

## Chapter 9

# Health

*Hong Kong's public and private medical sectors provide extensive healthcare services, including a low-cost public healthcare 'safety net' that ensures no one in Hong Kong is denied medical care due to lack of means.*

### 2016 Figures at a Glance

<i>Infant Mortality Rate</i>			1.6* per 1,000 registered live births
<i>Maternal Mortality Ratio</i>			0* per 100,000 registered live births
<i>Life Expectancy</i>	2016	81.3* (Male)	87.3* (Female)
	2064 ( <i>projected</i> )	87.0 (Male)	92.5 (Female)

(\*provisional figures)

Hong Kong has a high-quality healthcare system supported by a highly professional team of workers. The infant mortality rate has fallen steadily over the past 20 years, from four per 1,000 live births in 1996 to 1.6\* per 1,000 live births in 2016, one of the lowest in the world. Male and female life expectancy in 2016, at 81.3 years and 87.3 years respectively, were among the highest in the world.

Hong Kong's Domestic Health Accounts (DHA)<sup>1</sup> show total health expenditure increased from 3.6 per cent to 5.7 per cent of Gross Domestic Product from 1989-90 to 2013-14. Over the same period, public health spending (\$60.6 billion in 2013-14, or 2.8 per cent of GDP) rose from 39 per cent to 49 per cent of total health expenditure. The government's recurrent funding for health has risen substantially over the past five years, from \$41.5 billion in 2011 to \$57.3 billion by 2016, registering an increase of about \$15.8 billion, or more than 38 per cent. Recurrent expenditure on health accounted for 17 per cent of the government's recurrent expenditure in 2016.

<sup>1</sup> A series of accounts compiled over the years in accordance with the International Classification for Health Accounts Framework developed by the Organisation for Economic Cooperation and Development to keep track of Hong Kong's health spending and to allow for international comparison.

## Organisational Framework

The Food and Health Bureau formulates policies and allocates resources for healthcare services, with the aim of protecting and promoting public health, providing lifelong holistic care to every resident and ensuring no one is denied medical help due to lack of means.

The Department of Health is the government's health adviser and executes policies and statutory functions. It safeguards the community's health through a range of promotional, preventive, curative and rehabilitative services.

The Hospital Authority, established under the Hospital Authority Ordinance, provides public hospital and related services. It offers medical treatment and rehabilitation services through hospitals, specialist clinics, general outpatient clinics and outreach services organised into seven clusters that together serve the whole city.

## Healthcare Reform

In response to the challenges of an ageing population, the government is undertaking a number of initiatives to enhance the long-term sustainability of the healthcare system:

- **Private insurance** – The bureau has analysed the views received from the public on a proposed Voluntary Health Insurance Scheme in order to determine the way forward. The scheme aims to protect consumers better and encourage more people to use private health services.
- **Manpower planning and professional development** – The bureau is conducting a strategic review to meet projected demand for manpower and foster professional development of healthcare professions.
- **Development of private services** – The bureau is preparing new legislation to revamp the regulatory regime for private healthcare facilities.

## Primary Care Services

Primary care is the first step in the healthcare process. It covers a wide range of public services, including health promotion and disease prevention, general outpatient services and special health services for people in specific age groups who do not require immediate hospital attention.

Primary care services are provided mainly by the private sector and non-governmental organisations (NGOs). On average, private Western clinics handle about 31 million outpatient visits each year. NGOs operate community clinics, and many also organise health promotion, educational and related activities. Some NGOs provide health assessment services for the elderly and medical check-ups for women.

The Hospital Authority operates 73 general outpatient clinics, including community health centres. These focus on serving the elderly, low-income families and chronic disease patients. The body also runs family medicine specialist clinics as a key component of its primary care

services. In 2016, some 1.6 million people used these services, with 6.36 million attendances recorded.

Eighteen Chinese Medicine Centres for Training and Research established by the government promote the development of evidence-based Chinese medicine and provide training placements for graduates of local Chinese medicine bachelor's degree programmes under a tripartite collaboration model involving the Hospital Authority, NGOs and local universities. These centres, which are operated by the NGOs, served about 180,000 patients involving about 1.2 million attendances in 2016. Private Chinese medicine clinics record about 7.5 million attendances each year.

### **Family Health**

The Department of Health provides health promotion and disease prevention services through its 31 maternal and child health centres and three women's health centres for children from birth to five years of age and women aged 64 or below. The centres offer an Integrated Child Health and Development Programme for parents and caregivers to promote the holistic health and well-being of children.

For women, these centres offer antenatal, postnatal, family planning and cervical screening services, as well as health education on areas including psycho-social health, personal relationships, physical health and healthy lifestyles. Some 29,800 expectant mothers and 57,500 newborn children attended the centres in 2016.

The Family Health Service under the department disseminates information on child and woman health. The Family Planning Association of Hong Kong offers services and information on sexual and reproductive health treatments and counselling. In 2016, more than 400,000 people used its services or took part in its programmes.

