



醫院管理局
HOSPITAL
AUTHORITY

ANNUAL PLAN 2022 - 23





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



Content

Introduction from Chief Executive	4	Head Office Plan	50
Planning Context	6	• Corporate Governance • Capital Works • Business Support Services • Information Technology and Health Informatics Services	
Planning Process	7	Cluster Plans	70
Annual Plan Framework	10	• Hong Kong East Cluster • Hong Kong West Cluster • Kowloon Central Cluster • Kowloon East Cluster • Kowloon West Cluster • New Territories East Cluster • New Territories West Cluster	
Strategic Goals and Programme Targets	12	Abbreviations	132
• Provide Smart Care • Develop Smart Hospitals • Nurture Smart Workforce • Enhance Service Supply		Appendices	133
Service and Resource Estimates	44	Appendix 1 Key Service Statistics	
• Service Estimates • Manpower Estimates • Budget		Appendix 2 Service Estimates by Cluster	

Introduction from Chief Executive

As the major public healthcare service provider in Hong Kong, the Hospital Authority (HA) aims to provide the community with comprehensive, high-quality and people-centred healthcare services. The ongoing COVID-19 pandemic has brought about unprecedented burden and challenges to HA. I am most thankful to the staunch support from our colleagues under this evolving pandemic. It is only with the concerted efforts of our professional and dedicated staff that HA will be able to deliver quality care to all patients during this challenging time.

Notwithstanding the service adjustments brought about by the pandemic, HA is also facing the challenge of meeting the escalating service demand arising from the demographic changes and increasing burden of chronic diseases. To that, HA has planned its services strategically towards the direction of sustainable healthcare and published the HA Strategic Plan 2022-2027. Under the second triennial funding arrangement by the Government, the recurrent subvention for HA in 2022-23 amounts to \$90.4 billion. Around 120 initiatives will be implemented in this Annual Plan to strengthen HA's services. We would also like to thank the government for the additional resources in support of various anti-epidemic efforts.

Healthcare manpower is of utmost importance to HA and a series of staff retention measures has been implemented for addressing staff turnover. Extension of employment for retiring or retired staff who wish to continue to work in HA beyond normal retirement age was in place to address critical manpower shortage and succession gaps. We will continue to improve the career progression by increasing promotion positions for doctors, nurses and allied health staff. Limited Registration recruitment scheme for doctors and locum recruitment will continue. Besides, a new rank of Associate Nurse Consultant has been introduced to enhance the nursing career structure and facilitate the continuous development of nursing professional. In 2022-23, HA plans to recruit approximately 500 doctors, 2 730 nurses and 950 allied health professionals.

HA will continue to build up its capacity through the phased service operation of the hospital development projects. On top of ongoing projects, the Kwong Wah Hospital after redevelopment and the extension of Operating Theatre Block for Tuen Mun Hospital will be in

commission by phases. To cope with the rising service demand, a total of approximately 390 additional hospital beds will be provided across Clusters. HA is also transforming its services towards "Smart Care" by adopting alternative service models and modern technologies. Examples include promoting ambulatory care services using digital technology, as well as providing care options, such as nurse and pharmacist clinics, to address the waiting time issue of specialist outpatient services.

It is also crucial for HA to continue developing the "Smart Hospital" initiative. The innovative HA patient mobile application (HA Go) will continue to be enhanced with digitalised solutions to increase public's accessibility to HA's services. In addition, HA will improve clinical effectiveness and efficiency by developing the HA Artificial Intelligence and data analytics platform.

Looking ahead, HA will continue to ensure the public's accessibility to comprehensive and high quality healthcare services. I would like to take this opportunity to express my gratitude to our dedicated staff for their efforts in upholding their professionalism to continue to provide healthcare services to the community amidst the COVID-19 pandemic. I would also like to extend my sincere thanks to the Government, our patients and the community for the tremendous support during these unprecedented times.



Tony Ko
Chief Executive

Planning Context

This Annual Plan outlines the specific actions for the first year implementation of HA Strategic Plan 2022-2027.

Strategic Plan 2022-2027

The Strategic Plan 2022-2027 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 2022-23 is the first action plan derived from the HA Strategic Plan 2022-2027. The planning process for this Annual Plan began in April 2021. The priorities of this Annual Plan are guided by the strategic directions outlined in the HA Strategic Plan and are aligned with the key directions set out by the HA Task Group on Sustainability, HA Strategic Service Frameworks and Clusters' Clinical Services Plans. 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 2022-23 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, HA Task Group on Sustainability, Coordinating Committees and Central Committees (COC/CCs) of the different clinical specialties, Clusters' 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.

The Annual Planning Forum is an annual event where subject officers present potentially new programmes and initiatives. The Forums are chaired by the Director (Strategy and Planning) and attended by the Chief Executive, Head Office's Directors and Heads, Clusters' Chief Executives, Hospital Chief Executives, Head Office's Chief Managers, other senior executives and relevant clinical representatives. For this Annual Plan, the Forums were conducted as follows:

- **Coordinating Committees (COCs) and Central Committees (CCs) Annual Planning Forum**, was held on 20 April 2021, where Head Office subject officers presented proposals for clinical services.
- **Head Office Annual Planning Forum**, was held on 29 April 2021, where Head Office executives presented proposals that were initiated by the Head Office or coordinated at the corporate level.
- **Cluster Annual Planning Forum**, was held on 7 May 2021, where Cluster management proposed initiatives aimed at meeting the service needs of individual Clusters, with an emphasis on key pressure areas.

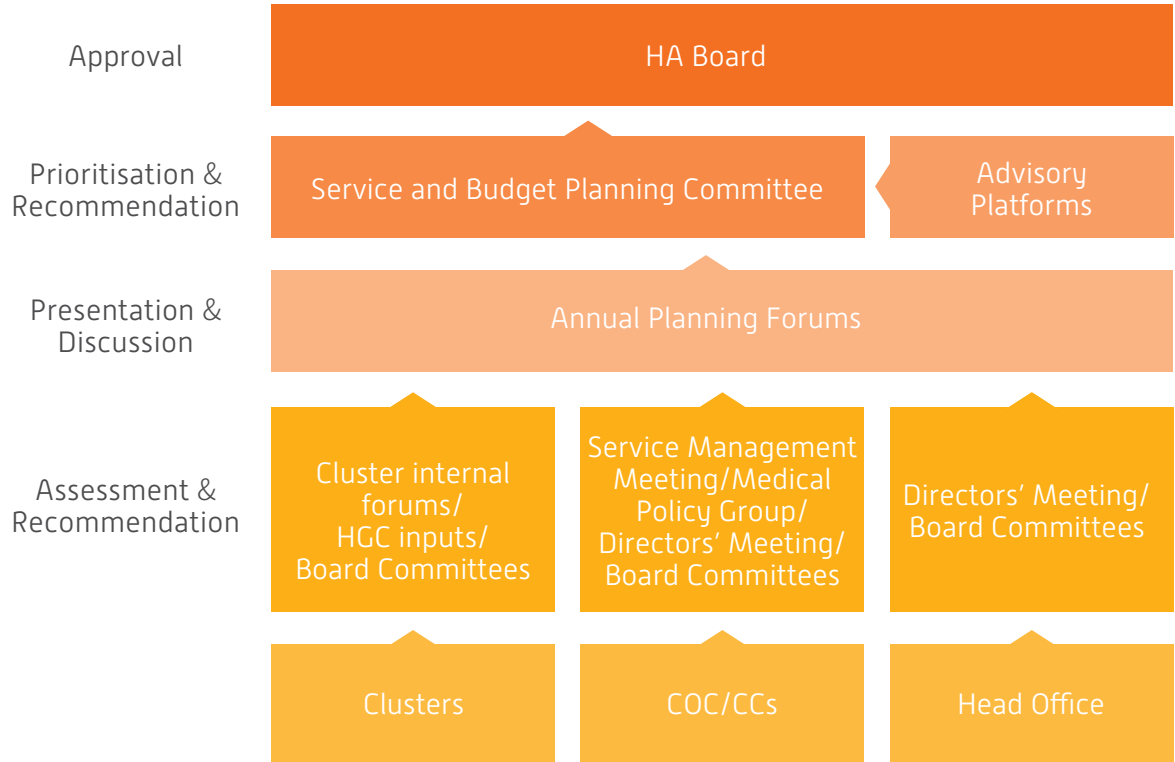
The forums were interactive, with opportunities for questions and comments from floor members. Clarifications were provided and comments raised were considered by subject officers for further refinement of the proposals.

All proposals presented at the forums 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 the proposals, 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 2022-23. 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 2022 and March 2023.

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



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 2022-23 comprises strategic goals, strategic directions, strategies and programme targets.

The strategic goals, strategic directions and strategies are as delineated in Strategic Plan 2022-2027. 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 four strategic goals in the **Annual Plan 2022-23**:

- Provide smart care
- Develop smart hospitals
- Nurture smart workforce
- Enhance service supply

Framework of Annual Plan 2022-23		
Strategic Goals [What we want to achieve]	Strategic Directions [Where we are going]	Strategies [How we get there]
Provide Smart Care	Leverage on big data and advanced technology	Develop personalised care
		Build up telemedicine and telecare
	Re-orientate service models	Promote ambulatory care
		Enhance community-based care
		Empower patients for self-care
	Explore care options for high demand services	Implement alternative options for specialist outpatient service
		Enhance and develop different PPP options
	Develop Smart Hospitals	Enable smart care provision
Develop smart ward, smart clinic and smart pharmacy		
Roll out “Mobile Patient” initiatives		
Enable smart hospital support and management		Automate services via IT tools / solutions and robotics
		Establish IT platforms to facilitate operational efficiency
Nurture Smart Workforce	Attract and retain staff	Conduct long-term manpower planning of healthcare staff
		Enhance staff recruitment and employment options
		Foster staff’s career prospects
		Strengthen staff relations, management and recognition
		Drive Digital Workplace
	Enhance training and development	Reinforce staff training programmes
		Facilitate staff to attend training
Enhance Service Supply	Increase healthcare capacity	Implement Hospital Development Plans
		Bolster the capability of healthcare facilities in meeting demand
	Ensure financial sustainability	Work out a viable funding arrangement with the Government

Strategic Goals and Programme Targets

In Annual Plan 2022-23, we map out four Strategic Goals and 22 Strategies with the corresponding Programme Targets that reflect the work we do to implement the five-year Strategic Plan.

This chapter delineates 123 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 ninth 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.

Provide Smart Care

Our strategies for 2022-23

- Develop personalised care
- Build up telemedicine and telecare
- Promote ambulatory care
- Enhance community-based care
- Empower patients for self-care
- Implement alternative options for specialist outpatient service
- Enhance and develop different PPP options

Develop personalised care

Action	Target for 2022-23
Develop specialised Chimeric Antigen Receptor T (CAR-T) Cell Therapy for patients with blood cancer at HA.	Build capacity for the provision of CAR-T Cell Therapy to 20 additional patients at QMH; and prepare for the development of CAR-T Cell Therapy service at HKCH and PWH by 1Q23.
Continue to enhance geriatric support at Accident & Emergency (A&E) Department to facilitate care coordination for elderly patients.	Enhance geriatric support by providing services for 3 000 additional focused geriatric assessments at A&E departments of TKOH, AHNH, NDH and POH by 1Q23.
Continue to improve peri-operative management and provide personalised care for elderly patients with acute fragility fractures.	Set up acute geriatric fragility fracture nursing coordination services at KWH, TKOH, AHNH and POH by 1Q23.

Action	Target for 2022-23
Extend the ortho-geriatric collaborative care model for elderly patients with hip or other fragility fractures in both acute and extended care settings.	Provide additional geriatric support for a total of 625 orthopaedic patients at KWH, WTSH and NDH by 1Q23.
Continue to provide Enhanced Recovery After Surgery (ERAS) programme.	Implement the ERAS programme for selected specialties at PYNEH, RH, QEH and PWH by 1Q23.
Improve treatment standard and outcomes for coagulopathy patients.	Enhance the coagulopathy genetics service network and build capacity for providing an additional total of 220 genetic tests at QMH and PMH by 1Q23.
Introduce Breast Cancer (BRCA) gene mutation testing for ovarian cancer patients.	Build capacity for providing an additional total of 710 breast cancer mutation tests at HKEC, HKWC, KCC, NTEC; and providing genetic counselling and clinic follow-up services for 600 additional cases at HKWC by 1Q23.
Enhance clinical and laboratory services for genetic and genomic medicine at NTEC.	Set up multidisciplinary clinical genetic service team at NTEC and build capacity for providing 100 additional panel tests by 1Q23.
Enhance the long term management of ventilator assisted care by centralising care provision at designated facilities.	Designate three additional paediatrics beds for chronic ventilator assisted care at DKCH by 1Q23.

