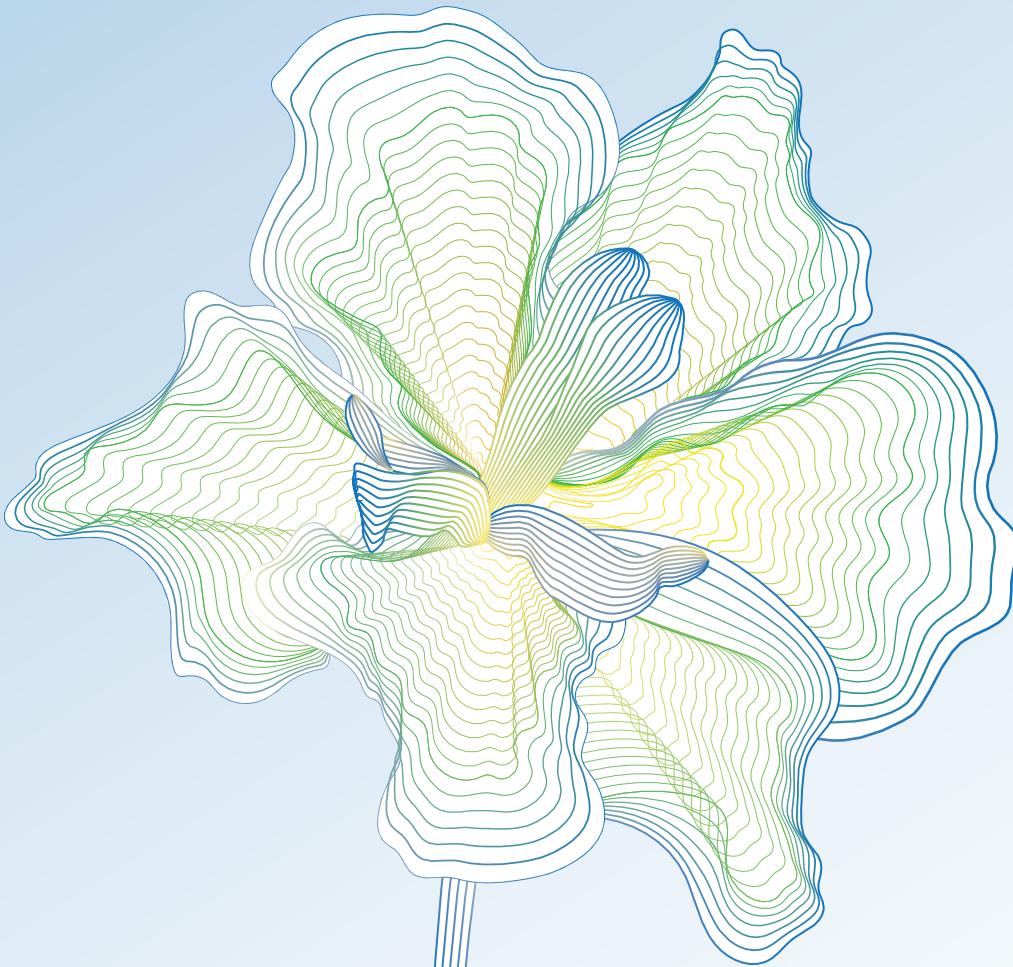


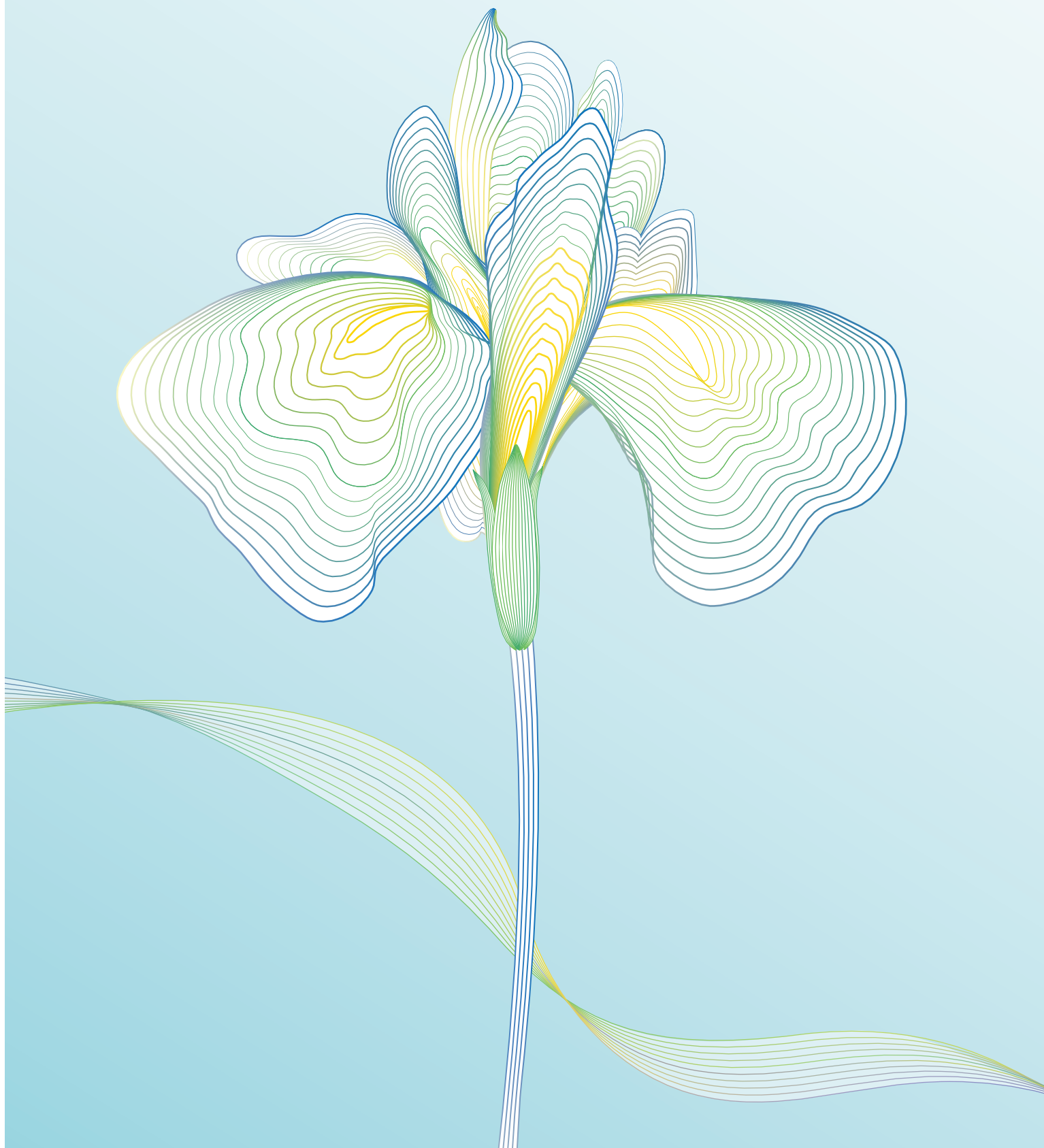


醫院管理局
HOSPITAL
AUTHORITY

ANNUAL PLAN 2021-22



About this Document



The annual plan is the action plan of the Hospital Authority (HA) for a specific financial year. It sets out the major goals, work plans and programme targets of the Head Office and seven Clusters.

Our service targets and activity throughput are delineated in the plan to facilitate the public in monitoring HA's performance. Also included is an overview of manpower estimates and budget allocation, illustrating the resources required for carrying out our work plan.



VISION

Healthy People
Happy Staff
Trusted by the Community



MISSION

Helping People
Stay Healthy



VALUES

People-centred Care
Professional Service
Committed Staff
Teamwork

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Introduction from Chief Executive

The Hospital Authority (HA) plans its services strategically and in a prudent manner, according to demographic changes as well as the rising service demand in Hong Kong. The COVID-19 pandemic has incurred major impact on our healthcare services, which has inevitably brought about adjustments in HA's service provision. Protecting the health and lives of the community and our staff is our highest priority. My deepest gratitude goes to all fellow colleagues for their selfless dedication in combating this unprecedented pandemic, and to the care of our patients.

HA can only succeed in enhancing the capacity and quality of public healthcare services with the continuous financial support from the Government. HA has updated its medium-term financial projection to estimate the need for additional funding to cope with population-driven demand growth. Planning for 2021-22 marks a new phase as we are entering the second triennial funding arrangement for 2021-22 to 2023-24. We are grateful for the Government's commitment to this arrangement in enhancing HA's services provision. The recurrent provision to HA for 2021-22 amounts to \$80.7 billion. Around 103 initiatives will be implemented through this Annual Plan to strengthen HA's services. We would also like to thank the Government for the additional funding support to HA to combat the COVID-19 pandemic.

With the additional recurrent funding provision, HA will continue to enhance its services to meet the escalating demand. In line with the Hong Kong Cancer Strategy rolled out by the Government in 2019, HA will strengthen cancer services by recruiting additional case managers, along with developing service model for providing one-stop diagnostic service to streamline and expedite diagnosis through coordination and collaboration between different specialties and disciplines.

Meanwhile, HA will continue to build up its capacity through phased service expansion of the Tin Shui Wai Hospital and commissioning of the new hospital block at Haven of Hope Hospital. A total of approximately 300 additional hospital beds will be provided across Clusters. At the same time, HA is also committed to clinical technological advancement for delivering modernised and quality care. The roles of genetics and genomic medicine will be further strengthened by the provision of enhanced prenatal diagnosis for selected high risk cases. New genomic technological platforms will also be established to better monitor disease status. HA will continue to support the care for patients with uncommon disorders and genetic disorders at the Hong Kong Children's Hospital.

Staff retention is of utmost importance to sustain our professional healthcare services. Like previous years, we will continue to implement a series of initiatives for attracting and retaining staff. Examples include continuing and enhancing the Limited Registration recruitment scheme for doctors and locum recruitment. During 2021-22, we plan to recruit around 480 doctors, 2 640 nurses and 800 allied health professionals.

Looking ahead, HA will continue to endeavor to safeguard the well-being of the community through the provision of a comprehensive range of public healthcare services. I would like to take this opportunity to show my earnest appreciation to all of our devoted staff again, who has worked in unity to deliver professional and quality services amidst this difficult moment under the pandemic.



Tony Ko
Chief Executive

Planning Context

This annual plan outlines the specific actions for the fifth year implementation of HA Strategic Plan 2017-2022.

Strategic Plan 2017-2022

The Strategic Plan 2017-2022 sets out the strategies and directions for addressing our key challenges over the five-year period. It is the overarching document for service and development planning throughout HA. This five-year plan is translated to action through five Annual Plans developed annually over that period.

The Annual Plan 2021-22 is the fifth action plan derived from the HA Strategic Plan 2017-2022. The planning process for this Annual Plan began in 2020. The priorities of the annual planning process are guided by the strategic directions outlined in the HA Strategic Plan. Resources will be allocated to specific programmes through the process.

Planning Process

Annual planning refers to the service and budget planning process where proposals undergo prioritisation, resource bidding and allocation.

Programmes or initiatives delineated in Annual Plan 2021-22 are the syntheses of detailed service and budget planning conducted throughout the HA. The annual planning process involves a broadly participative approach. Clusters and Head Office Divisions converge and plan prospectively for HA's service provision for the coming financial year.

Taking reference to the priorities set out in the Strategic Plan, Clinical Coordinating Committees and Central Committees (COC/CCs) of the different clinical specialties, Cluster management and Head Office executives identified service gaps and pressure areas. From this, service enhancement programmes were formulated and endorsement was sought at their respective platforms; including the Service Management Meeting, Medical Policy Group, Directors' Meeting, Hospital Governing Committee, and clusters' internal forum.

In view of the development of Coronavirus Disease (COVID-19) pandemic, the Annual Planning Forums for 2021-22 were cancelled. It is an annual event which would normally be organised for subject officers to present all potential new programmes and initiatives. Despite the Forums were cancelled, input and comments were sought through the coordination of Clusters' Annual Plan Coordinators and Head Office subject officers.

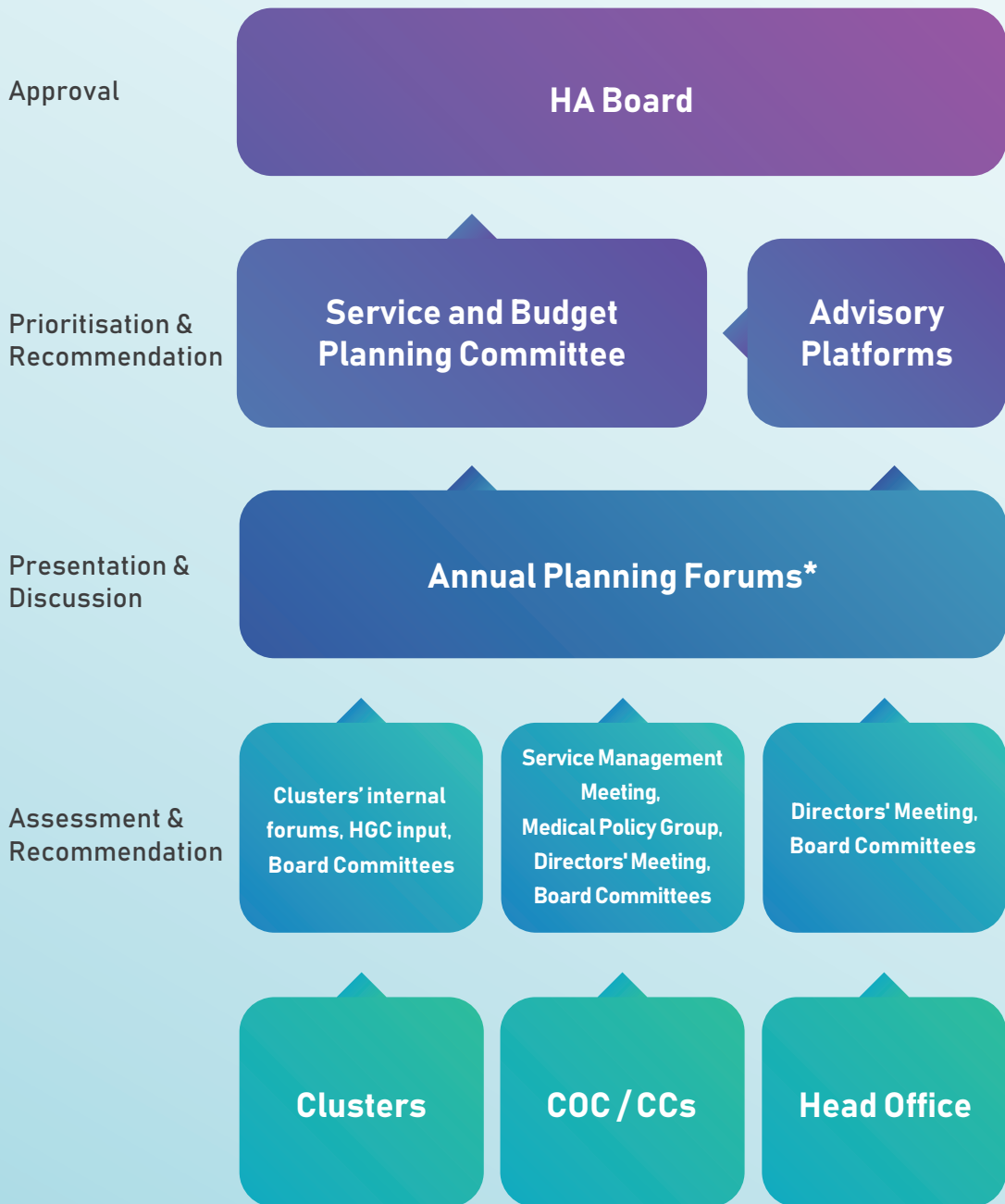
All proposals were then submitted to the Service and Budget Planning Committee (SBPC) for prioritisation and budget consideration. The SBPC was chaired by the Chief Executive with all the Directors, Heads and Cluster Chief Executives acting as members. Prioritisation was guided by HA's strategic priorities and service directions, the operational readiness of proposed programmes, and the government's healthcare priorities. Advice was also sought from the following advisory platforms as input to the prioritisation:

- **Medical Policy Group (MPG)** advised on the clinical merits of the clinical proposals, in terms of evidence as well as clinical needs and impact. The MPG comprised the chairmen of all the COCs.
- **Annual Plan Preparatory (APP) meeting** advised on the proposals' feasibility and readiness for implementation. Participants of the meeting were subject officers of the COC/CCs as well as Head Office Chief Managers and executives.

- **Drug Management Committee (DMC)** advised on the drug components in those proposals that involved the repositioning of drugs or widening use of drugs in the HA Drug Formulary.
- **Committee on IT** advised on proposals that required IT support.

After thorough deliberation and prioritisation by the SBPC, approved new programmes were incorporated in the Annual Plan along with programme targets established for 2021-22. Following endorsement by the HA Board, the Annual Plan was approved, published and disseminated. Programme targets will be monitored by the Board on a quarterly basis between April 2021 and March 2022.

The overall process and governance structure of the annual planning exercise are illustrated in the diagram below:



* In view of the development of Coronavirus Disease (COVID-19) pandemic, the Annual Planning Forums for 2021-22 were cancelled.

Policy directions and consensus for the Annual Plan were also obtained from the HA Board Functional Committees. They provided inputs in various forms to the development of the programmes. Examples included:

- The clinical programmes were formulated according to the developmental priorities recommended by the **Medical Services Development Committee**.
- Business support programmes that included equipment and capital works projects were advised by the **Supporting Services Development Committee**.
- Programmes related to IT development were endorsed by the **Information Technology Services Governing Committee**.
- Staff-related initiatives were deliberated by the **Human Resources Committee**.
- Clusters' programmes were developed under the guidance of the various **Hospital Governing Committees**.

Views of patient groups were collected from representatives of HA and various Non-Governmental Organisations (NGOs) through the Patient Advisory Committee (PAC). The PAC provided written comments on the Annual Plan for consideration.

Annual Plan Framework

The framework of Annual Plan 2021-22 comprises strategic goals, strategic directions, strategies and programme targets.

The strategic goals, strategic directions and strategies are as delineated in Strategic Plan 2017-2022. They are in accordance with the following three strategic foci:

- (1) Provide patient-centred care
- (2) Develop a committed and competent workforce
- (3) Enhance financial sustainability

Strategic goals set out objective goals of the HA. Strategic directions outline the broad directions for achieving the intended goals. Strategies map out what plan of action to achieve the goals. Specific programme outlines the actions for carrying out the strategies. Targets represent the measurable outcomes for programme monitoring and accountability reporting.

There are five strategic goals in the **Annual Plan 2021-22**:

Provide Patient-centred Care

- Improve service quality
- Optimise demand management

Develop a Committed and Competent Workforce

- Attract and retain staff
- Enhance staff training and development

Enhance Financial Sustainability

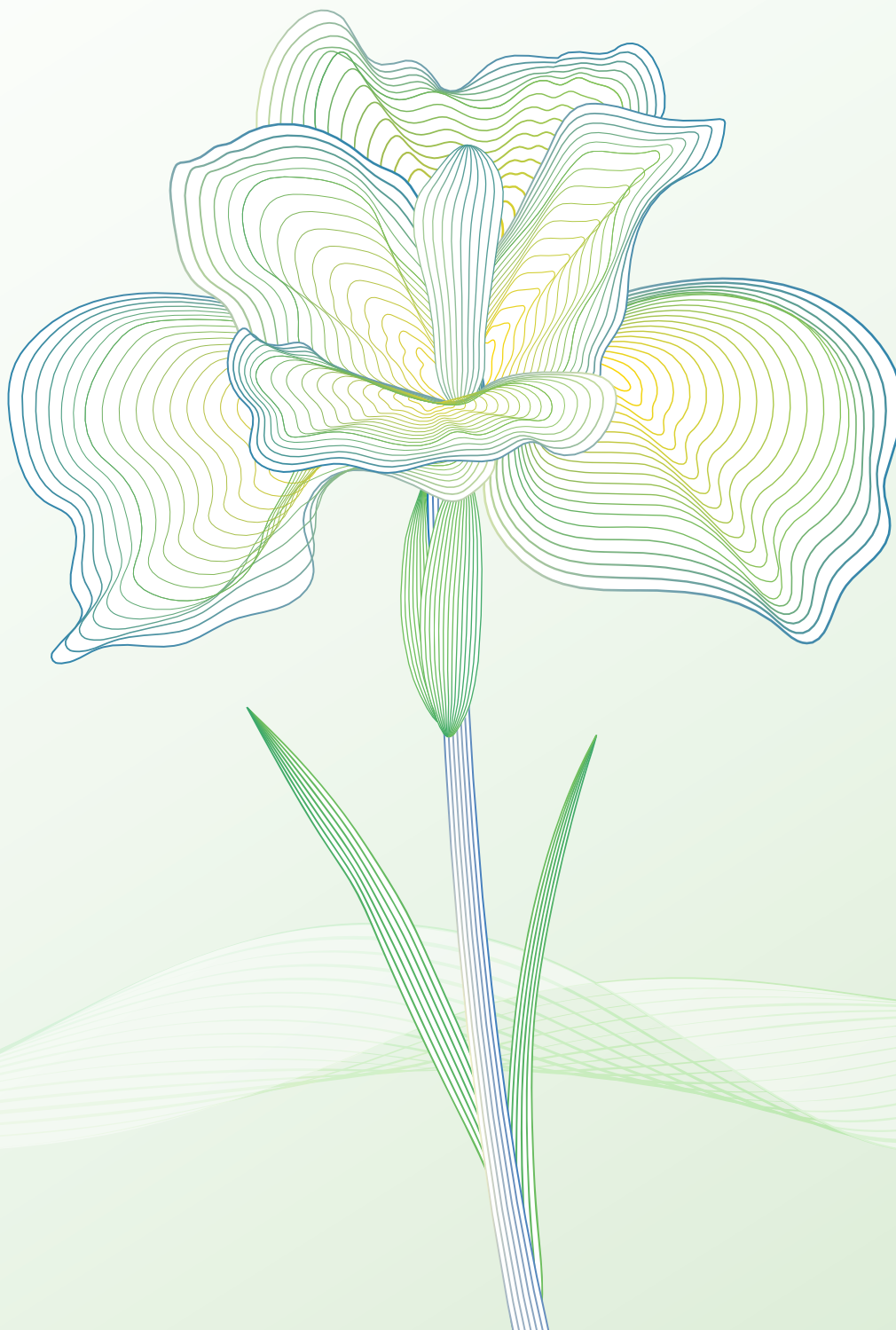
- Drive accountable and efficient use of financial resources

In addition, the strategic directions discussed in the Task Group on Sustainability (Task Group) in the priority areas are also considered, which includes manpower retention, hardware and software development, smart hospitals, waiting time of specialist outpatient clinics and Public-Private-Partnership Programme.