### **Student Health**

Health screening and individual counselling are available to primary and secondary students through the department's 12 student health service centres and three special assessment centres. In the 2015-16 school year, about 629,000 students joined these programmes. School health inspectors check schools' hygiene conditions in accordance with the Education Ordinance, while the department's Centre for Health Protection sends School Immunisation Teams to primary schools every year to administer free vaccinations for students.

Under the School Dental Care Service, the department's eight school dental clinics provided preventive dental services, including annual check-ups and basic care, in the 2015-16 school year to about 325,200 primary students, comprising 96.5 per cent of all Hong Kong primary students. At special schools, students with intellectual and/or physical disabilities, such as cerebral palsy, can use these services until age 18.

### **Elderly Health**

The department's 18 elderly health centres and 18 visiting health teams provide primary health care to the elderly, improve their ability to care for themselves, encourage healthy living and strengthen family support so as to minimise illness and disability. The centres provide health

assessment, treatment, education and counselling to people aged 65 and above. The visiting teams conduct health promotion activities for the elderly and provide training to improve carers' skills. In 2016, the centres recorded about 44,200 enrolments and 178,000 attendances for health assessment and medical consultation, while the visiting teams recorded 295,000 attendances at health promotion activities.

The Elderly Health Care Voucher Scheme subsidises the elderly aged 70 or above to receive private primary healthcare services in the community that best suit their needs. The annual voucher amount for each eligible elder is \$2,000 with a maximum accumulation limit of \$4,000. More than 640,000 elders had made use of the vouchers by end-2016.

Eligible Hong Kong elders may use the vouchers to pay for designated outpatient services at the University of Hong Kong-Shenzhen Hospital under a pilot scheme launched by the government on 6 October 2015.

### **Community Health**

Community healthcare services aim to reduce reliance on inpatient services and help patients recover in the community. In 2016, the Hospital Authority conducted 2.01 million home visits and outreach care services, including those for elderly and mental patients.

More than 80 per cent of those receiving the Hospital Authority's community nursing care services are elderly people. Community geriatric assessment teams visit residential care homes for the elderly regularly to provide medical and nursing care to residents who are unable to visit the specialist outpatient clinics. These teams also train carers at the homes to care for their frail residents. In 2015-16, the Hospital Authority started working with the homes to enhance medical and nursing care for residents with terminal illness and to train their staff. Its Community Health Call Centre provides high-risk elderly patients discharged from public hospitals with advice on disease management and care support, and arranges referrals to appropriate services.

### **Oral Health**

Eleven government dental clinics provide emergency services in pain relief and tooth extraction, while seven public hospitals offer specialist oral healthcare services. The department also monitors the level of fluoridation in public drinking water to reduce dental decay.

The department's Oral Health Education Unit holds targeted educational activities to promote oral health, such as the Bright Smiles Mobile Classroom for primary students. Information on oral health is available through the unit's homepage. The department also organises an annual Love Teeth Campaign to encourage good dental habits.

Government-subsidised outreach dental teams set up by NGOs provide free dental services including fillings, extractions and dentures for elders in residential care homes and similar facilities.

A four-year pilot project launched in 2013 provides dental services for adults with intellectual disability who are recipients of Comprehensive Social Security Assistance (CSSA), the Disability

Allowance or the Hospital Authority's medical fee waiver. Eligible patients get subsidised check-ups, treatment and oral health education at designated clinics, or treatment under intravenous sedation or general anaesthesia at designated hospitals.

The department also conducts Dandelion Oral Care Action, an oral health promotion programme to educate children with mild to moderate intellectual disability in special schools to take care of their oral hygiene themselves.

### **Mental Health**

The government adopts a holistic approach in promoting mental health through prevention, early identification, timely intervention and treatment, and rehabilitation.

A three-year, territory-wide mental health promotion programme titled Joyful@HK Campaign was launched in January to increase the public's engagement in promoting mental well-being and enhance their understanding about mental health.

The Hospital Authority is a major medical service provider for people with mental disorders. Its psychiatric services include inpatient facilities, day hospitals, specialist outpatient clinics and community outreach. In 2015-16, about 229,000 people received treatment and support through these services.

A case management programme piloted by the Hospital Authority provides intensive community support for patients with severe mental illness, in line with an international trend to focus more on community and ambulatory care in the treatment of mental illness. The programme was extended to cover the whole city in 2014-15 and now serves some 17,000 patients living in the community.

The government has two new two-year pilot schemes to enhance support services for children and adolescents with mental health needs and elderly people with mild or moderate dementia. The Student Mental Health Support Scheme, implemented in the 2016-17 school year, brings together cross-sectoral professional teams comprising teachers, educational psychologists, school social workers and psychiatric nurses to discuss the progress of each case and provide more adequate support to students with mental health needs in schools. The Dementia Community Support Scheme, to be launched in February 2017, provides support services at the community level for the elderly with mild or moderate dementia and their carers through District Elderly Community Centres.