Action	Target for 2022-23
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 setting.	Roll out the programme to YCH and AHNH, providing services for an additional total of 2 300 physiotherapy and 1 150 occupational therapy attendances during weekends and public holidays by 1Q23.
Continue the early patient mobilisation programme in the acute general adult Intensive Care Units (ICU) in HA to maintain physical mobility and improve functional status of patients.	Provide an additional total of 2 500 early mobilisation treatment sessions by physiotherapists to 400 ICU patients at KCC and NTEC by 1Q23.
Support effective implementation of rehabilitation care by up keeping the standard of medical technology and equipment.	Implement exoskeleton in rehabilitation training and provide 1 500 additional training sessions for patients with spinal cord injury at HKWC, KCC and NTEC by 1Q23.
Extend the 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 PYNEH, MMRC and UCH by 1Q23.
Enhance physiotherapy outpatient services by continuing the stratified care management for patients with low back pain.	Provide stratified care management services for 2 200 additional physiotherapy outpatient attendances at QMH by 1Q23.

Action	Target for 2022-23
Improve clinical outcome by adopting medical grade three-dimensional printing for personalised care.	Adopt medical grade three-dimensional printing technology to provide services in Orthopaedics and Traumatology (O&T) departments of QMH and YCH; enhance medical three-dimensional printing services at QEH by 1Q23.
Enhance medical device management by aligning the provision of medical devices used in 118 interventional procedures under specific clinical indications.	Provide additional medical devices used in interventional procedures under specific clinical indications by 2Q22.

Build up telemedicine and telecare

Action	Target for 2022-23
Promulgate the use of telemedicine in HA.	Provide an electronic sick leave certificate for telemedicine by 3Q22; promote and launch the model of smart village by 3Q22.

Promote ambulatory care

Action	Target for 2022-23
Provide additional day beds to relieve the reliance on inpatient care.	Provide an additional total of 90 day beds, three at KWH, 12 at QEH, 24 at YCH, 20 at PWH and 25 at TSWH by 4Q22; six at PMH by 1Q23.
Strengthen ambulatory care services.	Set up a Medical Ambulatory Care Centre (MACC) at YCH by 4Q22; implement MACC chronic disease model at PWH by 4Q22; and provide services for 490 additional patient attendances at the Cardiac Ambulatory Centre of QEH by 1Q23.
Enhance the ambulatory care for geriatric services.	Provide an additional of 24 Geriatric Day Hospital (GDH) places at WTSH by 4Q22; and a total of 2 500 additional GDH attendances at KCC by 1Q23.
Enhance the provision of day rehabilitation services.	Establish day rehabilitation programme for elderly with osteoporotic vertebral collapse at MMRC; provide services for 1 460 additional rehabilitation day attendances at MMRC and 1 950 at QEH by 1Q23.

Enhance community-based care

Action	Target for 2022-23
Continue to enhance the transitional post-discharge support for patients.	Continue to provide services for 1 800 additional home visits, 750 needs assessments and discharge planning for elderly patients at NTWC by 1Q23.
Continue to enhance the Community Geriatric Assessment Team (CGAT) support for terminally ill patients in Residential Care Homes for the Elderly (RCHes).	Provide 2 450 additional geriatric outreach attendances by 1Q23.
Further enhance the CGAT support for patients in RCHes.	Provide 1 520 additional geriatric outreach attendances by 1Q23.
Enhance Community Psychiatric Service to further increase the support for mental health patients in the community.	Recruit additional case managers at HKEC, HKWC, KEC, KWC, NTEC and NTWC to provide services for an additional total of 1 800 psychiatric outreach attendances by 1Q23.
Reinforce the multidisciplinary adult Palliative Care (PC) services for cancer and non-cancer PC patients.	Enhance PC services at HKEC, HKWC, KCC and NTEC and to provide 5 220 additional PC consultative visits across these clusters by 1Q23.

Empower patients for self-care

Action	Target for 2022-23
Continue the pilot of the new generation home haemodialysis model to enhance quality of self-care.	Provide an additional total of 10 patient capacity at KEC and NTEC by 1Q23.

Implement alternative options for specialist outpatient service

Action	Target for 2022-23
Utilise Family Medicine Specialist Clinic (FMSC) to relieve workload of Specialist Outpatient Clinic (SOPC) by further rolling out the collaborative model implemented for the O&T and surgery departments.	Provide an additional total of 4 000 FMSC attendances under the collaborative model for FM and O&T department at HKEC and NTWC by 1Q23; 2 000 additional FMSC attendances for FM and surgery at NTWC by 1Q23; and provide services for an additional total of 10 800 allied health outpatient attendances at KCC and KWC by 1Q23.
Implement the integrated model of SOP service for systemic anti-cancer therapy and breast cancer survivorship through nurse clinics and pharmacist clinics.	Provide services for an additional total of 540 nurse clinic attendances in SOPC and 720 pharmacist clinic attendances for systemic anti-cancer therapy at HKWC; and 560 additional nurse clinic attendances in SOPC for breast cancer survivorship at NTEC by 1Q23.

Action	Target for 2022-23
Enhance nurse clinic services in respiratory (chronic obstructive pulmonary disease), human immunodeficiency virus, ophthalmology (cataract surgery), hepatitis, pain management, total joint replacement, otorhinolaryngology (hearing problems), and set up nurse clinic for chest pain, vascular care and paediatrics and adolescent (atopic dermatitis) to alleviate the workload of doctors by adopting the integrated model of SOP service.	Recruit additional Advanced Practice Nurses (APNs), Registered Nurses (RNs) and Patient Care Assistants (PCAs) to establish or scale up 17 nurse clinics in 10 specialties to provide services for 11 160 additional attendances across Clusters by 1Q23.
Improve patient care by implementing pharmacist clinic for anticoagulant therapy management.	Provide services for an additional total of 4 500 pharmacist clinic attendances on anti-coagulant therapy management at GH and TMH by 1Q23.

Enhance and develop different PPP options

Action	Target for 2022-23
Provide additional patient choices through selected Public-Private Partnership (PPP) programmes. These programmes are: • Cataract Surgeries Programme (CSP), • 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) and Co-care Service Model, • Colon Assessment Public-Private Partnership Programme (Colon PPP), • Glaucoma Public-Private Partnership Programme (Glaucoma PPP), • Trauma Operative Service Collaboration Programme (Trauma Collaboration), • Breast Cancer Operative Service Collaboration Programme (Breast Cancer Collaboration), and • Radiation Therapy Service Public-Private Partnership Programme (RT PPP).	Provide PPP programmes for patients including 4 000 service quotas for CSP, 376 service quotas for HD PPP, 48 760 service quotas for Radi Collaboration, 49 280 service quotas for GOPC PPP and Co-care Service Model, 2 000 service quotas for Colon PPP, 2 700 service quotas for Glaucoma PPP, 240 service quotas for Trauma Collaboration, 120 service quotas for Breast Cancer Collaboration, and 277 service quotas for RT PPP by 1Q23.

Action	Target for 2022-23
In addition to the ongoing PPP programmes, various new PPP initiatives are being formulated for targeted implementation in 2022-23 to address service gaps and to dovetail with the Government's direction in strengthening primary care and cancer care strategy. These new initiatives include Total Joint Replacement Public-Private Partnership Programme (TJR PPP); Chemotherapy Public-Private Partnership Programme (Chemo PPP) and Laboratory Investigation Public-Private Partnership Programme (Lab PPP).	The new initiatives to be implemented in 2022-23 will provide 100 service quotas for TJR PPP, 200 service quotas for Chemo PPP and 18 480 service quotas for Lab PPP by 1Q23.

Develop Smart Hospitals

Our strategies for 2022-23

- Provide AI support for data-driven care
- Develop smart ward, smart clinic and smart pharmacy
- Roll out “Mobile Patient” initiatives
- Automate services via IT tools / solutions and robotics
- Establish IT platforms to facilitate operational efficiency

Provide AI support for data-driven care

Action	Target for 2022-23
Enhance clinical system capabilities to support the data-driven care.	Plan and develop the HA Artificial Intelligence (AI) and data analytics platform to support the development of data driven intelligence to improve clinical efficiency and effectiveness by 1Q23.

Develop smart ward, smart clinic and smart pharmacy

Action	Target for 2022-23
Enhance the safety and efficiency of medication process by implementation of inpatient drug distribution model at HA through the use of automated medication unit dose dispensing system and smart cabinets.	Implement aligned inpatient drug distribution model at HKWC, KCC and KWC by 1Q23.

Action	Target for 2022-23
Optimise medication safety and efficiency through extending the Inpatient Medication Order Entry (IPMOE) system to more specialties in a phased approach.	Roll out the IPMOE system chemotherapy module to the oncology department of QMH and QEH; roll out the IPMOE system at KWH by 1Q23.
Develop smart hospital initiatives.	Continue to implement and develop initiatives for smart hospital, including the hospital command centre, 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 and to improve patient, clinical and business experience by 1Q23.

Roll out “Mobile Patient” initiatives

Action	Target for 2022-23
Enhance clinical system capabilities for mobile application (App).	Develop the HA patient mobile App platform (HA Go) to further digitise HA's services so that the public can easily access to these services with a new experience through innovative approaches on their smart phones by 1Q23.
Develop a mobile application via HA Go platform to enhance users' experience in Samaritan Fund and Community Care Fund application.	Develop a mobile Medical Fee Assistance App for Samaritan Fund and Community Care Fund applicants to retrieve application and approval information by 1Q23.

Automate services via IT tools / solutions and robotics

Action	Target for 2022-23
Improve safety and effectiveness for surgery by implementing Robotic-Arm Assisted System at HA.	Adopt robotic assisted operation mode to perform joint replacement surgery at HKBH by 1Q23; provide robotic surgery sessions at QEH for selected urology patients of KWH by 1Q23; provide five additional OT sessions per week at TKOH for robotic surgery services by 4Q22.
Enhance clinical management and patient care through the implementation of smart hospital initiatives at HA.	Strengthen the manpower to support the smart hospital initiatives at KCC, KEC and NTWC by 1Q23.

Establish IT platforms to facilitate operational efficiency

Action	Target for 2022-23
Create smart emergency departments by digitalisation of documentation and workflow.	Roll out phase one eAED service model to QMH, KWH, UCH, PMH, PWH, AHNH and TMH; roll out the eResus service model to RH, NLTH and POH by 1Q23.
Improve efficiency by central coordination and risk management of the Anaesthesia Clinical Information System (ACIS) at HA.	Implement the centralised ACIS at DKCH, GH and TWH by 1Q23.

Action	Target for 2022-23
Continue the enhancement of different systems to improve the efficiency of human resources management.	Enhance and further roll out the e-Talent system to automate workflow for succession management; the electronic Staff Development Review (e-SDR) system to digitalise the staff performance process; and eAllowance system to support payment of allowances by 1Q23.
Continue to roll out the Staff Rostering System (SRS) to streamline the roster planning and facilitate management review.	Roll out SRS to the supporting staff group in administrative services by 1Q23.
Continue the enhancement of locum recruitment to improve efficiency.	Enhance the system update and sustainability for the eLocum management system to further automate job and skill matching and enhance internal communication for recruitment efficiency by 1Q23.
Implement the new blood bank computing system to monitor the blood supply, improve workflow and donor engagement.	Introduce real time online blood donation registration at mobile collection site by 1Q23.
Continue to develop the Clinical Management System (CMS) to improve the efficiency of clinical services.	Further develop the HA clinical system capabilities for the fourth generation of CMS, including new functions on paperless, protocol-enabled, closed-loop, personalised and patient-centred clinical services by 1Q23.

Action	Target for 2022-23
Provide IT support for technology adoption.	Continue to develop and introduce innovative solutions such as mobile payment (e-payment) capabilities; and explore, source and test potential technology solutions to support IT innovation initiatives comprising cloud services, mobile, telemedicine and Internet of Things, as well as AI and Big Data prototyping by 1Q23.
Provide IT support for clinical systems to cater for electronic Health Record (eHR) project.	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; and continue to expand the scope of data sharing including Chinese Medicine information and radiological images under eHR Stage 2 programme by 1Q23.
Provide IT support to community partners and Government departments in support of various PPP and eHealth initiatives.	Provide ongoing support and enhancements to existing PPP programmes, perform related IT enhancements to provide integrated support for various PPP programmes; continue to provide agency support for the implementation of eHR Sharing System and support other eHealth related initiatives including District Health Centre project and COVID-19 related initiatives by 1Q23.

