

Chapter 19

Health

During 2022, the third year of the COVID-19 pandemic, Hong Kong faced its fifth wave, which was the most severe with the fastest spread and largest number of infections. The government tackled the epidemic on the principles of science-based and targeted anti-epidemic measures, proper management of risks and citizen-focused facilitation. Anti-epidemic measures were adjusted timely based on analyses of scientific data. While safeguarding the well-being of citizens and protecting the public healthcare system, the government also sought to reduce the disruption to normal social activities with a view to achieving the greatest effect with the lowest cost.

After the initial surge of infections in early 2022, the high level of post-infectious immunity and a significant increase in the vaccination rate enabled the community to progressively resume normalcy, despite some fluctuations in the epidemic situation towards the year end. While resuming normalcy, the government shifted its anti-epidemic focus to preventing severe cases and deaths, as well as protecting high-risk groups such as the elderly and children. Essential facilities such as public hospitals and elderly homes strengthened their preparedness and defence to prevent further deaths.

The government released the Primary Healthcare Blueprint on 19 December, setting out the development direction and strategies for strengthening Hong Kong's primary healthcare system to address the challenges brought about by an ageing population and the increasing prevalence of chronic disease. The blueprint outlines steps to establish a prevention-oriented, community-based and family-centric primary healthcare system, in order to improve the overall health status of the population and reduce avoidable demand for secondary and tertiary health care. This will alleviate the pressure on the public hospital system, thereby ensuring a sustainable healthcare system.

To cope with the continuous shortage of healthcare manpower, the government has stepped up efforts in enhancing the training of local healthcare professionals. It has increased budget allocation to take forward various training initiatives such as providing subsidies for students taking healthcare-related undergraduate and taught postgraduate programmes, waiving clinical practicum training fees payable by tertiary institutions, as well as upgrading and increasing healthcare teaching facilities. It will also increase the number of healthcare training places. In view of the particular shortage of dentists and nurses in the public healthcare system, the government plans to create new pathways for the admission of qualified non-locally trained dentists and nurses to meet the service demand.

The Health Bureau is committed to promoting and protecting public health in Hong Kong, upholding the quality and efficiency of the healthcare system, enhancing the health of all citizens, and ensuring access to medical services is not denied due to lack of means.

The Department of Health is the government's health adviser and public health authority to execute policies and statutory functions. It safeguards the community's health through promotional, preventive, curative and rehabilitative services.

The Hospital Authority provides public hospital and related services. It offers medical treatment and rehabilitation services through hospitals, specialist clinics, general outpatient clinics and outreach services.

Figures at a Glance

Infant mortality rate	2022	1.6* per 1,000 registered live births	
Maternal mortality ratio	2022	3.0* per 100,000 registered live births	
Life expectancy at birth	2022	81.3** (Male)	87.2** (Female)
	2069 (<i>projected</i>)	88.4 (Male)	93.9 (Female)

* Provisional figures

The expectation of life at birth in 2022 has been affected by high mortality rates during the COVID-19 epidemic.

Hong Kong has an excellent healthcare system supported by a highly professional team of workers. The infant mortality rate in 2021 was among the lowest in the world.

The government's recurrent funding for health has risen by about 104 per cent over the past five years, from \$62.6 billion in 2017 to \$127.9 billion in 2022. Year on year, the recurrent funding for health grew more than 33 per cent from \$95.9 billion in 2021. It accounted for 23 per cent of the government's recurrent expenditure in 2022.

Hong Kong's Domestic Health Accounts¹ show total health expenditure increased from 3.6 per cent to 8.5 per cent of Gross Domestic Product from 1989-90 to 2021-22. Over the same period, public health spending (\$145.1 billion in 2021-22, or 5.1 per cent of GDP) rose from 40 per cent to 60 per cent of total health expenditure.

Treatment-oriented secondary and tertiary health care, especially public hospital services, account for the majority of healthcare services and spending. In 2021-22, the total current health expenditure was roughly 30 per cent on primary health care (\$70.2 billion) and 70 per cent on secondary and tertiary health care (\$157.2 billion). Owing to heavily subsidised public hospital services, 77 per cent of public health expenditure was spent on secondary and tertiary health care (\$101.1 billion) and 23 per cent on primary health care (\$29.5 billion).

¹ 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.

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:

- **Primary healthcare reform** – Facing the pressures of an ageing population and the increasing prevalence of chronic diseases, the government released the Primary Healthcare Blueprint in December which sets out the direction for reform in order to establish a prevention-oriented, community-based and family-centric primary healthcare system. The aim is to improve the overall health status of the population, provide accessible and coherent healthcare services, and establish a sustainable healthcare system.
- **Manpower planning and professional development** – Following the recommendations in the *Report of the Strategic Review on Healthcare Manpower Planning and Professional Development*, the government plans to meet long-term manpower demand and foster professional development by increasing the number of local subsidised healthcare training places and attracting more qualified non-locally trained healthcare professionals.
- **Regulation of private healthcare facilities** – The Private Healthcare Facilities Ordinance provides a regulatory regime for private healthcare facilities while protecting patient safety and rights. The government is implementing the regime in phases, based on the types of private healthcare facilities and their risk levels, and keeps in view the services and facilities to be subject to regulation for patient protection.

