and protect the public from second-hand smoking to

the maximum extent possible through a step-by-step and multi-pronged approach, including publicity, education, legislation, enforcement, promotion of smoking cessation, 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 the implementation of the Smoking (Public Health) Ordinance in 1982, the no-smoking areas have been gradually extended. Currently, smoking is banned in all indoor areas of workplaces and public places, including restaurants and bars, as well as outdoor areas of schools, leisure grounds, bathing beaches and public transport facilities.

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. Currently, all advertisements and promotions on tobacco products are prohibited in Hong Kong.

Taxation

To strengthen further the effectiveness of tobacco duty as a measure to discourage tobacco consumption, duty-free concessions on tobacco products for incoming passengers at border entries (except for a small quantity for self-consumption) were abolished on August 1, 2010. In addition, the Government increased tobacco duty rates by 41.5 per cent with immediate effect on Budget Day on February 23, 2011 with a view to curbing cigarette consumption.

Implementation and Enforcement

A main task of the Tobacco Control Office (TCO) under the DH, set up in 2001, is to enforce the smoking ban at statutory no-smoking areas. It conducted over 23 000 inspections and issued over 170 summonses and over 7 600 fixed penalty notices for smoking offences in 2011. In 2011, the TCO organised 10 seminars attended by some 260 people. The TCO also distributed health education materials (including guidelines, posters, no smoking signs and pamphlets) to venue managers of statutory no smoking areas and to 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. 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 163 500 people in 2011.

The COSH launched a territory-wide publicity drive called 'Smoke-Free Hong Kong' which included broadcasts on TV and radio and it also 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 advice on how to quit smoking, counselling services and pharmaceutical treatment through various channels, 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 2011, the TCO organised 35 seminars on smoking cessation. Some 940 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 DH, 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. Since April 2010, the DH has collaborated with Pok Oi Hospital in the provision of a smoking cessation pilot programme using traditional Chinese medicine.

In 2010, the DH also launched a pilot outreach programme on smoking prevention and cessation for new immigrants and ethnic minorities through the United Christian Nethersole Community Health Service.

In 2011, the DH provided funding to the University of Hong Kong for the launch of the Youth Quitline as well as to the Po Leung Kuk and the Life Education Activity Programme for organising activities in schools to prevent the uptake of smoking by children and young people.

To assist and encourage smokers to quit smoking, the DH launched the Quit Smoking App to provide information on smoking cessation, and to offer appropriate quitting advice, keep track of the smokers' quitting progress and issue regular reminders according to the smoking habits of the smokers.

The HA also provides smoking counselling and cessation services through its six full-time and 36 part-time 'Smoking Counselling and Cessation Centres'. It operates a telephone hotline providing booking and enquiry services for smokers who wish to quit smoking, and provides Chinese medicine practitioner trainees in the Chinese Medicine Centres for Training and Research with courses in counselling on quitting smoking organised by the School of Nursing of the University of Hong Kong to help develop smoking cessation methods with the aid of Chinese medicine.

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. It 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 \$1.62 billion on disease prevention and control at its maternal, child health and elderly health centres and similar facilities in the 2010-11 financial year.

Centre for Health Protection

The Centre for Health Protection (CHP) has been in operation since June 1, 2004. It collaborates with its local and international counterparts to effectively prevent and control diseases in Hong Kong. It works on three principles: real-time surveillance, rapid intervention and responsive risk communication. To carry out its mission, the centre has formulated three strategic directions: protect the health of the community, promote healthy living in the community, and partner with stakeholders to achieve its objectives.

The centre will continue to strengthen 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 data 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 meets 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 in the Mainland, in Macao and at the WHO have been reinforced to share professional knowledge and experience in combating diseases.

Prevention and Control of Infectious Diseases

The CHP 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 May 2011, in conjunction with the Shenzhen Entry-Exit Inspection and Quarantine Bureau, the centre conducted a cross-boundary public health exercise named 'Jasper' at Shenzhen Bay Port, ahead of the 26th Shenzhen Summer Universiade (the Universiade) in August 2011, to enhance communication and co-ordination between the relevant departments of the Hong Kong and Shenzhen governments, and to test the response of the two sides in the event of an infectious disease outbreak during the Universiade.

There are 47 statutory notifiable infectious diseases in Hong Kong. During the year, about 22 000 cases were reported, of which about 13 600 and 4 926 were diagnosed as chickenpox and tuberculosis respectively.