Framework of Annual Plan 2021-22

Strategic Goals (What we want to achieve)	Strategic Directions (Where we are going)	Strategies (How we get there)
Improve service quality	Enhance access & efficiency	Promote day services
		Strengthen service coordination & collaboration
		Develop more options for patient care
		Enhance community-based care
	Modernise HA	Refine technology planning and adoption to keep up with international standards
Optimise demand management	Raise the capacity of priority services	Increase capacity of high demand services
	Roll out service enhancements for time-critical care	
	Share out the demand	Reinforce Public-Private Partnerships (PPP)
Attract & retain staff	Improve staff management	Facilitate flexible working
		Develop structured succession planning
	Promote staff engagement & well-being	Develop ways to better engage & communicate with staff
	Foster staff health & a safe working environment	Reinforce ways to support the health of staff Strengthen Occupational Safety and Health
Enhance staff training & development	Strengthen training governance & policy	Establish a mechanism to align training with career development
	Improve training quality	Develop a quality assurance framework & raise staff training opportunities
Drive accountable & efficient use of financial resources	Improve financial planning	Refine HA's financial projection model

Strategic Goals and Programme Targets



In Annual Plan 2021-22, we map out five Strategic Goals and 17 Strategies with the corresponding Programme Targets that reflect the work we do to implement the five-year Strategic Plan.

This chapter delineates 103 of our programme targets. Other programme targets, specific to individual Cluster or Head Office division, are presented in the sections under **Cluster Plans** and **Head Office Plan** respectively. Approximately one eighth of the programmes listed here are new initiatives, while others are ongoing programmes or a continuation of previous years' initiatives. New initiatives are highlighted with the symbol  for easy reference.

Improve Service Quality

Our strategies for 2021-22

- Promote day services
- Strengthen service coordination and collaboration
- Develop more options for patient care
- Enhance community-based care
- Refine technology planning and adoption to keep up with international standards
- Empower patients for self-care

Promote day services

Action	Target for 2021-22
Provide additional day beds to relieve the reliance on inpatient care.	Provide 25 additional day beds at TKOH, 15 at AHNH, 15 at TSWH by 4Q21.
Strengthen ambulatory care services.	Set up an ambulatory center for ophthalmology service at TWEH by 3Q21; provide five additional Operating Theatre (OT) sessions per week at TKOH by 4Q21; extend the service hours of the surgical day ward at QEH by 1Q22.
Enhance the capacity of ambulatory care services at NTEC.	Implement the ambulatory care model in Accident & Emergency (A&E) department of PWH and NDH; and set up a medical ambulatory care centre at AHNH by 4Q21; provide services for 1 160 additional day patients attendances for ambulatory urological procedures at NTEC by 1Q22.
Enhance the provision of Child & Adolescent (C&A) psychiatry day services.	Provide five additional psychiatric day hospital places at KH by 1Q22; and five psychiatric day places at PYNEH by 1Q22.

Action	Target for 2021-22
Enhance the provision of day rehabilitation and allied health services.	Establish integrated ambulatory rehabilitation service at TSKH by 3Q21; provide services for additional rehabilitation day attendances of 2 700 at TSKH and 720 at KH; and provide an additional total of 1 760 attendances for allied health services at GH by 1Q22.
Enhance Outpatient Parenteral Antimicrobial Therapy (OPAT) service capacity for appropriate patients to reduce length of stay.	Provide OPAT services for 700 additional attendances at KEC by 1Q22.

Strengthen service coordination and collaboration


Action	Target for 2021-22
Enhance the collaboration among specialties by adopting the integrated care model.	Set up the integrated care team for urology and continence care at KEC by 1Q22.
Improve standard of care for patients on Non-Invasive Ventilation or Invasive Mechanical Ventilation by adopting a mobile respiratory team approach.	Set up a mobile team at UCH to provide respiratory care to patients in the medical wards by 1Q22.
Continue to expand restorative rehabilitation services to weekends and public holidays for patients with lower limb fracture or arthroplasties in acute setting and stroke patients in extended care settings.	Roll out the programme to TWH, WTSH, TKOH, NDH, providing services for an additional total of 4 600 physiotherapy and 2 300 occupational therapy attendances during weekends and public holidays by 1Q22.

Action	Target for 2021-22
Enhance physiotherapy outpatient services by continuing the stratified care management for patients with low back pain.	Provide services with stratified care management for 4 400 additional physiotherapy outpatient attendances at QEH and CMC by 1Q22.
Reinforce the multidisciplinary adult Palliative Care (PC) services for cancer and non-cancer PC patients.	Enhance PC consultative service to provide services for 650 additional consultative visits at KWC by 1Q22; enhance collaboration of PC services at NTWC by 1Q22.
Implement the collaborative care model between paediatrics and C&A psychiatry departments to provide better care management and timely treatment for patients with mild Attention Deficit Hyperactivity Disorder.	Implement the collaborative care model at KWC to provide services for 180 additional Specialist Outpatient Clinic (SOPC) new case attendances by 1Q22.
Enhance infectious disease services by expanding service coverage and improving coordination.	Establish cluster-based, infectious disease networks at HKEC, HKWC, KCC, KWC and NTEC by 1Q22.
Continue the cross-cluster collaboration on Robotic Assisted Surgery (RAS) so that surgeons in Clusters with no robotic surgery equipment have access to the technology.	Conduct a total of 64 sessions of cross-cluster RAS at PYNEH, QMH, QEH, PMH and PWH by 1Q22.
Enhance the HA's complaints management system to ensure long term sustainability and strengthen collaboration between Head Office and Clusters.	Establish cluster-based patient relations office structure at KWC and NTWC by 2Q21.

Develop more options for patient care

Action	Target for 2021-22
<p>Enhance nurse clinic services in rheumatology (rheumatoid arthritis), respiratory (chronic obstructive pulmonary disease), paediatrics (neonatal jaundice), colorectal care, ophthalmology (cataract surgery), otorhinolaryngology (for hearing problems) and set up nurse clinics in total joint replacement, pain management, neurosurgery, gastroenterology (inflammatory bowel disease) and endocrinology (osteoporosis) to alleviate doctors' workload by adopting the integrated model of SOP service.</p>	<p>Recruit additional Advanced Practice Nurses (APNs) and Patient Care Assistants (PCAs) to establish or scale up 30 nurse clinics to provide services for 19 620 additional attendances across Clusters by 1Q22.</p>
<p>Provide the advanced wound management services to address the complicated wound care needs.</p>	<p>Provide services for 2 000 additional wound consultations by nurse at NTEC by 1Q22.</p>
<p>Implement the integrated model of SOP service for systemic anti-cancer therapy through pharmacist clinics and nurse clinics.</p>	<p>Provide services for an additional total of 1 620 nurse clinic attendances at HKEC, KCC and KWC and 1 440 pharmacist clinic attendances at HKEC and KCC by 1Q22.</p>
<p>Continue to improve obstetric care by the provision of maternal special care beds in the labour ward and high-risk pregnancy care training for nursing staff.</p>	<p>Designate one maternal special care bed in the labour ward and recruit two Registered Nurses (RNs) for training and providing high-risk pregnancy care at PYNEH, QEH and UCH respectively by 1Q22.</p>






Action	Target for 2021-22
Extend structured, non-surgical treatment programme to optimise the physical function of patients waiting for total joint replacement surgery by using a case management approach.	Provide physiotherapy services for 7 200 additional outpatient attendances to patients on waiting list for total joint replacement surgery at QEH, PWH and POH under this programme by 1Q22.
Strengthen allied health support for the collaborative model implemented between the O&T department and the Family Medicine Specialist Clinic (FMSC) to relieve workload of SOPC.	Provide services for an additional total of 10 800 allied health outpatient attendances to support patients referred by O&T under the collaborative model at KEC and NTEC by 1Q22.
Modernise the treatments of ophthalmology services by providing intravitreal injection services and intraocular lens in HA.	 Enhance capacity by providing services for an additional total of 2 230 intravitreal injections across HKEC, KCC and KWC by 1Q22; and provide the basic intraocular lens models and viscoelastic agent for patients by 1Q22.
Enhance geriatric support for elderly patients attending A&E Department.	Enhance geriatric support by providing services for 3 000 additional focused geriatric assessments at A&E departments of PYNEH, QEH, KWH and UCH by 1Q22.
Develop Integrated Chinese-Western Medicine through specific disease programmes in selected hospitals of HA.	Introduce a new site for stroke care at UCH and continue the Integrated Chinese-Western Medicine programme for stroke care at TWH, PWH and SH; cancer palliative care at PMH and TMH; and musculoskeletal pain management at PYNEH and KWH with service enhancement by 1Q22.



Enhance community-based care

Action	Target for 2021-22
Continue to enhance the transitional post-discharge support for patients.	Continue to provide services for 450 additional needs assessments and discharge planning, 1 080 home visits for elderly patients at NTWC; and 500 additional post-discharge follow-up call at UCH by 1Q22.
Continue to enhance the Community Geriatric Assessment Team (CGAT) support for terminally ill patients in Residential Care Homes for the Elderly (RCHEs).	Provide services for 5 600 additional geriatric outreach attendances by 1Q22.
Enhance the service of Patient Support Call Centre (PSCC), which provides professional telephone advice to support discharged, elderly patients and chronic disease patients in the community.	Provide services for 5 500 additional calls at the PSCC by 1Q22.
Continue to enhance the multidisciplinary support for the provision of psychogeriatric outreach service to patients living in RCHEs.	Provide services for 3 780 additional psychogeriatric outreach attendances at HKWC, KCC, KWC and NTWC by 1Q22.
Expand the programme of the school-based medical-education-social collaboration platform, set up under the Student Mental Health Support Scheme, in collaboration with the Education Bureau and Social Welfare Department to enhance support for students with mental health needs.	Expand the programme to additional schools by 1Q22.

Action	Target for 2021-22
Enhance Community Psychiatric Service (CPS) to further increase the support for mental health patients in the community under the Personalised Care Programme.	Recruit additional case managers at HKEC, HKWC, KEC, KWC, NTEC and NTWC to provide services for an additional total of 3 000 psychiatric outreach attendances by 1Q22.

Refine technology planning and adoption to keep up with international standards

Action	Target for 2021-22
Continue to modernise the genetic and genomic services of HA. 	Build capacity by providing an additional total of 300 tests for minimal residual disease assays and next-generation sequencing panels for adult with myeloid blood cancers at QMH, QEH and PWH by 1Q22. Build capacity by providing an additional total of 2 800 pharmacogenetic tests across Clusters by 1Q22.
Support comprehensive service planning for patients with uncommon disorders and genetic disorders at HKCH. 	Build capacity on genomic and genetic tests and establish disease-based databases and information platform for uncommon disorders by phases at HKCH by 1Q22.
Enhance the prenatal diagnosis by providing Whole Exome Sequencing (WES) or Whole Genome Sequencing (WGS) services. 	Provide services for WES or WGS to 20 special prenatal cases by 1Q22.

Action	Target for 2021-22
Pilot the newborn screening programme for Severe Combined Immunodeficiency (SCID) by recruiting the newborns in all birthing hospitals of HA. 	Provide screening tests with capacity up to 25 000 under the newborn screening programme for SCID at HKCH by 1Q22.
Reduce the recall rate of the newborn screening programme for Inborn Errors of Metabolism (IEM) by extending the second tier testing.	Extend the second tier testing for the newborn screening programme for IEM at HKCH by 1Q22.
Establish robotic surgery services at more hospitals of HA.	Set up a robotic surgery suite at TKOH; and prepare the site for installation of an additional robotic surgery system at TMH by 1Q22.
Modernise radiotherapy planning and treatment by acquiring a Magnetic Resonance (MR) simulator at HA. 	Install an additional MR-simulator at TMH by 1Q22.
Optimise surgical planning by adopting medical grade three-dimensional printing.	Adopt medical grade three-dimensional printing technology to provide services at HKWC, KCC, NTEC and NTWC by 1Q22.
Enhance medical device management by aligning the provision of medical devices used in 109 interventional procedures under specific clinical indications.	Provide additional medical devices used in interventional procedures under specific clinical indications by 2Q21.
Expand the drug access in HA by improving the alignment of the HA Drug Formulary with current clinical evidence and international guidelines on the use of drugs.	Widen the indications of Special Drugs and reclassify Self-financed Drugs as Special Drugs for managing cancers, cardiovascular, multiple sclerosis, diabetes mellitus, tuberous sclerosis complex, genito-urinary and renal diseases by 2Q21.

Action	Target for 2021-22
Modernise the treatment for patients with Glioblastoma Multiforme (GBM) by providing Tumor Treating Field (TTF) therapy.	Provide TTF therapy to patients with GBM across Clusters by 1Q22.

Empower patients for self-care

Action	Target for 2021-22
Continue to collaborate with Non-Governmental Organisations (NGOs) to empower patients with chronic diseases and enhance their knowledge and self-care capabilities.	Provide places for 14 000 participants under the Patient Empowerment Programme by 1Q22.

Optimise Demand Management

Our strategies for 2021-22

- Increase capacity of high demand services
- Roll out service enhancements for time-critical care
- Reinforce Public-Private Partnerships (PPP)


Increase capacity of high demand services

Action	Target for 2021-22
Enhance the capacity of inpatient services at HKEC.	Provide one additional Intensive Care Unit (ICU) bed at PYNEH by 3Q21.
Enhance the capacity of inpatient services at KCC.	Provide one additional ICU bed and two additional High Dependency Unit (HDU) beds at QEH by 4Q21.
Enhance the capacity of inpatient services at KEC.	Provide an additional of one ICU bed, 10 acute beds at TKOH and 40 extended care beds at HHH by 3Q21.
Enhance the capacity of inpatient services at KWC.	Provide additional HDU beds, two at PMH and two at CMC by 4Q21; provide additional acute beds, 20 at PMH and 20 at CMC by 4Q21.
Enhance the capacity of inpatient services at NTEC.	Provide additional acute beds, 50 at PWH and 13 at NDH by 4Q21; provide one ICU bed at NDH and 28 psychiatric beds at TPH by 4Q21.
Enhance the capacity inpatient services at NTWC.	Provide an additional of one HDU bed, two ICU beds and 12 acute beds at TMH by 4Q21; 10 acute beds at POH and 40 extended care beds at TSWH by 4Q21.

Action	Target for 2021-22
Continue to enhance the capacity of OT services.	Provide 17 additional OT sessions per week, including six at PMH, two at AHNH, four at PWH by 4Q21 and five at NTWC by 1Q22.
Continue to improve peri-operative management of elderly patients with acute fragility fractures by providing additional OT sessions during day time.	Provide five additional OT sessions per week to the day-time trauma list for geriatric patients with acute fragility fracture at YCH, and set up acute geriatric fragility fracture nursing coordination services at YCH and NDH by 1Q22.
Continue to enhance the capacity of endoscopy services.	Provide an additional total of 31 sessions per week for endoscopic procedures at KCC, KEC, NTEC and NTWC by 1Q22.
Commence the operation of HKCH in phases, to provide territory-wide services for paediatric patients with complex and rare conditions under the hub-and-spoke model.	Provide six additional OT sessions per week by 3Q21, as well as enhancing pharmacy and pathology services at HKCH by 1Q22.
Continue to improve the outcome for surgical patients by commencing the Enhanced Recovery After Surgery (ERAS) programme.	Implement the ERAS programme for selected specialties at PWH, NDH by 4Q21, PYNEH and RH by 1Q22.
Continue to enhance the service capacity of General Outpatient Clinic (GOPC) to improve the access for major service users.	Increase the GOPC quota by a total of around 12 800 at KEC, NTEC and NTWC by 1Q22.
Enhance SOPC service capacity in various Clusters.	Provide services for an additional total of 3 320 SOPC new case attendances across all Clusters by 1Q22.

Action	Target for 2021-22
Enhance the multidisciplinary support for sleep service under a 24-hour integrated model.	Conduct 800 additional sleep studies at HKWC by 1Q22.
Enhance management of viral hepatitis by building up laboratory capacity for diagnosis, assessment and monitoring, and setting up hepatitis nurse clinics.	Enhance laboratory capacity by providing an additional of 5 500 hepatitis related tests; and set up additional hepatitis nurse clinics by 1Q22.
Enhance the service capacity of the laboratory testing services of HA.	Enhance laboratory capacity by providing services for an additional of 2 330 neuronal antibody tests; 4 760 prostate health index tests and 2 620 interferon gamma releasing assay tests by 1Q22.
Continue to enhance the capacity of radiology services.	Provide services for an additional total of 1 710 attendances for Magnetic Resonance Imaging (MRI) scan at HKCH, PMH, NDH and install an additional MRI scanner at PWH by 1Q22. Provide services for an additional total of 980 attendances for Computed Tomography (CT) scan at KWC; and install an additional CT scanner at AHNH by 1Q22. Provide services for an additional of 175 diagnostic and angiography attendances at PYNEH; 5 510 attendances for ultrasound scan at PYNEH, HKCH and UCH by 1Q22. Provide two additional X-ray sessions per week at CCH by 1Q22.

Action	Target for 2021-22
Continue to enhance pharmacy services in support of enhanced clinical services.	Implement clinical pharmacy services on discharge medication management for patients admitted to acute medical wards at PYNEH, QEH, PWH and TMH by 4Q21, as well as launching the drug refill services at selected hospitals in HKWC, KEC and KWC by 1Q22. Provide 1 600 additional medication therapy management clinic attendances at TWEH by 1Q22.
Enhance cancer treatments to meet service demand.	Commence the home ambulatory chemotherapy service at PYNEH by 2Q21; and enhance the ambulatory chemotherapy service at KEC by 1Q22. Extend the service hours of radiotherapy at PYNEH, QEH, PMH and PWH; enhance the non-radiotherapy oncology service at KWH; and medical oncology service at HKWC and KCC by 1Q22. Enhance capacity by providing 7 230 additional laboratory tests to support the targeted therapy or immunotherapy for lung cancer patients by 1Q22.
Provide integrated care for cancer services.	Set up one-stop diagnostic services and multidisciplinary clinic for patients suspected of lung cancer at KWC; enhance the multidisciplinary team support for patients with breast cancer at HKEC, HKWC and KEC by 1Q22.

Action	Target for 2021-22
<p>Enhance the quality of cancer service by providing coordinated, patient-centred care through the Cancer Case Manager (CCM) Programme.</p>	<p>Extend the CCM Programme to provide services for an additional total of 480 patients newly diagnosed with haematological cancer, gynaecological cancer or musculoskeletal tumour across Clusters by 1Q22.</p>
<p>Enhance renal services, and continue to expand the capacity of renal replacement therapy for patients with end-stage renal disease to improve their health outcomes. A total of 1153 hospital haemodialysis places have been provided by 2020-21.</p>	<p> Provide an additional total of 41 hospital haemodialysis places across Clusters; install four additional HD stations at QEH and four at PMH; extend the service hours of the renal day ward at PMH by 1Q22. Pilot a new generation home haemodialysis model and provide an additional total of 10 patient capacity at KEC and NTEC by 1Q22.</p>
<p>Enhance glaucoma care by increasing the frequency of Visual Field (VF) test and Optical Coherence Tomography (OCT) scan for early detection of glaucoma progression.</p>	<p>Perform an additional total of 14 890 VF tests and 22 960 OCT scans across Clusters by 1Q22.</p>

Roll out service enhancements for time-critical care

Action	Target for 2021-22
Strengthen the support to A&E departments to cope with the escalating service demand.	Enhance the service capacity of the A&E departments at QEH and PMH by 1Q22.
Expand the coverage of Primary Percutaneous Coronary Intervention (PPCI) for patients with ST-Elevation Myocardial Infarction (STEMI).	Provide 24-hour PPCI for eligible patients with STEMI at PMH and NLTH by 4Q21.
Continue to augment cardiac services by providing additional Cardiac Care Unit (CCU) beds and enhancing the service capacity of Cardiac Catheterisation Laboratory (CCL).	Provide four additional CCU beds at RH, two at POH by 4Q21; provide two additional CCU beds at PMH, four at YCH and set up a CCL at YCH by 1Q22; and provide five additional CCL sessions per week at POH by 4Q21.
Enhance vascular surgery service through setting up vascular surgery networks to provide emergency vascular surgery.	Enhance vascular surgical services at HKWC to prepare for the subsequent formation of a service network for Hong Kong Island by 1Q22.

Reinforce Public-Private Partnerships (PPP)

Action	Target for 2021-22
<p>Provide additional patient choices through selected Public-Private Partnership (PPP) programmes. These programmes include:</p> <ul style="list-style-type: none"> • Cataract Surgeries Programme, • Haemodialysis Public-Private Partnership Programme (HD PPP), • Project on Enhancing Radiological Investigation Services through Collaboration with the Private Sector (Radi Collaboration), • General Outpatient Clinic Public-Private Partnership Programme (GOPC PPP), • Provision of Infirmity Service through Public-Private Partnership (Infirmity Service PPP), • Colon Assessment Public-Private Partnership Programme (Colon PPP), and • Glaucoma Public-Private Partnership Programme (Glaucoma PPP). 	<p>Provide PPP programmes for patients, including 750 cataract surgeries, 336 haemodialysis HD places, 50 730 Radi Collaboration scans, 42 280 GOPC patient capacities, 64 beds for infirmity service, 1 800 colonoscopies and 2 000 glaucoma patient capacities by 1Q22.</p>
<p>Some new PPP programmes have been developed to divert a portion of public hospital patients to receive treatment at the private sector during COVID-19. Among all, provision of Radiotherapy Service, Trauma Operative Service Collaboration Programme and Breast Cancer Operative Service Collaboration Programme will be continued for eligible patients.</p>	<p>Provide PPP programmes for patients including 277 case capacities for radiotherapy service, 120 case capacities for trauma operative service and 120 case capacities for breast cancer operative service by 1Q22.</p>



Attract and Retain Staff

Our strategies for 2021-22

- Facilitate flexible working
- Develop structured succession planning
- Develop ways to better engage and communicate with staff
- Reinforce ways to support the health of staff
- Strengthen Occupational Safety & Health

Facilitate flexible working

Action	Target for 2021-22
Alleviate the workload of frontline doctors by recruiting additional, non-locally trained doctors under Limited Registration (LR).	Continue and enhance the LR recruitment scheme to attract and recruit more qualified, non-locally trained doctors to work in public hospitals under LR on an ongoing basis.
Continue the Special Retired and Rehire Scheme to re-employ suitable staff upon their retirement in order to retain expertise and help alleviate the manpower issues.	Implement rehiring of serving doctors, nurses and allied health staff who will leave HA in 2021-22 upon retirement or completion of contract at or beyond the normal retirement age by 1Q22.
Continue the enhancement of locum recruitment.	Enhance the executive support for the extension of locum recruitment to supporting staff and the extended service hours of locum office by 1Q22.