### **Other Special Services**

Specialist facilities under the department include 19 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. These facilities recorded about 6.3 million attendances in 2016.

## **Secondary, Tertiary and Specialised Healthcare Services**

These services are available mainly in the Hospital Authority's hospitals and specialist clinics. In 2015-16, it spent about \$46.4 billion on specialist outpatient and inpatient services. At the end of 2016, there were 28,126 public hospital beds, comprising 21,798 general beds, 2,041 infirmary beds, 3,607 beds for the mentally ill and 680 beds for the mentally handicapped. There were also 4,226 beds in private hospitals, 5,858 in nursing homes and 880 in institutions run by the Correctional Services Department. There are 5.3<sup>2</sup> beds per 1,000 people. Spending on secondary, tertiary and specialised healthcare services in both the public and private sectors totalled about \$62.1 billion in 2013-14, of which spending on public specialist outpatient and inpatient services accounted for 74 per cent.

In 2015-16, about \$10.5 billion was spent on medical services provided by the Hospital Authority's specialist clinics. The clinics cover internal medicine, surgery, obstetrics and gynaecology, paediatrics, orthopaedics and traumatology, ear, nose and throat, ophthalmology, psychiatry, neurosurgery, oncology, cardio-thoracic surgery and other specialities.

In 2016, the Hospital Authority's specialist outpatient clinics recorded more than 7.48 million attendances. Appointments for new patients are made based on the severity of their clinical conditions to ensure patients with acute conditions receive priority. Patients in stable condition are referred to primary care practitioners in the private sector or the Hospital Authority's general outpatient clinics for follow-up.

### **Allied Health Service**

Allied health professionals working under the Hospital Authority 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 to help patients receiving inpatient, outpatient, ambulatory and community care services to reintegrate into society. In 2016, the Hospital Authority's allied health outpatient departments recorded about 2.64 million attendances.

### **Inpatient Services**

In 2015-16, \$35.9 billion was spent on inpatient services at public hospitals. A total of 1.73 million inpatients and day inpatients were discharged in 2016.

### **Accident and Emergency Services**

Seventeen public hospitals provide accident and emergency (A&E) services, delivering a high standard of service for critically ill or injured people and victims of disasters. Some \$2.7 billion was spent in 2015-16 on these services, which handled 2.26 million visits by 1.3 million people in 2016, an average of about 6,200 attendances per day.

Patients attending the A&E departments of public hospitals are classified under five categories according to their clinical conditions: critical cases come under Category 1, emergency cases under Category 2, urgent cases under Category 3, semi-urgent cases under Category 4, and

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<sup>2</sup> Consisting of all beds in the Hospital Authority's hospitals, private hospitals, nursing homes and correctional institutions.

non-urgent cases under Category 5. The triage system ensures patients with more urgent needs receive prompt treatment. In 2016, all Category 1 patients received immediate treatment while 97 per cent of Category 2 patients were treated within 15 minutes.

### ***Medical Charges and Waivers***

Fees for public hospital and clinic services for the public are subsidised at the rate of 97 per cent by the government, and are waived for CSSA recipients. A medical fee waiver mechanism helps other needy groups, including low-income patients, the chronically ill, and elderly patients with financial difficulties.

### ***Private Hospitals***

The private care sector complements the public sector by providing a range of specialist and hospital services. There are doctors of Western medicine, Chinese medicine practitioners, dentists, nurses, chiropractors, physiotherapists, occupational therapists, pharmacists, optometrists and other healthcare professionals.

The 11 private hospitals served 381,690 inpatients in 2015, representing 19 per cent of the city's total number of inpatients. Spending on private inpatient services amounted to \$15.9 billion in 2013-14, accounting for 33 per cent of overall expenditure on inpatient services in the public and private sectors.

## **Development and Infrastructure**

### ***Public Hospital Development Projects***

In 2016, remaining works for the redevelopment of Yan Chai Hospital, construction of Tin Shui Wai Hospital and reprovisioning of Yaumatei Specialist Clinic at Queen Elizabeth Hospital were completed. The government began substructure and utilities diversion works for the extension of Tuen Mun Hospital's Operating Theatre Block, phase 1 redevelopment of Kwai Chung Hospital, demolition and substructure works for phase 1 redevelopment of Kwong Wah Hospital, and the expansion of Haven of Hope Hospital. Other ongoing projects include the construction of Hong Kong Children's Hospital, demolition and substructure works to expand United Christian Hospital, refurbishment of Hong Kong Buddhist Hospital, and expansion of Hong Kong Red Cross Blood Transfusion Service Headquarters. Preparatory works for phase 1 redevelopment of Queen Mary Hospital are under way.

### ***Public-private Partnership Projects***

The government takes part in clinical public-private partnership projects through the Hospital Authority, including the Cataract Surgeries Programme, Patient Empowerment Programme, Haemodialysis Public-Private Partnership Programme, and Project on Enhancing Radiological Investigation Services through Collaboration with the Private Sector. The Provision of Infirmity Service through Public-Private Partnership and Colon Assessment Public-Private Partnership Programme were launched in September and December respectively.