Nurture Smart Workforce

Our strategies for 2022-23

- Conduct long-term manpower planning of healthcare staff
- Enhance staff recruitment and employment options
- Foster staff's career prospects
- Strengthen staff relations, management and recognition
- Drive Digital Workplace
- Reinforce staff training programmes
- Facilitate staff to attend training

Conduct long-term manpower planning of healthcare staff

Action	Target for 2022-23
Strengthen nursing roles in clinical care by improving clinical supervision, specialty training, promotion prospect and recruiting additional manpower.	Enhance nursing manpower for general and psychiatric inpatient wards, A&E, ICU, infection control, stroke and peri-operative services by 1Q23.
Enhance the manpower planning for orthoptist services.	Recruit additional orthoptist at HKWC, KEC and KWC by 1Q23.
Enhance the manpower planning for prosthetist and orthotist services.	Recruit additional graduate prosthetist-orthotist at HKEC, KCC and NTEC by 1Q23.

Enhance staff recruitment and employment options

Action	Target for 2022-23
Attract more retired staff who are willing to take up further employment after their retirement age to address manpower shortage and succession gaps. 	Implement the policy of "Extending Employment Beyond Retirement" for retiring or retired staff who wish to continue to work in HA at or beyond retirement age by 1Q23.

Foster staff's career prospects

Action	Target for 2022-23
Continue to enhance career progression and promotion opportunities for doctors.	Provide additional promotion opportunities for residents and associate consultants by 1Q23.
Attract and retain Patient Care Assistant (PCA) / Operation 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 1Q23.
Strengthen nursing career structure. 	Introduce the Associate Nurse Consultant (ANC) rank and provide additional promotion opportunities for nurses; create additional positions for NC by 1Q23.

Action	Target for 2022-23
Enhance career progression and promotion opportunities for nurses.	Provide additional promotion opportunities for Enrolled Nurses to Registered Nurses (RNs), as well as RNs to Advanced Practice Nurses (APNs) to improve patient quality care and night supervision at clusters by 1Q23.
Enhance the career prospects and service coordination for allied health professionals. 	Enhance allied health manpower to support clinical stream coordinator (allied health) and succession planning in all Clusters by 1Q23.
Enhance the HA's complaints management system to ensure long team sustainability and facilitate succession planning of Patient Relations Officers and Complaint Managers.	Establish cluster-based patient relations office structure at KCC and KEC by 2Q22.

Strengthen staff relations, management and recognition

Action	Target for 2022-23
Improve the understanding of staff by conducting HA staff survey. 	Conduct around two focused staff surveys in a year to study specific areas for particular staff group, and tap staff intelligence or views of launching new initiatives by 1Q23.
Continue to strengthen staff's mental wellbeing and facilitate their recovery from COVID-19 by providing staff psychological services.	Enhance e-psychological services (e.g. the myOasis mental health App) and develop mental health promotion programmes according to staff's needs by 1Q23.

Drive Digital Workplace

Action	Target for 2022-23
Support the clinical duties by improving the coverage and accessibility of HA Wi-Fi and mobile access.	Continue to provide mobile access outside HA Wi-Fi for doctors in all Clusters by 1Q23.
Provide IT support for people and resource management.	Develop and implement digital workplace initiatives focusing upon increasing automation and facilitating more communication and collaboration by 1Q23.

Reinforce staff training programmes

Action	Target for 2022-23
Continue to reinforce the internship training at 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 doctors who passed the Licensing Examination of the Medical Council of Hong Kong and organise mandatory intern training programme for all intakes of interns by 1Q23.
Continue to strengthen training support for specialties with specialist training gaps.	Provide 69 trainee places for doctors by 1Q23.
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 1Q23.

Action	Target for 2022-23
Increase throughput of HA nursing schools, conduct 18-month midwifery programmes and encourage ENs to upgrade their skills and competency to RNs level by offering training sponsorship to the clinical practicum part of their enrolled RN Conversion Programmes.	Provide pre-registration training by enrolling 300 RN students for the HA Professional Diploma in Nursing and offer pre-enrollment training places for 100 EN students; offer midwifery programmes to around 80 trainees; and offer training sponsorship to support around 280 ENs to enroll the voluntary RN Conversion Programmes by 1Q23.
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 1Q23.
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 1Q23.
Strengthen the clinical training for pharmaceutical staff in HA.	Provide three core clinical training programmes for pharmaceutical staff in HA by 1Q23.
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 1Q23.
Continue to provide IT trainings to HA staff.	Provide training for a total of 1 800 participants to enhance IT skills and knowledge by 1Q23.

Facilitate staff to attend training

Action	Target for 2022-23
Continue to provide more training opportunities for clinical staff to facilitate service advancement and professional development.	Sponsor around 570 simulation training classes, including crew resources management training for clinical staff; provide 26 specialty training and around 50 enhancement programmes for nurses, 65 specialty training or enhancement programmes for allied health professionals and one specialty training and 11 enhancement programmes for pharmacy staff; conduct training on infection control and infectious diseases and other clinical training courses at the Simulation Training Centre of KWC by 1Q23.
Provide training subsidy to nurses, allied health and pharmacy staff for participating in recognised service-related programmes.	Offer training subsidies to around 600 nurses and around 225 allied health and pharmacy staff by 1Q23.
Continue to strengthen the competency of nurses working beyond Palliative Care (PC) setting in supporting terminally ill patients through clinical attachments at PC units.	Provide clinical attachments to a total of 24 nurses to PC units at KCC and NTWC by 1Q23.
Continue the Staff Development Rotation Programme in Patient Relations and Engagement Department (PRED) to enhance the exposure, competence and experience of PR Officers and Complaint Managers' in complaints management service.	Organise three rounds of rotation for a four to six months' period for PR Officers and Complaint Managers by 1Q23.

Enhance Service Supply

Our strategies for 2022-23

- Implement Hospital Development Plans
- Bolster the capability of healthcare facilities in meeting demand
- Work out a viable funding arrangement with the Government

Implement Hospital Development Plans

Action	Target for 2022-23
Strengthen the manpower support for the hospital development projects to ensuring smooth transition in the planning process.	Continue the planning and coordination for hospital development projects and strengthen the executive support by 1Q23.
Prepare for the commissioning upon redevelopment of KWH, Phase 1.	Provide 40 additional acute beds at the emergency medical ward at KWH by 4Q22; recruit additional manpower to support KWH phase 1 service commencement by 1Q23.
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 two additional High Dependency Unit (HDU) beds, one acute bed by 3Q22; provide emergency OT services at weekends by 3Q22; provide six additional Operating Theatre (OT) sessions per week by 4Q22; build capacity for genomic and genetic and oncology tests by 1Q23; provide 190 additional Magnetic Resonance Imaging (MRI) scans by 1Q23.

Action	Target for 2022-23
Prepare for the commissioning of the phased operation of the new Ambulatory Block of UCH.	Recruit additional clinical and non-clinical staff in preparation for the commissioning of services by 1Q23.
Commission the operation of the new hospital block of HHH.	Recruit additional administrative staff for the operation of the new hospital block of HHH by 1Q23.
Prepare for the commissioning upon redevelopment of KCH, Phase 2.	Recruit and train additional psychiatric nurses and supporting staff in preparation for the commissioning of services.
Commence General Outpatient Clinic (GOPC) services at a new clinic in Sham Shui Po district.	Commence services to provide 1 580 additional GOPC quota at KWC by 1Q23.
Commission the operation of the extension of OT block for TMH.	Recruit additional manpower for the commencement of services by phases, including to provide two additional ICU beds by 4Q22, 20 additional OT sessions per week, operate the intra-operative MRI, hybrid OT and robotic assisted surgery services at TMH by 1Q23.
Provide IT infrastructure and systems to support new hospitals and clinics.	Provide IT set up for the new hospital buildings in the first 10-year Hospital Development Plan; set up IT infrastructure and implement corporate IT systems for OT Block of TMH, Trinity Block of HHH, KWH redevelopment Phase 1, Shek Kip Mei Community Health Centre (CHC), Nam Cheong Family Medicine Clinic, UCH redevelopment, KCH redevelopment and North District CHC by 1Q23.

Bolster the capability of healthcare facilities in meeting demand

Action	Target for 2022-23
Enhance the capacity of inpatient services at HKEC.	Provide one additional ICU bed at RH and two additional neurosurgical HDU beds at PYNEH by 3Q22.
Enhance the capacity of inpatient services at KCC.	Provide one additional HDU bed at QEH by 4Q22.
Enhance the capacity of inpatient services at KEC.	Provide additional acute beds, 10 at TKOH and 26 at UCH by 3Q22, and 40 extended care beds at HHH by 3Q22.
Enhance the capacity of inpatient services at KWC.	Provide additional acute beds, 10 at PMH and 30 at CMC by 4Q22.
Enhance the capacity of inpatient services at NTEC.	Provide two additional ICU beds at PWH by 4Q22; provide additional acute beds, 10 at PWH and 20 at NDH by 4Q22.
Enhance the capacity inpatient services at NTWC.	Provide additional acute beds, 10 at TMH and 40 at POH by 4Q22; provide additional extended care beds, 20 at TSWH and 30 at TMH by 4Q22.
Continue to enhance the capacity of Operating Theatre (OT) services.	Provide 37 additional OT sessions per week, including one at HKEC, seven at KEC, 24 at KWC, five at NTEC by 1Q23.
Enhance the capacity for cardiovascular surgery services.	Provide four additional OT sessions per week at NTEC by 4Q22; and provide open heart surgery service for 30 additional patients at QMH by 1Q23.

Action	Target for 2022-23
Provide timely diagnosis and treatment for patients and enhance interventional radiology services through hybrid OT.	Set up a hybrid OT at PYNEH and provide 62 additional interventional procedures by 1Q23.
Expand the service capacity of the Hyperbaric Oxygen Therapy (HBOT) Centre in HA, which was first established in 2018-19.	Provide 24-hour emergency HBOT service at PYNEH by 1Q23.
Enhance the service capacity for total joint replacement surgery.	Conduct 150 additional total joint replacement surgeries at HKEC by 1Q23.
Continue to enhance the capacity of endoscopy services.	Provide an additional total of 13 endoscopy sessions per week at HKEC and KWC by 4Q22.
Continue to enhance the service capacity of GOPC to improve the access for major service users.	Increase the GOPC quota by a total of 9 500 at KEC, NTEC and NTWC by 1Q23.
Enhance SOPC service capacity in various Clusters.	Provide services for an additional total of 8 555 SOPC new case attendances across all Clusters by 1Q23.
Enhance the service capacity of the laboratory testing of HA.	Build up laboratory capacity for 10 750 and 1 000 additional polymerase chain reaction tests for Candida auris and Hepatitis E virus respectively by 1Q23.

Action	Target for 2022-23
Enhance medication safety and antimicrobial stewardship through a drug allergy de-labelling initiative (DADI). 	Set up a DADI hub and enhance laboratory allergy diagnostic service at HKWC; set up nurse-led low risk Penicillin Allergy Centre at KCC, KWC and NTEC; and to provide an additional total of 400 day inpatient attendances at HKWC, KCC, KWC and NTEC by 1Q23.
Continue to enhance the capacity of radiology services.	Provide services for an additional total of 3 240 attendances for MRI scan at PMH, PWH and TMH by 1Q23. Provide services for an additional total of 2 790 attendances for Computed Tomography scan at YCH and AHNH by 1Q23. Provide services for an additional of 3 120 attendances for ultrasound scan at NDH by 1Q23. Enhance nuclear medicine services by acquiring a cardiac gamma camera system at QEH to provide services for 300 additional patient attendances; and provide support for bone densitometry services at HKCH for 370 additional attendances by 1Q23.
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 selected hospitals of all Clusters by 4Q22; launch the drug refill services at GH, TWH and YCH by 1Q23; extend the service hours of pharmacy at WTSH by 1Q23; enhance clinical pharmacy service for ICU and medical oncology services of QMH, and for chemotherapy prescription screening at PYNEH and PWH by 1Q23.