Develop structured succession planning

Action	Target for 2021-22
Continue to enhance career progression and promotion opportunities for doctors.	Provide additional promotion opportunities for residents and associate consultants by 1Q22.
Strengthen nursing roles in clinical care by improving clinical supervision, specialty training, promotion prospect and recruiting additional manpower.	Provide additional nurse consultant positions; enhance nursing manpower for general and psychiatric inpatient wards, labour wards, A&E, ICU, infection control, stroke and peri-operative services, as well as night and clinical supervision by 1Q22.
Attract and retain PCA/ Operational Assistant (OpA)/ Executive Assistant (EA) in inpatient wards or services by improving their career progression opportunities within HA.	Continue the annual progression exercise for PCA IIIA in inpatient wards or services on 24-hour shift, as well as for OpA IIIB in inpatient services and EA IIIA in inpatient wards by 1Q22.


Develop ways to better engage and communicate with staff

Action	Target for 2021-22
Enhance the engagement with staff by developing and implementing electronic and virtual corporate staff activities under the new normal situation. 	Pilot the HA Esports Competition and Virtual Run by 1Q22.

Reinforce ways to support the health of staff

Action	Target for 2021-22
<p>Strengthen the psychological resilience and coping skills of staff by providing diversified staff psychological services during the outbreak of COVID-19.</p> 	<p>Provide online self-help resources, tele-care (individual and group services), pre-incident or deployment briefing, crisis intervention and resilience programmes for staff by 1Q22.</p>

Strengthen Occupational Safety & Health

Action	Target for 2021-22
<p>To foster staff safety culture and improve overall Occupational Safety & Health (OSH) of HA through enhancing the full-time manpower and professional competence of OSH personnel.</p>	<p>Strengthen manpower to support the implementation of OSH initiatives at cluster and corporate level by 1Q22.</p>
<p>Strengthen the competence and knowledge of Occupational Safety Hygienist (OSHy) grade to enhance professional development.</p> 	<p>Provide training programmes for OSH professionals and general staff by 1Q22.</p>
<p>Promote staff safety culture in OSH through enhancing communications via electronic platform.</p> 	<p>Develop the OSH module in HR application for sharing OSH safety tips, news and information to staff by 4Q21.</p>

Enhance Staff Training and Development

Our strategies for 2021-22

- Establish a mechanism to align training with career development
- Develop a quality assurance framework and raise staff training opportunities

Establish a mechanism to align training with career development

Action	Target for 2021-22
Enhance the Training Information Management System (TIMS) to provide comprehensive training-related information for the management and planning of staff training programmes.	Roll out the training administration automation platform to overseas training by 1Q22.
Continue implementation of the generic competencies training series in support of grade-specific curriculums for both clinical and non-clinical grades.	Offer a full range of training programmes under Management 001, 101, 202 and 303 to enhance management capabilities of professional staff at different levels by 1Q22.
Further strengthen the competency of nursing staff in supporting terminally ill patients beyond PC setting through clinical attachments at PC units.	Provide clinical attachments for 36 nurses at PC units in settings beyond PC at HKEC, KWC and NTEC by 1Q22.
Continue with the establishment of HA Institute of Health IT and provide IT training for HA staff.	Provide training to a total of 1 700 participants on IT services by 1Q22.
Continue to reinforce the internship training in HA for local medical graduates and doctors who passed the Licensing Examination of the Medical Council of Hong Kong.	Provide internship training to all local medical graduates and overseas medical graduates who passed the Licensing Examination of the Medical Council of Hong Kong and organise mandatory orientation programme for all intakes of interns by 1Q22.

Action	Target for 2021-22
Continue to enhance the proficiency and competency of junior nurses.	Recruit 100 Full-Time Equivalent APNs as part-time clinical preceptors for junior nurses by 1Q22.
Increase throughput of HA nursing schools, conduct 18-month Midwifery programmes and encourage Enrolled Nurses (ENs) to upgrade their skills and competency to Registered Nurses (RNs) level by offering training sponsorship to the clinical practicum part of their enrolled RN Conversion Programmes.	Provide higher level of pre-registration training by enrolling 300 RN students for the HA Professional Diploma in Nursing Programme and offer pre-enrolment training places for 100 EN students; offer midwifery programmes to around 80 trainees; and offer training sponsorship to support around 220 ENs to enroll the voluntary RN Conversion Programmes by 1Q22.
Continue to implement the Training Sponsorship Programme for supporting staff to undergo ENs (General) training to enhance their career development.	Select high calibre, qualified supporting staff to undergo the two-year ENs (General) training programme by 1Q22.
Enhance training and development of legal professionals in HA to improve professional and operational competency.	Provide opportunities for all legal professional staff to attend continuing professional development courses by 1Q22.
Enhance training and development of finance division staff for professional and operational competency.	Provide opportunity for finance professional staff to attend continuing professional development courses, and continue the finance graduate trainee programme by 1Q22.
Provide a structured rotation programme for corporate communication staff in the Head Office and Clusters.	Extend the Staff Development Rotation Programme to corporate communication staff by 1Q22.

Action	Target for 2021-22
Strengthen the training on emergency response.	Sustain corporate emergency and response by recruiting Executive Partners from Clusters to second to the Infection, Emergency and Contingency Department or Head Office Major Incident Control Centre through the Executive Partnership Programme by 1Q22.
Support newly appointed Chief of Services to adapt to the new roles or functions by providing structured trainings.	 Provide a structured training curriculum and offer learning support by 2Q21.

Develop a quality assurance framework and raise staff training opportunities

Action	Target for 2021-22
Continue to sponsor overseas training of doctors, nurses, allied health and pharmacy staff.	Offer a total of around 270 overseas training scholarships to clinical staff by 1Q22.
Continue to provide more training opportunities for clinical staff to facilitate service advancement and professional development.	Sponsor around 510 simulation training classes, including crew resource management training for doctors and nurses; provide 26 specialty training and around 50 enhancement programmes for nurses, 65 specialty training or enhancement programmes for allied health professionals, 12 specialty training or enhancement programmes for pharmacy staff, and two multidisciplinary programmes for mental health service by 1Q22.

Action	Target for 2021-22
Provide training subsidy to nurses, allied health and pharmacy staff for participating in recognised service-related programmes.	Offer training subsidies to around 550 nurses and around 225 allied health and pharmacy staff by 1Q22.
Continue to strengthen training support for specialties with specialist training gaps.	Provide 62 trainee places for doctors by 1Q22.
Reinforce basic resuscitation capabilities of HA staff.	Provide a total of around 4 470 training places for formal resuscitation training to clinical staff and formal first aid training to security staff by 1Q22.
Strengthen clinical training for pharmaceutical staff in HA.	Provide three core clinical training programmes for pharmaceutical staff in HA by 1Q22.
Maintain the service level of e-Knowledge Gateway (eKG) by monitoring and reviewing coverage of the electronic journal service for delivering the latest clinical and management knowledge to staff.	Maintain the eKG journal service at the current level, taking into account the rising subscription fee of electronic journals by 1Q22.

Drive Accountable and Efficient Use of Financial Resources

Our strategies for 2021-22

- Refine HA's financial projection model

Refine HA's financial projection model

Action	Target for 2021-22
Reassess HA's future funding needs and advise the Government of HA's future resource requirements through conducting a medium-term financial projection, using the latest available information.	Provide the Government with the projected needs and resources required for public healthcare services provided by HA by 1Q22.

Service and Resource Estimates



HA planned to provide 29 851 hospital beds as at 31 March 2021 and managed about 8.76 million patient days in 2020-21¹.

HA delivers a comprehensive range of preventive, curative and rehabilitative medical services to ensure every citizen have access to affordable healthcare. As at 31 December 2020, we managed 43 public hospitals or institutions, 49 SOPCs and 73 GOPCs. The facilities are organised into seven Clusters according to geographical locations.

Service Estimates

Service Estimates for 2021-22¹

- 1.96 million inpatient and day inpatient discharge episodes*
- 2.20 million A&E attendances
- 8.09 million SOP (clinical) attendances
- 3.04 million allied health (outpatient) attendances
- 6.58 million primary care attendances
- 2.16 million community outreach visits, which include outreach medical, nursing and allied health services to support our discharged patients, in particular geriatric and psychiatric patients for rehabilitation in the community

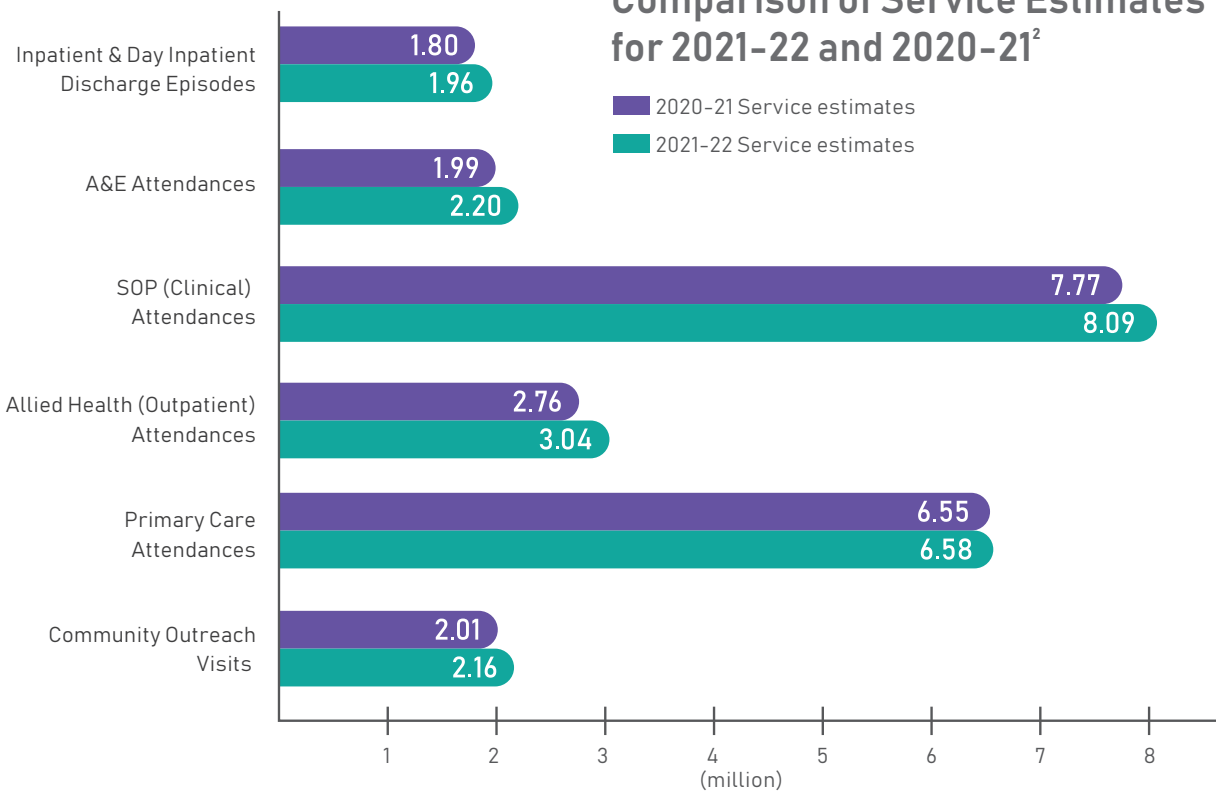
* Refers to discharges and deaths in the Controlling Officer's Report (COR). This applies to all "discharge episodes".

¹ In view of the emergence of COVID-19 pandemic in Hong Kong since early 2020, HA has adjusted its services in response to the pandemic along with tightening up infection control measures. Hence, the service throughput across a wide range of services provided by HA may be reduced when compared with that of previous years.

To meet escalating service demand arising from an ageing and growing population, HA plans to increase inpatient and day inpatient service throughput by around 9.2% in 2021-22, as compared to 2020-21². This translates into an additional of 165 610 inpatient and day inpatient discharge episodes. It is estimated that HA will increase the throughput for primary care services by 0.4%, which is an increase of 24 300 attendances to enhance medical care and disease management for elderly and patients with chronic diseases.

A comparison of HA’s estimated service throughput for 2021-22 and 2020-21 is shown in Figure 1². These and other key service statistics are delineated in Appendix 1, while Appendix 2 provides a breakdown of the service estimates by Cluster.

Figure 1
Comparison of Service Estimates for 2021-22 and 2020-21²



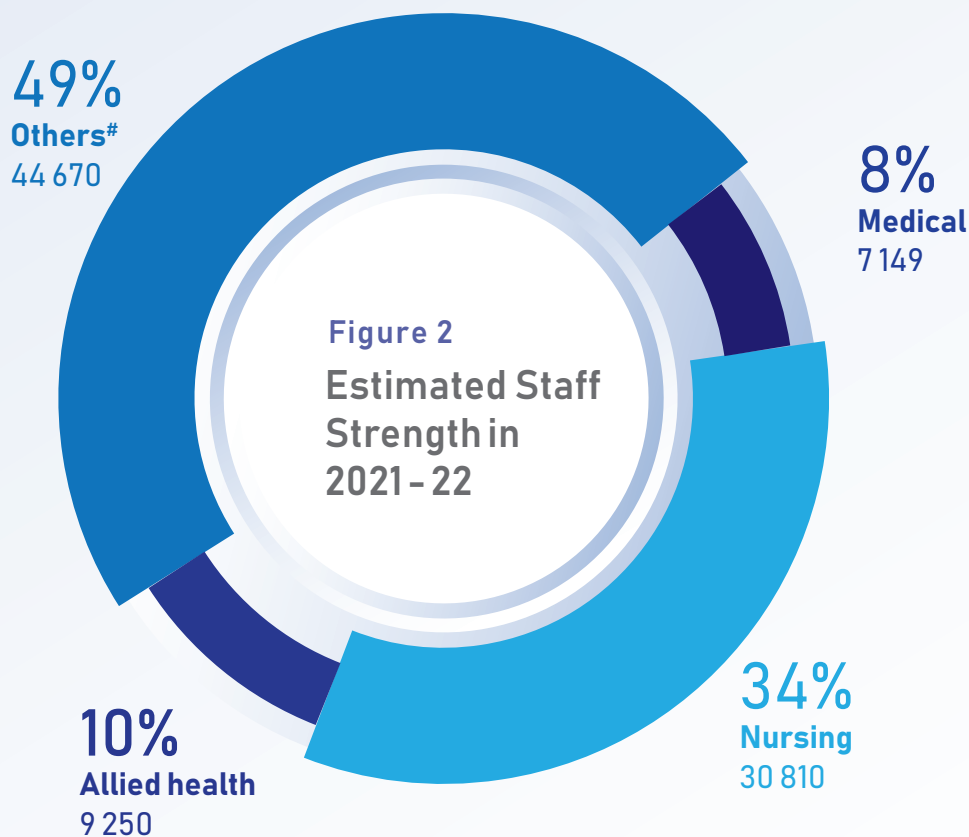
² HA had taken into account COVID-19 effect when preparing the service estimates for 2020-21, i.e. with lower activity level. Nevertheless, given the dynamic pandemic situation at the time when HA was preparing the 2021-22 service estimates, HA had taken an assumption of “no COVID-19 effect” for 2021-22 service estimates. Due to different assumptions of COVID-19 effect adopted in preparing the 2020-21 and 2021-22 service estimates, the growth rates in 2021-22, i.e. 2021-22 versus 2020-21 service estimates, appeared relatively higher than those in previous years.

Manpower Estimates

HA's existing staff strength is more than 87 000 full-time equivalents. Around 70% of them are providing direct patient care, while others provide essential supporting services such as managing patient records and maintaining the proper functioning of patient amenities.

It is estimated that we need to increase our workforce by 4.5% in the coming year. The manpower increase, which is expected for all staff groups, is intended for delivering new service programmes, service enhancements and quality improvement measures. At the same time, new recruits are also needed to replace staff members who have resigned or retired.

The planned recruitment level for healthcare professionals in 2021-22 will be around 480 doctors, 2 640 nurses and 800 allied health professionals. Figure 2 provides a breakdown of estimated staff strength for the coming year. A detailed comparison of the manpower estimates for 2021-22 and 2020-21 is provided in Appendix 1.



Comprise supporting staff and managerial / administrative staff
Note: The percentage may not add up to 100% due to rounding

Budget

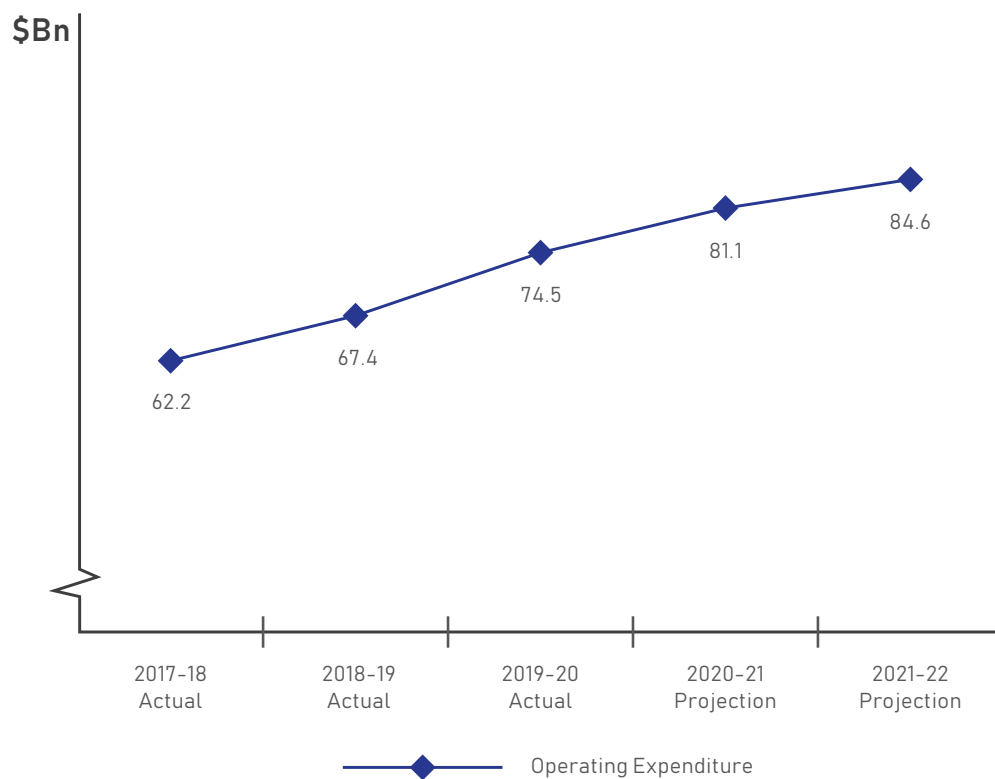
The Government will increase its recurrent subvention to HA by \$3.6 billion in 2021-22

To enable HA to cope with rising service demand, the Government has been increasing the recurrent funding for HA progressively on a triennium basis from 2018-19 having regard to population growth and demographic changes. With the first triennium funding cycle ending in 2020-21, the Government has committed to the second triennium funding arrangement for HA from 2021-22 to 2023-24, with annual funding growth for the three years being \$3.75 billion, \$3.9 billion and \$4.1 billion respectively. Overall, the recurrent Government provision to HA for 2021-22 amounts to \$80.7 billion, representing a 4.7% increase as compared to the baseline allocation in 2020-21. The majority of the new funding allocated represents the first year of funding growth committed by the Government under the second triennium funding arrangement to meet the challenges arising from surging demand. Besides, additional funding is also provided for HA to continue combatting the Coronavirus Disease 2019 (“COVID-19”) pandemic.

Operating Expenditure

In order to attain the strategic goals and programme targets as set out in preceding chapters, HA will be carrying out a series of initiatives in 2021-22, which will involve an operating expenditure totalling \$84.6 billion. As healthcare is a labour-intensive service industry, around 70% of the expenditure is on staff cost, while the remaining portion is on other expenditure items such as drugs, medical supplies, repairs and maintenance, etc.

The graph below demonstrates the trend of HA's operating expenditure in recent years:



The increase in the operating expenditure projected for 2021-22 mainly arises from the additional resources required for meeting the growing demand for public hospital services and implementation of new / enhanced services, including further enhancement measures for staff retention. On top of the above, further resources will be deployed for continuation of anti-pandemic measures in the coming year.

Capital Expenditure

In addition to operating expenditure, different types of capital expenditure are required to support the delivery of HA's service development. These are primarily funded by the Government's capital subvention as follows:

- (1) Procurement of equipment and development of information systems for modernising hospital services (\$1.67 billion);
- (2) Minor works projects including improvement works, regular maintenance, and preparatory works for capital works projects (\$1.8 billion); and
- (3) Major capital works for HA's future development, such as construction of new hospitals and re-development of existing hospitals (\$9.12 billion).

Looking Ahead

With the Government's firm commitment to the second triennium funding arrangement, HA will make the best use of the financial resources available to address the rising service demand resulting from a growing and ageing population in a more effective and sustained manner. Notwithstanding the above, the uncertainties inflicted on Hong Kong's economy by the COVID-19 pandemic poses some pressure on its long-term financial sustainability.

As the COVID-19 pandemic continues to evolve, its impact on HA's operation and the resources required for combatting the pandemic in 2021-22 is highly volatile and subject to various uncertainties. HA will continue to vigilantly monitor the use of the additional funding and the implication brought by the pandemic on the operating expenditure.

Head Office Plan



This section sets out the work plans of the HA Head Office for 2021-22.

This section covers the work plans of the Head Office with respect to three key enablers of HA services: Capital Works, Business Support Services, and Information Technology and Health Informatics Services. It also sets out HA's approach on corporate governance, which is coordinated by the Head Office.

Head Office Plan Components

- Corporate Governance
- Capital Works
- Business Support Services
- Information Technology and Health Informatics Services

Corporate Governance

Good governance is at the heart of HA and will continue to be of the highest importance as the Authority continues to develop. The HA Board has developed a formal schedule of matters specifically reserved for its decision in order to ensure that the direction and control of HA is specifically and demonstrably in the hands of the Board. It also ensures institutional sustainability by working with the management to set HA's strategies and Annual Plan. On-going efforts will be made to deliver service plans and programmes under the Annual Plan, and to ensure that there are effective systems of control and risk management.