The Hospital Authority's General Outpatient Clinic Public-Private Partnership Programme subsidises hypertension and/or diabetes mellitus patients (with or without hyperlipidemia) of stable condition from its general outpatient clinics to receive treatment by private doctors. The

programme has been rolled out to 12 districts and is expected to cover all 18 districts in the next two years. It had covered 211 participating service providers and 9,710 patients by end-2016.

### ***Sharing of Electronic Health Records***

In 2009, the government started to take forward the development of a citywide Electronic Health Record Sharing System (eHRSS) for two-way sharing of participating patients' health data by healthcare providers in the public and private sectors. This new information technology infrastructure aims to enhance the continuity of patient care, promote public-private partnership and improve the quality and efficiency of health care.

The Stage 1 eHRSS was commissioned in March 2016 following the start of major provisions of the Electronic Health Record Sharing System Ordinance (Cap 625).

Healthcare recipients and providers are encouraged to register through engagement and promotional activities. As at end-2016, over 350,000 healthcare recipients and about 1,130 organisations, including private clinics and elderly homes, have registered in addition to the Hospital Authority, Department of Health and 11 private hospitals. About 36,500 accounts have been created for healthcare professionals, including about 9,340 doctors, 26,800 nurses and 360 dentists, to enable access to the eHRSS.

## **Health Promotion**

### ***Healthy Lifestyle***

The Department of Health's Central Health Education Unit formulates and implements health promotion strategies. It runs campaigns and programmes to provide information and advice on health-related topics and to encourage healthy eating and regular physical activity. The unit also updates information and health advice on infectious diseases, and produces materials in various languages to raise awareness among ethnic minorities of hygiene measures and the need to prevent communicable diseases.

In the 2015-16 school year, 608 pre-primary institutions participated in the StartSmart@school.hk campaign and over 470 primary schools, including special schools, joined the EatSmart@school.hk campaign. In 2016, about 680 restaurants took part in the EatSmart@restaurant.hk campaign.

The department also collaborated with the Education Bureau to launch a Joyful@School campaign in August to promote mental well-being among primary and secondary students.

In October, the department and the Occupational Safety and Health Council launched a Joyful@Healthy Workplace programme. About 390 organisations involving 230,000 employees joined the programme.

A total of 318 secondary schools, about 69,300 students and 500 parents and teachers enrolled in the Adolescent Health Programme and received its services.



### ***Aids Counselling and Education***

The department's Red Ribbon Centre collaborates with community partners to enhance public awareness and prevention of human immunodeficiency virus (HIV) and to promote caring and acceptance of HIV patients. In 2016, the centre organised 25 major activities and 42 special programmes, involving some 81,700 participants.

Information on Acquired Immune Deficiency Syndrome (Aids), sexually transmitted infections and multilingual Aids hotlines is available at the department's website.

Appointments for counselling and HIV antibody/rapid tests may be made on the hotline 2780 2211. In 2016, the hotline received about 21,700 calls and nurse counsellors received 18,420 calls for Aids counselling service. About 1,006,100 condoms were distributed to promote safer sex. There are also a Gay Men HIV Testing Hotline (2117 1069) and a website. In 2016, the Gay Men HIV Testing Hotline received 190 calls for counselling and HIV antibody/rapid testing.

### ***Organ Donation and Transplant***

The department promotes organ donation via a dedicated page on Facebook and in collaboration with the Hospital Authority, healthcare professional bodies and NGOs. In April, the government established the Committee on Promotion of Organ Donation to coordinate the promotion work by different parties. The Organ Donation Promotion Charter was introduced in June to invite organisations, including companies and schools, to promote organ donation through their own channels. By end-2016, more than 200 organisations had signed the charter.

As at the end of 2016, more than 241,000 people had registered with the Centralised Organ Donation Register to express their wish to donate their organs after death.

The number of patients waiting for kidney, liver, heart and double-lung transplants stood at 2,047, 89, 50 and 19 respectively. During the year, there were 37 liver, 60 renal, 12 heart, eight double-lung and 276 cornea donations from the deceased in public hospitals. There was one single-lung donation.

The Human Organ Transplant Ordinance regulates the transplant of human organs and import of human organs for transplant purposes, and prohibits commercial dealings in human organs intended for transplant. Approval from the statutory Human Organ Transplant Board is required for the transplant of human organs between living persons who are not genetically related or a couple whose marriage has subsisted for not more than three years. In 2016, the board received 25 applications for organ transplants between living non-related persons and Hong Kong imported 54 human organs for transplant purposes.

Under the ordinance, applications can be made to the department to exempt certain commercial products made from processed human tissue, enabling patients with genuine medical needs to benefit from the use of these products. As at the end of 2016, the department had received 42 applications for exemption and approved 34 products since the ordinance took effect in 2011.