Action	Target for 2022-23
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 repositioning Self-financed Drugs as Special Drugs for transplantation and managing cardiovascular disease, diabetes mellitus and psychotic disorders by 2Q22.
Enhance cancer treatments to meet service demand.	Enhance chemotherapy services at KCC, KEC, KWC and NTWC to provide an additional total of 3 130 day inpatient attendances by 1Q23; enhance medical oncology service at QMH and KWH by 1Q23.
Enhance radiotherapy services for cancer treatment. 	Extend the service hours of radiotherapy at PMH by 1Q23; commence MR-Simulator services for enhancing the service quality of radiotherapy at TMH by 1Q23; provide MRI simulation services for planning of radiotherapy at PWH by 1Q23.
Enhance the quality of cancer service by providing coordinated, patient-centred care through the Cancer Case Manager (CCM) Programme.	Extend the CCM Programme to provide services for 50 additional patients newly diagnosed with haematological cancer at HKEC and 100 additional patients newly diagnosed with urological cancer at NTWC by 1Q23.

Action	Target for 2022-23
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 1 194 hospital haemodialysis places have been provided by 2021-22.	Provide an additional total of 65 hospital haemodialysis places across Clusters and install three additional stations for haemodialysis at QMH by 1Q23.
Enhance the provision of Child & Adolescent (C&A) psychiatry day services.	Provide additional psychiatric day hospital places, five at PYNEH by 3Q22 and five at KH by 4Q22; provide paediatrics inpatient consultation services at QEH and KWH by 1Q23; and provide 500 additional nursing assessment at KEC by 1Q23.
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 CMC to provide respiratory care to patients in the medical wards and designate four beds to support cases with respiratory complications by 1Q23.
Enhance the multidisciplinary support for sleep service under a 24-hour integrated model.	Designate four existing beds for sleep studies and conduct 540 additional sleep studies at KCC by 1Q23.
Continue to develop dermatology services in HA.	Build up consultant-led dermatology team at HKWC and NTEC; and enhance multidisciplinary care for patients with severe dermatosis or complex needs at HKWC by 1Q23.

Action	Target for 2022-23
Modernise the treatments of ophthalmology services by providing intravitreal injection services in HA.	Enhance capacity by providing services for an additional total of 2 970 intravitreal injections across HKWC, KEC and NTWC by 1Q23.
Enhance the infectious disease services and sustain the operation of NLTH Hong Kong Infection Control Centre (HKICC).	Continue to support the operation of NLTH HKICC at KWC and strengthen infectious disease management at HKWC by 1Q23.
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 20 sessions of cross-cluster RAS at QMH and PMH by 1Q23.
Evaluate the clinical effectiveness of Integrated Chinese-Western Medicine (ICWM) programme.	Commence the clinical effectiveness studies for ICWM programme of stroke and musculoskeletal pain by 1Q23.
Improve the standard of care for acute ischaemic stroke patients by providing Intra-Arterial Mechanical Thrombectomy in a phased approach.	Provide 24-hour Intra-Arterial Mechanical Thrombectomy service for acute ischaemic stroke patients at KWC by 1Q23.
Expand the coverage of Primary Percutaneous Coronary Intervention (PPCI) for patients with ST-Elevation Myocardial Infarction (STEMI).	Provide cluster-based 24-hour PPCI for eligible patients with STEMI at KWC by 1Q23 and NTWC by 4Q22.

Action	Target for 2022-23
Continue to augment cardiac services by providing additional Cardiac Care Unit (CCU) beds and enhancing the service capacity of Cardiac Catheterisation Laboratory (CCL).	Provide additional CCU beds, two at TKOH by 3Q22 and two at PMH by 4Q22; and provide two additional CCL sessions per week at TKOH by 3Q22.
Enhance vascular surgery service through setting up vascular surgery networks to provide emergency vascular surgery.	Enhance vascular surgical service in HA to maintain a sustainable structure of Kowloon vascular surgery network by 1Q23; set up a vascular surgical team at the Hong Kong Island network and provide specialist coverage for emergency and elective surgeries for HKEC and HKWC by 1Q23.
Continue to strengthen the clinical management of patients diagnosed with Human Immunodeficiency Virus (HIV) by offering Highly Active Antiretroviral Therapy (HAART) to eligible patients.	Provide multi-disciplinary care for additional HIV new cases and offer HAART to eligible patients at QEH and PMH by 1Q23.

Work out a viable funding arrangement with the Government

Action	Target for 2022-23
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 resource required for public healthcare services provided by HA by 1Q23.



Service and Resource Estimates

HA planned to provide 30 174 hospital beds as at 31 March 2022 and managed about 8.99 million patient days in 2021-22¹.

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 2021, 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 2022-23¹

- 2.02 million inpatient and day inpatient discharge episodes*
- 2.20 million A&E attendances
- 8.15 million SOP (clinical) attendances
- 3.13 million allied health (outpatient) attendances
- 6.61 million primary care attendances
- 2.19 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

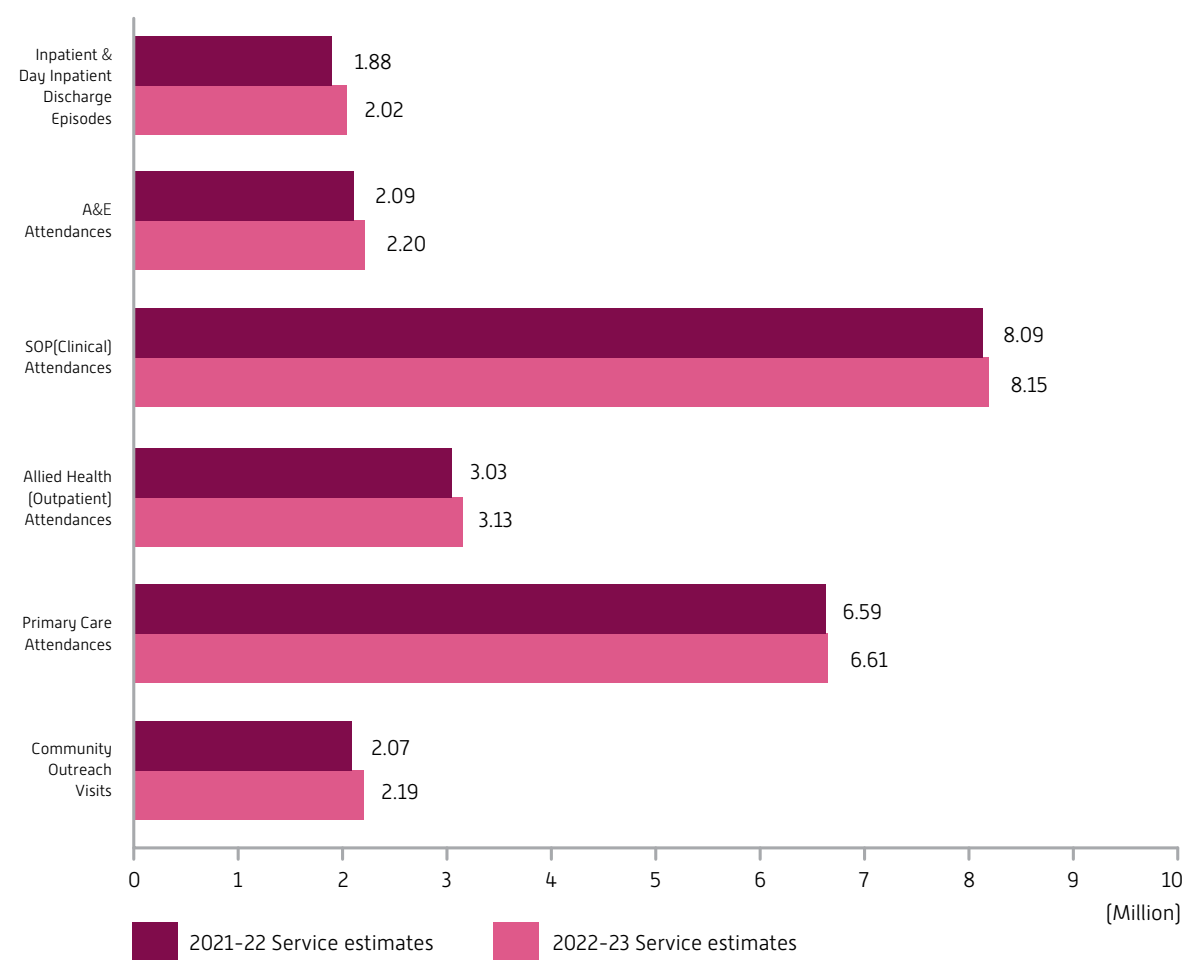
* Refers to discharges and deaths in the Controlling Officer's Report (COR). This applies to all "discharge episodes".

¹ In view of the emergence of the 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. This should be taken into account when comparing the throughput of services provided by HA across the 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 7.6% in 2022-23, as compared to 2021-22². This translates into an additional of 143 200 inpatient and day inpatient discharge episodes. It is estimated that HA will increase the throughput for primary care services by 0.2%, which is an increase of 16 300 attendances to enhance medical care and disease management for elderly and patients with chronic diseases.

A comparison of HA's estimated service throughput for 2022-23 and 2021-22 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 2022-23 and 2021-22²



² HA takes into account COVID-19 effect when preparing the service estimates for 2021-22, i.e. with lower activity level. Nevertheless, given the dynamic pandemic situation at the time when HA was preparing the 2022-23 service estimates, HA had taken an assumption of "no COVID-19 effect" for 2022-23 service estimates. Due to different assumptions of COVID-19 effect adopted in preparing the 2021-22 and 2022-23 service estimates, the growth rates in 2022-23, i.e. 2022-23 versus 2021-22 service estimates, appeared relatively high. Owing to the gradual pick-up of service activities in 2021-22, the growth rate in 2022-23 is slightly lower than that in 2021-22.

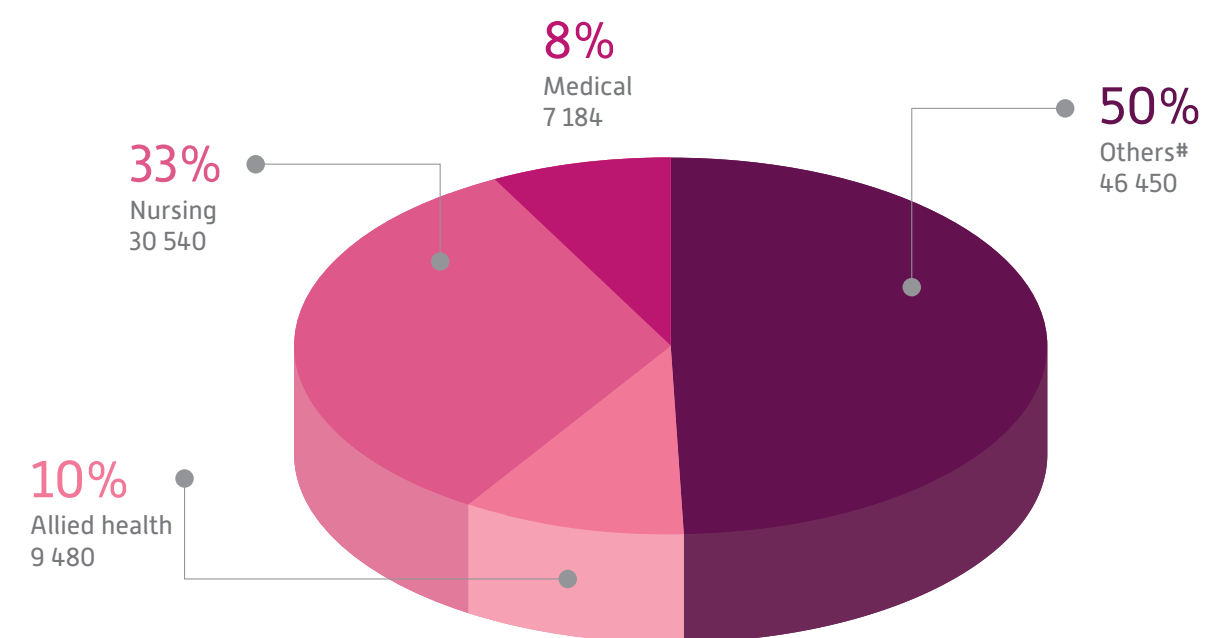
Manpower Estimates

HA's existing staff strength is more than 89 000 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 2.7% 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 2022-23 will be around 500 doctors, 2 730 nurses and 950 allied health professionals. Figure 2 provides a breakdown of estimated staff strength for the coming year. A detailed comparison of the manpower estimates for 2022-23 and 2021-22 is provided in Appendix 1.