Stewardship of the Board

The Task Group on Sustainability set up by the Board in December 2019 has examined major sustainability challenges for HA, and formulated strategic directions in the priority areas of manpower retention, hardware and software development, smart hospitals, waiting time of specialist outpatient clinics and Public-Private-Partnership Programme. The directions recommended by the Task Group will inform the formulation of the HA Strategic Plan 2022-27, which is under preparation. At the same time, the management is following up on initiatives and action plans correspondingly on the respective areas, with a view to enabling the Authority to cope with the challenges and demands ahead.

The Board's Executive Committee will continue to be engaged at early stages in the formulation of strategies, directions and policies. The Board and its functional committees conduct annual agenda forecast along different strategic and functional dimensions for guiding their operations throughout the year, and extra steps are taken to proactively and specifically align the agenda planning with their respective Terms of Reference. The role and participation of the functional committees in setting key standards, driving for best practices and monitoring performance are also strengthened. We will continue to build on our robust corporate governance framework to ensure proper management and control of the public hospitals for the provision of quality hospitals services in Hong Kong.

The Hospital Governing Committees (HGCs) appointed by the HA Board under the HA Ordinance are serving important functions in enhancing community participation in governance of public hospitals. In the past few years, enhancement measures have been taken to strengthen communication

between HA and HGCs. We will continue to engage HGCs in the management and control of public hospitals and service planning and provision, as well as enhance communication between HGCs and various stakeholders in HA including the HA Board, HA Head Office, cluster and hospital management and frontline staff.

Risk Management

Managing risk is an integral part of HA's overall approach to good corporate governance. The Organisation-wide Risk Management (ORM) Policy and Strategy was overseen and approved by the HA Board. It demonstrates HA's commitment to managing and continuously improving the risk management process across HA. It provides a holistic and standardised approach to risk management, incorporating both clinical and non-clinical risks across HA. Through the ORM framework, HA will continue to reinforce the key structures and processes for ORM Policy and Strategy and promote risk awareness across HA.

Through ORM Policy and Strategy, HA has established a risk governance structure, for identifying and reporting risks. It has designated roles and responsibilities for risk management in HA from the hospital, Cluster and Head Office level to the Audit and Risk Committee (ARC) and HA Board. Risk profiles are produced annually by the Clusters and Head Office to identify the top risks across major functions, both clinical and non-clinical. Based on their risk profiles, major risks and challenges at the local level are addressed by risk mitigation measures. Additional resources for risk mitigations can be sought through the annual planning process as appropriate.

As part of this process, risk profiles for Clusters and hospitals are reported annually to Cluster Management Committees and HGCs respectively. This mechanism facilitates communication about risk up and down the organisation. This allows for escalation of the highest risks to senior management, and facilitates execution and monitoring of mitigation measures to reduce the likelihood and consequences of the risks.

By making reference to these risk profiles during the annual planning process, Clusters and Head Office Divisions can take account of the major risks and challenges they face and plan appropriate measures to mitigate key risks.

Capital Works

Capital works in HA are coordinated by the Capital Planning Department (CPD), under the Strategy and Planning Division of the HA Head Office. To manage the different aspects of capital works, CPD is organised into the following six sections:

- Planning and Development
- Capital Projects
- Building Works
- Engineering
- Quality Management
- Administration and Operation

The CPD is responsible for the planning, development and maintenance of quality healthcare facilities through multidisciplinary professional teamwork. Its functions are as follows:

- To plan and develop safe and efficient facilities, with designs that are flexible, environmentally friendly and conducive to optimal care delivery.
- To plan, organise and manage resources to ensure that capital works projects are completed on schedule and within budget.
- To provide and maintain quality facilities and infrastructure to facilitate the delivery of patient-centred, high quality healthcare services to the community.
- To ensure the provision of safe, reliable, practical, cost-effective, quality and modern healthcare engineering facilities and infrastructure in a timely manner.

Major Risks and Challenges

In the 2016 Policy Address, the Government announced that \$200 billion would be set aside for HA to implement a 10-year Hospital Development Plan (HDP). This comprises the construction of a new acute hospital, the redevelopment or expansion of 11 hospitals, as well as the construction of three community health centres and a new supporting services centre. Upon completion of the first 10-year HDP, there will be over 5 000 additional public hospital beds and over 90 additional operating theatres. In parallel with the implementation of projects under the first 10-year HDP, as announced in the 2018-19 Budget Speech, the Government has invited HA to commence planning for a second 10-year HDP. The second 10-year HDP covers 18 hospital projects and one community health centre project with a total budget of \$270 billion. Upon completion of the second 10-year HDP, there will be a planned capacity of over 9 000 additional beds and other additional hospital facilities that will largely meet the projected service demand up to 2036. These are massive projects that require meticulous planning and management to ensure they progress according to schedule and within budget.

Even prior to the first 10-year HDP, HA already has one of the largest and most complex building stocks in Hong Kong, comprising a total of over 2 900 000 m² floor space in around 300 buildings. It is a challenge for CPD in managing resources to renew, upgrade and maintain these facilities.

As at November 2020, 17 major capital works projects, with a total project cost of \$200 billion, have been initiated and are currently at various stages of planning and development. Of these, various works packages for 15 projects with a budget of \$71 billion have been approved by the Government. In addition, about 1 700 minor works projects will need to be carried out for the improvement and maintenance of existing premises in 2021-22, with the annual budget of \$1,800 million.

Major Initiatives in 2021-22

Capital works is one of the key enablers of clinical services. In 2021-22, the CPD will undertake the following major initiatives to ensure that our healthcare facilities are able to meet the demands of quality service provision:

- Facilitate capacity increase by commencing the foundation works for the expansion of NDH and Lai King Building in PMH; and the main works for NAH at Kai Tak Development Area; and by carrying out the preparatory works for redevelopment of OLMH; the foundation works for redevelopment of GH (Phase 1) and PWH (Phase 2, Stage 1); and the main works for extension of Operating Theatre Block for TMH; expansion of UCH and HHH, and redevelopment of KWH (Phase 1) and KCH (Phases 2 & 3).
- Modernise HA's facilities by carrying out the main works for redevelopment of QMH (Phase 1) and construction works for HA Supporting Services Centre.
- Enhance safety performance of HA capital works projects by expanded use of Independent Safety Audit Scheme for all major capital works projects irrespective of the contract value; conducting regular seminars on site safety requirements for HA managers, consultants and site supervisory staff; and conducting random site safety inspections with sharing on findings to minimise recurrence of similar non-conformances.
- Ensure the quality of HA facilities by conducting annual, full independent quality assurance checking on two major capital works projects, and six-monthly curtailed checking on all major capital works projects.
- Formulate procurement strategy to facilitate the appointment of one Term Maintenance Contractor for each cluster for the implementation of minor works projects to ascertain output quality.
- Commence business case development and cost benefit analysis for setting up a central Information Technology platform for facility and project management in HA.

The capital work targets for 2021-22 are outlined in the following section.

Capital Works Targets	
• Commence alteration and addition works for the extension of Operating Theatre Block for TMH	2Q21
• Commence foundation works for HA Supporting Services Centre	2Q21
• Commence superstructure works for the redevelopment of KCH (Phase 2)	2Q21
• Commence energy retro-commissioning to nine hospitals	2Q21
• Commence procurement of Term Maintenance Contractor for three clusters	2Q21
• Complete decanting works for Outpatient Department Block for the redevelopment of OLMH	2Q21
• Complete superstructure works of the lower ground floors for the expansion of UCH	2Q21
• Commence site formation and foundation works for the expansion of Lai King Building in PMH	3Q21
• Commence site formation and foundation works for the expansion of NDH	3Q21
• Complete superstructure works of the lower ground floors for the redevelopment of QMH (Phase 1)	3Q21
• Commence consultancy study on the feasibility of development of Core Information Technology System for facilities and project management in HA	1Q22
• Commence superstructure works for the NAH at Kai Tak Development Area	1Q22
• Complete superstructure works for the redevelopment of KWH (Phase 1)	1Q22

Business Support Services

Business Support Services Department (BSSD) is a corporate, multi-skilled team within the Cluster Services Division of the HA Head Office. Core functions of the BSSD encompass a wide portfolio of non-clinical support activities and operational systems integral to the smooth operation of hospitals and clinics. These functions include:

- Hospital support services – including patient food, patient transport, laundry, security, waste management, etc.
- Procurement and supply management
- Equipment management
- Biomedical engineering services

Major Risks and Challenges

Equipment Replacement

As at June 2020, the total asset of medical equipment items in HA is valued at approximately \$15 billion. Of these, around 34% are major equipment items with unit costs of over \$1 million, while 28% are minor equipment items with unit costs ranging from \$0.2 million to \$1 million.

Additional funding of \$5 billion has been earmarked by the Government to expedite the upgrading and acquisition of medical equipment since 2019-20. The planning of upgrading and additional medical equipment is carried out in close liaison with the Central Technology Office, through the engagement of clinical specialties via Coordinating Committees / Central Committees, to modernise medical technology.

Non-Emergency Ambulance Transfer Service

Due to the increasing number of hospital beds and clinical activities, the demand for patient discharge and transfer by Non-Emergency Ambulance Service (NEATS) has been increasing correspondingly. The pressure of service demand for NEATS has been further aggravated during the winter surge period. Enhancement plans with additional manpower and number of vehicles allocated to the NEATS Centres will be implemented in 2021-22 to strengthen the overall support to the clinical services.

Hospital Authority Supporting Services Centre

The Hospital Authority Supporting Services Centre (HASSC) at North Lantau will be built, which consists of laundry service, a Central Food Production Unit, an Information Technology Data Centre, and central emergency stores for critical personal protective equipment and linen. Upon its completion, it is expected that the capacity of business support services will meet the expansion in clinical services under the first 10-year Hospital Development Plan (HDP) for HA.

Biomedical Engineering Services

In order to cater for the increased biomedical engineering service demand arising from the two 10-year HDPs and additional funding support to expedite the upgrading and procurement of advanced medical equipment, the biomedical engineering services will be strengthened to support the additional medical equipment planning and acquisition activities. The asset maintenance functions in the Enterprise Asset Management (EAM) System will be enhanced to facilitate more efficient and effective equipment replacement planning.

Major Initiatives in 2021-22

- Replace existing and provide additional equipment that are critical to clinical services, including radiological equipment, surgical equipment, endoscopic equipment, laboratory analyser or pathology equipment, and physiological equipment. The plan involves an estimated total of around 800 pieces of equipment at a total budget of around \$1,200 million.
- Allocate additional resources to all NEATS Centres to meet the increasing demand induced by new clinical activities, as well as narrowing the existing service gaps and enhancing supervision to frontline staff by recruiting 75 additional Patient Care Assistants (PCAs).

- Continue planning for the design and construction of the HASSC in North Lantau.
- Enhance the asset maintenance functions in EAM System through automation in equipment maintenance cost analysis and continue to strengthen biomedical engineering services to support expedition of medical equipment replacement and procurement of advanced medical equipment, as well as the additional acquisition activities in the two 10-year HDPs.

The BSSD targets for 2021-22 are outlined in the following section.

BSSD Targets	
• Complete the acquisition of around 800 pieces of equipment under Capital Block Vote.	1Q22
• Recruit 75 additional PCAs for all NEATS Centres for meeting the increasing demand induced by new clinical activities, narrowing existing gaps and enhancing supervision to frontline staff.	1Q22
• Commence the design and construction works for the HASSC, including plan for the builders and building services provision for furniture and equipment.	2Q21
• Set up an additional biomedical engineering service team to support the two 10-year HDPs.	1Q22
• Enhance asset maintenance functions in EAM System.	1Q22

Information Technology and Health Informatics Services

Information Technology and Health Informatics Division (IT&HID) is a strategic enabler and solution provider, with multiple roles to support daily hospital operations, service enhancement and ensure the long-term sustainability of HA's services:

- **Serve as a business enabler for providing quality patient care services** – maintaining 24-hour support for clinical and corporate IT systems to enable HA-wide critical hospital operational services.
- **Act as a change agent for transforming service provision** – enabling HA to adopt an information-driven and patient-centred service model through innovative application of proven technology in IT services.
- **Sustain information technology services and infrastructure** – supporting end-to-end clinical and enterprise user IT requirements, maintaining a scalable infrastructure, and formulating IT policies, standards, governance and other control mechanisms.

Aligning with HA Strategic Plan 2017-2022, IT&HID maintains an IT Strategy Framework to support the realisation of HA's strategic directions over the five years, which comprises five core portfolios:

- **Next Generation Clinical Management** – to improve access, efficiency and risk management for clinical service through workflow streamlining, information sharing and cross-team coordination.
- **Enhanced Patient Experience and Outcome** – to facilitate patient-centred care within the community and patient empowerment, enabling insights and data visualisation for clinical and management decision-making via innovative use of tele-medicine, mobile applications and data analytics.

- **Digital Workplace and Collaboration** – to support strategic human resources and financial management, and enable a more integrated and connected workplace for all staff.
- **Advanced Process and Infrastructure** – to transform IT infrastructure, processes and tools to uplift IT capability in supporting HA’s digital transformation.
- **Resource Centralisation and Specialisation** – to optimise the IT professional workforce to increase specialisation sustainability, including collaboration with external IT professional communities to increase capability and efficiency whilst maintaining a high level of productivity.

Leveraging these portfolios, IT&HID will play a leading role in managing and coordinating the implementation of strategy for Smart Hospital, which is one of the sustainable developments for HA. Through working closely with the hospital teams by using a co-deployment methodology during 2021-22, IT&HID will launch pilot programmes in selected hospitals to develop smart wards and smart clinics, as well as to facilitate the introduction of smart hospital management and hospital support initiatives.

A robust governance structure is in place to ensure IT investments are prioritised and aligned with clinical and business needs. The services of IT&HID are governed by the HA Board through the Information Technology Services Governing Committee (ITGC), and supported by the IT Technical Advisory Sub-Committee for advice on information technology and infrastructure directions.

In addition, programmes related to IT development are prioritised according to their business needs by the Committee on IT, and endorsed by the ITGC before implementation. Programme targets with key performance indicators for major development initiatives are reported for progress monitoring together with regular progress updates to the ITGC.

Major Risks and Challenges

Given the increasing reliance on information technology to improve service quality and patient outcome, there is a need for IT&HID to ensure system integrity and guard against interruption (i.e. downtime) of IT systems. Overall, IT&HID faces a number of key challenges as follows:

- Minimising the likelihood and impact of a cybersecurity breach through improvements in the overall cybersecurity resilience, staff security awareness, detection and response.
- Consolidating and standardising innovative and mobile technology to support emerging workforce needs.
- Introducing new digital tools and technologies for staff, helping to increase productivity through more automation, and facilitating communication and collaboration.
- Establishing a data analytics platform to enable data driven initiatives within HA and data collaboration for data analytical research across Hong Kong.
- Further strengthening management of agency services to meet the needs of increased service demand, system stability and availability.
- Improving system availability and performance levels to ensure timely access to information.
- Monitoring and enhancing the effectiveness of controls to safeguard the security and privacy protection of HA's sensitive information assets, including patient data.
- Maintaining the IT&HID organisational structure and the skill and competency mix to enhance delivery of corporate strategies and frontline priorities.
- Maximising the use of standardised architectural design to manage demands for service improvements.
- Ensuring sustainability of project management capabilities to facilitate efficient and effective delivery of projects in accordance with stakeholder requirements.

Major Initiatives in 2021-22

IT&HID has responsibility for a number of initiatives in 2021-22, including support for the service plans of both internal and external stakeholders. The majority of these are multi-year projects and the key initiatives are highlighted below:

Internal Service Provision

IT Product Delivery for Service Transformation and Provision

- Develop further on the HA clinical system capabilities for the fourth generation of Clinical Management System (CMS), including new functions on paperless, protocol-enabled, closed-loop, personalised and patient-centred clinical services.
- Develop and support the implementation of initiatives for Smart Hospital to improve both patient and staff experience through more efficient and effective workflow, leveraging automation and integration technologies for clinical care, hospital support and hospital management processes.
- Develop the HA patient mobile app platform (HA Go) to further digitalise HA's services so that the public can easily access to these services with a new experience through innovative approaches on their smart phones.
- Strategically plan and develop the HA Artificial Intelligence (AI) and data analytics platform to improve clinical efficiency and effectiveness through the use of data driven services such as using AI on radiological diagnosis and performing concurrent safety check for complicated clinical situations.
- Provide IT planning for the hospital buildings in the first 10-year Hospital Development Plan (HDP). Set up network infrastructure and implement corporate information systems for Operation Theatre Block of TMH, Trinity Block of HHH, redevelopment of KWH Phase I, as well as expansion of BTS and UCH.

IT Service for Improving Service Standards

- Extend the roll-out of closed-loop Inpatient Medication Order Entry (IPMOE) project to five hospitals (DKCH, FYKH, GH, MMRC & TWH) to strengthen medication safety.
- Continue to enhance cybersecurity resilience, quality assurance and risk management controls for all IT services and systems through standardisation and automation of processes and monitoring of compliance.
- Replace ageing IT equipment and obsolete software to reduce operational risks in supporting hospital services.

IT Innovation for Technology Adoption

- Explore, source and test potential technology solutions to support IT Innovation initiatives comprising mobile, tele-medicine and Internet of Things (IoT), as well as AI and big data prototyping.
- Continue the development and implementation of initiatives for Smart Hospital, including the Queue Management System, smart payment kiosks, electronic bed panels, smart vital signs charting and hospital navigation, to improve the efficiency of patient services at public hospitals.
- Continue the development of mobile apps and devices for clinical staff to carry out clinical functions in patient care.
- Continue to develop and introduce innovative solutions such as mobile payment (e-payment) capabilities to support the transformation of service provision.

IT Product Delivery for Community Partnerships

- Provide on-going IT support and enhancements to existing Public-Private Partnership (PPP) programmes, and perform related IT enhancements for the development of Integrated Management Framework for clinical PPP programmes.
- Continue to enhance clinical systems and provide IT service support to cater for the data needs of the territory-wide Electronic Health Records (eHR) initiative.

IT Product Delivery for People and Resources Management

- Continue the enhancement of corporate IT systems to improve the efficiency of various administrative and management functions.
- Leverage technology to develop and implement digital workplace initiatives focusing upon increasing automation, and facilitating more communication and collaboration.

External Service Provision

eHR Programme

- Continue the provision of technical agency services for the implementation and on-going operation of Stage one and the development of Stage two for the eHR Sharing System, and support other eHealth related initiatives including District Health Centre project led by the Government.

eHealth and Information Systems for Department of Health

- Continue the provision of technical agency for the Department of Health to develop Stage 2 Clinical Information Management System (CIMS 2) as a major initiative for their Clinical Service Improvement.
- Continue to provide on-going IT support for the Health Care Voucher, Vaccination, and Primary Care Directory schemes.
- Continue to provide on-going IT support for the system interfaces with the Department of Health's Communicable Disease Information System.
- Continue to provide on-going IT support for the Laboratory Information System for the Department of Health's Clinical Pathology Laboratory Centre.
- Continue to provide on-going IT support to Department of Health for the Colorectal Cancer Screening Programme and the Electronic Platform for Regulation of Private Healthcare Facilities.

The IT&HI targets for 2021-22 are outlined in the following section.

IT&HID Targets	
Internal Service Provision	
<p>IT Product Delivery for Service Transformation and Provision</p> <ul style="list-style-type: none"> • Develop planned features to enhance the HA’s clinical system capabilities for the fourth generation of CMS, including new functions on paperless, protocol-enabled, closed-loop, personalised and patient-centred clinical services. • Develop and support the implementation of initiatives for Smart Hospital to improve both patient and staff experience through more efficient and effective workflow, leveraging automation and integration technologies for clinical care, hospital support and hospital management processes. • Plan and develop planned features for the HA patient mobile app platform (HA Go) by integrating more mobile apps to facilitate public access to HA’s services. • Plan and develop planned features for the HA data analytics and machine learning platform to support the development of data driven intelligence for improving clinical efficiency and effectiveness. • Continue the planning of IT services, including network infrastructure, hospital data centres and corporate information systems for the hospital buildings in the first 10-year HDP. Set up network infrastructure and implement corporate information systems for Operation Theatre Block of TMH, Trinity Block of HHH, redevelopment of KWH Phase I, as well as expansion of BTS and UCH. 	1Q22

IT&HID Targets

IT Service for Improving Service Standards

1Q22

- Extend the closed-loop IPMOE project to five hospitals (DKCH, FYKH, GH, MMRC & TWH) and continue system enhancement service.
- Continue to enhance the quality assurance and risk management controls for all IT services and systems.
- Continue to replace ageing IT network, servers, PC workstations, related equipment and obsolete software.

IT Innovation for Technology Adoption

1Q22

- Explore, source and test potential technology solutions to support IT innovation initiatives comprising mobile, tele-medicine and Internet of Things (IoT), as well as AI and big data prototyping.
- Continue the implementation of Queue Management System, smart payment kiosks, electronic bed panels, smart vital signs charting and hospital navigation.
- Continue to develop mobile apps and devices for clinical staff.
- Continue to develop and introduce innovative solutions such as mobile payment (e-payment) capabilities.