### **Smoking and Health**

China is a state party to the Framework Convention on Tobacco Control of the World Health Organisation (WHO), making provisions of the convention applicable to Hong Kong. The city's tobacco control policy aims to discourage smoking, contain the proliferation of tobacco use and minimise the impact from passive smoking through a progressive and multi-pronged approach, comprising legislation, publicity, education, enforcement, smoking cessation and taxation.

The Smoking (Public Health) Ordinance stipulates statutory no-smoking areas, regulates the packaging and labelling of tobacco products, and prohibits all advertisements and promotions for such products. Smoking is banned in all indoor areas of workplaces and public places, including restaurants and bars, as well as some outdoor areas, including the open areas of schools, leisure grounds, bathing beaches and public transport facilities. The government extended the smoking ban to the eight bus interchanges at tunnel portal areas in March. Offenders are liable to a fine of \$1,500 under the Fixed Penalty (Smoking Offences) Ordinance.

In 2016, the department's Tobacco Control Office conducted 30,395 inspections and issued 207 summonses and 8,650 fixed penalty notices for smoking offences. It distributes guidelines, posters, no-smoking signs and pamphlets to venue managers of statutory no-smoking areas and to the public.

The Hong Kong Council on Smoking and Health, an independent statutory body, advises the government on smoking, passive smoking and health, and on publicising the hazards of smoking. The council conducts publicity, education and community involvement campaigns, which attracted 242,000 participants in 2016. It also operates a website and a hotline to receive enquiries and suggestions from the public on smoking and health.

The Tobacco Control Office provides advice on how to quit smoking, counselling services and pharmaceutical treatment through a smoking cessation hotline (1833 183), clinics and an interactive online cessation centre. In 2016, the hotline handled more than 7,700 phone calls. The office also broadcasts announcements on television and radio, conducts seminars and issues materials to increase public awareness of the harmful effects of smoking and second-hand cigarette smoke. It collaborates with NGOs to run community-based smoking cessation programmes, including the use of Chinese medicine acupuncture, peer-led phone counselling, smoking cessation services at the workplace, programmes for ethnic minorities and new immigrants, and school activities to promote a smoke-free culture.

The Hospital Authority provides counselling and cessation services through its 15 full-time and 52 part-time Smoking Counselling and Cessation Centres. It also operates a hotline providing booking and enquiry services for people who wish to quit smoking.

### **Disease Prevention and Control**

The department spent \$3.1 billion on disease prevention and control at its maternal and child health centres, elderly health centres and similar facilities in 2015-16.

### **Centre for Health Protection**

The Centre for Health Protection collaborates with local and international counterparts to prevent and control diseases in Hong Kong. It works on three principles: real-time surveillance, rapid intervention and responsive risk communication. The centre keeps track of communicable diseases and issues surveillance reports on a regular basis, as well as reports on laboratory data.

A board of scientific advisers and six scientific committees meet periodically to help the centre formulate effective policies to improve the health protection system.

The centre maintains close liaison with District Councils and Healthy Cities projects at district level and solicits their support to disseminate health information and guidelines, to alert the public to health threats and facilitate rapid implementation of preventive measures, and to carry out other health promotion activities. It also shares professional knowledge and experience in combating diseases with other health authorities in the Mainland and Macao and at the WHO.

### **Prevention and Control of Infectious Diseases**

The Prevention and Control of Disease Ordinance specifies 50 statutory notifiable infectious diseases in Hong Kong. In 2016, 17,503 cases were reported, of which about 8,880 and 4,412 were diagnosed as chickenpox and tuberculosis respectively.

Up to December 2016, Hong Kong had confirmed 16 human cases of avian influenza A (H7N9) since the city reported its first human case in December 2013. All 16 cases were considered upon investigation to be sporadic imported cases. A Preparedness Plan for Influenza Pandemic defines the city's respective response levels, sets out the corresponding command structures and outlines the measures to be taken when a pandemic develops.

The centre continually reviews and updates its strategies for coping with major outbreaks of infectious diseases, including the Ebola virus disease, Middle East Respiratory Syndrome and Zika virus infection, ensuring both the government and the community are prepared to deal with them.

### **Vaccination**

Children are protected against communicable diseases such as tuberculosis, hepatitis B, poliomyelitis, diphtheria, tetanus, pertussis, measles, mumps, rubella, chickenpox and pneumococcal disease under a Childhood Immunisation Programme.

The Government Vaccination Programme, which includes a Residential Care Home Vaccination Programme, provides eligible people in target groups with free seasonal flu and pneumococcal vaccinations each year at public hospitals and clinics, residential care homes for the elderly and people with disabilities, and designated institutions serving people with intellectual disability. In November, the programmes extended free seasonal flu vaccination to all children from six months to under 12 years old from families with financial difficulties and to Disability Allowance recipients living in the community.