According to the surveillance data of the CHP, from April to June 2011, the number of reports on Scarlet Fever (SF) cases was rising. In addition, an increase of SF cases was also observed in the Mainland and Macao, where the condition is a notifiable disease as in Hong Kong. The rise of SF cases in Hong Kong may be a regional phenomenon. The centre took a multi-pronged approach to prevent and control SF, including setting up a surveillance mechanism with public and private hospitals; reminding relevant personnel such as doctors, staff of institutions and schools to take prevention and infection control measures; and strengthening publicity, health education and risk communication, and so on.

SF activity in Hong Kong has been steadily declining since its peak in June 2011 and has remained stable. During the year, the CHP recorded a total of 1 527 SF cases, including two deaths reported in May and June respectively. The overall epidemiological and clinical characteristics of SF cases in this outbreak resemble those in the past. The case fatality rate so far is not significantly higher than historical or international figures. The centre therefore ended the enhanced surveillance exercise mentioned above in October 2011, but will continue to monitor the local SF situation closely.

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'. On the advice of the Scientific Committee on Vaccine Preventable Diseases (SCVPD) under the CHP, the Government has included pneumococcal conjugate vaccine in the Childhood Immunisation Programme since 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. The catch-up programme was completed at the end of March 2011. Currently, a 13-valent pneumococcal conjugate vaccine is being used under the Childhood Immunisation Programme to provide greater protection to the public.

Since 1998, the Government has been providing target groups with free seasonal influenza vaccinations each year at public hospitals and clinics. Based on the recommendation of the SCVPD on seasonal influenza vaccination target groups

for the year, the Government launched the 2011-12 vaccination programme on November 1, 2011, the scope of which was further extended to cover recipients of the Comprehensive Social Security Assistance (CSSA) aged 50-64 and CSSA recipients with obesity (Body Mass Index of 30 or above) in addition to those persons eligible in 2010-11. Apart from the seasonal influenza vaccination, the programme also provides one dose of free pneumococcal vaccination to all elderly persons living in residential care homes for the elderly or the disabled, those aged 65 or above with chronic medical problems attending public clinics, and those aged 65 or above receiving CSSA, who have not yet been vaccinated.

In 2011-12, the Government will continue the Childhood Influenza Vaccination Subsidy Scheme which caters to children aged between six months and less than six years; and the Elderly Vaccination Subsidy Scheme which applies to persons aged 65 or above, to provide subsidies for both target groups to receive seasonal influenza vaccinations at private clinics. Elders aged 65 or above who have never had pneumococcal vaccination before may receive one dose of subsidised vaccination. Two vaccination subsidy schemes, with a total of over 1 500 participating private doctors, were launched on September 26, 2011.

The Government also continues to provide free seasonal influenza vaccination for all eligible residents/boarders and staff of residential care homes for the elderly or the disabled, as well as free pneumococcal vaccination for all eligible residents living in residential care homes for the elderly or the disabled through over 300 visiting medical officers under the Residential Care Home Vaccination Programme in the form of PPP.

These vaccination programmes help 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 54.3 per cent of all registered deaths in 2011. Elderly people are the major victims of these chronic non-communicable diseases which will continue to cause an increasing number of deaths in Hong Kong as the population ages. To combat this problem, in 2008 the DH drew up 'Promoting Health in Hong Kong: A Strategic Framework for Prevention and Control of Non-communicable Diseases', and formed a steering committee chaired by the Secretary for Food and Health comprising representatives from the Government, public and private sectors, academia, professional bodies, industry and other key partners to oversee the implementation of the framework.

Common chronic non-communicable diseases are mostly associated with people's 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 reduction of alcohol-related harm and injuries.

In September 2010 the DH launched an action plan prepared by the Working Group on Diet and Physical Activity focussing on risk factors and promoting a healthy diet and participation in physical activity. The plan also aims to create an

environment that is conducive to health and empower the public to make healthy behavioural choices at individual, family, organisation and community levels through cross-sectoral collaboration. Moreover, after careful consideration of the available evidence and the local situation, the Working Group on Alcohol and Health developed the 'Action Plan to Reduce Alcohol-related Harm in Hong Kong', which was formally launched and uploaded onto the DH's website and the CHP website in October 2011. The working groups will regularly monitor the implementation of the respective action plans and report to the steering committee.

The CHP continues to step up surveillance, prevention and control of non-communicable diseases through its 'Behavioural Risk Factor Surveillance System' and other health surveys.