IT&HID Targets	
<p>IT Product Delivery for Community Partnerships</p> <ul style="list-style-type: none"> • Provide IT on-going support and enhancements to existing PPP programmes, and perform IT enhancements to provide integrated support for various clinical PPP programmes. • Continue to enhance HA’s clinical systems and provide IT support to facilitate data sharing between public and private healthcare sectors under eHR Stage 1 programme. • Continue to expand the scope of data sharing including Chinese Medicine information and radiological images under eHR Stage 2 programme. 	1Q22
<p>IT Product Delivery for People and Resources Management</p> <ul style="list-style-type: none"> • Leverage technology to develop and implement digital workplace initiatives focusing upon increasing automation, and facilitating more communication and collaboration. • Develop the Facility Improvement and Maintenance Works Order Management System. 	1Q22

IT&HID Targets

External Service Provision

eHR Programme

1Q22

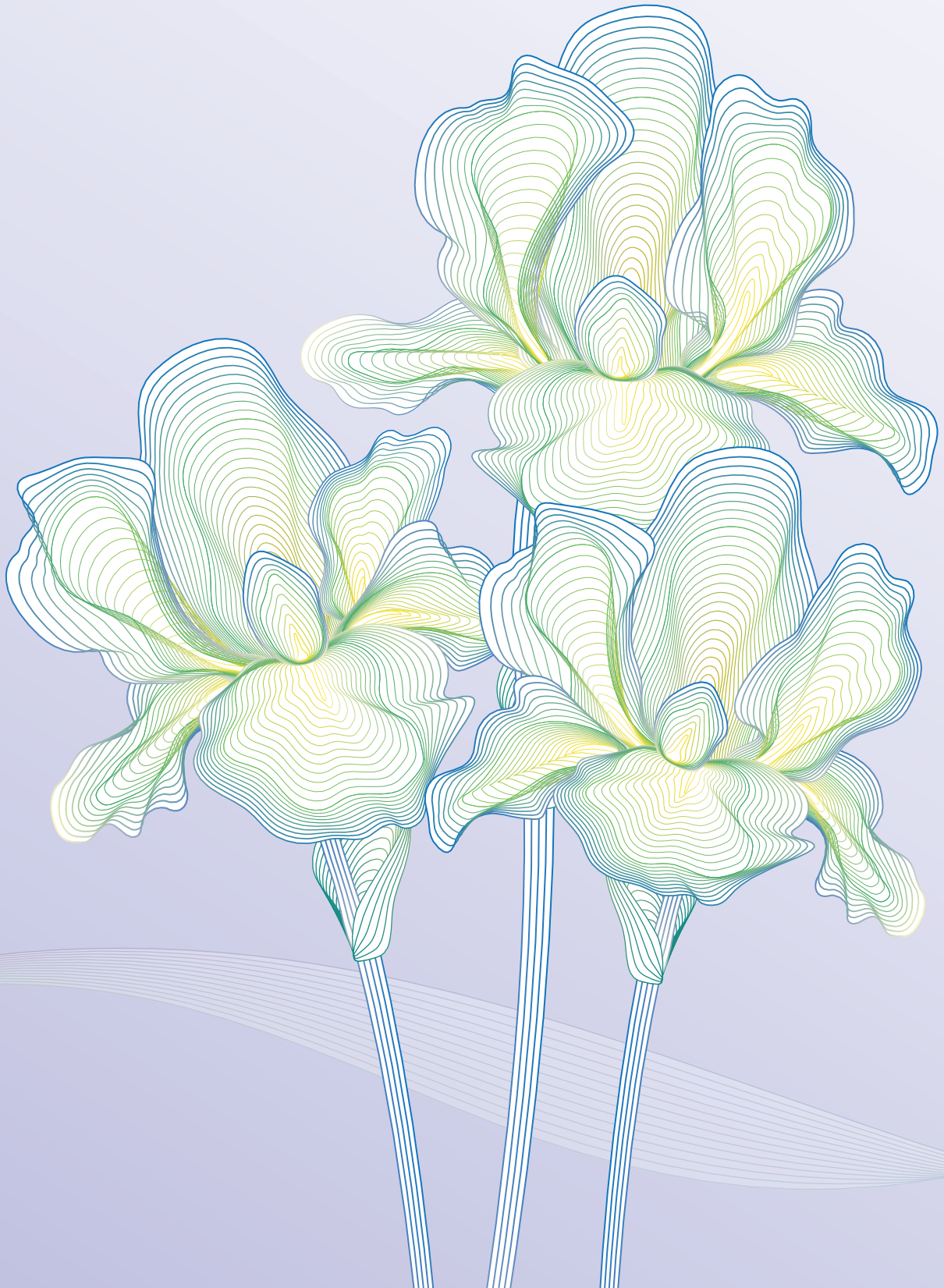
- Provide agency support for the eHR Sharing System, including implementation and on-going operation of Stage 1; development of Stage 2; and support other eHealth related initiatives including various PPP programmes and District Health Centre led by the Government.

eHealth and Information Systems for Department of Health

1Q22

- Provide technical agency support for the Department of Health to develop Stage 2 of the Clinical Information Management System.
- Continue to provide on-going IT support for the Health Care Voucher, Vaccination, and Primary Care Directory schemes.
- Continue to provide on-going IT support for the Colorectal Cancer Screening Programme and the Electronic Platform for Regulation of Private Healthcare Facilities.
- Continue to provide on-going IT support for the system interfaces with the Department of Health's Communicable Disease Information System.
- Continue to provide on-going IT support for the Laboratory Information System.

Cluster Plans



This section contains an overview of the work plans of the seven Clusters for 2021-22.

The front page of each Cluster Plan contains a map showing the distribution of hospitals, specialist outpatient clinics and general outpatient clinics in the Cluster. Hospitals with A&E service are marked with the symbol **+** for easy identification. Following the Cluster map are the summary of healthcare facilities available and a table showing the distribution of patients served in 2019-20 by district of residence in the Cluster. Major risks and challenges faced by the Cluster, as well as the key initiatives and targets in 2021-22 are also included in the respective Cluster Plan.

Sequence of the Plans

- Hong Kong East Cluster (HKEC)
- Hong Kong West Cluster (HKWC)
- Kowloon Central Cluster (KCC)
- Kowloon East Cluster (KEC)
- Kowloon West Cluster (KWC)
- New Territories East Cluster (NTEC)
- New Territories West Cluster (NTWC)

Hong Kong East Cluster



As at 31 Mar 2020	Hospital / Institution	Specialist Outpatient Clinic	General Outpatient Clinic
1 Cheshire Home, Chung Hom Kok	✓	✓	
2 Pamela Youde Nethersole Eastern Hospital +	✓	✓	
3 Ruttonjee Hospital +	✓	✓	
4 St. John Hospital +	✓	✓	✓
5 Tang Shiu Kin Hospital / Tang Shiu Kin Hospital Community Ambulatory Care Centre / Violet Peel General Out-patient Clinic	✓	✓	✓
6 Tung Wah Eastern Hospital	✓	✓	✓
7 Wong Chuk Hang Hospital	✓		
8 Sai Wan Ho General Out-patient Clinic		✓	✓
9 Anne Black General Out-patient Clinic			✓
10 Chai Wan General Out-patient Clinic			✓
11 North Lamma General Out-patient Clinic			✓
12 Peng Chau General Out-patient Clinic			✓
13 Shau Kei Wan Jockey Club General Out-patient Clinic			✓
14 Sok Kwu Wan General Out-patient Clinic			✓
15 Stanley General Out-patient Clinic			✓
16 Wan Tsui General Out-patient Clinic			✓

+ Hospital with A&E service

Healthcare Facilities

There are seven hospitals or institutions in the Hong Kong East Cluster (HKEC). There are also seven specialist outpatient clinics and 12 general outpatient clinics. As at 31 March 2020, HKEC provided a total of 3 275 beds; of which 2 248 were for acute, convalescent and rehabilitation care; 627 for infirmary care and 400 for psychiatric care.

Actual Patients Served

In 2019-20, approximately 394 300 patients had utilised services in HKEC. Approximately 74% of them resided in the Eastern, Wan Chai and Islands Districts, whereas 6% were from the neighbouring Southern District.

Number and percentage distribution of patients ever utilised HKEC services in 2019-20 according to district of residence

District of residence	No. of patients ^{^#}	Distribution [#]
Eastern	225 400	57%
Wan Chai	48 000	12%
Southern	22 400	6%
Islands	20 100	5%
Others*	78 400	20%
HKEC Total	394 300	100%

* It also includes patients from places outside Hong Kong or with unknown addresses

[^] Figures are rounded to the nearest hundred

[#] There may be a slight discrepancy between the sum of individual items and the total as shown in the table owing to rounding

Major Risks and Challenges

To prepare for the challenges in the years ahead, HKEC embarked the development of the Clinical Services Plan (CSP) in 2019. After a year of concerted effort by staff and stakeholders, the publication of CSP was officially launched in October 2020. The CSP not only maps out the future service models and roles of cluster hospitals, but also addresses the long-term healthcare service needs of the community.

In order to deliver safe and quality services amid the immense challenges of demographic changes, public health threats like Coronavirus disease 2019 (COVID-19) pandemic, limited space and resources for capacity building and service development, HKEC will conscientiously plan its service provision in accordance with the directions of HA Strategic Plan and 2017-2022 HKEC CSP.

Demographic Changes

It is projected that there will be a significant growth in the elderly (aged 65 and above) population by 33% in HKEC catchment from 2017¹ to 2026², mounting the proportion of ageing population in HKEC catchment to one of the highest across Hong Kong. On the other hand, decrease in the population of children is anticipated. As such, demand for healthcare services on elderly, paediatrics, obstetrics, and other related services will be affected. It is of paramount importance for HKEC to consider the future service needs from different age cohorts of the catchment population as well as the maintenance of adequate staff exposure and training for services with decreasing case volume.

Pandemic of Coronavirus disease 2019

The COVID-19 pandemic has overwhelmed the global healthcare systems and this battle has lasted for a long period, which inevitably has an impact on future service planning. Drawing on the experience in combating COVID-19, HKEC will take further steps to strengthen and expand its service capacity and coverage by establishing a cluster-based infectious disease network and building laboratory capacity so as to get better prepared for possible challenges in future.

¹ Based on population estimates released by the Census & Statistics Department on 13-Feb-2018, and mid-2017 Distribution of Population by the District Council District provided by the Planning Department.

² Based on "Hong Kong Population Projections 2017-2066" (baseline population projections) and "Projections of Population Distribution 2018-2026" published by the Census & Statistics Department and the Planning Department respectively.

Major Initiatives in 2021-22

In alignment with the corporate objectives, HKEC's major initiatives for 2021-22 are as follows:

Capacity Building

- Provide an additional Intensive Care Unit (ICU) bed at PYNEH and four Cardiac Care Unit (CCU) beds at RH.
- Enhance imaging services at HKEC for diagnostic and angiography and ultrasound scan at PYNEH, and provide two additional X-ray sessions per week at CCH.
- Commence the Enhanced Recovery After Surgery (ERAS) programme at HKEC.
- Enhance ENT services by providing additional Specialist Out-patient Clinic (SOPC) new cases attendances.
- Provide additional hospital haemodialysis places for patients with end-stage renal disease.
- Enhance allied health services at HKEC by providing additional allied health inpatient and outpatient attendances.
- Enhance the management of viral hepatitis by building service capacity for additional hepatitis related tests and setting up hepatitis nurse clinic.
- Build up laboratory service capacity for additional tests for prostate health index.

Cancer Service

- Enhance cancer services by commencing the ambulatory chemotherapy service at home for patients at PYNEH and building service capacity for additional laboratory tests to support the targeted therapy or immunotherapy for lung cancer.
- Provide Tumor Treating Field therapy for patients with Glioblastoma Multiforme at PYNEH.
- Extend the service hours of radiotherapy at PYNEH to provide additional treatment services.
- Enhance the multidisciplinary team support for patients with breast cancer at RH.
- Enhance SOPC services on systemic anti-cancer therapy by providing additional nurse clinic and pharmacy clinic attendances.
- Enhance the quality of cancer care by providing case management services to patients with gynaecological cancer.

Geriatric Service

- Enhance geriatric support for patients attending Accident & Emergency (A&E) by providing additional focused geriatric assessments at PYNEH.
- Enhance the Community Geriatric Assessment Team (CGAT) support for terminally ill patients in Residential Care Homes for the Elderly (RCHEs) by providing services for additional geriatric outreach attendances.

Eye Service

- Set up an ambulatory center for ophthalmic services at TWEH and build service capacity for additional intravitreal injections at HKEC.
- Enhance glaucoma care by providing additional optical coherence tomography scans and visual field tests.

Psychiatric Service

- Provide additional psychiatric day places at PYNEH to enhance psychiatry services for Child & Adolescent (C&A).
- Provide additional psychiatric outreach services to patients with mental illness by nursing case manager.

Time-critical Service and Infectious Disease Management

- Establish a cluster-based, infectious disease network at HKEC for expanding service coverage and improving coordination.

Staff Training & Development

- Provide clinical attachment at Palliative Care (PC) units for nurses working beyond PC setting.
- Recruit Advanced Practice Nurses (APNs) as part-time clinical preceptors for junior nurses.

HKEC Targets

Improve Service Quality	
• Set up an ambulatory center for ophthalmic services at TWEH and build service capacity for 240 additional intravitreal injections at HKEC	3Q21
• Provide integrated ambulatory rehabilitation service at TSKH	3Q21
• Provide five additional psychiatric day places at PYNEH to enhance psychiatry services for C&A	1Q22
• Enhance allied health services at HKEC by providing an additional of 1 580 allied health inpatient attendances and 780 allied health outpatient attendances	1Q22
• Establish a cluster-based, infectious disease network at HKEC for expanding service coverage and improving coordination	1Q22
• Provide services for 3 410 additional nurse clinic attendances	1Q22
• Enhance SOPC services on systemic anti-cancer therapy by providing services for an additional of 540 nurse clinic attendances and 720 pharmacist attendances	1Q22
• Designate one maternal special care bed in the labour ward of PYNEH and recruit two Registered Nurses for training in high-risk pregnancy care	1Q22
• Commence the fast-track screening programme at HKEC for patients with diabetic critical limb ischaemia	2Q21
• Enhance geriatric support for patients attending A&E by providing 750 additional focused geriatric assessments at PYNEH	1Q22
• Enhance the CGAT support for terminally ill patients in RCHEs by providing services for 700 additional geriatric outreach attendances	1Q22
• Enhance the quality of cancer care by providing case management services to 100 additional patients with gynaecological cancer	1Q22

Improve Service Quality	
• Recruit an additional case manager at HKEC to provide services for 300 additional psychiatric outreach attendances to patients with mental illness	1Q22
• Enhance genetic and genomic services by building service capacity for 210 additional pharmacogenetic tests	1Q22
• Provide Tumor Treating Field therapy for patients with Glioblastoma Multiforme at PYNEH	1Q22
Optimise Demand Management	
• Provide an additional ICU bed at PYNEH	3Q21
• Provide four additional CCU beds at RH	4Q21
• Commence the ERAS programme to provide services for 190 additional patients at PYNEH and RH	1Q22
• Enhance ENT services by providing 260 additional SOPC new case attendances	1Q22
• Enhance the management of viral hepatitis by building service capacity for 390 additional hepatitis related tests and setting up hepatitis nurse clinic	1Q22
• Build up laboratory service capacity for 4 700 additional tests for prostate health index	1Q22
• Enhance imaging services at HKEC to provide an additional of 175 attendances for diagnostic and angiography attendances, 2 400 attendances for ultrasound scan at PYNEH, and provide two additional X-ray sessions per week at CCH	1Q22
• Enhance cancer services by commencing the ambulatory chemotherapy service at home for patients at PYNEH	2Q21

Optimise Demand Management	
• Build service capacity for 700 additional laboratory tests to support the targeted therapy for immunotherapy for lung cancer	1Q22
• Extend the service hours of radiotherapy at PYNEH to provide services for 1 330 additional treatment attendances	1Q22
• Enhance the multidisciplinary team support for patients with breast cancer at RH	1Q22
• Provide two additional hospital haemodialysis places for patients with end-stage renal disease	1Q22
• Enhance glaucoma care by providing services for 3 890 additional optical coherence tomography scans and 630 visual field tests	1Q22
Enhance Staff Training and Development	
• Provide clinical attachment at PC units for 12 nurses working beyond PC setting	1Q22
• Recruit 13 Full-Time Equivalent (FTE) Advanced Practice Nurses (APNs) as part-time clinical preceptors for junior nurses	1Q22
• Provide 850 training places for clinical staff to undergo resuscitation training and 270 first aid training places for security staff	1Q22

Hong Kong West Cluster



As at 31 Mar 2020	Hospital / Institution	Specialist Outpatient Clinic	General Outpatient Clinic
1 Grantham Hospital	✓	✓	
2 MacLehose Medical Rehabilitation Centre	✓	✓	
3 Queen Mary Hospital +	✓	✓	
4 The Duchess of Kent Children's Hospital at Sandy Bay	✓	✓	
5 Tsan Yuk Hospital	✓	✓	
6 Tung Wah Group of Hospitals Fung Yiu King Hospital	✓	✓	
7 Tung Wah Hospital	✓	✓	✓
8 David Trench Rehabilitation Centre		✓	
9 Aberdeen Jockey Club General Out-patient Clinic			✓
10 Ap Lei Chau General Out-patient Clinic			✓
11 Central District Health Centre General Out-patient Clinic			✓
12 Kennedy Town Jockey Club General Out-patient Clinic			✓
13 Sai Ying Pun Jockey Club General Out-patient Clinic			✓

+ Hospital with A&E service

Healthcare Facilities

There are seven hospitals or institutions in the Hong Kong West Cluster (HKWC). There are also eight specialist outpatient clinics and six general outpatient clinics. As at 31 March 2020, HKWC provided a total of 3 128 beds; of which 2 846 were for acute, convalescent and rehabilitation care, 200 for infirmary care and 82 for psychiatric care.

Actual Patients Served

In 2019-20, approximately 333 400 patients had utilised services in HKWC. Approximately 57% of them resided in the Southern and Central & Western Districts, whereas 13% were from the neighbouring Eastern and Islands Districts.

Number and percentage distribution of patients ever utilised HKWC services in 2019-20 according to district of residence

District of residence	No. of patients ^{^#}	Distribution [#]
Southern	110 300	33%
Central & Western	80 000	24%
Eastern	30 000	9%
Islands	13 100	4%
Others*	100 000	30%
HKWC Total	333 400	100%

* It also includes patients from places outside Hong Kong or with unknown addresses

[^] Figures are rounded to the nearest hundred

[#] There may be a slight discrepancy between the sum of individual items and the total as shown in the table owing to rounding

Major Risks and Challenges

Infection control

The pandemic of Coronavirus disease 2019 (COVID-19) continues to pose significant challenges to the healthcare system in Hong Kong. HKWC has mobilised Cluster's manpower and resources to combat the disease, which include providing care for patients and strengthening infection control measures for disease prevention. At the same time, HKWC also strives to maintain emergency and essential services in accordance with the overall direction of HA. Colleagues have been walking extra miles to uphold the infection control strategies, which includes the appropriate and vigilant use of personal protective equipment, improvement of isolation facilities and environmental hygiene in patient and staff areas, as well as enforcing social distancing. HKWC will provide necessary support to the Government's COVID-19 vaccination programme.

Ageing population

The ageing population of Hong Kong has become a major challenge to the healthcare system. With the increase in proportion of elderly population in HKWC's catchment areas, the demand for managing chronic disease and other age-related medical conditions continues to increase. HKWC will continue to enhance services for managing the demand, and re-engineering service models to address the complex needs of patients.

Ageing facilities

Each hospital at HKWC had its own long history. TWH, for instance, was established 150 years ago, QMH and TYH were built over 80 years. The other three hospitals, GH, DKCH and FYKH are also with more than 60 years of service. Staff are working in buildings that require modernisation. Aside from the redevelopment projects of QMH and GH which would bring forth long-term service enhancement, other short- and medium-term enhancements to improve the hardware are being contemplated to upkeep the service standard.

Demand of space

QMH has been providing tertiary and quaternary medical services for Hong Kong, including organ transplant, bone marrow transplant, cardiothoracic surgery, burn surgery, and plastic & reconstructive surgery. There is always a need for advancement of infrastructure and expansion of services, which requires physical space. Coupled with the increasing number of medical and nursing students on site for clinical training, the effective use of space and facilities is one of the major challenges for HKWC.

Diverse roles and partnership

Each hospital at HKWC has inherited the traditions and attributes of its own parent organisation. The plan for service re-organisation in these hospitals can widen their service scopes. There is also the Cluster's unique partnership with the Li Ka Shing Faculty of Medicine of the University of Hong Kong. Academia footprints are ubiquitous in each and every hospital at HKWC, and HA colleagues in these hospitals are likewise conversant with the roles of service, education and research.

Major Initiatives in 2021-22

To align with the corporate objectives and the strategic roles of HKWC, HKWC's major initiatives for 2021-22 are as follows:

Improve Service Quality

- Optimise surgical planning by adopting medical grade 3D printing.
- Enhance collaboration between rheumatologists and immunologists on drug allergy delabelling programme to provide services for 110 additional day patient attendances.
- Provide multidisciplinary cardiac rehabilitation programme to 30 additional patients with advanced heart failure and 15 additional patients after open heart surgery.

- Enhance functional neurosurgery for eligible patients by providing 260 additional allied health outpatient attendance at QMH for assessment and rehabilitation.
- Establish a cluster-based, infectious disease network at HKWC for expanding service coverage and improving coordination.

Optimise Demand Management

- Enhance vascular surgical services at HKWC to prepare for the subsequent formation of a service network for Hong Kong Island.
- Enhance dermatology service by extending inpatient consultation dermatology service to all HKWC hospitals.
- Enhance transition care for Adult Congenital Heart Disease (ACHD) service at QMH and provide services for 520 additional non-invasive cardiac procedures.
- Recruit an additional Advanced Practice Nurse (APN) to provide discharge services for 375 additional O&T SOPC patients at QMH.
- Enhance urogynaecology service at QMH by providing five additional nurse clinic sessions per week.

Enhance Staff Training and Development

- Recruit 11 Full-Time Equivalent (FTE) APNs as part-time clinical preceptors for junior nurses.
- Provide 63 training places for clinical staff to undergo resuscitation training.