Under a Vaccination Subsidy Scheme, children aged six months to less than 12 years, elders aged 65 or above, people with intellectual disability, pregnant women and Disability Allowance recipients can receive subsidised seasonal flu vaccination at private clinics. From the 2016-17 season, the government increased the subsidy for all eligible groups from \$160 to \$190 per dose. A subsidised pneumococcal vaccination at private clinics is also available for elders who have not previously received one. About 1,700 private doctors take part in the scheme.

### ***Non-communicable Diseases***

The major killers in Hong Kong are cancer, heart and cerebrovascular diseases, which together accounted for about 51 per cent of all registered deaths in 2016. Elderly people are the major victims of these chronic non-communicable diseases.

The Cancer Coordinating Committee, chaired by the Secretary for Food and Health, steers and recommends the strategies and work for the prevention and control of cancer, which claimed more than 14,100 lives locally in 2016. The Department of Health's Cervical Screening Programme encourages women aged 25 to 64 to undergo regular cervical cancer screening. In 2016, about 109,600 women underwent cancer screening.

On 28 September, the department launched a Colorectal Cancer Screening Pilot Programme to provide subsidised screening for Hong Kong residents born in the years 1946 to 1955 in phases to prevent colorectal cancer.

## **Regulatory Activities**

### ***Healthcare Professionals***

As at end-2016, 14,013 doctors, 2,441 dentists, 9,956 listed and registered Chinese medicine practitioners, 52,389 registered and enrolled nurses, 4,540 midwives, 2,659 pharmacists, 209 chiropractors, 2,956 physiotherapists, 1,911 occupational therapists, 3,443 medical laboratory technologists, 2,180 optometrists, 2,209 radiographers and 424 dental hygienists were registered in Hong Kong.

The government launched a pilot Accredited Registers Scheme in 2016 to enhance the society-based registration arrangements of healthcare professions currently not subject to statutory regulation, to ensure the professional competency of healthcare personnel and provide more information for the public to make informed decisions.

### ***Western Medicine***

Western medicine in Hong Kong is regulated under the Pharmacy and Poisons Ordinance. Acting on the authority of the Pharmacy and Poisons Board, the department evaluates and approves applications for registration of pharmaceutical products, issues licences to drug manufacturers, wholesalers and retailers, and takes action against the illegal sale of controlled drugs. The department also enforces regulatory controls on poisons, antibiotics and dangerous drugs for medicinal use.

In 2016, the board approved 3,233 applications for registration of pharmaceutical products. As at the year end, 18,584 pharmaceutical products were registered.

### **Chinese Medicine**

Chinese medicine is regulated under the Chinese Medicine Ordinance, which requires any person engaged in the retail or wholesale of Chinese herbal medicine or the manufacture or wholesale of proprietary Chinese medicine to obtain a licence. The Chinese Medicine Council of Hong Kong is the statutory body responsible for devising and implementing regulatory measures for Chinese medicine. All proprietary Chinese medicine must be registered before they can be sold, imported or possessed in Hong Kong. As a transitional arrangement, proprietary Chinese medicine manufactured or offered for sale on 1 March 1999 is eligible for a transitional registration status upon submission of acceptable basic test reports. By the end of 2016, there were 6,867 licensed Chinese medicine traders, including 16 holding the Certificate for Manufacturer; 7,498 proprietary Chinese medicines had obtained transitional registration status; and 912 had been issued with a 'Certificate of registration of proprietary Chinese medicine'.

The department has released reference standards for 236 commonly used Chinese medicines since it launched the Hong Kong Chinese Materia Medica (HKCMM) Standards Project in 2002, aiming to ensure the safety and quality of common Chinese herbal medicine. The project is supported by local universities and overseas and Mainland experts. A pilot study on setting standards for Chinese medicinal decoction is under way.

As announced in the 2015 Policy Address, the government had accepted the Chinese Medicine Development Committee's recommendation to set up a testing centre for Chinese medicines, to be managed by the department. Before a permanent testing centre is ready, the department will set up a temporary centre which is expected to start operating in phases from 2017.

The department's Chinese Medicine Division, which is designated by the WHO as a WHO Collaborating Centre for Traditional Medicine, focuses on helping the WHO formulate policies and strategies and setting regulatory standards for traditional medicine.

### **Integrated Chinese-Western Medicine Pilot Programme**

Following directions spelled out in the 2013 Policy Address, the Hospital Authority is conducting an Integrated Chinese-Western Medicine Pilot Programme with the aims of using such medicine to maximise the outcome of patient care, gaining experience in the development of Chinese medicine inpatient services, and facilitating postgraduate Chinese medicine development and training. The pilot programme is operating in seven public hospitals: Tung Wah Hospital, Pamela Youde Nethersole Eastern Hospital, Tuen Mun Hospital, Prince of Wales Hospital, Shatin Hospital, Kwong Wah Hospital and Princess Margaret Hospital.