Primary Health Care

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

General outpatient and allied services are provided mainly by the private sector and non-governmental organisations (NGOs). In 2021-22, private Western clinics handled about 20 million outpatient visits. NGOs operate community clinics, and many also organise health promotion and educational activities. Some NGOs provide health assessments for the elderly and medical check-ups for women.

The public sector provides primary health care mainly through the Department of Health and the Hospital Authority. The authority operates 74 general outpatient clinics, including community health centres, used mainly by the elderly, low-income families and chronic disease patients. In 2022, some 1.54 million people used these services, with 5.2 million attendances recorded.

District Health Centres

To enhance district-based primary health care, District Health Centres (DHCs) or smaller, interim DHC Expresses have been set up across all 18 districts. Each centre is operated by an NGO with

government funding to promote medical-social collaboration, public-private partnership and district-based services. They focus on primary, secondary and tertiary prevention, including health promotion, health assessment, screening and managing chronic diseases, and community rehabilitation.

Preventive Care

The department provides health promotion and disease prevention services to the community particularly for infants, children, women and the elderly through the following services.

Family Health

There are 31 maternal and child health centres and three women's health centres that provide immunisation, parenting, health and developmental surveillance, and breastfeeding support for children from birth to five years of age and women aged 64 or below. Antenatal, postnatal, family planning and cervical screening services as well as health education are also offered for women. Around 14,000 expectant mothers and 30,000 newborn babies attended such centres in 2022.

Student Health

There are 13 student health service centres and four special assessment centres that provide health screening and individual counselling to primary and secondary students. In the 2021-22 school year, about 587,000 students joined these programmes.

Eight school dental clinics provide preventive dental services, including annual check-ups and basic care. In 2021-22, about 326,200 or 94 per cent of all primary students participated in such services. For special schools, students with disabilities can use these services until age 18.

Elderly Health

Eighteen elderly health centres provide primary health care to people aged 65 and above, including assessment, treatment, education and counselling, and 18 visiting health teams conduct health promotion activities for the elderly and provide training to carers. In 2022, there were about 27,000 enrolments and 113,000 attendances for health assessment and medical consultation, as well as some 230,000 attendances at promotional activities organised by the Elderly Health Service.

The Elderly Health Care Voucher Scheme subsidises the elderly to receive private primary care in the community that best suits their needs. The annual voucher amount for each eligible person is \$2,000, with a maximum accumulation limit of \$8,000. Enhancements to the scheme were announced in 2022, which included extended coverage to four healthcare professions under the Accredited Registers Scheme for Healthcare Professions; shared use of vouchers between spouses; and a three-year pilot scheme to encourage the more effective use of designated primary health care.

By end-December, over 1.49 million elderly residents had used the vouchers, accounting for about 97 per cent of the eligible population.

Vaccination

The Hong Kong Childhood Immunisation Programme protects children against vaccine-preventable diseases such as tuberculosis, hepatitis B, poliomyelitis, tetanus, pertussis, measles, diphtheria, mumps, rubella, chickenpox, pneumococcal disease and human papillomavirus (for school girls of suitable grades). Pertussis vaccinations are provided for women between 26 and 34 weeks of pregnancy, as part of routine antenatal care at maternal and child health centres.

The Government Vaccination Programme and the Vaccination Subsidy Scheme provide free or subsidised seasonal influenza vaccinations respectively from October each year to eligible groups, including children and those aged 50 or above. The vaccinations are provided through kindergartens and child care centres, primary schools, public hospitals and clinics, residential care homes for the elderly and for persons with disabilities, residential child care centres, and designated institutions serving people with intellectual disabilities. In November, the government included secondary school students as an eligible group to prevent possible school outbreaks and community transmission.

Cancer Screening Programmes

The government provides screening for cervical cancer, colorectal cancer and breast cancer. The Cervical Screening Programme encourages women aged between 25 and 64 who have ever had sex to undergo regular screening while the Colorectal Cancer Screening Programme subsidises asymptomatic residents aged between 50 and 75 to undergo screening. The Breast Cancer Screening Pilot Programme provides screening services for eligible women, aiming to detect breast cancer before symptoms appear for early treatment.

Community Outreach Health Care

Community outreach health care aims to reduce reliance on inpatient services and help patients recover in the community. In 2022, the Hospital Authority conducted 1.96 million home visits and outreach care services for, among others, the elderly and people with mental illness. As at end-2022, around 85 per cent of those receiving community nursing services were elderly. Community geriatric assessment teams visit residential care homes for the elderly regularly to provide medical and nursing care to frail residents who are unable to attend specialist outpatient clinics. These teams also train carers at the homes to care for their residents. The Patient Support Call Centre provides support to high-risk elderly patients discharged from public hospitals, offering advice on disease management and care support, and arranging referrals to appropriate services for patients in need.