Figure 2: Estimated Staff Strength in 2022-23



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

Budget

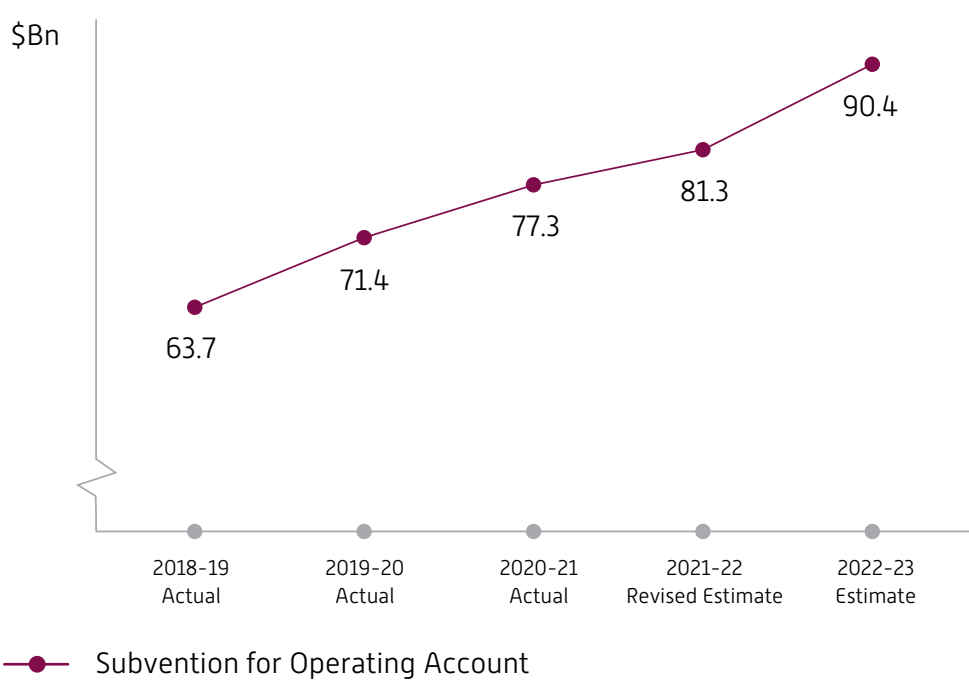
The Government is increasing its subvention to HA by \$9 billion in 2022-23

The Government subvention to HA for 2022-23 amounts to \$90.4 billion, representing a 11.1% increase as compared to the baseline allocation in 2021-22. The increase is mainly contributed by:

- a. **\$3.9 billion** being the second consecutive year of funding growth committed by the Government under the second triennium funding arrangement;
- b. **\$0.3 billion** to support the staff retention measures for 2022-23;
- c. **\$7.5 billion** being the one-off designated funding for HA to enhance its capacity in combatting the new wave of COVID-19 epidemic and to sustain its prevailing anti-epidemic efforts; partly offset by
- d. reduction of **\$0.8 billion** under the Expenditure Reduction Programme (ERP).

As announced in the 2021-22 Budget Speech, the Government will implement an ERP in 2022-23 by requiring all policy bureaux and departments to reduce recurrent expenditure by one percent. HA, as a subvented organisation under the Food and Health Bureau, is required to contribute a funding reduction of \$0.8 billion in 2022-23.

The graph below demonstrates the trend of Government subvention to HA in recent years:



The resources will be deployed to carry out a series of initiatives in 2022-23 to achieve the strategic goals and programme targets as delineated in preceding chapters.

Capital Expenditure

To support the delivery of HA's service development, different types of capital expenditure are funded by the Capital subvention as follows:

1. Procurement of equipment and development of information systems for modernising hospital services (\$1.71 billion);
2. Minor works projects including improvement works, regular maintenance, and preparatory works for capital works projects (\$2.10 billion); and
3. Major capital works for HA's future development, such as construction of new hospitals and re-development of existing hospitals (\$5.30 billion).

Looking Ahead

With the Government's staunch support despite the challenging economic climate, HA will exercise extra prudence and make the best use of the financial resources available. As the financial position of HA will hinge on various factors, such as the volatile evolvement of the COVID-19 situation, the ever-changing service volume under the epidemic and the ongoing development of persistent manpower shortfall, there is a degree of uncertainty regarding HA's long-term financial sustainability. HA will timely discuss with the Government the funding arrangement following the lapse of the second triennium funding cycle so as to secure continued funding support for meeting ever-increasing service needs in future.



Head Office Plan

This section sets out the work plans of the HA Head Office for 2022-23.

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 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. Ongoing 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 formed under the HA Board in December 2019 had examined the major challenges facing HA and recommended strategic directions and action plans to drive for HA's sustainable development in the public healthcare system. The key directions recommended by the Task Group formed the base of the HA Strategic Plan 2022-2027. The management, with the assistance of specific subgroups formed under the Task Group, is actively working on the various recommended initiatives and action plans, including in respect of staff retention, waiting time of specialist out-patient clinics, smart hospitals, public-private-partnership programmes, new service models and capacity building etc., with a view to enabling the Authority to cope with the challenges and demands ahead.

The COVID-19 pandemic sets unprecedented challenges to public health globally and locally. To timely address this emergency situation, the Emergency Executive Committee under the Board will continue to assess the risks facing HA and act for the Board on strategies and policies for managing the emergency issues arising from the COVID-19 pandemic.

The Board's Executive Committee is 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 the governance of public hospitals. In the past few years, enhancement measures were made 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 the 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 Head Office and Clusters 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 will 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 (CMCs) 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 6 000 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 around 3 000 000 m² floor space in over 300 buildings. It is a challenge for CPD in managing resources to renew, upgrade and maintain these facilities.

As at November 2021, 16 major capital works projects, with a total project cost of \$190 billion, have been initiated and are currently at various stages of planning and development. Of these, various works packages for 14 projects with a budget of \$103 billion have been approved by the Government. In addition, about 2 000 minor works projects will need to be carried out for the improvement and maintenance of existing premises in 2022-23, with the annual budget of \$2,100 million.

Major Initiatives in 2022-23

Capital works is one of the key enablers of clinical services. In 2022-23, the CPD will undertake the following major initiatives to ensure that HA's healthcare facilities are able to meet the demands of quality service provision:

- Facilitate capacity increase by commencing the main works for redevelopment of PWH (Phase 2, Stage 1), OLMH and GH (Phase 1); and by carrying out the foundation works for expansion of NDH and Lai King Building in PMH; and the main works for extension of Operating Theatre Block for TMH, NAH at Kai Tak Development Area, 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; including Site Safety Cycle as standard contract requirements to promote site safety awareness; 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.
- Develop Project Surveillance System to keep track of hospital projects with implementation mechanism to monitor budget, cashflow and project progress with Key Performance Indicators for senior management to overview and for project team to monitor, minimise project issues and formulate recovery measure.
- Formulate procurement strategy to facilitate the appointment of one Term Maintenance Surveyor for each cluster for the implementation of minor works projects to ascertain output quality.
- Formulate 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 2022-23 are outlined in the following section.

Capital Works Targets	
Commence superstructure works for HA Supporting Services Centre.	2Q22
Commence demolition works for the redevelopment of OLMH.	3Q22
Complete superstructure works for the redevelopment of KWH (Phase 1).	3Q22
Complete energy retro-commissioning to nine hospitals.	3Q22
Commence superstructure works for the redevelopment of GH (Phase 1).	4Q22
Commence procurement of four Term Maintenance Surveyors for four clusters.	4Q22
Commence superstructure works for the redevelopment of PWH (Phase 2, Stage 1).	1Q23
Complete alteration and addition works for the extension of Operating Theatre Block for TMH.	1Q23
Complete structural works for the redevelopment of KCH (Phase 2).	1Q23
Complete the Concept Plan for the extension of HHH and TKOH.	1Q23
Complete the Concept Plan for the expansion of CMC and YCH.	1Q23
Develop business case and conduct cost benefit analysis for setting up a central Information Technology platform for facilities and project management in HA.	1Q23

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 April 2021, the total asset of medical equipment items in HA is valued at approximately \$16 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

Enhancement plans with additional manpower and number of vehicles allocated to the Non-Emergency Ambulance Service (NEATS) Centres will be implemented in 2022-23 to strengthen the overall support to meet the increasing demand for patient discharge and transfer by NEATS from clinical services.

Hospital Authority Supporting Services Centre

The Hospital Authority Supporting Services Centre (HASSC) at North Lantau is being built, which consists of laundry service, a Central Food Production Unit, an Information Technology Corporate Data Centre, and central emergency stores for critical personal protective equipment and key linen items. Upon its completion and anticipated handover in 2024, it is expected that the capacity of business support services will meet the expansion in clinical services under the first 10-year HDP for HA.

Biomedical Engineering Services

With the two 10-year HDPs for additional public healthcare facilities, the total asset value of medical equipment items in HA has increased by around 30% over the past five years. A significant increase in the number of medical equipment items and related maintenance activities are anticipated in the coming years when the new facilities commence services. The asset maintenance functions in the Enterprise Asset Management (EAM) System will be further enhanced to facilitate more efficient planning and management of maintenance activities to ensure the reliability, safety and availability of the medical equipment for patient services.

Major Initiatives in 2022-23

- 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 NEATS Centres to meet the increasing demand arising from new clinical activities by recruiting 26 additional Patient Care Assistants (PCAs).
- Continue planning for the design and construction of the HASSC in North Lantau.
- Further enhance the asset maintenance module in EAM System through automation in maintenance scheduling and enhancement to system interface for maintenance contractors to facilitate better planning and control of scheduled maintenance activities, as well as improve system workflow and efficiency.

The BSSD targets for 2022-23 are outlined in the following section.

BSSD Targets	
Complete the acquisition of around 800 pieces of equipment under Capital Block Vote.	1Q23
Recruit 26 additional PCAs for NEATS Centres for meeting the increasing demand induced by new clinical activities.	1Q23
Continue to work on the design and construction works for the HASSC, including plan for the builders and building services provision for furniture and equipment.	1Q23
Continue to enhance the asset maintenance functions in EAM system.	1Q23

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 2022-2027, IT&HID maintains an IT Strategy Framework to support the realisation of HA’s strategic directions over the five years, which comprises six core portfolios:

- **Digital Hospital and Community Care** — to improve access, efficiency and risk management for clinical service through workflow streamlining, information sharing and cross-team coordination.
- **Digital Patient Experience** — 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 telemedicine, mobile applications and data analytics.
- **Digital Workplace and Smart Hospital Operation** — to support strategic human resources and financial management, empower staff with self-service and easy access digital workspace and improve hospital efficiency and operational intelligence.
- **Innovative and Data Driven Enterprise** — to integrate data analysis into the core of HA business process, and cultivate continuous improvement of business processes and services via technology innovation.

- **Future Ready Digital Platform** — to transform IT infrastructure, processes and tools to uplift IT capability in supporting HA's digital transformation.
- **World Class IT Organisation** — to optimise the IT professional workforce to product-centric and value-driven teams, 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 continue to play a critical role in managing and coordinating the implementation of Smart Hospital, which is one of the key sustainability strategies for HA. Through keeping to work closely with the hospital teams by using a co-delivery methodology, IT&HID will launch pilot programmes in selected hospitals to implement 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 Committee (ITSC), 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 ITSC before implementation. Programme targets with key performance indicators for major development initiatives are reported for progress monitoring together with regular progress updates to the ITSC.

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.
- 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 HA business continuity under cyberattack.

- 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 combat local IT resource and skills shortfall.
- Maximising the use of advanced architectural design to upgrade legacy systems and reduce technology debts.
- Ensuring sustainability of project management capabilities to facilitate efficient and effective delivery of projects in accordance with stakeholder requirements.

Major Initiatives in 2022-23

IT&HID has responsibility for a number of initiatives in 2022-23, 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.
- Further 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 new hospital buildings in the first 10-year HDP. Set up network infrastructure and implement corporate information systems for the extension of Operating Theatre Block for TMH, expansion of HHH, development of Shek Kip Mei CHC, redevelopment of KWH, development of Nam Cheong Family Medicine Clinic, redevelopment of UCH, KCH and development of North District CHC.

IT Service for Improving Service Standards

- Extend the roll-out of closed-loop Inpatient Medication Order Entry (IPMOE) project to KWH 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, monitoring of compliance and proactive risk mitigations.
- 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 cloud services, mobile, telemedicine 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 hospital command centre, 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 ongoing 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 employee experience, providing tools to ease and automate their workload and increasing their productivity automation, and facilitating more communication and collaboration.

External Service Provision

eHR Programme

- Continue the provision of technical agency services for the implementation and ongoing operation of Stage 1 and the development of Stage 2 for the eHR Sharing System, and support other eHealth related initiatives including various PPP programmes, District Health Centre project and COVID-19 related initiatives led by the Government.

eHealth and Information Systems for Department of Health

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

The IT&HI targets for 2022-23 are outlined in the following section.