### **Human Reproductive Technology**

Activities using human reproductive technology 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 Ordinance confines the application of human 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. Reproductive technology service providers and embryo researchers who wish to conduct relevant activities under the ordinance must apply for a licence issued by the Council on Human Reproductive Technology set up under the legislation. As at the end of 2016, the council had issued 48 valid licences, including 16 treatment licences, 30 artificial insemination-by-husband licences and two research licences.

The council's Code of Practice on Reproductive Technology and Embryo Research sets out the requirements, standards and good practices for embryo researchers and reproductive technology practitioners.

### **Port Health**

To prevent and control the cross-boundary spread of infectious and other serious diseases into and out of Hong Kong, the department's Port Health Office enforces quarantine measures according to the International Health Regulations and the Prevention and Control of Disease Ordinance. Arriving travellers at boundary control points are required to undergo temperature screening as a precautionary measure.

The Port Health Office also operates two Travel Health Centres to provide outbound travellers with disease preventive services, including medical consultation, vaccination, prophylactic medication and advice on travel-related risks. The office works closely with the travel industry and provides travel health information on the department's website.

### **Radiation Health**

Set up under the Radiation Ordinance, the independent Radiation Board controls the import, export, possession and use of radioactive substances and irradiating apparatus. The board's executive arm is the department's Radiation Health Unit, which carries out licensing controls and conducts inspections of radioactive substances or irradiating apparatus. It also provides health surveillance and radiation monitoring for radiation workers, maintains metrology standards for environmental and occupational protection level radiation dosimetry measurements, and provides the related standard calibration services. The unit advises the government on the protection of public health in nuclear incidents and management of radioactive substances and wastes.

## **Training of Medical Personnel**

### **Doctors**

Degree courses in medicine and surgery are offered at the University of Hong Kong (HKU) and Chinese University of Hong Kong (CUHK), which admitted a total of 475 medical students to their six-year bachelor degree programmes in 2016. Another 40 medical graduates with professional qualifications obtained outside Hong Kong passed a licensing examination conducted by the Medical Council of Hong Kong.

The Hong Kong Academy of Medicine is an independent statutory body which approves, assesses and accredits specialist training within the medical and dental professions. Its 15 colleges conduct training and examinations to award specialist qualifications to qualifying candidates.

The Hospital Authority also trains specialist doctors, offering appointments to nearly all the medical graduates of the two universities each year for on-the-job specialist training. In 2016, about 400 doctors were recruited for specialist training and some 290 doctors obtained specialist qualifications at the end of their training.

### **Dentists**

HKU offers degree courses in dentistry, admitting 76 students to its six-year bachelor degree programme in 2016. Sixteen candidates who completed their dental training outside Hong Kong passed a licensing examination conducted by the Dental Council of Hong Kong.

### **Chinese Medicine Practitioners**

CUHK, HKU and Hong Kong Baptist University offer full-time undergraduate degree courses in Chinese medicine. In 2016, 75 full-time local bachelor's degree graduates who passed the licensing examination were registered as Chinese medicine practitioners.

The 18 Chinese Medicine Centres for Training and Research are required to employ these fresh graduates as junior Chinese medicine practitioners and to provide them with three years of training. As at the end of 2016, these centres provided 72 junior places for their first year of training and 144 trainee places for their second and third years of training.

### **Allied Health Professionals**

Hong Kong Polytechnic University (PolyU) and Tung Wah College offer degree programmes for allied health professionals. In 2016, PolyU admitted 124, 105, 100, 53 and 39 students to its publicly funded degree programmes in physiotherapy, radiography, occupational therapy, medical laboratory science and optometry respectively. Tung Wah College admitted 22, 11 and 61 students to its self-financing degree programmes in medical laboratory science, radiation therapy and occupational therapy respectively. The professional accreditation process has been completed for the degree programmes in medical laboratory science and radiation therapy and is under way for Tung Wah's occupational therapy degree programme.

The Hospital Authority's Institute of Advanced Allied Health Studies devises structured long-term training plans for allied health staff members and runs courses on specialist and multidisciplinary training, clinical and personal development. These include three years of in-service training for new recruits of allied health grades. In 2016, the institute offered 67 training courses and 47 overseas scholarships.

### **Nurses**

HKU, CUHK, PolyU, the Open University of Hong Kong (OUHK), Tung Wah College and the Caritas Institute of Higher Education provide pre-registration nursing training. They recruited 1,616 students into their five-year full-time nursing degree programmes in 2016. PolyU and CUHK also enrolled another 124 nursing students in their three-year Master's Degree of Nursing programmes.

Hong Kong Baptist Hospital, Hong Kong Sanatorium and Hospital, St Teresa's Hospital, Union Hospital, HKU Space Community College and Tung Wah College provide pre-enrolment nursing

training. They recruited 397 pupil nurses into their two-year Higher Diploma in Enrolled Nurse (General) training programmes in 2016. OUHK enrolled 196 and 44 pupils in their two-year Higher Diploma in Nursing and Higher Diploma in Mental Health Nursing programmes respectively. Another 33 nurses with professional nursing qualifications obtained outside Hong Kong passed the Nursing Council of Hong Kong's licensing examination and received practising certificates for registered nurses or enrolled nurses.