Oral Health

The government seeks to improve oral health and prevent dental diseases by raising public awareness of oral health and encouraging improved habits through promotion and education. A working group was set up in December to review the dental care services provided or subsidised by the government.

Educational activities include the Brighter Smiles for the New Generation for pre-school children and the Bright Smiles Mobile Classroom for primary students, while the annual Love Teeth

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

Under the Outreach Dental Care Programme for the Elderly, teams set up by NGOs receive government subsidies to provide free on-site oral check-ups for elderly people and oral care training to caregivers in residential care homes, day care centres and similar facilities. Free dental treatment will be provided on-site or at a dental clinic if necessary. The Healthy Teeth Collaboration programme provides free oral check-ups, dental treatment and oral health education for adults with intellectual disabilities aged 18 or above through NGO dental clinics. The Special Oral Care Service provides dental service for pre-school children under six years old with intellectual disabilities at the Hong Kong Children's Hospital, and provides on-site dental check-ups and oral health education for eligible children at special child care centres.

Mental Health

The government adopts an integrated approach in promoting mental health, encompassing prevention, early identification, timely intervention and rehabilitation. Cross-sectoral and multidisciplinary support and care services are available through collaboration among government bodies and other relevant organisations including the Health Bureau, Labour and Welfare Bureau, Education Bureau, Hospital Authority, Social Welfare Department and Department of 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 2021-22, about 288,900 people received treatment and support through these services and the authority earmarked additional funding of around \$156 million to address the escalating demand for psychiatric services.

The Advisory Committee on Mental Health advises the government on mental health policies and follows up on recommendations in the *Mental Health Review Report*. It initiated a pilot scheme in 2021 to provide timely assessment, intervention and support to children and adolescents with mental health needs through medical-social collaboration.

The committee implements the mental health promotion and public education initiative *Shall We Talk*. As part of the initiative, the Mental Health Workplace Charter aims to promote a mental health-friendly workplace. To address the impact of the COVID-19 epidemic on public mental health, the government earmarked \$300 million for the committee to launch the Mental Health Initiatives Funding Scheme.

Smoking and Health

The World Health Organisation Framework Convention on Tobacco Control is applicable to Hong Kong as a part of China. The city's tobacco control policy aims to discourage smoking, contain the proliferation of tobacco use and minimise the impact from passive smoking through 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 advertising and promoting such products. In 2022, the Tobacco and Alcohol Control Office conducted over 35,150 inspections and issued 35 summonses and 6,296 fixed penalty notices for smoking offences.

The emergence of alternative smoking products, including electronic smoking products, heated tobacco products and herbal cigarettes, poses new health risks and challenges. The Smoking (Public Health) (Amendment) Ordinance 2021, banning the import, manufacture, sale, distribution and advertising of alternative smoking products, came into effect on 30 April.

The Hong Kong Council on Smoking and Health, an independent statutory body, advises the government on smoking, passive smoking and health matters, and publicises the hazards of smoking. The council also conducts publicity, education and community involvement campaigns, and receives enquiries and suggestions from the public on smoking and health matters.

HIV Testing, Counselling and Education

The Department of Health's Red Ribbon Centre works with community partners to enhance awareness and prevention of the human immunodeficiency virus (HIV) and to promote the care and acceptance of people with HIV. In 2022, the centre organised 61 activities for 67,642 participants. Information on Acquired Immune Deficiency Syndrome (AIDS) and sexually transmitted infections is available on the department's website and a multilingual AIDS hotline. Appointments for counselling and HIV testing can be made via the hotline or the website. HIV self-test kits can also be obtained via the website. During the year, around 1,200 appointments for HIV testing were arranged and 1,231 self-test kits were distributed.

Secondary, Tertiary and Specialised Health Care

These services are available mainly in the Hospital Authority's hospitals and specialist outpatient clinics. As at end-2022, the city had 30,483 public hospital beds, comprising 24,172 general beds, 1,961 infirmary beds, 3,675 beds for the mentally ill and 675 for the mentally disabled. There were also 5,207 private hospital beds, comprising 4,826 inpatient beds and 381 day beds, and 874 in institutions run by the Correctional Services Department. There were five beds per 1,000 population². Public hospitals spent \$54.6 billion on inpatient services in 2021-22 and discharged 1.64 million inpatients and day inpatients in 2022.

The authority's specialist outpatient clinics arrange appointments for new patients based on the urgency of their clinical conditions, to ensure those with acute conditions receive priority. Patients in stable condition are referred to family medicine and general outpatient clinics, or to primary care practitioners in the private sector for follow-up. In 2022, the specialist outpatient clinics recorded 7.7 million attendances.

² Consisting of all beds in the Hospital Authority's hospitals, private hospitals and correctional institutions.

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 2022, the authority's allied health outpatient departments recorded 2.77 million attendances.

Accident and Emergency Services

Eighteen public hospitals provide accident and emergency services, delivering a high standard of service for critically ill or injured people and victims of disasters.

Patients 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 non-urgent cases under Category 5. This triage system ensures patients with more urgent needs receive prompt treatment. In 2022, all Category 1 patients received immediate treatment and over 95 per cent of Category 2 patients were treated within 15 minutes.