A Cancer Co-ordinating Committee regularly makes recommendations for the prevention and control of cancer, which claimed more than 13 000 lives in Hong Kong in 2011. 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 available in September 2010.

To reduce the incidence and mortality rate of cervical cancer, 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 screening. In 2011, about 103 000 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 DM and HT 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, 2011, the number of healthcare professionals required by law to be registered with their respective boards or councils before they can practise in Hong Kong included 12 818 doctors, 2 215 dentists, 9 230 Chinese medicine practitioners (CMPs) (including both listed and registered CMPs), 41 310 nurses (including both registered and enrolled nurses), 4 655 midwives, 2 050 pharmacists, 154 chiropractors, 2 340 physiotherapists, 1 455 occupational therapists, 2 954 medical laboratory technologists, 2 046 optometrists, 1 809 radiographers and 319 dental hygienists.

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 evaluates and approves the applications for the registration of pharmaceutical products, issues licences to drug manufacturers, importers and exporters, wholesalers and retailers, and takes action against the 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 2011, 3 858 applications for registration of pharmaceutical products were approved. At year-end, 18 903 pharmaceutical products were registered in Hong Kong.

In the 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 control, sale, supply and procurement of drugs in the public and private sectors, control of pharmaceutical products, pharmacovigilance, 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, and reorganised the Pharmaceutical Service into the Drug Office in September 2011 to strengthen existing drug regulatory activities.

Chinese Medicines

The regulation of Chinese medicines is stipulated under 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. After obtaining a licence, the manufacturers may apply for a Certificate for Manufacturer, certifying that they follow the requirements of Good Manufacturing Practice (GMP) in manufacture and quality control of pCm. Any pCm sold, imported or possessed in Hong Kong must be registered. The Chinese Medicine Council of Hong Kong is the statutory body responsible for devising and implementing regulatory measures for Chinese medicines. 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 manufactured or on sale on March 1, 1999 are eligible for a transitional registration status upon submission of acceptable basic test reports. By the end of 2011, there were 6 591 licensed Chinese medicine traders (including eight holding Certificate for Manufacturer), and 9 118 pCm have obtained the transitional registration status.

The mandatory registration requirement and the labelling and package insert requirements of pCm commenced on December 3, 2010 and December 1, 2011 respectively. All pCm must be registered before they can be imported or sold in Hong Kong. Products which have obtained registration status must also be affixed with the relevant registration number. Their labels and package inserts should also comply with the relevant requirements. The import, sale or possession of unregistered pCm is an offence. Provisions relating to clinical trials and medicinal tests also took effect on the aforementioned date, which stipulate that an application for a certificate for clinical trial and medicinal test can be made to the Chinese Medicine Board for the purpose of conducting a clinical trial or medicinal test of any proprietary Chinese medicine.

Human Organ Transplantation

Under the Human Organ Transplant Ordinance (HOTO), 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. An exemption mechanism provided under the HOTO came into effect in September 2011, allowing certain commercial products made from human tissues that have been subjected to processing to be exempted from the HOTO through applications to the DH, so that patients with genuine medical need for a transplant could benefit from the use of these products. As at the end of 2011, the DH had received 18 applications for exemption, the processing of which is under way.

In 2011, the Human Organ Transplant Board received a total of 25 applications for organ transplants between living non-related persons. During the same year, no organs were imported into Hong Kong for transplant purposes.

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, 2011, the council had issued a total of 52 licences, including 13 treatment licences, 36 artificial insemination-by-husband licences and three research licences.

The ordinance confines the application of reproductive technology procedures to infertile married couples, regulates surrogacy arrangements and the use of

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

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 and out of Hong Kong, the Port Health Office under the DH enforces quarantine measures according to the International Health Regulations and the Prevention and Control of Disease Ordinance. Currently, travellers arriving in Hong Kong at boundary control points are required to undergo temperature screening as a precautionary measure.

The Port Health Office also provides Hong Kong residents with disease 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 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 2011, the unit assessed and issued 11 480 and 3 559 licences/permits according to the Radiation Ordinance and the Import (Radiation) (Prohibition) Regulations respectively. It provided monitoring services to 10 496 occupationally exposed persons. The average radiation exposure of occupationally exposed persons was 0.12 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. However, depending on the nature and characteristics of the products, there may be other pieces of legislation which may

need to be observed. 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 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 in-vitro diagnostic medical devices is maintained by the DH. In 2011, the DH approved a total of 648 applications for listing medical devices, and processed 1 498 safety alerts and 20 adverse incident reports.