IT&HID Targets	
Internal Service Provision	
IT Product Delivery for Service Transformation and Provision	1Q23
- 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. - Further 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. - Further 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. - Further 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 new hospital buildings in the first 10-year HDP. Set up network infrastructure and implement corporate information systems for Operating Theatre Block for TMH, expansion of HHH, development of Shek Kip Mei CHC, redevelopment of KWH, development of Nam Cheong Family Medicine Clinic, redevelopment of UCH, KCH and development of North District CHC.	

IT&HID Targets	
Internal Service Provision	
IT Service for Improving Service Standards	1Q23
- Extend the closed-loop IPMOE project to KWH 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	1Q23
- Explore, source and test potential technology solutions to support IT Innovation initiatives comprising cloud services, mobile, telemedicine and Internet of Things (IoT), as well as AI and big data prototyping. - Continue the implementation of hospital command centres, 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	
Internal Service Provision	
IT Product Delivery for Community Partnerships • Provide ongoing IT 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.	1Q23
IT Product Delivery for People and Resources Management • Leverage technology to develop and implement digital workplace initiatives focusing upon increasing employee experience, providing tools to ease and automate their workload and increasing their productivity automation, and facilitating more communication and collaboration. • Develop the Facility Improvement and Maintenance Works Order Management System.	1Q23

IT&HID Targets	
External Service Provision	
eHR Programme • Provide agency support for the eHR Sharing System, including implementation and ongoing operation of Stage 1 and the development of Stage 2; and support other eHealth related initiatives including various PPP programmes, District Health Centre project and COVID-19 related initiatives led by the Government.	1Q23
eHealth and Information Systems for DH • Provide technical agency support for the DH to develop and maintain Stage 2 CIMS. • Continue to provide ongoing IT support for the Health Care Voucher, Vaccination, and Primary Care Directory schemes. • Continue to provide ongoing IT support for the Colorectal Cancer Screening Programme and the Electronic Platform for Regulation of Private Healthcare Facilities. • Continue to provide ongoing IT support for the system interfaces with the DH's Communicable Disease Information System. • Continue to provide ongoing IT support for the Laboratory Information System.	1Q23

Cluster Plans

This section contains an overview of the work plans of the seven Clusters for 2022-23.

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 2020-21 by district of residence in the Cluster. Major risks and challenges faced by the Cluster, as well as the key initiatives and targets in 2022-23 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 2021		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 2021, HKEC provided a total of 3 302 beds; of which 2 275 were for acute, convalescent and rehabilitation care; 627 for infirmary care and 400 for psychiatric care.

Actual Patients Served

In 2020-21, approximately 372 800 patients had utilised services in HKEC. Approximately 75% 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 2020-21 according to district of residence

District of residence	No. of patients^#	Distribution#
Eastern	215 100	58%
Wan Chai	44 800	12%
Southern	20 900	6%
Islands	17 700	5%
Others*	74 300	20%
HKEC Total	372 800	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

HKEC strives to deliver safe and quality services amid the immense challenges of ageing population, limited space and resources for service development, coupled with increasing staff attrition and the COVID-19 pandemic.

With the official launch of the publication of HA Strategic Plan 2022-2027 and Clinical Services Plan [CSP] for HKEC, the Cluster will conscientiously plan for its service provision in accordance with corporate's aspiration to enhance sustainability and towards the future service directions of HKEC CSP.

Ageing Population

HKEC catchment has one of the highest projected growth in the elderly population, and it is anticipated that there will be surging demand of healthcare services for age-related medical conditions. HKEC has considered the future service needs by expanding capacity of elderly services across different specialties through enhanced intra-cluster and community collaborations. HKEC will continue to enhance services capacity and quality and enable smart care provision by rejuvenation of hospital facilities and nurturing a smart workforce of professionals.

Demand of Space

Immense effort was made to strengthen services in critical care and life-threatening diseases under space constraint. HKEC endeavours to enhance services with strategic use of limited space by extending service hours of emergency Hyperbaric Oxygen Therapy (HBOT) centre, setting up a hybrid Operating Theatre (OT), and optimising bed capacities in Intensive Care Unit (ICU). Provision of outreach services and collaboration with the community will continue to be major components of the Cluster plan to enhance patient care and minimise unnecessary hospitalisation.

Increase in Staff Attrition

The significant increase in staff attrition among various staff groups has brought daunting challenges for HKEC to deliver quality services. Manpower shortage and turnover of experienced staff have created pressure on the provision of certain clinical services. In conjunction with existing staff retention measures, HKEC has adopted measures involving inter-departmental and cross-cluster coordination to alleviate pressure on manpower shortages. In line with the corporate strategy, public-private partnership options will be considered, aiming to address the waiting time issue.

COVID-19 Pandemic

In view of the volatile and rapid evolving development of COVID-19 pandemic, HKEC has strengthened its service capacity and coverage by establishing a cluster-based infectious disease network and building laboratory capacity. HKEC will continue to stay vigilant and prepare for possible challenges in future.

Major Initiatives in 2022-23

Provide Smart Care

- Build capacity for providing additional breast cancer mutation tests for ovarian cancer patients at PYNEH.
- Implement the Enhanced Recovery After Surgery (ERAS) programme for surgery at HKEC.
- Enhance neuropsychological services at PYNEH.
- Continue to enhance the Community Geriatric Assessment Team (CGAT) support for terminally ill patients with additional outreach services in Residential Care Homes for the Elderly (RCHes).
- Enhance Palliative Care (PC) services at HKEC to provide additional inpatient consultative visits.
- Provide additional physiotherapy services for patients waiting for total joint replacement surgery at PYNEH.

- Provide additional Family Medicine Specialist Clinic (FMSC) attendances under the collaborative model for Family Medicine (FM) and Orthopaedics and Traumatology (O&T) departments at HKEC.
- Implement early vestibular assessment and management for otolaryngology patients with allied health outpatient services at HKEC.
- Increase support for mental health patients in the community by providing additional psychiatric outreach services.
- Provide specialist coverage for emergency and elective vascular surgeries for HKEC by a surgical team of the Hong Kong Island network to be coordinated by HKWC.

Develop Smart Hospital

- Roll out the eResus service model to the Accident & Emergency (A&E) department of RTSKH.

Nurture Smart Workforce

- Enhance nursing manpower for general and psychiatric inpatient wards, as well as A&E, ICU and peri-operative services at HKEC.
- Recruit an additional graduate prosthetist-orthotist at HKEC to enhance manpower planning for allied health services.
- Enhance allied health manpower to support clinical stream coordinator (allied health) and succession planning at HKEC.
- Recruit advanced practice nurses as part-time clinical preceptors for junior nurses.
- Provide resuscitation training for clinical staff and first aid training for security staff.

Enhance Service Supply

- Provide an additional ICU bed at RTSKH and two additional neurosurgical High Dependency Unit (HDU) beds at PYNEH.
- Provide additional OT sessions for urology services at RTSKH.
- Set up a hybrid OT to enhance interventional radiology services with additional interventional procedures at PYNEH.
- Provide 24-hour emergency HBOT services at PYNEH.
- Provide additional total joint replacement operations at HKEC.
- Provide additional endoscopy sessions at PYNEH and RTSKH.
- Provide additional Specialist Outpatient Clinic (SOPC) new case attendances for ophthalmology services at HKEC.
- Provide clinical pharmacy services on chemotherapy prescription screening for patients of the haematology oncology at day ward of PYNEH and implement clinical pharmacy services on discharge medication management for patients admitted to acute medical wards at RTSKH.
- Enhance the quality of cancer care by providing case management services to patients newly diagnosed with haematological cancer.
- Enhance psychiatric consultation liaison services with additional nurse consultations.
- Provide additional psychiatric day places for Child and Adolescent (C&A) mental health services at PYNEH.
- Provide additional hospital haemodialysis places for patients suffering from end-stage renal disease at PYNEH.

HKEC Targets

Provide Smart Care	
• Provide physiotherapy services for 2 400 additional outpatient attendances to patients on waiting list for total joint replacement surgery at PYNEH.	1Q23
• Implement the ERAS programme for surgery to provide services for 165 additional patients at HKEC.	1Q23
• Build capacity for providing 170 additional breast cancer mutation tests for ovarian cancer patients at PYNEH.	1Q23
• Enhance neuropsychological services at PYNEH and provide services for 38 additional patients.	1Q23
• Recruit an additional case manager at HKEC to provide services for 300 additional psychiatric outreach attendances to increase support for mental health patients in the community.	1Q23
• Continue to enhance the CGAT support for terminally ill patients in RCHes by providing 350 additional geriatric outreach attendances.	1Q23
• Enhance PC services at HKEC and provide 625 additional inpatient consultative visits.	1Q23
• Provide 2 000 additional FMSC attendances under the collaborative model for FM and O&T departments at HKEC.	1Q23
• Implement early vestibular assessment and management for otolaryngology patients and provide services for 2 260 additional allied health outpatient attendances at HKEC.	1Q23
Develop Smart Hospitals	
• Roll out the eResus service model to the A&E department of RH.	1Q23

Nurture Smart Workforce

• Enhance nursing manpower for general and psychiatric inpatient wards, as well as A&E, ICU and peri-operative services at HKEC.	1Q23
• Recruit an additional graduate prosthetist-orthotist at HKEC to enhance manpower planning for allied health services.	1Q23
• Enhance allied health manpower to support clinical stream coordinator (allied health) and succession planning at HKEC.	1Q23
• Recruit 13 full-time equivalent advanced practice nurses as part-time clinical preceptors for junior nurses	1Q23
• Provide 830 training places for clinical staff to undergo resuscitation training and 270 first aid training places for security staff.	1Q23

Enhance Service Supply

• Provide an additional ICU bed at RH.	3Q22
• Provide two additional neurosurgical HDU beds at PYNEH.	3Q22
• Provide an additional OT session per week at RH for urology services.	4Q22
• Enhance interventional radiology services by setting up a hybrid OT to provide 60 additional interventional procedures at PYNEH.	1Q23
• Provide 24-hour emergency HBOT services at PYNEH.	1Q23
• Enhance service capacity to provide 150 additional total joint replacement operations at HKEC.	1Q23
• Provide seven additional endoscopy sessions per week at PYNEH.	1Q23
• Provide five additional endoscopy sessions per week at RH.	4Q22
• Enhance ophthalmology services at HKEC by providing 1 000 additional SOPC new case attendances.	1Q23
• Implement clinical pharmacy services on discharge medication management for patients admitted to acute medical wards at RH.	4Q22

Enhance Service Supply

Provide clinical pharmacy services on chemotherapy prescription screening for patients of the haematology oncology at day ward of PYNEH.	1Q23
Enhance allied health services at HKEC to provide 1 350 additional allied health inpatient or day inpatient attendances.	1Q23
Enhance the quality of cancer care by providing case management services to 50 additional patients newly diagnosed with haematological cancer.	1Q23
Enhance psychiatric consultation liaison services and provide services for 900 additional consultations by nurses.	1Q23
Enhance C&A mental health services by providing five additional psychiatric day places at PYNEH.	3Q22
Provide three additional hospital haemodialysis places for patients suffering from end-stage renal disease at HKEC.	1Q23

Hong Kong West Cluster



As at 31 Mar 2021		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 2021, HKWC provided a total of 3 076 beds; of which 2 794 were for acute, convalescent and rehabilitation care, 200 for infirmary care and 82 for psychiatric care.

Actual Patients Served

In 2020-21, approximately 316 900 patients had utilised services in HKWC. Approximately 57% of them resided in the Sothern 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 2020-21 according to district of residence

District of residence	No. of patients^#	Distribution#
Southern	106 000	33%
Central & Western	75 100	24%
Eastern	28 600	9%
Islands	12 700	4%
Others*	94 500	30%
HKWC Total	316 900	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

Infection Control

COVID-19 pandemic remained as the top of the public concern. To enhance the control and prevention of the disease, HKWC was the first Cluster in HA to set up and operate the Community Vaccination Centre. From venue planning and setting, operation flow to staff arrangement, HKWC's colleagues and cluster management worked under a tight timeframe to put up the services to the community. HKWC will continue to support the Government's initiative to increase the uptake and pace of COVID-19 vaccination in future.

Within hospitals, HKWC has mobilised Cluster's manpower and resources to enforce infection control measures while maintaining or even upgrading the regular service level. Staff amenities were enhanced to provide a comfort and high hygiene standard environment. Special arrangement was in place to facilitate patient visitation on compassionate ground. All these were done with the aim to mitigate the impact of COVID-19 on hospital services.