Accident and emergency services spent some \$4.2 billion in 2021-22 and handled 1.66 million visits by 1.04 million people in 2022, an average of about 4,500 attendances per day.

Medical Charges and Waivers

Fees for public hospital and clinic services are government-subsidised at a rate of 97.3 per cent³. Under the existing medical fee waiver mechanism, the Hospital Authority grants waivers to needy groups including Comprehensive Social Security Assistance recipients, low-income patients, Old Age Living Allowance recipients aged 75 or above, the chronically ill and elderly patients with financial difficulties.

Private Hospitals

Private hospitals complement the public sector by providing a range of specialist and hospital services. There were 13 private hospitals providing 5,207 hospital beds as at end-December. In 2021, the private hospitals served 345,610 inpatients, representing 16 per cent of the city's total. Spending on private inpatient services amounted to \$24 billion in 2021-22, accounting for 31 per cent of overall expenditure on public and private inpatient services.

Public-private Partnership Programmes

The government has launched various clinical public-private partnership programmes through the Hospital Authority. Services include cataract surgery, haemodialysis, colon assessment, radiological investigation, glaucoma treatment, trauma operation, breast cancer surgery and radiation therapy.

³ Percentage is calculated based on 2019-20 information.

The authority's General Outpatient Clinic Public-Private Partnership Programme subsidises clinically stable patients with hypertension and/or diabetes mellitus under the care of its general outpatient clinics to opt for primary care from the private sector. As at end-2022, over 600 service providers and 40,000 patients had participated in the programme.

A co-care service model launched for designated specialties in 2021 enables clinically stable patients under the authority's specialist outpatient clinics to receive healthcare services from the private sector.

Voluntary Health Insurance Scheme

The Voluntary Health Insurance Scheme aims to regulate the quality of individual indemnity hospital insurance products and improve market transparency, providing consumers with greater confidence in health insurance and private healthcare services, thereby alleviating pressure on the public healthcare system. As of end-2022, the number of scheme policies reached 1,175,000.

Genomic Medicine

The Hong Kong Genome Institute implements the Hong Kong Genome Project, aiming to sequence 40,000 to 50,000 genomes. The pilot phase began in 2021, focusing on patients with undiagnosed disorders and hereditary cancers, and their family members. The main phase, with the scope extended to cases related to genomics and precision health, was launched in July 2022. The sequencing results may help the diagnosis or clinical management of participants, and the resulting genomics database will facilitate relevant scientific research.

Organ Donation and Transplant

The Department of Health, working with the Hospital Authority, healthcare professional bodies and NGOs, promotes organ donation on different fronts. The promotional work is coordinated by the Committee on Promotion of Organ Donation.

By end-2022, the Centralised Organ Donation Register recorded more than 350,000 registrations. The number of patients waiting for kidney, liver, heart and lung transplants stood at 2,451, 66, 81 and 13 respectively. During the year, there were 45 kidney, 17 liver, 11 heart, seven double-lung and 244 cornea donations from the deceased in public hospitals; and one deceased heart donation from the Mainland.

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 2022, the board received nine applications for organ transplants between living non-related persons and Hong Kong imported 40 human organs for transplant purposes.

The authority performs organ matching regularly on renal patients and their relatives who have joined the Paired Kidney Donation Pilot Programme.

Other Special Services

Specialist facilities under the department include 18 methadone clinics, 18 chest clinics, eight social hygiene clinics, four dermatological clinics, one integrated treatment centre, four centres and clinics providing services related to clinical genetics, seven child assessment centres and two travel health centres. These facilities recorded around 1.8 million attendances in 2022.

End-of-life Care

The public consultation report on legislative proposals on advance directives and dying in place was published in 2020. Relevant law drafting work is under way with a view to introducing a bill in 2023.

Chinese Medicine

Flagship Infrastructure

The government is constructing the first Chinese medicine hospital in Hong Kong, promoting service development, education and training, innovation and research. In January, the government signed the service deed for the operation of the hospital with the contractor, Hong Kong Baptist University (HKBU), and the operator, the HKBU Chinese Medicine Hospital Company Limited. The hospital is expected to begin services, in phases, from 2025.

The Government Chinese Medicines Testing Institute specialises in testing and scientific research of Chinese medicines aiming to set internationally recognised reference standards. The temporary institute began operation in 2017 and has published research results on the Chinese Medicine Regulatory Office website. The permanent institute is expected to be commissioned in phases starting from 2025.

Services

At the district level, 18 Chinese Medicine Clinics cum Training and Research Centres promote the development of Chinese medicine through services, training and research, under a collaboration model involving the Hospital Authority, NGOs and local universities. The government provides an annual quota of around 620,000 subsidised Chinese medicine outpatient attendances, covering general consultation, acupuncture and bone setting/*tui na* services. It was announced in the 2022 Policy Address that this quota would be increased to 800,000. There were about 1.52 million attendances in 2022.