To prepare for the statutory regulation of medical devices, the DH commissioned 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 a total of 339 students in 2011. The admission quota of first-year degree courses in medicine and surgery will increase to 840 in 2012-13³. 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 enhance 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.

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 290 doctors for specialist training in 2011. 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 280 doctors completed training at the HA and obtained specialist qualification in 2011.

³ Two separate cohorts of 840 students will be admitted in 2012-13, with one admitted to a 5-year programme while another cohort to a 6-year programme. 420 medical students admitted to the 5-year programme are expected to graduate in 2017 and the 420 from the 6-year programme in 2018.

Dentists

Training in dentistry is available at the University of Hong Kong, which enrolled 57 dental students in 2011. During the year, seven 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 Chinese University of Hong Kong, the Hong Kong Baptist University, and the University of Hong Kong all offer full-time undergraduate degree courses in Chinese medicine. The HA also assists the universities in providing Western medicine training and clinical practice for their undergraduates. In 2011, 58 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 in the clinics. As at the end of 2011, 68 graduates in their first year training and 132 trainees in their second and third year training were employed in 16 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 2011, 33, 70, 49, 40 and 51 students enrolled in these programmes respectively.

The Institute of Advanced Allied Health Studies under the HA devises structured long-term training plans for allied health staff and runs courses on specialist and multi-disciplinary training, clinical and personal development. These include a three-year in-service training course organised for new recruits of allied health grades. In 2011, a total of 60 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 pre-registration nursing training. The four universities recruited 905 nursing students into their four-year full-time nursing degree programmes in 2011, while the Hong Kong

Polytechnic University and the Chinese University of Hong Kong enrolled another 120 nursing students into their three-year Master Degree of Nursing programmes. In addition, the Hong Kong Polytechnic University enrolled 174 students into its three-year higher diploma nursing programme.

The Hong Kong Sanatorium and Hospital, St Teresa's Hospital, Hong Kong Baptist Hospital, Union Hospital and the Tung Wah College provide pre-enrolment nursing training. They recruited 473 pupil nurses into their two-year Higher Diploma or Diploma in Enrolled Nurse (General) training programmes. In addition, the Open University of Hong Kong enrolled 100 and 72 pupils into their two-year Higher Diploma in Nursing programme and Higher Diploma in Mental Health Nursing programme respectively. During the year, 49 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 2011. It also runs a two-year enrolled nurse basic training programme and recruited a total of 193 pupil nurses in 2011. During the year, it recruited 260 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. The HA's Institute of Advanced Nursing Studies seeks to strengthen the training of nurses in the 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. It also provides experienced nurses with clinical leadership training to enhance clinical management and supervision, and offers new overseas scholarships to experienced nurses to enable them to attend overseas training for increased international exposure. 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 2010-11, it spent \$154.11 million on providing scientific services for the protection of public health.

In 2011, a total of 191 697 tests were carried out on a wide range of foods to ensure they were safe and fit for consumption. The laboratory also provided testing services for investigations into food complaints. A total of 20 456 such tests were conducted in 2011. 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 2011, it carried out a total of 55 963 tests on western pharmaceutical products and 80 579 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 12 504 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 conducts laboratory tests for clinical and surveillance specimens and provides clinical diagnostic and public health laboratory services to the public and private health sectors for patient care and for other public health purposes. The branch conducted more than five million such tests in 2011.

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, a Regional Reference Laboratory for measles, an Influenza A(H5) Reference Laboratory, a 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 2011.

Auxiliary Medical Service

The Auxiliary Medical Service (AMS) is a government department under the Security Bureau with an establishment of 96 civil servants. It manages a government-financed auxiliary service comprising 4 602 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.

The AMS is prepared at all times to deal with unexpected and urgent situations affecting public health. In the aftermath of the Fukushima nuclear incident in Japan, the AMS set up a health desk at the Hong Kong International Airport to provide voluntary radiation checks for travellers in need. A total of 3 936 travellers were checked and no one was found with radiological contamination.

An AMS Cadet Corps was established on April 1, 2011 to encourage young people, aged between 12 and 17, to develop practical skills and leadership through various training activities which focus on general medical knowledge, as well as to cultivate their civic awareness. A total of 400 cadets were recruited in 2011.

The AMS also gives talks to the public on cardiopulmonary resuscitation, drug abuse and other such matters.

Websites

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

eHealth Record Office: www.eHealth.gov.hk

Department of Health: www.dh.gov.hk

Organ Donation Website under the Department of Health: www.organdonation.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