Population Health Management

HKWC has embarked on introducing advanced technology in patient care, including the provision of Chimeric Antigen Receptor T (CAR-T) Cell Therapy for patients with relapsed or refractory blood cancer and exoskeleton in rehabilitation training for patients with spinal cord injury. Besides, telemedicine was implemented as an alternative mode of health care delivery that avoid direct physical contact between healthcare professional and patients and to minimise the risk of COVID-19. There were plans on adopting telemedicine in managing the selected neurosurgical patients and orthopaedics patients for increasing service accessibility and reducing social contact during the outbreak of the COVID-19 pandemic. Cross disciplinary service models were developed to provide comprehensive care for addressing the needs of patients.

Hospital Redevelopment Projects

The redevelopment projects of QMH and GH are well underway. The 30-storey New Block in QMH will bring service enhancement after the completion of the redevelopment project at 2024-25. The stacking of the New Block will adopt a patient-oriented design with well-coordinated services and convenient connection between the Accident & Emergency (A&E) department and hot floors such as Operating Theatres (OT) and Intensive Care Unit (ICU) so as to strengthen emergency services for patients requiring critical care. The Phase 1 redevelopment project of GH is also targeted to be completed in 2025-26. Upon completion, the phase 1 redevelopment will provide an oncology centre and three additional OTs. There will also be an ambulatory care centre with ancillary as well as administrative and supporting services.

Major Initiatives in 2022-23

Provide Smart Care

- Build capacity for the provision of CAR-T Cell Therapy treatment at QMH.
- Enhance the coagulopathy genetics service network at HKWC for Hong Kong Island and build capacity for providing additional genetic tests at QMH.
- Build capacity for providing additional breast cancer mutation tests for ovarian cancer patients at QMH and provide genetic counselling and clinic follow-up services for additional cases.
- Implement exoskeleton in rehabilitation training at HKWC and provide additional training sessions for patients with spinal cord injury.
- Adopt medical grade three-dimensional printing technology to provide services in Orthopaedics and Traumatology (O&T) departments at QMH.
- Establish day rehabilitation programme for elderly with osteoporotic vertebral collapse at MMRC.
- Provide additional pharmacist clinic attendances on anti-coagulant therapy management at GH.

Develop Smart Hospital

- Roll out the phase one eAED service model to the A&E department of QMH.
- Implement the aligned inpatient drug distribution model at HKWC.
- Implement the centralised Anaesthesia Clinical Information System (ACIS) at DKCH, GH and TWH.

Nurture Smart Workforce

- Enhance nursing manpower for general inpatient wards, as well as A&E, ICU, infection control, and peri-operative services.
- Enhance allied health manpower to support clinical stream coordinator (allied health) and succession planning at HKWC.
- Provide resuscitation training to staff.

Enhance Service Supply

- Set up a drug allergy de-labelling initiative hub and enhance laboratory allergy diagnostic service at HKWC, and to provide additional day inpatient attendances.
- Enhance clinical pharmacy services at ICU by providing additional medication verifications and reviews at QMH.
- Launch the drug refill services at GH and TWH.
- Build capacity for the provision of counselling and investigation services to additional potential live donor kidney transplant patients for complex kidney transplantation and improve the care and coordination at HKWC.
- Enhance multidisciplinary care for patients with severe dermatosis or complex needs.
- Set up a vascular surgical team at the Hong Kong Island network and provide specialist coverage for emergency and elective surgeries for HKEC and HKWC.
- Enhance eye services for patients with systemic association by setting up an eye disease clinic and enhance diagnosis and management for patients with Meibomian Gland Dysfunction at GH.
- Provide six additional hospital haemodialysis places for patients suffering from end-stage renal disease at HKWC.
- Enhance epilepsy services by providing additional video electroencephalogram tests.

HKWC Targets

Provide Smart Care	
• Build capacity for the provision of CAR-T Cell Therapy treatment to 20 additional patients at QMH.	1Q23
• Provide 75 additional apheresis sessions to support the transplant services and CAR-T Cell Therapy.	1Q23
• Designate three additional paediatrics beds for chronic ventilator assisted care at DKCH.	1Q23
• Enhance the coagulopathy genetics service network at HKWC for Hong Kong Island, and build capacity for providing 20 additional genetic tests at QMH.	1Q23
• Build capacity for providing 190 additional breast cancer mutation tests for ovarian cancer patients at QMH and provide genetic counselling and clinic follow-up services for 600 additional cases at HKWC.	1Q23
• Provide physiotherapy services for 2 400 additional outpatient attendances to patients on waiting list for total joint replacement surgery at MMRC.	1Q23
• Enhance physiotherapy outpatient services by providing stratified care management for 2 200 additional attendances at QMH.	1Q23
• Provide services for 1 220 additional allied health inpatient attendances to enhance swallowing and speech assessment, as well as rehabilitation for post-intubation or tracheostomy patients in high intensity care units.	1Q23
• Implement End-of-life and Careful Hand Feeding Programme at GH and provide 675 additional allied health inpatient attendances.	1Q23
• Implement exoskeleton in rehabilitation training at HKWC and provide 500 additional training sessions for patients with spinal cord injury.	1Q23
• Adopt medical grade three-dimensional printing technology to provide services in O&T departments at QMH.	1Q23

Provide Smart Care

• Establish day rehabilitation programme for elderly with osteoporotic vertebral collapse at MMRC and provide services for 1 460 additional rehabilitation day attendances.	1Q23
• Continue to enhance the Community Geriatric Assessment Team support for terminally ill patients in Residential Care Homes for the Elderly by providing 350 additional geriatric outreach attendances.	1Q23
• Enhance Palliative Care (PC) services at HKWC and provide 1250 additional consultative visits.	1Q23
• Recruit an additional case manager at HKWC to provide services for 300 additional psychiatric outreach attendances to increase support for mental health patients in the community.	1Q23
• Provide services for 1 680 additional nurse clinic attendances in SOPC.	1Q23
• Provide services for an additional total of 540 nurse clinic attendances in SOPC and 720 pharmacist clinic attendances for systemic anti-cancer therapy at HKWC.	1Q23
• Provide services for 2 250 additional pharmacist clinic attendances on anti-coagulant therapy management at GH.	1Q23

Develop Smart Hospitals

• Implement the aligned inpatient drug distribution model at HKWC.	1Q23
• Roll out the Inpatient Medication Order Entry chemotherapy module to the oncology department of QMH.	1Q23
• Roll out the phase one eAED service model to the A&E department of QMH.	1Q23
• Implement the centralised ACIS at DKCH, GH and TWH.	1Q23

Nurture Smart Workforce

- | | |
|--|------|
| • Enhance nursing manpower for general inpatient wards, as well as A&E, ICU, infection control, and peri-operative services. | 1Q23 |
| • Recruit an additional orthoptist to enhance the manpower planning. | 1Q23 |
| • Enhance allied health manpower to support clinical stream coordinator (allied health) and succession planning at HKWC. | 1Q23 |
| • Provide 60 training places for clinical staff to undergo resuscitation training. | 1Q23 |
| • Recruit 11 full-time equivalent advanced practice nurses as part-time clinical preceptors for junior nurses. | 1Q23 |

Enhance Service Supply

- | | |
|---|------|
| • Enhance capacity of the medical SOPC at HKWC by providing services for 370 additional SOPC new case attendances and 1 680 additional procedures. | 1Q23 |
| • Set up a drug allergy de-labelling initiative hub and enhance laboratory allergy diagnostic service at HKWC, as well as to provide services for 100 additional day inpatient attendances. | 1Q23 |
| • Enhance clinical pharmacy services at ICU by providing additional medication verifications and reviews at QMH. | 1Q23 |
| • Implement clinical pharmacy services on discharge medication management for patients admitted to acute medical wards at QMH. | 4Q22 |
| • Launch the drug refill services at GH and TWH. | 1Q23 |
| • Build laboratory capacity for 1 000 additional polymerase chain reaction tests for hepatitis E virus. | 1Q23 |
| • Strengthen multidisciplinary care for medical oncology services and providing 580 additional medication counselling and prescription verification services at QMH. | 1Q23 |

Enhance Service Supply

- | | |
|---|------|
| • Provide six additional hospital haemodialysis places for patients suffering from end-stage renal disease at HKWC and provide three additional stations for haemodialysis at QMH. | 1Q23 |
| • Build capacity for the provision of counselling and investigation services to 60 additional potential live donor kidney transplant patients for complex kidney transplantation and improve the care and coordination at HKWC. | 1Q23 |
| • Enhance dermatology services by setting up consultant-led dermatology team at HKWC to provide services for 250 additional SOPC new case attendances. | 1Q23 |
| • Enhance multidisciplinary care for patients with severe dermatosis or complex needs. | 1Q23 |
| • Enhance epilepsy services by providing services for 15 additional video electroencephalogram tests. | 1Q23 |
| • Enhance the infectious disease management at HKWC. | 1Q23 |
| • Enhance eye services for patients with systemic association by setting up an eye disease clinic and enhance diagnosis and management for patients with Meibomian Gland Dysfunction at GH. | 1Q23 |
| • Enhance the diagnostic and management pathway for 450 additional patients referred for lung nodule or suspicious lung malignancy. | 1Q23 |
| • Enhance capacity by providing services for 990 additional intravitreal injections. | 1Q23 |
| • Conduct 30 additional heart surgeries at QMH. | 1Q23 |
| • Set up a vascular surgical team at the Hong Kong Island network and provide specialist coverage for emergency and elective surgeries for HKEC and HKWC. | 1Q23 |

Kowloon Central Cluster



As at 31 Mar 2021		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			✓

As at 31 Mar 2021		Hospital / Institution	Specialist Outpatient Clinic	General Outpatient Clinic
16	Li Po Chun General Out-patient Clinic			✓
17	Robert Black General Out-patient 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 2021, KCC provided a total of 5 996 beds; of which 5 281 were for acute, convalescent and rehabilitation care, 250 for infirmary care and 465 for psychiatric care.

Actual Patients Served

In 2020-21, approximately 695 700 patients had utilised services in KCC. Approximately 60% 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 2020-21 according to district of residence

District of residence	No. of patients [^] #	Distribution [#]
Wong Tai Sin	171 400	25%
Kowloon City	137 800	20%
Yau Tsim Mong	104 800	15%
Kwun Tong	72 600	10%
Sham Shui Po	53 600	8%
Others*	155 500	22%
KCC Total	695 700	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. Service capacity of KCC has been very limited due to escalating demand for hospital beds and over congestion in wards during surge period. Furthermore, manpower shortage and the turnover of experienced staff have created enormous pressure on service provision.

KCC's challenge is not only to strive for providing safe and quality medical services while continuing to rationalise the provision of medical services among hospitals within the KCC in particular during the COVID-19 pandemic. KCC's colleagues continued to pay concerted efforts, strong coordination and application of smart initiatives to overcome these challenges. In managing public health crisis and unpredicted surge of caseload, KCC adopts contingency measures to expedite diversion of patients to appropriate settings of cluster hospitals. This complementary arrangement can segregate 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 preparation for the service commencement of KWH redevelopment phase one, preparation for the decanting works of OLMH and planning for the new acute hospital in Kai Tak Development Area. In line with the corporate move, smart components will also be integrated into different design and implementation stages.

Major Initiatives in 2022-23

Provide Smart Care

- Set up acute geriatric fragility fracture nursing coordination services at KWH.
- Implement the Enhanced Recovery After Surgery (ERAS) programme to provide additional services at QEH.
- Build capacity for providing additional breast cancer mutation tests for ovarian cancer patients at QEH.
- Enhance elderly care by extending the ortho-geriatric collaborative care model to KWH and WTSH to provide support for geriatric patients with hip or other fragility fractures; and to provide additional geriatric day hospital places at WTSH.
- Provide additional early mobilisation treatment sessions by physiotherapists to Intensive Care Unit (ICU) patients at KCC.
- Implement exoskeleton in rehabilitation training at KCC and provide additional training sessions for patients with spinal cord injury.
- Enhance medical grade three-dimensional printing services at QEH and provide services for 90 additional cases.
- Provide an additional of three oncology day beds at KWH and 12 medical day beds at QEH.
- Enhance day rehabilitation services and provide services for additional rehabilitation day attendances at QEH for patients with fragility fractures.
- Enhance cancer services by providing additional day inpatient attendances for chemotherapy services at KCC and enhancing the medical oncology services at KWH.
- Continue to enhance the Community Geriatric Assessment Team (CGAT) support for terminally ill patients in Residential Care Homes for the Elderly (RCHes) by providing additional geriatric outreach attendances.
- Enhance Palliative Care (PC) services at KCC and provide additional consultative visits.
- Provide additional nurse clinic attendances in SOPC.