The Hospital Authority implements the Integrated Chinese-Western Medicine Programme at designated public hospitals to gain experience in providing Chinese medicine inpatient services in stroke care, musculoskeletal pain management and cancer palliative care. Eight hospitals, covering all seven of the authority's hospital clusters, participate in the programme.

Private Chinese medicine clinics record about 10 million attendances each year.

Development Initiatives

The \$500 million Chinese Medicine Development Fund provides subsidies which benefit different segments of the sector, including training in Chinese medicine, enhancing

manufacturing practices for proprietary Chinese medicines, supporting the registration of proprietary Chinese medicines, improving clinic facilities, improving Chinese medicines warehouse management, logistics and services, and supporting scientific research and promotional activities.

During the pandemic, the fund has provided subsidies for the industry to implement promotion, training and research projects relating to COVID-19, as well as two special anti-epidemic projects that provided Chinese medicine treatment and rehabilitation services to the public so as to widen the use and application of Chinese medicine with a view to promoting the long-term development of Chinese medicine in Hong Kong.

Disease Prevention and Control

The Centre for Health Protection works 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 and laboratory data reports regularly. It works with the district councils to disseminate health information and guidelines, alert the public to health threats, and facilitate prompt implementation of preventive measures.

Prevention and Control of Infectious Diseases

The Prevention and Control of Disease Ordinance specifies 53 statutory notifiable infectious diseases in Hong Kong. During the year, 2,618,483 cases were reported, of which 2,612,983 and 3,217 were diagnosed as COVID-19 and tuberculosis respectively. The centre reviews and updates its strategies for coping with major outbreaks of infectious diseases, ensuring both the government and community are prepared.

In November, the government launched the Hong Kong Strategy and Action Plan on Antimicrobial Resistance (2023-2027) to map out response strategies to the threat of antimicrobial resistance.

The government is also implementing the Hong Kong Viral Hepatitis Action Plan 2020-2024, which sets out strategies and priorities to meet the World Health Organisation (WHO) target of eliminating the threat posed by viral hepatitis by 2030.

To prevent and control the cross-boundary spread of infectious and other serious diseases into or out of Hong Kong, the Department of Health's Port Health Division enforces health quarantine measures according to the International Health Regulations and the Prevention and Control of Disease Ordinance.

Measures to Combat COVID-19

During the year, the government tackled the COVID-19 epidemic on the principles of science-based and targeted measures, proper management of risks and citizen-focused facilitation, which covered the following areas:

- **Legal framework** – The government invoked the Prevention and Control of Disease Ordinance to introduce specific regulations to support anti-epidemic measures, including border control measures, mask wearing, social distancing, virus testing, use of vaccines and vaccination requirements for entry into specified places.
- **Professional advice** – The government took account of advice from the WHO and maintained communication and cooperation with the National Health Commission and Mainland provinces and cities on joint prevention and control of COVID-19. It consulted an advisory panel of experts and the relevant scientific committees on epidemic control measures and the use of vaccines. The government also sponsored local research and development to inform epidemic control policies and measures.
- **Prevention of imported cases** – The government maintained control of the importation of cases through testing and quarantine, taking into account the infection risk of places outside Hong Kong. From end-2020 to end-September 2022, travellers arriving at Hong Kong International Airport from overseas and Taiwan were required to travel by designated point-to-point transport to designated quarantine hotels for compulsory quarantine so as to minimise the risk of introduction of the disease into the community.
- **Maintaining social distancing** – The government adjusted social distancing measures applicable to various venues, group gathering restrictions and mask wearing requirements according to the epidemic development, and introduced the Vaccine Pass in February to encourage vaccination.
- **Application of technology** – The LeaveHomeSafe QR code and app assisted in tracing contacts of confirmed cases while platforms were provided for reporting positive nucleic acid or rapid antigen test cases. Building sewage testing technology helped detect confirmed cases.
- **Information transparency** – Up-to-date information was provided to the public through various channels, including briefings by the Centre for Health Protection and the Hospital Authority, press conferences by the Chief Executive and bureau secretaries, thematic websites, press releases and social media posts.
- **Vaccination** – The government offered free vaccines to all eligible members of the public under the COVID-19 Vaccination Programme. The first and second dose vaccination coverage exceeded 90 per cent and that of third dose exceeded 80 per cent, amounting to more than 20 million doses administered. Paediatric and toddler formulas were introduced so that children as young as six months could receive vaccination. Following the initiation of a fourth dose in April, the government added a new bivalent vaccine to the programme in December.
- **Use of Chinese medicine** – The government promoted the application of Chinese medicine in epidemic prevention, treatment and rehabilitation, enhancing its use in various establishments, such as community isolation facilities and residential care homes for the elderly.

Prevention and Control of Non-communicable Diseases

Non-communicable diseases including cancer, cardiovascular diseases, chronic respiratory diseases and diabetes mellitus together accounted for about 54 per cent of all registered deaths in 2021.

The government is implementing its action plan, *Towards 2025: Strategy and Action Plan to Prevent and Control Non-communicable Diseases in Hong Kong*, which sets out nine targets to be achieved by 2025 and a portfolio of initiatives to reduce the burden of non-communicable diseases.