HKWC Targets

Improve Service Quality	
• Establish multidisciplinary cardiac rehabilitation programme for 30 patients with advanced heart failure and 15 patients after open heart surgery	1Q22
• Enhance podiatry service by providing services for 310 additional allied health outpatient attendances at GH	1Q22
• Enhance functional neurosurgery for eligible patients by providing 260 additional allied health outpatient attendance at QMH for assessment and rehabilitation purposes	1Q22
• Roll out the restorative rehabilitation programme for stroke patients at TWH and provide an additional of 1150 physiotherapy and 1150 occupational therapy attendances to cover weekends and public holidays	1Q22
• Establish a cluster-based, infectious disease network at HKWC for expanding service coverage and improving coordination	1Q22
• Provide services for 1 760 additional nurse clinic attendances	1Q22
• Enhance urogynaecology service at QMH by providing five additional nurse clinic sessions per week	3Q21
• Enhance the Community Geriatric Assessment Team support for terminally ill patients in Residential Care Homes for the Elderly by providing services for 350 additional geriatric outreach attendances	1Q22
• Enhance multidisciplinary support for providing 840 additional psychogeriatric outreach attendances to RCHes at HKWC	1Q22
• Recruit an additional case manager at HKWC to provide service for 300 additional psychiatric outreach attendances to patients with mental illness	1Q22

Improve Service Quality	
• Build laboratory service capacity to provide 100 additional tests for minimal residual disease assays and next-generation sequencing panels for adult with myeloid blood cancers at QMH	1Q22
• Enhance genetic and genomic services by building service capacity for 350 additional pharmacogenetic tests	1Q22
• Optimise surgical planning by adopting medical grade 3D printing at HKWC	1Q22
• Provide Tumor Treating Field therapy for patients with Glioblastoma Multiforme at QMH	1Q22
Optimise Demand Management	
• Enhance sleep services by providing services to conduct 800 additional sleep studies at HKWC	1Q22
• Recruit an additional APN to provide discharge services for 375 additional O&T SOPC patients at QMH	1Q22
• Enhance the management of viral hepatitis by building service capacity for 680 additional hepatitis related tests	1Q22
• Build laboratory service capacity to provide 2 330 additional neuronal antibody tests	1Q22
• Enhance pharmacy services by launching drug refill services at QMH	1Q22
• Build laboratory service capacity for 780 additional tests to support targeted therapy or immunotherapy for lung cancer	1Q22
• Enhance the multidisciplinary team support for patients with breast cancer by providing services for 900 additional day patient attendances at HKWC	1Q22
• Provide two additional hospital haemodialysis places for patients with end-stage renal disease	1Q22

Optimise Demand Management	
• Enhance glaucoma care by providing services for 870 additional optical coherence tomography scans and 130 visual field tests	1Q22
• Enhance vascular surgical services at HKWC to prepare for the subsequent formation of a service network for Hong Kong Island	1Q22
• Enhance transition care for Adult Congenital Heart Disease (ACHD) service at QMH and provide services for 520 additional non-invasive cardiac procedures	1Q22
• Enhance dermatology service by extending inpatient consultation dermatology service to all HKWC hospitals	1Q22
• Enhance collaboration between rheumatologists and immunologists on drug allergy delabelling programme for 110 additional day patient attendances at HKWC	1Q22
Enhance Staff Training and Development	
• Recruit 11 FTE APNs as part-time clinical preceptors for junior nurses	1Q22
• Provide 63 training places for clinical staff to undergo resuscitation training	1Q22

Kowloon Central Cluster



As at 31 Mar 2020	Hospital / Institution	Specialist Outpatient Clinic	General Outpatient Clinic
1 Hong Kong Buddhist Hospital	✓	✓	✓
2 Hong Kong Children's Hospital	✓	✓	
3 Hong Kong Eye Hospital	✓	✓	
4 Hong Kong Red Cross Blood Transfusion Service	✓		
5 Kowloon Hospital	✓	✓	
6 Kwong Wah Hospital +	✓	✓	✓
7 Our Lady of Maryknoll Hospital / Our Lady of Maryknoll Hospital Family Medicine Clinic	✓	✓	✓
8 Queen Elizabeth Hospital +	✓	✓	
9 Tung Wah Group of Hospitals Wong Tai Sin Hospital	✓	✓	
10 Community Rehabilitation Service Support Centre, Hospital Authority		✓	
11 Yau Ma Tei Jockey Club General Out-patient Clinic		✓	✓
12 Central Kowloon Health Centre			✓
13 East Kowloon General Out-patient Clinic			✓
14 Hung Hom Clinic			✓
15 Lee Kee Memorial Dispensary			✓
16 Li Po Chun General Out-patient Clinic			✓
17 Robert Black General Out-patient Clinic			✓

As at 31 Mar 2020	Hospital / Institution	Specialist Outpatient Clinic	General Outpatient Clinic
18 Shun Tak Fraternal Association Leung Kau Kui Clinic			✓
19 Wang Tau Hom Jockey Club General Out-patient Clinic			✓
20 Wu York Yu General Out-patient Clinic			✓

+ Hospital with A&E service

Healthcare Facilities

There are nine hospitals or institutions in Kowloon Central Cluster (KCC). There are also 10 specialist outpatient clinics and 13 general outpatient clinics. As at 31 March 2020, KCC provided a total of 5 852 beds; of which 5 137 were for acute, convalescent and rehabilitation care, 250 for infirmary care and 465 for psychiatric care.

Actual Patients Served

In 2019-20, approximately 731 100 patients had utilised services in KCC. Approximately 59% of them resided in the Wong Tai Sin, Kowloon City and Yau Tsim Mong Districts, whereas 18% were from the neighbouring Kwun Tong and Sham Shui Po Districts.

Number and percentage distribution of patients ever utilised KCC services in 2019-20 according to district of residence

District of residence	No. of patients [^] #	Distribution [#]
Wong Tai Sin	177 900	24%
Kowloon City	145 600	20%
Yau Tsim Mong	112 900	15%
Kwun Tong	74 600	10%
Sham Shui Po	56 700	8%
Others*	163 400	22%
KCC Total	731 100	100%

* It also includes patients from places outside Hong Kong or with unknown addresses

[^] Figures are rounded to the nearest hundred

[#] There may be a slight discrepancy between the sum of individual items and the total as shown in the table owing to rounding

Major Risks and Challenges

Centrally located in the densely populated Kowloon region with ease of access, KCC has been providing quality services to residents in Kowloon areas. Due to population ageing, KCC faces the challenge of delivering quality services under increasing service volume and complexity. The escalating demand for hospital beds, over congestion in wards during surge period, manpower shortage and turnover of experienced staff have created enormous pressure on service provision.

KCC's challenge is to strive for providing safe and quality medical services while continuing to rationalise the provision of medical services among hospitals within the Cluster, in particular during the situation of Coronavirus disease 2019 (COVID-19) pandemic this year. Concerted effort and strong coordination are required from all KCC colleagues to overcome these challenges. In managing the public health crisis and unpredicted surge of caseload, KCC adopts contingency measures to expedite diversion of patients to appropriate settings among cluster hospitals. This complementary arrangement can segregate the confirmed and suspected COVID-19 cases effectively and conserve resources and facilities for KCC to prepare for the resumption of other services at an opportune time.

KCC will continue to coordinate various major capital projects, including the service commissioning of phase one redevelopment of KWH upon completion, preparation for the decanting works of OLMH and planning for the new acute hospital in Kai Tak Development Area.

Major Initiatives in 2021-22

KCC has formulated a wide range of initiatives in alignment with the corporate key objectives to develop quality and patient-centred healthcare services. The major initiatives for 2021-22 are as follows:

Improve Service Quality

- Enhance ambulatory care by extending the service hours of surgical day ward at QEH.
- Five additional psychiatric day hospital places will be provided and rehabilitation services will be enhanced by providing 720 additional rehabilitation day attendances at KH.
- Restorative rehabilitation programme will be rolled out for stroke patients in WTSH and an additional of 1 150 physiotherapy and 1 150 occupational therapy attendances will be provided to cover weekends and public holidays.
- In QEH, stratified care management will be provided for 2 200 additional physiotherapy outpatient attendances. In addition, 2 400 additional physiotherapy services outpatient attendances will be provided for patients on waiting list for total joint replacement surgery under the structured non-surgical treatment programme.
- Neuroscience service will be enhanced at KCC to provide 450 additional allied health outpatient attendances.
- SOPC services on systemic anti-cancer therapy will be enhanced by providing an additional of 540 nurse clinic attendances and 720 pharmacist attendances.
- An additional of 2 660 nurse clinic attendances will be provided at KCC.
- A cluster-based, infectious disease network will be established at KCC for expanding service coverage and improving coordination.
- One maternal special care bed will be set up at the labour ward of QEH and two Registered Nurses will be recruited for training in high-risk pregnancy care.

- Service capacity will be built for 990 additional intravitreal injections at HKEH.
- Geriatric support for patients attending Accident & Emergency (A&E) will be enhanced by providing an additional of 1 500 focused geriatric assessments at QEH and KWH.
- Community Geriatric Assessment Team (CGAT) support for terminally ill patients in Residential Care Homes for the Elderly (RCHEs) will be enhanced by providing services for 1 050 additional geriatric outreach attendances.
- Multidisciplinary support will be enhanced at KCC to provide 840 additional psychogeriatric outreach attendances services to RCHEs.
- Quality of cancer care will be enhanced by providing case management services to 40 additional patients with musculoskeletal tumour.
- Laboratory service capacity will be built and to provide 100 tests for minimal residual disease assays and next-generation sequencing panels for adult with myeloid blood cancers at QEH.
- In addition, genetic and genomic services will be enhanced by building service capacity for 500 pharmacogenetic tests.
- In HKCH, a disease-based databases and information platform for uncommon disorders will be established and the newborn screening programme for Severe Combined Immunodeficiency (SCID) will be piloted to provide screening tests with capacity up to 25 000. Furthermore, the newborn screening programme for Inborn Errors of Metabolism (IEM) with second tier testing will be extended at HKCH.
- Medical grade 3D printing will be adopted at KCC to optimise surgical planning.
- Tumor Treating Field therapy for patients with Glioblastoma Multiforme will be provided at QEH and KWH.

Optimise Demand Management

- KCC will enhance service capacity of A&E department at QEH.
- An additional Intensive Care Unit (ICU) bed and two additional High Dependency Unit (HDU) beds will be added at QEH.
- Two additional Hospital Haemodialysis (HD) places will be provided for patients with end-stage renal disease and four additional HD stations will be installed at QEH to enhance the renal services.
- Clinical pharmacy services on discharge medication management for patients admitted to acute medical wards will be implemented at QEH.
- Seven additional sessions per week will be provided for endoscopic procedures at QEH. HKCH will continue to expand the service capacity by providing six additional Operating Theatre (OT) sessions per week and enhancing the pathology and imaging services.
- HKEH will enhance glaucoma care by providing services for 2 580 additional optical coherence tomography scans and 2 280 visual field tests.
- Laboratory service capacity will be built to provide 1060 additional viral hepatitis-related tests, 2 620 additional interferon gamma releasing assay tests and 1540 additional tests to support the targeted therapy or immunotherapy for lung cancer.
- Service hours of radiotherapy at QEH will be extended to provide services for 1330 additional treatment attendances and non-radiotherapy and medical oncology service will be enhanced at KCC.

Enhance Staff Training and Development

- KCC will also provide 320 training places for clinical staff to undergo resuscitation training. 17 additional Advanced Practice Nurses (APNs) will be recruited as part-time clinical preceptors to support junior nurses.

KCC Targets

Improve Service Quality	
• Enhance ambulatory care by extending the service hours of surgical day ward at QEH	1Q22
• Provide five additional psychiatric day hospital places at KH	1Q22
• Enhance rehabilitation services by providing 720 additional rehabilitation day attendances at KH	1Q22
• Roll out the restorative rehabilitation programme for stroke patients at WTSH and provide an additional of 1 150 physiotherapy and 1 150 occupational therapy attendances to cover weekends and public holidays	1Q22
• Provide services with stratified care management for 2 200 additional physiotherapy outpatient attendances at QEH	1Q22
• Enhance the neuroscience service at KCC by providing 450 additional allied health outpatient attendances	1Q22
• Establish a cluster-based, infectious disease network at KCC	1Q22
• Provide services for 2 660 additional nurse clinic attendances	1Q22
• Enhance SOPC services on systemic anti-cancer therapy by providing services for an additional of 540 nurse clinic attendances and 720 pharmacist attendances	1Q22
• Designate one maternal special care bed in the labour ward of QEH and recruit two Registered Nurses for training in high-risk pregnancy care	1Q22
• Provide physiotherapy services for 2 400 additional outpatient attendances for patients on waiting list for total joint replacement surgery at QEH under the structured, non-surgical treatment programme	1Q22
• Build service capacity for 990 additional intravitreal injections at HKEH	1Q22
• Enhance geriatric support for patients attending A&E by providing an additional of 1 500 focused geriatric assessments at QEH and KWH	1Q22

Improve Service Quality	
• Enhance the Community Geriatric Assessment Team support for terminally ill patients in Residential Care Homes for the Elderly by providing services for 1050 additional geriatric outreach attendances	1Q22
• Enhance multidisciplinary support to provide 840 additional psychogeriatric outreach attendances services to RCHEs at KCC	1Q22
• Enhance the quality of cancer care by providing case management services to 40 additional patients with musculoskeletal tumour	1Q22
• Build laboratory service capacity to provide 100 additional tests for minimal residual disease assays and next-generation sequencing panels for adult with myeloid blood cancers at QEH	1Q22
• Enhance genetic and genomic services by building service capacity for 500 additional pharmacogenetic tests	1Q22
• Establish disease-based databases and information platform for uncommon disorders at HKCH	1Q22
• Pilot the newborn screening programme for Severe Combined Immunodeficiency Disease (SCID) and provide screening tests with capacity up to 25 000 at HKCH	1Q22
• Extend the newborn screening programme for Inborn Errors of Metabolism (IEM) with second tier testing at HKCH	1Q22
• Optimise surgical planning by adopting medical grade 3D printing at KCC	1Q22
• Provide Tumor Treating Field therapy for patients with Glioblastoma Multiforme at QEH and KWH	1Q22
Optimise Demand Management	
• Provide an additional ICU bed and two additional HDU beds at QEH	4Q21

Optimise Demand Management	
• Provide seven additional sessions per week for endoscopic procedures at QEH	1Q22
• Provide six additional OT sessions per week and enhancing the pathology and imaging services at HKCH	1Q22
• Enhance the management of viral hepatitis by providing 1 060 additional hepatitis-related tests	1Q22
• Build laboratory service capacity for 2 620 additional interferon gamma releasing assay tests	1Q22
• Implement clinical pharmacy services on discharge medication management for patients admitted to acute medical wards at QEH	1Q22
• Extend the service hours of radiotherapy at QEH to provide services for 1 330 additional treatment attendances	1Q22
• Build laboratory service capacity for 1 540 additional tests to support the targeted therapy or immunotherapy for lung cancer	1Q22
• Enhance the non-radiotherapy and medical oncology service at KCC	1Q22
• Provide two additional hospital haemodialysis places for patients with end-stage renal disease and install four additional HD stations at QEH to enhance the renal services	1Q22
• Enhance glaucoma care by providing services for 2 580 additional optical coherence tomography scans and 2 280 visual field tests	1Q22
• Enhance the service capacity of A&E department at QEH	1Q22
Enhance Staff Training and Development	
• Recruit 17 Full-Time Equivalent (FTE) APNs as part-time clinical preceptors for junior nurses	1Q22
• Provide 320 training places for clinical staff to undergo resuscitation training	1Q22

Kowloon East Cluster



As at 31 Mar 2020	Hospital/ Institution	Specialist Outpatient Clinic	General Outpatient Clinic
1 Haven of Hope Hospital	✓	✓	
2 Tseung Kwan O Hospital +	✓	✓	
3 United Christian Hospital +	✓	✓	
4 Yung Fung Shee Memorial Centre		✓	
5 Kowloon Bay Health Centre General Out-patient Clinic			✓
6 Kwun Tong Community Health Centre			✓
7 Lam Tin Polyclinic General Out-patient Clinic			✓
8 Mona Fong General Out-patient Clinic			✓
9 Ngau Tau Kok Jockey Club General Out-patient Clinic			✓
10 Shun Lee General Out-patient Clinic			✓
11 Tseung Kwan O (Po Ning Road) General Out-patient Clinic			✓
12 Tseung Kwan O Jockey Club General Out-patient Clinic			✓

+ Hospital with A&E service

Healthcare Facilities

There are three hospitals / institutions in the Kowloon East Cluster (KEC). There are also four specialist outpatient clinics and eight general outpatient clinics. As at 31 March 2020, KEC provided a total of 2 800 beds; of which 2 604 were for acute, convalescent and rehabilitation care, 116 for infirmary care and 80 for psychiatric care.

Actual Patients Served

In 2019-20, approximately 511 900 patients had utilised services in KEC. Approximately 85% of them resided in the Kwun Tong and Sai Kung Districts.

Number and percentage distribution of patients ever utilised KEC services in 2019-20 according to district of residence

District of residence	No. of patients ^{^#}	Distribution [#]
Kwun Tong	266 100	52%
Sai Kung	168 900	33%
Others*	76 900	15%
KEC Total	511 900	100%

* It also includes patients from places outside Hong Kong or with unknown addresses

[^] Figures are rounded to the nearest hundred

[#] There may be a slight discrepancy between the sum of individual items and the total as shown in the table owing to rounding

Major Risks and Challenges

Since the outbreak of Coronavirus disease 2019 (COVID-19) in early 2020, the Cluster has been facing unprecedented challenges and impacts. Robust multidisciplinary coordination and collaboration are made in realms of infection control management, service contingency planning and build up of hardware capability in response to the local waves of coronavirus ravages. In view of uncertainty over the ongoing battle against the pandemic, the Cluster will continue staying vigilant and preparing for timely interplay of service and staff mobilisation to cope with the volatile and rapid evolving development of COVID-19.

The other major challenges confronting the Cluster are the increase in service demand due to the incessant growth and demographic changes in population, as well as leveraging of technology and innovation to achieve the ultimate goal of improving patient-centered care and safety. To address these challenges, the Cluster will ride on the strategic directions to develop and enhance services on 'CARE' (Cancer, Ambulatory, Rehabilitation, Emergency) as mapped out in the Clinical Services Plan for KEC.

In 2021-22, the Cluster will continue following along the service development roadmap to build up capacity and improve service quality to meet the healthcare demand from the community. With the vision of revolutionising healthcare service through the development of 'Smart Hospital', the Cluster is endeavoured to drive and integrate advanced technologies in both clinical and non-clinical aspects for the betterment of patient care and efficiency spike in workplace. TKOH has been a pioneer for smart hospital development and the first 5G-enabled hospital in HA. KEC will further explore and launch smart initiatives with the cutting edge technology for modernising healthcare journey.

Major Initiatives in 2021-22

In alignment with the corporate objectives and the CSP for KEC, the major initiatives for 2021-22 are as follows:

Capacity Building

- Provide additional surgical in-patient beds at TKOH.
- Enhance diagnostic radiology service at UCH, such as the ultrasound service.
- Establish robotic surgery service at KEC by installing the robotic system at TKOH.
- Provide seven additional sessions per week for endoscopic procedures at UCH.
- Enhance replantation and microvascular surgery service at KEC.
- Enhance genetic and genomic services by building up service capacity for pharmacogenetic tests.
- Set up integrated multidisciplinary team for urology and continence care at KEC.

Cancer Service

- Provide additional day patient attendances for chemotherapy at KEC.
- Enhance integrated cancer care services for breast cancer patients.
- Render case management services to haematological and gynaecological cancer patients.
- Build laboratory test capacity to support the targeted therapy or immunotherapy for lung cancer.

Ambulatory Service

- Provide additional medical day beds at TKOH.
- Enhance ambulatory surgical services by providing additional day beds and Operating Theatre (OT) sessions at TKOH.
- Enhance ophthalmology Specialist Out-patient Clinic (SOPC) service at KEC.
- Develop Outpatient Parenteral Antimicrobial Therapy (OPAT) at KEC.
- Provide additional General Outpatient Clinic (GOPC) quotas.

Rehabilitation Service

- Provide additional extended care beds for orthopaedic patients at HHH.
- Extend rehabilitation services to cover weekends and public holidays with lower limb fracture or arthroplasties at TKOH.

Emergency Service

- Enhance critical patient care by providing additional Intensive Care Unit (ICU) bed at TKOH.
- Provide 24-hour microbiology laboratory services to facilitate timely clinical management at the hospitals of KEC.

Quality & Safety

- Set up mobile team to strengthen respiratory care to patients in medical wards at UCH.

Staff Training & Development

- Provide additional training places for clinical staff to undergo resuscitation training.
- Enhance nursing, administrative and supporting manpower to buttress clinical and non-clinical service areas.

KEC Targets

Improve Service Quality	
• Provide 25 additional day beds at TKOH	4Q21
• Provide five additional OT sessions per week at the day surgery centre of TKOH	4Q21
• Provide OPAT service for 700 additional attendances at KEC	1Q22
• Set up an integrated multidisciplinary team for urology and continence care at KEC	1Q22
• Set up mobile team at UCH to provide respiratory care to patients in the medical wards	1Q22
• Roll out the restorative rehabilitation programme for patients with lower limb fracture or arthroplasties at TKOH and provide services for 1 150 additional physiotherapy attendances to cover weekends and public holidays	1Q22
• Enhance podiatry service at KEC to provide services for 470 additional allied health outpatient attendances	1Q22
• Provide services for 2 590 additional nurse clinic attendances	1Q22
• Designate one maternal special care bed in the labour ward of UCH and recruit two Registered Nurses for training in high-risk pregnancy care	1Q22
• Enhance geriatric support for patients attending A&E by providing 750 additional focused geriatric assessments at UCH	1Q22
• Enhance the Community Geriatric Assessment Team support for terminally ill patients in Residential Care Homes for the Elderly by providing services for 700 additional geriatric outreach attendances	1Q22
• Enhance the quality of cancer care by providing case management services to an additional of 50 patients with haematological cancer and 100 patients with gynaecological cancer	1Q22

Improve Service Quality	
• Recruit an additional case manager at KEC to provide services for 300 additional psychiatric outreach attendances to patients with mental illness	1Q22
• Enhance genetic and genomic services by building service capacity for 320 pharmacogenetic tests	1Q22
• Set up a robotic surgery suite and build service capacity for serving 20 additional patients at TKOH	1Q22
Optimise Demand Management	
• Provide an additional Intensive Care Unit bed at TKOH	3Q21
• Provide 10 additional acute surgical beds at TKOH	3Q21
• Provide 40 additional extended care beds at HHH	3Q21
• Provide seven additional sessions per week for endoscopic procedures at UCH	1Q22
• Increase the GOPC quota by 5 720 at KEC	1Q22
• Enhance ophthalmology SOPC capacity to provide services for 185 additional new case attendances	1Q22
• Enhance the management of viral hepatitis by building service capacity for 770 additional hepatitis related tests	1Q22
• Provide services for 2 080 additional attendances for ultrasound scan at UCH	1Q22
• Enhance pharmacy services by launching drug refill services at UCH	1Q22
• Enhance cancer care by providing services for 375 additional day patient attendances for chemotherapy at KEC and enhance day chemotherapy service at TKOH	1Q22
• Build laboratory service capacity for 630 additional tests to support the targeted therapy or immunotherapy for lung cancer	1Q22

Optimise Demand Management

- | | |
|---|------|
| • Enhance integrated cancer care services by providing 1 700 additional allied health outpatient attendances for patients with breast cancer | 1Q22 |
| • Provide four additional hospital haemodialysis places for patients with end-stage renal disease, as well as providing five additional patient capacity for the new generation home haemodialysis model at KEC | 1Q22 |
| • Enhance glaucoma care by providing services for 4 740 additional optical coherence tomography scans and 2 420 visual field tests | 1Q22 |

Enhance Staff Training and Development

- | | |
|--|------|
| • Recruit 11 Full-Time Equivalent (FTE) Advanced Practice Nurses (APNs) as part-time clinical preceptors for junior nurses | 1Q22 |
| • Provide 410 training places for clinical staff to undergo resuscitation training | 1Q22 |

Kowloon West Cluster



As at 31 Mar 2020	Hospital / Institution	Specialist Outpatient Clinic	General Outpatient Clinic
1 Caritas Medical Centre + / Caritas Medical Centre Family Medicine Clinic	✓	✓	✓
2 Kwai Chung Hospital	✓	✓	
3 North Lantau Hospital + / North Lantau Community Health Centre	✓	✓	✓
4 Princess Margaret Hospital +	✓	✓	
5 Yan Chai Hospital + / Yan Chai Hospital General Practice Clinic	✓	✓	✓
6 East Kowloon Psychiatric Centre		✓	
7 Kwai Chung–Psychogeriatric Out–patient Department cum Carers Support Centre / Ha Kwai Chung General Out–patient Clinic		✓	✓
8 Yaumatei Child and Adolescent Mental Health Service		✓	
9 Cheung Sha Wan Jockey Club General Out–patient Clinic			✓
10 Lady Trench General Out–patient Clinic			✓
11 Mrs Wu York Yu General Out–patient Clinic			✓
12 Mui Wo General Out–patient Clinic			✓
13 Nam Shan General Out–patient Clinic			✓

As at 31 Mar 2020	Hospital / Institution	Specialist Outpatient Clinic	General Outpatient Clinic
14 North Kwai Chung General Out-patient Clinic			✓
15 Shek Kip Mei General Out-patient Clinic			✓
16 South Kwai Chung Jockey Club General Out-patient Clinic			✓
17 Tai O Jockey Club General Out-patient Clinic			✓
18 Tsing Yi Cheung Hong General Out-patient Clinic			✓
19 Tsing Yi Town General Out-patient Clinic			✓
20 West Kowloon General Out-patient Clinic			✓

+ Hospital with A&E service

Healthcare Facilities

There are five hospitals or institutions in Kowloon West Cluster (KWC). There are also eight specialist outpatient clinics and 16 general outpatient clinics. As at 31 March 2020, KWC provided a total of 4 835 beds; of which 3 559 were for acute, convalescent and rehabilitation care, 196 for infirmary care, 160 for mentally handicapped care and 920 for psychiatric care.