In the 2015-16 academic year, the government started subsidising students to pursue designated self-financing undergraduate programmes in nursing. The number of subsidised places increased from 420 in 2015-16 to 480 in 2016-17.

The Hospital Authority's three-year higher diploma programme provides basic registered nurse training and enrolled 300 students in 2016. Another 100 pupil nurses were admitted to its two-year enrolled nurse basic training programme.

The Hospital Authority's Institute of Advanced Nursing Studies seeks to strengthen specialty care training for nurses and encourage them to improve professional standards through continuous learning. The institute provides simulation training for new graduates to strengthen their skills in clinical care and medical emergencies. Experienced nurses can apply for scholarships to attend overseas training for international exposure.

## **Laboratory Services**

### **Government Laboratory**

The Government Laboratory offers a comprehensive range of analytical, investigatory and advisory services to support the government in upholding its commitment to the protection of public health. In the 2015-16 financial year, \$226 million was spent on providing the required services.

In 2016, the laboratory carried out 196,763 tests on foods to ensure they were fit for consumption and complied with legal requirements, and conducted 12,422 tests arising from investigations into food complaints. Some routine testing was outsourced to private laboratories to better utilise its own resources for developing new testing methods and coping with a broadened scope of testing services, and to develop the capability of the private laboratory sector.

The laboratory performed more than 54,700 tests on pharmaceutical products and over 81,900 tests on Chinese medicine to ensure they met recognised quality and safety standards and to verify proprietary Chinese medicines were free from western drug adulteration or harmful ingredients. It also supported investigations into the use of undeclared western drugs in preparations and incidents of intoxication suspected to have been caused by misused or contaminated Chinese herbal medicine.

The laboratory provides analytical support in certifying chemical markers of unregistered proprietary Chinese medicine, and helps develop the HKCMM Standards. It also conducts year-round surveillance of tar and nicotine yields in cigarettes, releasing more than 12,800 results to the public in 2016.



### **Public Health Laboratory Services**

The Department of Health's Public Health Laboratory Services Branch conducts laboratory tests for clinical and surveillance specimens and provides clinical diagnostic and public health laboratory services to the public and private sectors for patient care and other public health purposes.

The branch's Public Health Laboratory Centre is a WHO-designated National Influenza Centre, National Poliovirus Laboratory, National Measles Laboratory of the Hong Kong Special Administrative Region, Supranational TB Reference Laboratory, Regional Reference Laboratory for measles in the Western Pacific Region, Global Influenza A(H5) Reference Laboratory and Sars Reference Laboratory.

### **Auxiliary Medical Service**

The Auxiliary Medical Service is a government department under the Security Bureau, with 99 civil servants and about 6,000 adult volunteers and cadets. Its main role is to reinforce regular medical, health and ambulance services during emergencies and to provide backup in normal circumstances. The volunteers come from all walks of life and include doctors, nurses, pharmacists and paramedics. All are qualified Disaster Medical Assistants. The cadets, aged 12 to 17, receive training in discipline and medical skills, helping them develop self-discipline and a sense of responsibility.

The department deploys First Aid Bicycle Teams along designated cycling tracks in the New Territories during weekends and public holidays. It also runs programmes on first aid at schools and gives talks to the public on cardiopulmonary resuscitation and other health-related subjects.

### **Websites**

Aids Hotline Website: [www.27802211.com](http://www.27802211.com)

Auxiliary Medical Service: [www.ams.gov.hk](http://www.ams.gov.hk)

Centre for Health Protection: [www.chp.gov.hk](http://www.chp.gov.hk)

Department of Health: [www.dh.gov.hk](http://www.dh.gov.hk)

Electronic Health Record Office: [www.eHealth.gov.hk](http://www.eHealth.gov.hk)

Food and Health Bureau: [www.fhb.gov.hk](http://www.fhb.gov.hk)

Family Health Service: [www.fhs.gov.hk](http://www.fhs.gov.hk)

Gay Men HIV Testing Hotline: [www.21171069.com](http://www.21171069.com)

Healthcare Reform: [www.myhealthmychoice.gov.hk](http://www.myhealthmychoice.gov.hk)

Hong Kong Council on Smoking and Health: [www.smokefree.hk](http://www.smokefree.hk)

Hospital Authority: [www.ha.org.hk](http://www.ha.org.hk)

Oral Health Education Unit: [www.toothclub.gov.hk](http://www.toothclub.gov.hk)

Organ Donation Website under the department: [www.organdonation.gov.hk](http://www.organdonation.gov.hk)

Red Ribbon Centre: [www.rrc.gov.hk](http://www.rrc.gov.hk)

Travel Health Service of the department: [www.travelhealth.gov.hk](http://www.travelhealth.gov.hk)

Virtual Aids Office of the department: [www.info.gov.hk/aids/](http://www.info.gov.hk/aids/)