The Hong Kong Cancer Strategy aims to reduce the cancer burden in the local population and improve the quality of life and survivorship of cancer patients. The government promotes healthy lifestyle as the primary preventive strategy, which includes no smoking, avoiding alcohol consumption, eating a balanced diet and engaging in regular physical activity.

Health Promotion

The Department of Health formulates and implements strategies and measures to promote healthy eating, regular physical activity and mental health to target groups at different settings. It also updates information and health advice on infectious diseases and produces materials in various languages to raise awareness among ethnic minorities of how to prevent communicable diseases and adopt a healthy lifestyle.

The department works closely with Healthy Cities projects, NGOs and other community partners to carry out health promotion activities, disseminate health information, alert the public to health threats and facilitate implementation of preventive measures.

Health Infrastructure Development

Public Hospital Development Projects

In 2022, the new expansion block for Haven of Hope Hospital was officially opened; the new operating theatre block for Tuen Mun Hospital and phase 1 redevelopment of Kwong Wah Hospital were completed; the preparatory works for the redevelopment of Our Lady of Maryknoll Hospital were completed and its main works have commenced. Other new or ongoing projects included the main works for phase 1 redevelopment of Queen Mary Hospital, phases 2 and 3 redevelopment of Kwai Chung Hospital, and the expansion of United Christian Hospital; the construction of the Hospital Authority Supporting Services Centre and Community Health Centre cum Social Welfare Facilities at Pak Wo Road in North District; the foundation and main works for the construction of a new acute hospital at the Kai Tak Development Area; and the preparatory and foundation works for phase 1 redevelopment of Grantham Hospital, stage 1 of phase 2 redevelopment of Prince of Wales Hospital, and the expansion of North District Hospital and Lai King Building in Princess Margaret Hospital.

Sharing of Electronic Health Records

The territory-wide Electronic Health Record Sharing System (eHRSS) allows public and private healthcare providers to view and share consenting patients' electronic health records. As at

end-2022, about 2,700 healthcare providers, including the Hospital Authority, Department of Health and 13 private hospitals, and over 5.7 million residents had registered for the system. More than 56,000 accounts have been created for healthcare professionals specified under the Electronic Health Record Sharing System Ordinance.

Stage 2 development of the eHRSS was completed in March 2022. Radiology image sharing was piloted by the Hospital Authority since March 2021, then private healthcare providers from mid-2021. As of end-2022, image sharing from seven private healthcare providers to eHRSS had been enabled. Sharing of Chinese medicine information was also enabled in March 2022, with the 18 Chinese Medicine Clinics cum Training and Research Centres the first to join and share health records.

A Chinese medicine information system, EC Connect, is provided to Chinese medicine practitioners to support their clinic operations, including health record documentation and sharing to eHRSS. Sharing of information by participating practitioners has been enabled since late March. As of end-2022, about 80 Chinese medicine healthcare service locations were using EC Connect.

The eHealth App launched in 2021 facilitates patient empowerment and self-care by providing relevant information to patients and their caregivers. It also allows patients to view some electronic health records and check their health care voucher balance and quotas of selected public-private partnership programmes. Users can also access their COVID-19 vaccination record and QR code if they received the vaccine in Hong Kong. As of end-2022, eHealth App had recorded about 2.8 million downloads.

Health and Medical Research

The Health and Medical Research Fund aims to build research capacity and to encourage, facilitate and support research to inform health policies, improve population health, strengthen the health system, enhance healthcare practices, advance the standard and quality of care, and promote clinical excellence, through evidence-based scientific knowledge derived from local research in health and medicine. It also provides funding to evidence-based health promotion projects that help people adopt healthier lifestyles.

During the fight against COVID-19, the Health Bureau and the fund approved \$556 million from April 2020 to end-2022 to support 70 research studies. Many of these studies applied cutting-edge technology to fill knowledge gaps and better prepare Hong Kong for the recovery stage of the pandemic.

The Statistics Unit of the bureau's Research Office is setting up the Population-based Health Dataset to support healthcare policy planning and formulation.

Healthcare Professional Regulation and Training

Healthcare Professional Regulation

As at end-2022, 15,815 doctors, 2,786 dentists, 10,732 listed and registered Chinese medicine practitioners, 66,492 registered and enrolled nurses, 4,538 midwives, 3,259 pharmacists,

304 chiropractors, 4,170 physiotherapists, 2,966 occupational therapists, 4,326 medical laboratory technologists, 2,283 optometrists, 2,790 radiographers and 558 dental hygienists were registered in Hong Kong.

The Pilot Accredited Registers Scheme for Healthcare Professions enhances the society-based registration arrangements for healthcare professions not subject to statutory registration. As at end-2022, the number of voluntary registrants for each profession was 305 for the Hong Kong Institute of Speech Therapists, 49 for the Hong Kong Institute of Audiologists, 100 for the Hong Kong Academy of Accredited Dietitians, 229 for the Hong Kong Association of Educational Psychologists and 396 for the Hong Kong Institute of Clinical Psychologists.