Actual Patients Served

In 2019-20, approximately 688 800 patients had utilised services in KWC. Approximately 80% of them resided in the Kwai Tsing, Sham Shui Po, Tsuen Wan and Islands Districts.

Number and percentage distribution of patients ever utilised KWC services in 2019-20 according to district of residence

District of residence	No. of patients ^{^#}	Distribution [#]
Kwai Tsing	230 100	33%
Sham Shui Po	148 800	22%
Tsuen Wan	111 800	16%
Islands	63 100	9%
Others*	135 000	20%
KWC Total	688 800	100%

* It also includes patients from places outside Hong Kong or with unknown addresses

[^] Figures are rounded to the nearest hundred

[#] There may be a slight discrepancy between the sum of individual items and the total as shown in the table owing to rounding

Major Risks and Challenges

The Coronavirus disease 2019 (COVID-19) pandemic has a substantial impact on the services of KWC. We have commissioned the North Lantau Hospital Hong Kong Infection Control Centre within a short period of time in 2020-21 to provide additional isolation facilities and COVID-19 testing capacity for the territory. The pandemic also generated additional demand for manpower to provide services for the additional isolation facilities, laboratory tests, and deliver mass vaccination. Despite the slightly lower attrition rate in 2020-21, it is still uncertain that the attrition rate will stay low in the coming year. The recruitment of supporting staff is expected to be continued as training courses for Patient Care Assistant (PCA), especially for inpatient services, and phlebotomists have been affected due to the pandemic. Due to the pandemic, managing the backlog of patients waiting for procedures will be another challenge in the coming year.

KWC continues to face increasing service demand brought about by the ageing and growing population. Inpatient bed occupancy rate remains high throughout the year, and the need for higher level of care like High Dependency Unit (HDU) or Cardiac Care Unit (CCU) beds are strong. The increase in service demand is also reflected in the lengthening of waiting time for Specialist Out-patient Clinic (SOPC) and radiology investigation. There is also imminent need to provide 24-hour life-saving procedures for diseases like myocardial infarction or strokes.

In order to cope with the growing clinical service demand, additional space is required for service expansion. There is an urgent need to modernise and expand the hospitals and institutions at KWC. Therefore, the planning for a number of capital projects is in progress. These include the Expansion of Lai King Building at PMH, and Redevelopment of KCH. There are also continuous renovation works and upgrade of infrastructure in the cluster.

In 2021-22, the cluster will strive to strike a balance between enhancing the service capacity and quality, as well as strengthening the coordination and collaboration of the hospitals within cluster and to provide comprehensive medical services to the community.

Major Initiatives in 2021-22

In 2021-22, KWC will continue to fight against the pandemic while sustaining and boosting cluster services to serve the public. The initiatives are as follows:

Managing the escalating service demand from growing population

- Additional acute and HDU beds will be provided at KWC. These include 20 acute medical beds, two surgical HDU beds and two designated paediatrics beds for chronic ventilator assisted care at CMC; 12 acute surgical beds, eight acute neurosurgical beds, two neurosurgical HDU beds and two CCU beds at PMH; and also four CCU beds at YCH.

Enhancing clinical services in different specialties across cluster hospitals

- Expand service coverage and improve coordination, a cluster-based service network for infectious disease.
- 24-hour Primary Percutaneous Coronary Intervention (PPCI) for ST-Elevation Myocardial Infarction patients will be provided at PMH.
- YCH will offer cardiac catheterisation laboratory services.
- Tumor Treating Field therapy for Glioblastoma Multiforme patients will be provided at PMH.
- 650 additional Palliative Care (PC) consultative visits will be provided at KWC.
- Surgical capacity will also be enhanced by providing six additional emergency Operating Theatre (OT) sessions per week and 250 additional cystoscopy procedures at PMH.
- Renal services will be strengthened by adding two haemodialysis (HD) places for end-stage renal patients, extending service hour for nephrology day ward and installing four additional HD stations at PMH.

Strengthening KWC oncology service

- One-stop diagnostic service and multidisciplinary team clinic will provide integrated care for patients suspected of lung cancer.
- Build service capacity for 1 150 additional laboratory tests to support targeted therapy or immunotherapy for lung cancer.
- Service hours of radiotherapy at PMH will be extended to provide 1 330 additional treatment attendances.

Building diagnostic testing and imaging service capacity

- KWC will provide an additional of 430 pharmacogenetic tests, 1 010 hepatitis related tests for managing viral hepatitis.
- Provide services for an additional of 980 attendances for CT scans and 330 for Magnetic Resonance Imaging (MRI) scans.

Augmenting ophthalmology service

- Glaucoma care will be enhanced by providing an additional of 4 300 optical coherence tomography scans and 5 840 visual field tests.
- 993 additional intravitreal injections will also be provided at CMC.

Improving mental health services

- 180 additional SOPC new case attendances for mild Attention Deficit Hyperactivity Disorder patients will be provided at KWC.
- Four case managers will be recruited for providing 1 200 additional psychiatric outreach attendances.
- Multidisciplinary support will also be solicited to provide 1 260 additional psychogeriatric outreach attendances to Residential Care Homes for the Elderly (RCHEs).

Increasing SOPC and nurse clinic service capacity

- 3 400 additional nurse clinic attendances will be provided and a hepatitis nurse clinic will be set up at KWC.
- SOPC service capacity will be strengthened by providing 540 additional nurse clinic attendances for systemic anti-cancer therapy, 375 additional new case attendance for internal medicine and 225 additional new case attendance for neurosurgery at KWC.

Boosting the cluster allied health service

- KWC will enhance the multidisciplinary care by providing 4 920 additional allied health outpatient attendances.
- CMC will provide stratified care management service for 2 200 physiotherapy outpatient attendances.

Intensifying geriatric support

- Community Geriatric Assessment Team (CGAT) will provide additional 1 400 outreach attendance for terminally ill patients in RCHEs of KWC.
- YCH will offer five additional OT sessions per week for geriatric patients with acute fragility fractures and set up related nursing coordinating service.

KWC Targets

Improve Service Quality	
• Designate two paediatrics beds for chronic ventilator assisted care at CMC	3Q21
• Provide services with stratified care management for 2 200 additional physiotherapy outpatient attendances at CMC	1Q22
• Enhance the multidisciplinary care at KWC to provide services for 4 920 additional allied health outpatient attendances	1Q22
• Enhance the PC service at KWC and provide services for 650 additional consultative visits	1Q22
• Implement the collaborative care model between paediatrics and Child & Adolescent (C&A) psychiatry departments to provide services for 180 additional SOPC new case attendances for patients with mild Attention Deficit Hyperactivity Disorder	1Q22
• Establish a cluster-based, infectious disease network at KWC for expanding service coverage and improving coordination	1Q22
• Enhance the HA's complaints management system by establishing a cluster-based, patient relations office structure at KWC	2Q21
• Provide services for 3 400 additional nurse clinic attendances	1Q22
• Enhance SOPC services on systemic anti-cancer therapy by providing services for 540 additional nurse clinic attendances	1Q22
• Build service capacity for 993 additional intravitreal injections at CMC	1Q22
• Enhance the CGAT support for terminally ill patients in RCHes by providing services for 1 400 additional geriatric outreach attendances	1Q22

Improve Service Quality	
• Enhance multidisciplinary support for providing 1 260 additional psychogeriatric outreach attendances to RCHEs at KWC	1Q22
• Recruit four additional case managers at KWC to provide services for 1 200 additional psychiatric outreach attendances to patients with mental illness	1Q22
• Enhance genetic and genomic services by building service capacity for 430 additional pharmacogenetic tests	1Q22
• Provide Tumor Treating Field therapy for patients with Glioblastoma Multiforme at PMH	1Q22
Optimise Demand Management	
• Provide 20 additional acute medical beds at CMC	4Q21
• Provide 12 additional acute surgical beds and eight acute neurosurgical beds at PMH	4Q21
• Provide two additional neurosurgical HDU beds at PMH, and two additional surgical HDU beds at CMC	4Q21
• Provide two additional CCU beds at PMH and four at YCH	4Q21
• Provide six additional OT sessions per week for emergency services at PMH	1Q22
• Provide five additional OT sessions per week to the day-time trauma list for geriatric patients with acute fragility fractures and set up acute geriatric fragility fracture nursing coordination services at YCH	1Q22
• Provide 250 additional cystoscopy procedures at PMH	1Q22
• Enhance SOPC capacity by providing services for additional new case attendances of 375 for internal medicine and 225 for neurosurgery at KWC	1Q22
• Enhance the management of viral hepatitis by building service capacity for 1 010 additional hepatitis related tests and setting up hepatitis nurse clinic	1Q22

Optimise Demand Management	
• Enhance imaging services at KWC to provide an additional of 980 attendances for CT scans and 330 attendances for MRI scans	1Q22
• Enhance pharmacy services by launching drug refill services at CMC	1Q22
• Extend the service hours of radiotherapy at PMH to provide services for 1 330 additional treatment attendances	1Q22
• Build laboratory service capacity for 1 150 additional tests to support the targeted therapy or immunotherapy for lung cancer	1Q22
• Provide integrated cancer care by providing one-stop diagnostic services and multidisciplinary team clinic for patients suspected of lung cancer	1Q22
• Provide two additional hospital haemodialysis places for patients with end-stage renal disease, extend the service hours of the day ward for nephrology services and install four additional HD stations at PMH	1Q22
• Enhance glaucoma care by providing services for 4 300 additional optical coherence tomography scans and 5 840 visual field tests	1Q22
• Provide 24-hour PPCI for eligible patients with ST-Elevation Myocardial Infarction at PMH and NLTH	4Q21
• Provide cardiac catheterisation laboratory services at YCH	1Q22
Enhance Staff Training and Development	
• Provide clinical attachment at PC units for 12 nurses working beyond PC setting	1Q22
• Recruit 16 Full-Time Equivalent (FTE) Advanced Practice Nurses (APNs) as part-time clinical preceptors for junior nurses	1Q22
• Provide 2 300 training places for clinical staff to undergo resuscitation training	1Q22

New Territories East Cluster



As at 31 Mar 2020	Hospital / Institution	Specialist Outpatient Clinic	General Outpatient Clinic
1 Alice Ho Miu Ling Nethersole Hospital +	✓	✓	
2 Bradbury Hospice	✓	✓	
3 Cheshire Home, Shatin	✓	✓	
4 North District Hospital +	✓	✓	
5 Prince of Wales Hospital +	✓	✓	
6 Shatin Hospital	✓	✓	
7 Tai Po Hospital	✓	✓	
8 Fanling Family Medicine Centre			✓
9 Lek Yuen General Out-patient Clinic			✓
10 Ma On Shan Family Medicine Centre			✓
11 Sha Tau Kok General Out-patient Clinic			✓
12 Shatin (Tai Wai) General Out-patient Clinic			✓
13 Shek Wu Hui Jockey Club General Out-patient Clinic			✓
14 Ta Kwu Ling General Out-patient Clinic			✓
15 Tai Po Jockey Club General Out-patient Clinic			✓
16 Wong Siu Ching Family Medicine Centre			✓
17 Yuen Chau Kok General Out-patient Clinic			✓

+ Hospital with A&E service

Healthcare Facilities

There are seven hospitals or institutions in the New Territories East Cluster (NTEC). There are also seven specialist outpatient clinics and 10 general outpatient clinics. As at 31 March 2020, NTEC provided a total of 4 927 beds; of which 3 886 were for acute, convalescent and rehabilitation care, 517 for infirmary care and 524 for psychiatric care.

Actual Patients Served

In 2019-20, approximately 642 300 patients had utilised services in NTEC. Approximately 84% of them resided in the Sha Tin, North and Tai Po Districts.

Number and percentage distribution of patients ever utilised NTEC services in 2019-20 according to district of residence

District of residence	No. of patients ^{^#}	Distribution [#]
Sha Tin	272 400	42%
North	140 900	22%
Tai Po	131 200	20%
Others [*]	97 800	15%
NTEC Total	642 300	100%

* It also includes patients from places outside Hong Kong or with unknown addresses

[^] Figures are rounded to the nearest hundred

[#] There may be a slight discrepancy between the sum of individual items and the total as shown in the table owing to rounding

Major Risks and Challenges

Having the largest geographical coverage among HA clusters, NTEC is serving a population of around 1.3 million in its catchment area³. Growing service demand emerged from population growth with rising proportion of elderly remains to be the key challenge of NTEC. Increasing service demand and case complexity are expected in view of the projected ageing population in the coming decades. Hence, there is a pressing need to expand service capacity and introduce more efficient service models at NTEC to cope with the challenges ahead.

To address the access block issue and alleviate the long waiting time for some clinical services arising from ever-increasing service demand, NTEC has progressively increased the number of inpatient and day beds, and implemented many new service delivery models over the years. In 2021-22, NTEC will further develop new service models for emergency and medical ambulatory care to manage patients with stable conditions in ambulatory and community settings. In light of the challenges posed by the Coronavirus disease 2019 (COVID-19) pandemic, a cluster-based infectious disease network will be established to improve service coverage and coordination.

NTEC will continue to follow the directions set out in its Clinical Service Plan when formulating service improvement programmes and in close collaboration with relevant stakeholders.

³ Based on "Projection of Population Distribution 2019-2028" published by Planning Department.

Major Initiatives in 2021-22

In alignment with the corporate objectives, NTEC has formulated its 2021-22 Annual Plan with major initiatives highlighted as follows:

Inpatient Services

- NTEC will commission a total of 92 additional inpatient beds, six additional Operating Theatre (OT) sessions per week, and 10 additional endoscopy sessions per week in 2021-22 to expand its inpatient service capacity.
- 780 additional nursing screening and case assessments will be conducted to enhance epilepsy services.

Ambulatory Services

- NTEC will strengthen its ambulatory services by rolling out the ambulatory care model at the Accident & Emergency (A&E) Departments of PWH and NDH, and setting up a medical ambulatory centre at AHNH.
- Additional day hospital haemodialysis places and ambulatory urological services will also be provided to treat patients with renal and urologic diseases in ambulatory setting.
- Enhanced Recovery After Surgery (ERAS) programme will be extended to thoracic, urology and orthopaedic surgeries to speed up patient rehabilitation and reduce demand for inpatient beds.

Outpatient and Outreach Services

- Capacity of General Outpatient Clinic (GOPC) services will be enhanced with an addition of 4 750 quotas.
- Additional new case attendances for internal medicine Specialist Outpatient Clinic (SOPC) and nurse clinic will also be provided to meet service needs.
- Allied health outpatient services will be augmented to support preterm infants, patients with lower limb fracture or arthroplasties, and patients on the waiting list for total joint replacement surgery.
- For outreach services, geriatric and psychiatric outreach attendances will be provided to strengthen community support to patients.

Cancer Service

- NTEC has planned to improve its cancer services in the coming year by providing case management service to patients with musculoskeletal tumour, implementing Tumor Treatment Field therapy for Glioblastoma Multiforme, extending service hours of radiotherapy, and conducting additional tests for adults with myeloid blood cancer and for lung cancer patients undergoing targeted therapy or immunotherapy.

Diagnostic and Laboratory Service Capacity

- An additional Magnetic Resonance Imaging (MRI) scanner and Computed Tomography (CT) scanner will be installed at PWH and AHNH respectively, while service hours of the MRI at NDH will be extended to enhance the imaging services at NTEC.
- Laboratory service capacity will be expanded to carry out more haematological, pharmacogenetic and hepatitis-related tests to support cancer treatment.
- Additional optical coherence tomography scans and visual field tests will also be provided.

Combat the COVID-19 pandemic

- NTEC will strengthen the leadership of microbiology and infectious control services with additional consultant and medical technologist.
- Laboratory service capacity of multiplex Polymerase Chain Reaction (PCR) tests will also be augmented for viral pathogen detection.

NTEC Targets

Improve Service Quality	
• Set up a medical ambulatory care centre at AHNH	4Q21
• Implement the ambulatory care model at A&E department of PWH and NDH	4Q21
• Provide ambulatory urological services for 1 160 additional day patient attendances at NTEC	1Q22
• Roll out the restorative rehabilitation programme for patients with lower limb fracture or arthroplasties at NDH and provide services for 1 150 additional physiotherapy attendances to cover weekends and public holidays	1Q22
• Enhance post-discharge support for families with preterm infant by providing 340 additional allied health outpatient attendances	1Q22
• Enhance allied health services at NTEC by providing 500 additional allied health outpatient attendances, 390 additional speech therapy attendances at the geriatric day hospital, and building laboratory capacity for additional hematological tests	1Q22
• Establish a cluster-based, infectious disease network at NTEC for expanding service coverage and improving coordination	1Q22
• Provide services for 2 615 additional nurse clinic attendances	1Q22
• Provide services for 2 000 additional wound consultation at NTEC	1Q22
• Enhance nursing care for epilepsy services and provide 780 additional screening and case assessment	1Q22
• Provide physiotherapy services for 2 400 additional outpatient attendances for patients on waiting list for total joint replacement surgery at PWH under the structured non-surgical treatment programme	1Q22

Improve Service Quality	
• Enhance the Community Geriatric Assessment Team support for terminally ill patients in Residential Care Homes for the Elderly by providing services for 350 additional geriatric outreach attendances	1Q22
• Enhance the quality of cancer services by providing case management services to 40 additional patients with musculoskeletal tumour	1Q22
• Recruit an additional case manager at NTEC to provide services for 300 additional psychiatric outreach attendances to patients with mental illness	1Q22
• Build laboratory service capacity to provide 100 additional tests for minimal residual disease assays and next-generation sequencing panels for adult with myeloid blood cancers at PWH	1Q22
• Enhance genetic and genomic services by building service capacity for 590 additional pharmacogenetic tests	1Q22
• Optimise surgical planning by adopting medical grade 3D printing at NTEC	1Q22
• Tumor Treatment Field therapy for Glioblastoma Multiforme will be introduced at PWH	1Q22
Optimise Demand Management	
• Provide an additional of 30 acute surgical beds, 10 medical beds, and 10 oncology beds at PWH	4Q21
• Provide 13 additional acute orthopaedic beds at NDH	4Q21
• Provide an additional Intensive Care Unit bed at NDH	4Q21
• Provide 28 additional psychiatric beds at TPH	4Q21
• Provide additional Operation Theatre (OT) sessions of two per week at AHNH and four per week at PWH	4Q21

Optimise Demand Management	
• Set up acute geriatric fragility fracture nursing coordination services at NDH	1Q22
• Provide 10 additional sessions per week for endoscopic procedures at NTEC	4Q21
• Implement the Enhanced Recovery After Surgery programme for thoracic surgery and urology services at PWH, and orthopaedics services at NDH	4Q21
• Increase the GOPC quota by 4 750 at NTEC	1Q22
• Enhance internal medicine SOPC capacity by providing services for 375 additional new case attendances at NTEC	1Q22
• Enhance the management of viral hepatitis by building service capacity for 900 additional hepatitis related tests and setting up hepatitis nurse clinic	1Q22
• Build laboratory service capacity of multiplex PCR tests for viral pathogens detection on 30 000 respiratory samples and recruit one consultant and one medical technologist to strengthen microbiology and infection control services at NTEC	1Q22
• Enhance imaging services at NTEC by extending the service hours of Magnetic Resonance Imaging (MRI) at NDH to provide 1 010 additional MRI scans; install an additional scanner for MRI at PWH and an additional scanner for Computed Tomography at AHNH	1Q22
• Implement clinical pharmacy services on discharge medication management for patients admitted to acute medical wards at PWH	1Q22
• Extend the service hours of radiotherapy at PWH to provide services for 1 330 additional treatment attendances	1Q22
• Build laboratory service capacity for 1 390 additional tests to support the targeted therapy or immunotherapy for lung cancer	1Q22

Optimise Demand Management

- | | |
|--|------|
| • Provide 13 additional hospital haemodialysis places for patients with end-stage renal disease, as well as providing five additional patient capacity for the new generation home haemodialysis model | 1Q22 |
| • Enhance glaucoma care by providing services for 3 950 additional optical coherence tomography scans and 1 250 visual field tests | 1Q22 |

Enhance Staff Training and Development

- | | |
|--|------|
| • Provide clinical attachment at Palliative Care (PC) units for 12 nurses working beyond PC setting | 1Q22 |
| • Recruit 16 Full-Time Equivalent (FTE) Advanced Practice Nurses (APNs) as part-time clinical preceptors for junior nurses | 1Q22 |
| • Provide 150 training places for clinical staff to undergo resuscitation training | 1Q22 |

New Territories West Cluster



As at 31 Mar 2020	Hospital / Institution	Specialist Outpatient Clinic	General Outpatient Clinic
1 Castle Peak Hospital	✓	✓	
2 Pok Oi Hospital +	✓	✓	
3 Siu Lam Hospital	✓		
4 Tin Shui Wai Hospital +	✓	✓	
5 Tuen Mun Hospital +	✓	✓	
6 Tuen Mun Eye Centre		✓	
7 Kam Tin Clinic			✓
8 Madam Yung Fung Shee Health Centre			✓
9 Tin Shui Wai (Tin Yip Road) Community Health Centre			✓
10 Tin Shui Wai Health Centre (Tin Shui Road)			✓
11 Tuen Mun Clinic			✓
12 Tuen Mun Wu Hong Clinic			✓
13 Yan Oi General Out-Patient Clinic			✓
14 Yuen Long Jockey Club Health Centre			✓

+ Hospital with A&E service

Healthcare Facilities

There are five hospitals or institutions in the New Territories West Cluster (NTWC). There are also five specialist outpatient clinics and eight general outpatient clinics. As at 31 March 2020, NTWC provided a total of 4 618 beds; of which 2 787 were for acute, convalescent and rehabilitation care, 135 for infirmary care, 520 for mentally handicapped care and 1 176 for psychiatric care.

Actual Patients Served

In 2019-20, approximately 544 100 patients had utilised services in NTWC. Approximately 92% of the patients resided in the Yuen Long and Tuen Mun Districts.

Number and percentage distribution of patients ever utilised NTWC services in 2019-20 according to district of residence

District of residence	No. of patients ^{^#}	Distribution [#]
Yuen Long	282 800	52%
Tuen Mun	218 600	40%
Others [*]	42 700	8%
NTWC Total	544 100	100%

^{*} It also includes patients from places outside Hong Kong or with unknown addresses

[^] Figures are rounded to the nearest hundred

[#] There may be a slight discrepancy between the sum of individual items and the total as shown in the table owing to rounding

Major Risks and Challenges

NTWC faces the challenges of coping with soaring service demand for a wide range of medical specialties. These are posed by the growing population in the catchment area, which is projected to further increase from 1.15 million in 2019 to 1.30 million in 2028, with significant increase of 58% in the elderly population⁴. To tackle the situation, NTWC will follow and implement the key clinical strategies and service directions set out in the Clinical Services Plan for NTWC.

Apart from addressing the challenge of service volume, the quality of services is also accorded the highest priority in NTWC. As the cluster's services have been growing rapidly in the past few years, the newly joined colleagues have constituted a significant portion to the total workforce. NTWC needs to dedicate more resources to their supervision and training. In addition, the rapid increase in acute services has resulted in more demand for quality rehabilitation service. Therefore, apart from developing acute services, extended care and community care services will also be enhanced.

NTWC will continue to weigh up priorities and increase service capacity with full commitment in providing quality services and addressing the service demand within the catchment area of the Cluster.

⁴ Based on "Projection of Population Distribution 2019-2028" published by Planning Department.

Major Initiatives in 2021-22

To align with the corporate objectives, the major initiatives of NTWC for 2021-22 are as follows:

Improve service quality

- Enhance the complaints management system by establishing a cluster-based, patient relations office structure at NTWC.
- Enhance Palliative Care (PC) services and a cluster medical palliative care team will be formed.
- Enhance the Community Geriatric Assessment Team (CGAT) support, as well as the psychogeriatric outreach service for Residential Care Homes for the Elderly (RCHes) by providing additional outreach attendances.
- Adopt medical grade 3D printing at NTWC and the site for installing a robotic surgery system will be reserved.

Optimise demand management

- Provide one High Dependency Unit (HDU) bed, two Intensive Care Unit (ICU) beds and 12 acute inpatient beds at TMH, 10 acute and two Cardiac Care Unit (CCU) beds at POH, 40 extended care and 15 day beds at TSWH.
- Provide five additional Operating Theatre (OT) sessions per week to enhance the capacity of OT services.
- Additional seven sessions per week for endoscopy services will be provided at TSWH.
- Five additional Cardiac Catheterisation Laboratory sessions will be provided at POH.

- Continue to increase Specialist Outpatient Clinic (SOPC) consultation sessions.
- Increase General Outpatient Clinic (GOPC) quota by 2 370 at NTWC.
- Enhance ophthalmology services by providing 175 additional surgeries and 340 additional SOPC new case attendances.
- Laboratory service capacity will be enhanced by providing 1 040 additional tests to support the targeted therapy or immunotherapy for lung cancer.
- Enhance support for patients with end-stage renal failure, an additional 16 hospital haemodialysis places will be provided.

Enhance staff training and development

- Recruit 16 Full-Time Equivalent (FTE) Advanced Practice Nurses (APNs) as part-time clinical preceptors for junior nurses.
- Provide 105 training places for clinical staff to undergo resuscitation training.

NTWC Targets

Improve Service Quality	
• Provide an additional of 10 surgical day beds and five medical day beds at TSWH	4Q21
• Enhance PC services by forming a cluster medical PC team at NTWC	2Q21
• Enhance psychiatry inpatient services by designating seven beds for child & adolescent at CPH	1Q22
• Enhance the HA's complaints management system by establishing a cluster-based, patient relations office structure at NTWC	2Q21
• Provide services for 3 190 additional nurse clinic attendances	1Q22
• Provide physiotherapy services for 2 400 additional outpatient attendances for patients on waiting list for total joint replacement surgery at NTWC under the structured, non-surgical treatment programme	1Q22
• Enhance case management services under the integrated care model for elderly patients to provide 450 additional needs assessments and discharge planning and 1 080 home visits at NTWC	1Q22
• Enhance the CGAT support for terminally ill patients in RCHEs by providing services for 1 050 additional geriatric outreach attendances	1Q22
• Enhance multidisciplinary support for providing 840 additional psychogeriatric outreach attendances to RCHEs at NTWC	1Q22
• Enhance the quality of cancer care by providing case management services to an additional of 50 patients with haematological cancer and 100 patients with gynaecological cancer	1Q22
• Recruit two additional case managers at NTWC to provide services for 600 additional psychiatric outreach attendances to patients with mental illness	1Q22

Improve Service Quality	
• Enhance genetic and genomic services by building service capacity for 380 additional pharmacogenetic tests	1Q22
• Prepare the site for installing an additional robotic surgery system at TMH	1Q22
• Optimise surgical planning by adopting medical grade 3D printing at NTWC	1Q22
• Provide Tumor Treating Field therapy for patients with Glioblastoma Multiforme at TMH	1Q22
Optimise Demand Management	
• Provide an additional HDU bed and two additional ICU beds at TMH	4Q21
• Provide 10 additional acute surgical beds and two additional CCU beds at POH	4Q21
• Provide 12 additional acute orthopedic beds at TMH	4Q21
• Provide 40 additional extended care beds at TSWH	4Q21
• Provide five additional OT sessions per week at NTWC	1Q22
• Provide seven additional sessions per week for endoscopic procedures at TSWH	4Q21
• Increase the GOPC quota by 2 370 at NTWC	1Q22
• Enhance ophthalmology services at NTWC by providing services for an additional of 175 surgeries and 340 SOPC new case attendances	1Q22
• Enhance the management of viral hepatitis by building service capacity for 660 additional hepatitis related tests and setting up hepatitis nurse clinic	1Q22
• Implement clinical pharmacy services on discharge medication management for patients admitted to acute medical wards at TMH	1Q22

Optimise Demand Management

- | | |
|--|------|
| • Build laboratory service capacity for 1 040 additional tests to support the targeted therapy or immunotherapy for lung cancer | 1Q22 |
| • Provide 16 additional hospital haemodialysis places for patients with end-stage renal disease at NTWC | 1Q22 |
| • Enhance glaucoma care by providing services for 2 600 additional optical coherence tomography scans and 2 310 visual field tests | 1Q22 |
| • Provide five additional Cardiac Catheterisation Laboratory sessions at POH | 4Q21 |

Enhance Staff Training and Development

- | | |
|--|------|
| • Recruit 16 Full-Time Equivalent (FTE) Advanced Practice Nurses (APNs) as part-time clinical preceptors for junior nurses | 1Q22 |
| • Provide 105 training places for clinical staff to undergo resuscitation training | 1Q22 |

Abbreviations

A&E	Accident & Emergency
APN	Advanced Practice Nurse
CC	Central Committee
CCU	Cardiac Care Unit
C&A	Child & Adolescent
CGAT	Community Geriatric Assessment Team
COC	Coordinating Committee
COVID-19	Coronavirus disease 2019
CSP	Clinical Services Plan
CT	Computed Tomography
eHR	Electronic Health Record
EA	Executive Assistant
EN	Enrolled Nurse
ERAS	Enhanced Recovery After Surgery
FMSC	Family Medicine Specialist Clinic
FTE	Full-Time Equivalent
GOPC	General Outpatient Clinic
HA	Hospital Authority
HBOT	Hyperbaric Oxygen Therapy
HDP	Hospital Development Plan
HDU	High Dependency Unit
ICU	Intensive Care Unit
IEM	Inborn Errors of Metabolism
IPMOE	Inpatient Medication Order Entry
IT	Information Technology
MRI	Magnetic Resonance Imaging
NEATS	Non-Emergency Ambulance Transfer Service
NGO	Non-Governmental Organisation
O&T	Orthopaedics & Traumatology
OpA	Operation Assistant
OPAT	Out-patient Parenteral Antimicrobial Therapy
OT	Operating Theatre
PAAC	Pre-anaesthetic Assessment Clinic
PC	Palliative Care
PCA	Patient Care Assistant
PPCI	Primary Percutaneous Coronary Intervention
PPP	Public-Private Partnerships
RCHEs	Residential Care Homes for the Elderly
RN	Registered Nurse
SOPC	Specialist Outpatient Clinic
STEMI	ST-Elevation Myocardial Infarction

Clusters

HKEC	Hong Kong East Cluster
HKWC	Hong Kong West Cluster
KCC	Kowloon Central Cluster
KEC	Kowloon East Cluster
KWC	Kowloon West Cluster
NTEC	New Territories East Cluster
NTWC	New Territories West Cluster

Hospitals and Institutions

AHNS	Alice Ho Miu Ling Nethersole Hospital
BTS	Hong Kong Red Cross Blood Transfusion Service
CCH	Cheshire Home, Chung Hom Kok
CMC	Caritas Medical Centre
CPH	Castle Peak Hospital
DKCH	The Duchess of Kent Children's Hospital at Sandy Bay
FYKH	Tung Wah Group of Hospitals Fung Yiu King Hospital
GH	Grantham Hospital
HHH	Haven of Hope Hospital
HKCH	Hong Kong Children's Hospital
HKEH	Hong Kong Eye Hospital
KCH	Kwai Chung Hospital
KH	Kowloon Hospital
KWH	Kwong Wah Hospital
MMRC	MacLehose Medical Rehabilitation Centre
NDH	North District Hospital
NLTH	North Lantau Hospital
OLMH	Our Lady of Maryknoll Hospital
PMH	Princess Margaret Hospital
POH	Pok Oi Hospital
PWH	Prince of Wales Hospital
PYNEH	Pamela Youde Nethersole Eastern Hospital
QEH	Queen Elizabeth Hospital
QMH	Queen Mary Hospital
RH	Ruttonjee Hospital
SH	Shatin Hospital
TKOH	Tseung Kwan O Hospital
TMH	Tuen Mun Hospital
TPH	Tai Po Hospital
TSKH	Tang Shiu Kin Hospital
TSWH	Tin Shui Wai Hospital
TWEH	Tung Wah Eastern Hospital
TWH	Tung Wah Hospital
TYH	Tsan Yuk Hospital
UCH	United Christian Hospital
WTSH	Tung Wah Group of Hospitals Wong Tai Sin Hospital
YCH	Yan Chai Hospital

Appendix 1 Key Service Statistics

Targets	As at 31 March 2020	As at 31 March 2021 (Estimate)	As at 31 March 2022 (Plan/ Estimate)
I. Access to services			
Inpatient services			
no. of hospital beds			
general (acute and convalescent)	23 067	23 526	23 843
mentally ill	3 647	3 647	3 675
mentally handicapped	680	677	675
infirmary	2 041	2 001	1 981
overall	29 435	29 851	30 174
Ambulatory and outreach services			
accident and emergency (A&E) services			
percentage of A&E patient attendances seen within target waiting time			
triage I (critical cases – 0 minute) (%)	100	100	100
triage II (emergency cases – 15 minutes) (%)	98	95	95
triage III (urgent cases – 30 minutes) (%)	77	90	90
specialist outpatient services			
median waiting time for first appointment at specialist outpatient clinics			
priority 1 cases	< 1 week	2 weeks	2 weeks
priority 2 cases	5 weeks	8 weeks	8 weeks
rehabilitation and geriatric services			
no. of geriatric day places	669	703	703
psychiatric services			
no. of psychiatric day places	889	889	899

Indicators	Actual for 2019-20	Estimate for 2020-21	Estimate for 2021-22
II. Delivery of services			
Inpatient services			
overall			
no. of patient days	8 167 243	8 056 000	8 654 000
bed occupancy rate (%)	86	86	86
no. of discharge episodes ^[Note 1]	1 109 302	1 093 260	1 217 570
general (acute and convalescent)			
no. of patient days	6 570 417	6 491 000	7 049 000
bed occupancy rate (%)	89	89	89
no. of discharge episodes ^[Note 1]	1 088 745	1 072 800	1 196 100
average length of stay (days) ^[Note 2]	6.1	6.1	6.1
mentally ill			
no. of patient days	923 033	911 000	943 000
bed occupancy rate (%)	71	71	71
no. of discharge episodes ^[Note 1]	16 960	16 900	17 900
average length of stay (days) ^[Note 2]	56	56	56
mentally handicapped			
no. of patient days	183 568	183 000	186 000
bed occupancy rate (%)	74	74	74
infirmary			
no. of patient days	490 225	471 000	476 000
bed occupancy rate (%)	89	89	89
Ambulatory and outreach services			
day inpatient services			
no. of discharge episodes ^[Note 1]	683 477	706 000	747 300
A&E services			
no. of A&E attendances	2 048 039	1 989 000	2 203 000
no. of A&E first attendances			
triage I	22 335	22 300	22 300
triage II	52 011	52 000	52 000
triage III	711 744	700 300	748 600

Indicators	Actual for 2019-20	Estimate for 2020-21	Estimate for 2021-22
specialist outpatient services			
no. of specialist outpatient (clinical) first attendances	776 166	796 000	864 000
no. of specialist outpatient (clinical) follow-up attendances	6 865 554	6 977 000	7 225 000
total no. of specialist outpatient (clinical) attendances	7 641 720	7 773 000	8 089 000
primary care services			
no. of general outpatient attendances	5 815 680	6 236 000	6 249 000
no. of family medicine specialist clinic attendances	307 614	315 300	326 600
total no. of primary care attendances	6 123 294	6 551 300	6 575 600
rehabilitation and palliative care services			
no. of rehabilitation day and palliative care day attendances	84 253	78 500	112 900
no. of community nurse attendances	886 315	897 000	926 000
no. of allied health (community) attendances	33 153	33 600	36 700
no. of allied health (outpatient) attendances	2 654 470	2 755 000	3 044 000
geriatric services			
no. of geriatric outreach attendances ^[Note 3]	679 527	730 600	759 100
no. of geriatric elderly persons assessed for infirmary care service	1 697	1 670	1 850
no. of geriatric day attendances	129 963	117 600	156 700
no. of Visiting Medical Officer attendances ^[Note 3]	92 830	N.A.	N.A.
psychiatric services			
no. of psychiatric outreach attendances	269 705	259 000	323 700
no. of psychiatric day attendances	194 417	176 700	233 100
no. of psychogeriatric outreach attendances ^[Note 4]	91 390 ^[Note 4]	89 600	110 900

Indicators	Actual for 2019-20	Estimate for 2020-21	Estimate for 2021-22
III. Quality of services			
no. of hospital deaths per 1 000 population <small>[Note 5]</small>	2.8	2.8	2.8
unplanned readmission rate within 28 days for general inpatients (%)	10.6	10.6	10.6
IV. Cost of services			
Cost distribution			
cost distribution by service types (%)			
inpatient	54.5	54.3	54.6
ambulatory and outreach	45.5	45.7	45.4
cost of services for persons aged 65 or above			
share of cost of services (%)	49.9	49.8	50.2
cost of services per 1 000 population (\$m)	27.4	27.7	28.1
Unit costs			
inpatient services			
cost per patient day (\$)			
general (acute and convalescent)	6,020	6,480	6,310
mentally ill	3,170	3,350	3,370
mentally handicapped	1,980	2,050	2,060
infirmary	1,810	1,920	1,930
ambulatory and outreach services			
cost per A&E attendance (\$)	1,780	1,920	1,820
cost per specialist outpatient attendance (\$)	1,460	1,500	1,490
cost per general outpatient attendance (\$)	560	540	560
cost per family medicine specialist clinic attendance (\$)	1,280	1,310	1,310
cost per community nurse attendance (\$)	675	690	705
cost per psychiatric outreach attendance (\$)	2,000	2,160	1,810
cost per geriatric day attendance (\$)	2,730	3,130	2,480

Indicators	Actual for 2019-20	Estimate for 2020-21	Estimate for 2021-22
Fee waivers ^[Note 6]			
total amount of waived fees (\$m)	1,032.3	1,068.3	1,165.9
percentage of Comprehensive Social Security Assistance (CSSA) fee waiver (%) ^[Note 7]	16.0	15.8	15.9
percentage of non-CSSA fee waiver (%) ^[Note 7]	18.8	N.A.	N.A.
percentage of Higher Old Age Living (OALA) Allowance fee waiver (%) ^[Note 7]	N.A.	13.1	12.9
percentage of other fee waiver (%) ^[Note 7]	N.A.	6.6	6.7
V. Manpower (no. of full time equivalent staff as at 31 March)			
Medical			
doctor	6 195	6 430	6 630
specialist	3 305	3 290	3 290
non-specialist	2 890	3 140	3 340
intern	475	438	506
dentist	11	13	13
medical total	6 681	6 881	7 149
Nursing			
nurse	27 403	28 530	29 710
trainee	1 554	1 050	1 100
nursing total	28 957	29 580	30 810
Allied health	8 420	8 880	9 250
Others	40 443	42 570	44 670
total	84 501	87 911	91 879

- Note 1** Refers to discharges and deaths in the Controlling Officer's Report (COR).
- Note 2** Derived by dividing the sum of length of stay of inpatients by the corresponding number of inpatients discharged and treated.
- Note 3** Starting from 2020–21, the overall service model for Community Geriatric Assessment Team and Visiting Medical Officer in the Hospital Authority (HA) has been streamlined. The indicators for the number of geriatric outreach attendances and number of Visiting Medical Officer attendances are consolidated.
- Note 4** Starting from 2020–21, the number of Psychogeriatric Outreach Attendances no longer includes attendances arising from consultation liaison services. For comparison purposes, the figures for 2019–20 Actual has been adjusted accordingly (i.e. exclude consultation liaison).
- Note 5** Refers to the age-standardised hospital death rate covering inpatient and day inpatient deaths in HA hospitals in a particular year. The standardised rate, as a standard statistical technique to facilitate comparison over years, is calculated by applying the HA age-specific hospital death rate in that particular year to the "standard" population in mid-2001.
- Note 6** In light of the increasing portion of Higher OALA fee waiver, the indicator "percentage of non-CSSA fee waiver" is categorised into "percentage of Higher OALA fee waiver" and "percentage of other fee waiver" for 2020–21 Revised Estimate and 2021–22 Estimate to further differentiate various types of fee waiver. The percentage of Higher OALA fee waiver for 2019–20 Actual as included under "percentage of non-CSSA waiver" is 12.1 per cent.
- Note 7** Refers to the amount waived as percentage to total charge.

Appendix 2 Service Estimates by Cluster

Service Estimates for 2021-22	HKEC	HKWC	KCC	KEC	KWC	NTEC	NTWC
Inpatient services							
general (acute and convalescent)							
no. of patient days	643 400	666 300	1 573 500	847 700	1 123 600	1 232 100	962 400
no. of discharge episodes ^[Note 1]	120 100	116 260	236 300	144 800	216 990	199 630	162 020
mentally ill							
no. of patient days	102 700	21 800	129 000	20 400	239 500	158 500	271 100
no. of discharge episodes ^[Note 1]	1 770	700	3 200	480	4 470	4 410	2 870
mentally handicapped							
no. of patient days	-	-	-	-	19 800	-	166 200
infirmary							
no. of patient days	164 000	43 000	79 500	21 300	43 900	94 100	30 200
Ambulatory and outreach services							
day inpatient services							
no. of discharge episodes ^[Note 1]	76 180	103 590	152 330	75 970	94 850	139 570	104 810
accident and emergency services							
no. of A&E attendances	214 700	123 900	312 400	282 600	473 900	356 300	439 200
specialist outpatient services							
no. of specialist outpatient (clinical) attendances	863 300	931 900	1 525 800	926 200	1 410 800	1 308 200	1 122 800
primary care services							
no. of primary care attendances	649 560	414 790	1 219 750	1 072 730	1 111 040	1 117 310	990 420
rehabilitation and palliative care services							
no. of rehabilitation day and palliative care day attendances	44 710	30 340	5 580	7 540	9 430	9 550	5 750
no. of community nurse attendances	100 300	57 500	187 100	179 500	162 500	136 600	102 500
no. of allied health (community) attendances	2 610	3 590	5 200	1 500	5 680	10 900	7 220
no. of allied health (outpatient) attendances	343 900	237 500	669 800	433 100	457 700	473 400	428 600

Service Estimates for 2021-22	HKEC	HKWC	KCC	KEC	KWC	NTEC	NTWC
geriatric services							
no. of geriatric outreach attendances	109 310	66 740	168 260	54 810	144 370	95 120	120 490
no. of geriatric day attendances	29 510	8 270	26 860	18 050	25 190	33 370	15 450
psychiatric services							
no. of psychiatric outreach attendances	24 890	22 230	20 820	34 300	109 210	45 870	66 380
no. of psychiatric day attendances	27 300	22 760	11 260	34 190	69 050	48 010	20 530
no. of psychogeriatric outreach attendances	12 740	17 500	9 870	11 380	30 660	14 810	13 940
Quality of services							
unplanned readmission rate within 28 days for general inpatients (%)	10.4	8.6	10.0	10.8	12.5	9.7	11.4

Note 1 Refers to discharges and deaths in the Controlling Officer's Report (COR).

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We welcome your suggestions on the
Hospital Authority Annual Plan.
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This Annual Plan can also be downloaded
from the Hospital Authority website.

ANNUAL PLAN 2021-22