Doctors

To increase the number of doctors in Hong Kong, the government has more than doubled the number of training places for medical students funded by the University Grants Committee from 250 in 2008-09 to 590 in 2022-23.

Degree courses in medicine and surgery are offered at the University of Hong Kong (HKU) and the Chinese University of Hong Kong (CUHK), which admitted 604 medical students to their bachelor's degree programmes in 2022.

Non-locally trained doctors can register and practise in Hong Kong after passing the Medical Council of Hong Kong's licensing examination and completing a period of assessment of normally 12 months in an approved hospital. Non-locally trained specialist doctors who have passed the licensing examination and have a specialist qualification comparable to a fellowship of the colleges under the Hong Kong Academy of Medicine can apply for exemption from the assessment period for six months.

During 2022, 33 non-locally trained doctors passed the licensing examination. Non-locally trained doctors may also work in specified institutions on a limited registration basis. Since 2018, the period of limited registration and renewal has been extended from not more than one year to not more than three years.

The Medical Registration Ordinance was amended in 2021 to create an alternative pathway for non-locally trained doctors to obtain full registration in Hong Kong. The Special Registration Committee established under the Medical Council determines a list of recognised medical qualifications of a quality comparable to those provided by the two medical schools in Hong Kong. As at end-2022, the committee had recognised 75 such medical qualifications.

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. The Hospital Authority trains specialist doctors, offering appointments to all qualified medical graduates from HKU and CUHK each year for on-the-job specialist training. In 2021-22, about 420 doctors were recruited for specialist training. Around 300 doctors were awarded specialist qualifications by the academy in 2022.

Dentists

HKU offers degree courses in dentistry, admitting 90 students to its bachelor's degree programme in 2022, while 23 non-locally trained dental graduates passed licensing examinations conducted by the Dental Council of Hong Kong.

Chinese Medicine Practitioners

HKBU, CUHK and HKU offer full-time undergraduate degree courses in Chinese medicine. In 2022, 82 full-time local bachelor's degree graduates who passed the licensing examination were registered as Chinese medicine practitioners.

The Hospital Authority implements the Chinese Medicine Practitioner Trainee Programme at the 18 Chinese Medicine Clinics cum Training and Research Centres, which provides 216 training places for Chinese medicine practitioner trainees, including 72 places for the first year of training.

Allied Health Professionals

Caritas Institute of Higher Education (CIHE), Hong Kong Metropolitan University (HKMU), Hong Kong Polytechnic University (PolyU) and Tung Wah College (TWC) offer degree programmes for allied health professionals. In 2022, the four institutions admitted a total of 821 students to their degree programmes in physiotherapy, radiography/radiation therapy, occupational therapy, medical laboratory science and optometry. The degree programmes offered by PolyU are publicly funded, while those at CIHE, HKMU and TWC are self-financing and students are eligible for government subsidies. Professional accreditation for the physiotherapy degree programmes offered by TWC was completed in 2022 and that for CIHE and HKMU is in progress.

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, and clinical and personal development. These include three years of in-service training for new recruits of allied health grades. In 2022, the institute offered 103 training courses.

Nurses

CIHE, CUHK, HKBU, HKU, HKMU, PolyU, TWC and Hong Kong Sanatorium and Hospital (HKSH) provide pre-registration nursing training. They recruited 2,427 students into their nursing degree programmes in 2022. HKU, CUHK and PolyU enrolled another 147 students in their Master's Degree of Nursing programmes.

HKSH, St Teresa's Hospital, Union Hospital, TWC and CIHE provide pre-enrolment nursing training. They recruited 452 pupil nurses into their two-year Higher Diploma in Enrolled Nurse (General) programmes in 2022. HKMU enrolled 280 and 60 pupils in its two-year Higher Diploma in General Health and Higher Diploma in Mental Health Nursing programmes respectively.

Six nurses with professional nursing qualifications obtained outside Hong Kong passed the Nursing Council of Hong Kong's licensing examinations and received practising certificates for registered nurses or enrolled nurses.

Government-subsidised, self-financing undergraduate programmes in nursing offered 1,200 places in 2021-22.

The Hospital Authority's four-year Professional Diploma in Nursing programme provides pre-registration nursing training and enrolled 300 students in 2022. Another 100 pupil nurses were admitted to its two-year pre-enrolment nursing training programme.

The authority's Institute of Advanced Nursing Studies strengthens specialty training for nurses and encourages them to improve professional standards through continuous learning. New graduates undergo simulation training to strengthen their competence and skills in clinical care and medical emergencies.

Healthcare Professional Training

To tackle future shortages in healthcare professionals, additional government funding was announced in the 2022-23 Budget, which will go toward more subsidies for students to enrol in healthcare postgraduate programmes, more designated places on a subsidy scheme for undergraduate healthcare programmes and waiving clinical practicum training fees paid by tertiary institutions.

An additional \$10 billion was set aside to upgrade teaching facilities at HKU, CUHK and PolyU, which will result in about 900 more healthcare training places.

Regulatory Activities

Western Medicines

Western medicines, including advanced therapy products, are regulated in Hong Kong under the Pharmacy and Poisons Ordinance. Acting on the authority of the Pharmacy and Poisons Board, the department provides support to the board in evaluating and approving applications to register pharmaceutical products and issuing licences to drug manufacturers, wholesalers and retailers. The department's Drug Office takes action against the illegal sale of controlled drugs and enforces regulatory controls on poisons, antibiotics and dangerous drugs for medicinal use.

In 2022, the board approved 2,878 applications to register pharmaceutical products. As at the year end, 14,704 pharmaceutical products were registered.

With effect from 1 November, the board added the Mainland, Brazil, Korea and Singapore to the list of reference places for registration of pharmaceutical products containing new chemical or biological entities. Products registered by the drug regulatory authorities of these places that meet relevant registration requirements will be approved for registration in Hong Kong.

Chinese Medicines

Chinese medicines are regulated under the Chinese Medicine Ordinance, which requires any person engaged in the retail or wholesale of Chinese herbal medicines or the manufacture or wholesale of proprietary Chinese medicines to obtain a licence.

The Chinese Medicine Council of Hong Kong is the statutory body that devises and implements regulatory measures for Chinese medicines. All proprietary Chinese medicines must be registered before they can be sold, imported or possessed in Hong Kong. As at end-2022, there were 7,902 licensed Chinese medicine traders, including 22 holding the Certificate for Manufacturer; 3,817 proprietary Chinese medicines with transitional registration status; and 4,278 with a Certificate of Registration of proprietary Chinese medicines.

The Hong Kong Chinese Materia Medica Standards Project aims to ensure the safety and quality of common Chinese herbal medicines. It is supported by local universities and overseas and Mainland experts. As at end-2022, the department had released reference standards for 330 commonly used Chinese herbal medicines under the project.

The department's Chinese Medicine Regulatory Office, which is designated by the WHO as a WHO Collaborating Centre for Traditional Medicine, helps the WHO formulate policies and strategies and sets regulatory standards for traditional medicine.

Human Reproductive Technology

The Human Reproductive Technology Ordinance regulates the application of human reproductive technologies to ensure the procedures are conducted in a safe and informed manner, and to safeguard the welfare of children born through the technologies.

The Council on Human Reproductive Technology's code of practice sets out the requirements, standards and good practices for embryo researchers and reproductive technology practitioners. As at end-2022, the council had issued 40 licences, comprising 15 treatment licences, 21 artificial insemination by husband licences, three research licences and one storage licence.

Laboratory Services

Public Health Laboratory Services

The department's Public Health Laboratory Services Branch conducts laboratory tests on 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.

Laboratories of the branch's Microbiology Division are variously designated by the WHO as a National Influenza Centre, National Polio Laboratory, National Measles Laboratory, Supranational Tuberculosis Reference Laboratory, Regional Reference Laboratory for Measles and Rubella in the Western Pacific Region, Global Influenza A(H5) Reference Laboratory, Global Severe Acute Respiratory Syndrome Reference Laboratory and COVID-19 Reference Laboratory.

Private Medical Laboratories/Diagnostic Centres

Medical laboratories/diagnostic centres provide clinical diagnostic laboratory testing services to manage, prevent and treat diseases and for health assessment. The standard of the medical laboratory service is ensured through the professional regulation of medical laboratory technologists. There were 156 private laboratories in Hong Kong as of end-2022.

Websites

Accredited Registers Scheme for Healthcare Professions: www.ars.gov.hk
AIDS hotline website: www.27802211.com
Cancer Online Resource Hub: www.cancer.gov.hk
Cervical Screening Programme: www.cervicalscreening.gov.hk
Change for Health: www.change4health.gov.hk
Chinese Medicine Development Fund: www.cmdevfund.hk
Chinese Medicine Regulatory Office: www.cmro.gov.hk
Colorectal Cancer Screening Programme: www.colonscreen.gov.hk
COVID-19 thematic website: www.coronavirus.gov.hk
COVID-19 Vaccination Programme: www.covidvaccine.gov.hk
Department of Health: www.dh.gov.hk
District Health Centre: www.dhc.gov.hk
eHealth Record Office: www.eHealth.gov.hk
Health Bureau: www.healthbureau.gov.hk
Hong Kong Council on Smoking and Health: www.smokefree.hk
Hong Kong Genome Institute: www.hkqp.org
Hong Kong's Domestic Health Accounts: www.healthbureau.gov.hk/statistics/en/dha.htm
Hospital Authority: www.ha.org.hk
Oral Health Education Division: www.toothclub.gov.hk
Organ Donation: www.organdonation.gov.hk
Primary Healthcare Blueprint: www.primaryhealthcare.gov.hk
Red Ribbon Centre: www.rrc.gov.hk
School Dental Care Service: www.schooldental.gov.hk
Shall We Talk initiative: www.shallwetalk.hk/en/
Travel Health Service: www.travelhealth.gov.hk
Viral Hepatitis Control Office: www.hepatitis.gov.hk
Virtual AIDS Office: www.aids.gov.hk
Voluntary Health Insurance Scheme Office: www.vhis.gov.hk