Develop Smart Hospital

- Implement the aligned inpatient drug distribution model at KCC.
- Roll out the Inpatient Medication Order Entry (IPMOE) system at KWH, as well as roll out the IPMOE chemotherapy module to the oncology department of QEH.
- Improve safety and effectiveness for surgery by adopting robotic assisted operation mode to perform joint replacement surgery at HKBH and providing robotic surgery sessions at QEH for selected urology patients of KWH.
- Roll out the phase one eAED service model to the Accident & Emergency (A&E) department of KWH.
- Strengthen the manpower to support the smart hospital initiatives at KCC.

Nurture Smart Workforce

- Enhance nursing manpower for general and psychiatric inpatient wards, as well as A&E, ICU, infection control, stroke and peri-operative services.
- Recruit an additional graduate prosthetist-orthotist at KCC to enhance manpower planning for allied health services.
- Enhance the HA's complaints management system by establishing a cluster-based, patient relations office structure at KCC.
- Enhance allied health manpower to support clinical stream coordinator (allied health) and succession planning at KCC.
- Recruit practice nurses as part-time clinical preceptors for junior nurses.
- Provide clinical attachments to nurses to PC unit at KCC.
- Provide resuscitation training to staff.

Enhance Service Supply

- Provide additional acute beds at the emergency medical ward at KWH.
- Recruit additional manpower to support KWH Phase 1 service commencement.
- Provide an additional High Dependency Unit (HDU) bed at QEH.

- Provide two additional HDU beds, and an additional acute bed at HKCH.
- Provide additional Operating Theatre (OT) sessions and emergency OT services at weekends; provide additional attendances for Magnetic Resonance Imaging (MRI) scans; build capacity for various types of genomic and genetic tests and oncology tests; and build capacity for Chimeric Antigen Receptor T (CAR-T) cell services at HKCH.
- Enhance ophthalmology services at KCC by providing additional SOPC new case attendances.
- Set up nurse-led low risk Penicillin Allergy Centre at KCC and provide services for additional day inpatient attendances.
- Implement clinical pharmacy services on discharge medication management for patients admitted to acute medical wards at KWH.
- Provide inpatient and discharge medication management services at OLMH and WTSH, as well as extend the service hours of pharmacy at WTSH.
- Acquire a cardiac gamma camera system at QEH to provide additional examinations; and provide additional bone densitometry services attendances at HKCH.
- Provide additional hospital haemodialysis places for patients suffering from end-stage renal disease.
- Enhance child and adolescent mental health services by providing additional psychiatric day hospital places at KH.
- Designate four existing beds for sleep studies and conduct additional sleep studies.
- Set up a multidisciplinary team to provide care for patients with chronic heart failure at the Cardiac Ambulatory Centre, and provide additional echocardiograms services.
- Enhance vascular surgical service in HA – maintain a sustainable structure of Kowloon vascular surgery network.
- Enhance otolaryngology services at KWH and provide additional allied health outpatient attendances.
- Recruit additional administrative manpower for the provision of 24-hour support at BTS Headquarters.

KCC Targets

Provide Smart Care	
• Set up acute geriatric fragility fracture nursing coordination services at KWH.	1Q23
• Implement the ERAS programme to provide services for 160 additional patients at QEH.	1Q23
• Build capacity for providing 140 additional breast cancer mutation tests for ovarian cancer patients at QEH.	1Q23
• Enhance elderly care by extending the ortho-geriatric collaborative care model to KWH and WTSH to provide support for an additional total of 375 geriatric patients with hip or other fragility fractures; and to provide 24 additional geriatric day hospital places at WTSH.	1Q23
• Provide 1 250 additional early mobilisation treatment sessions by physiotherapists to 200 ICU patients at KCC.	1Q23
• Implement exoskeleton in rehabilitation training at KCC and provide 500 additional training sessions for patients with spinal cord injury.	1Q23
• Enhance medical grade three-dimensional printing services at QEH.	1Q23
• Provide three additional oncology day beds at KWH and 12 additional medical day beds at QEH.	4Q22
• Provide services for 1 950 additional rehabilitation day attendances at QEH for patients with fragility fractures.	1Q23
• Enhance cancer services by providing additional 300 day inpatient attendances for chemotherapy services at KCC and enhancing the medical oncology service at KWH.	1Q23
• Continue to enhance the CGAT support for terminally ill patients in RCHes by providing 350 additional geriatric outreach attendances.	1Q23
• Enhance PC services at KCC and provide 1 420 additional consultative visits.	1Q23
• Provide services for 3 430 additional nurse clinic attendances in SOPC.	1Q23

Develop Smart Hospitals

• Implement the aligned inpatient drug distribution model at KCC.	1Q23
• Roll out the IPMOE system at KWH, as well as roll out the IPMOE chemotherapy module to the oncology department of QEH.	1Q23
• Improve safety and effectiveness for surgery by adopting robotic assisted operation mode to perform joint replacement surgery at HKBH and providing robotic surgery sessions at QEH for selected urology patients of KWH.	1Q23
• Roll out the phase one eAED service model to the A&E department of KWH.	1Q23
• Strengthen the manpower to support the smart hospital initiatives at KCC.	1Q23

Nurture Smart Workforce

• Enhance nursing manpower for general and psychiatric inpatient wards, as well as A&E, ICU, infection control, stroke and peri-operative services.	1Q23
• Recruit an additional graduate prosthetist-orthotist at KCC to enhance manpower planning for allied health services.	1Q23
• Enhance the HA's complaints management system by establishing a cluster-based, patient relations office structure at KCC.	1Q23
• Enhance allied health manpower to support clinical stream coordinator (allied health) and succession planning at KCC.	1Q23
• Recruit 17 full-time equivalent advanced practice nurses as part-time clinical preceptors for junior nurses.	1Q23
• Provide clinical attachments to 12 nurses to PC unit at KCC.	1Q23
• Provide 220 training places for clinical staff to undergo resuscitation training.	1Q23

Enhance Service Supply

• Provide 40 additional acute beds at the emergency medical ward at KWH.	4Q22
• Recruit additional manpower to support KWH Phase 1 service commencement.	1Q23
• Provide an additional HDU bed at QEH.	4Q22
• Provide two additional HDU beds, and an additional acute bed at HKCH.	3Q22
• Provide six additional OT sessions per week and emergency OT services at weekends; provide 190 additional attendances for MRI scan; build capacity for various types of genomic and genetic tests and oncology tests; and build capacity for CAR-T cell services at HKCH.	1Q23
• Enhance ophthalmology services at KCC by providing 250 additional SOPC new case attendances.	1Q23
• Set up nurse-led low risk Penicillin Allergy Centre at KCC and provide services for 100 additional day inpatient attendances.	1Q23
• Implement clinical pharmacy services on discharge medication management for patients admitted to acute medical wards at KWH.	4Q22
• Provide inpatient and discharge medication management services at OLMH and WTSH, as well as extend the service hours of pharmacy at WTSH.	1Q23
• Acquire a cardiac gamma camera system at QEH to provide services for 300 additional patient attendances; and provide support for bone densitometry services at HKCH to 370 additional attendances.	1Q23
• Provide 11 additional hospital haemodialysis places for patients suffering from end-stage renal disease.	1Q23
• Enhance child and adolescent mental health services by providing five additional psychiatric day hospital places at KH.	4Q22
• Designate four existing beds for sleep studies and conduct 540 additional sleep studies.	1Q23

Enhance Service Supply

• Set up a multidisciplinary team to provide services for 490 additional patient attendances for patients with chronic heart failure at the Cardiac Ambulatory Centre, and provide services for 500 additional echocardiograms.	1Q23
• Enhance vascular surgical service in HA to maintain a sustainable structure of Kowloon vascular surgery network.	1Q23
• Enhance otolaryngology services at KWH and provide services for 1 550 additional allied health outpatient attendances.	1Q23
• Recruit additional administrative manpower for the provision of 24-hour support at BTS Headquarters.	1Q23

Kowloon East Cluster



As at 31 Mar 2021		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 or institutions in the Kowloon East Cluster (KEC). There are also four specialist outpatient clinics and eight general outpatient clinics. As at 31 March 2021, KEC provided a total of 2 846 beds; of which 2 690 were for acute, convalescent and rehabilitation care, 76 for infirmary care and 80 for psychiatric care.

Actual Patients Served

In 2020-21, approximately 487 200 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 2020-21 according to district of residence

District of residence	No. of patients^#	Distribution#
Kwun Tong	253 100	52%
Sai Kung	161 800	33%
Others*	72 300	15%
KEC Total	487 200	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

Prompted by the ongoing battle against the COVID-19 pandemic, the KEC hospitals have endeavoured to develop new normal mode of patient care and daily operations to cope with the ever-changing situation.

While maintaining vigilance and upkeeping effective anti-epidemic measures in light of contagious mutated virus strain of COVID-19, KEC is facing daunting challenges of an ageing population and space and facilities constraints that created inordinate pressure on the demand for hospitalisation and medical treatment for complex comorbidities in KEC hospitals.

In 2022-23, continuous effort will be put in bed capacity optimisation and further strengthening ambulatory care, collaboration with community, outreach services and multidisciplinary patient management in order to optimise inpatient service demand, minimise hospitalisation and reduce length of stay in KEC hospitals. The Cluster will continue to ride on the strategic directions as mapped out in the Clinical Services Plan (CSP) for KEC to develop and enhance services on 'CARE' (Cancer, Ambulatory, Rehabilitation, Emergency). In parallel, KEC will follow along the corporate's strategic plan to instil smart concepts and initiatives into hospital care, the facilities and the workforce. KEC's overall services capacity will be further buttressed by the new facilities upon completion of the major capital works projects which the KEC hospitals will be developed into modernised, technology-driven and smart hospitals.

Major Initiatives in 2022-23

In alignment with corporate objectives and the CSP for KEC, the major initiatives for 2022-23 are highlighted as follows:

Provide Smart Care

- Smart and personalised care will be introduced to renal patients with the new generation home haemodialysis model, elderly patients attending Accident & Emergency (A&E) department and psychiatric patients.
- Launch of acute geriatric fragility fracture nursing coordination services as an initiative to enhance geriatric support to the elderly patients in addition to the enhanced geriatric outreach services to patients in the Residential Care Homes for the Elderly (RCHes) by Community Geriatric Assessment (CGAT) Team in KEC.

Develop Smart Hospital

- Smart workflow solutions such as Inpatient Medication Order Entry (IPMOE) system and phase one eAED service model to enhance medical safety, operation efficiency and support a paperless working environment.
- Manpower for supporting various smart hospital initiatives at KEC will be strengthened.

Nurture Smart Workforce

- Engage staff in streamlined workflows and smart work processes through enhancement of nursing manpower in general inpatient wards and clinical departments; mentorship for junior nurses; additional training to clinical staff; and establishment of a cluster-based, patient relations office structure at KEC.

Enhance Service Supply

- Provide additional medical beds in UCH and TKOH; and additional extended care beds at HHH.
- Enhance cardiac services at TKOH by providing additional Cardiac Care Unit (CCU) beds and additional Cardiac Catheterisation Laboratory sessions.
- Provide additional Operating Theatre (OT) sessions in UCH and TKOH.
- Prepare for the commissioning of KEC Oncology Centre and provide additional day patient attendances for chemotherapy at KEC.
- Provide services for additional Specialist Outpatient Clinic (SOPC) attendances and increase the General Outpatient Clinic (GOPC) quota.
- Implement clinical pharmacy services on discharge medication management for patients admitted to acute medical wards at UCH and TKOH.
- Provide additional hospital haemodialysis places for patients suffering from end-stage renal disease at KEC.
- Provide additional intravitreal injections for eye patients.
- Increase healthcare capacity by strengthening manpower to enhance clinical microbiology and infection control services in KEC, and recruit additional manpower for the operation of the new hospital block of HHH and preparation for the commissioning of the new Ambulatory Block of UCH.

KEC Targets

Provide Smart Care	
• Enhance geriatric support by providing services for 750 additional focused geriatric assessments at the A&E department of TKOH.	1Q23
• Set up acute geriatric fragility fracture nursing coordination services at TKOH.	1Q23
• Provide physiotherapy services for 2 400 additional outpatient attendances to patients on waiting list for total joint replacement surgery at UCH.	1Q23
• Provide services for managing 100 additional day and same day surgical cases admitted to UCH.	1Q23
• Enhance podiatry services at KEC by providing 640 additional allied health outpatient attendances.	1Q23
• Continue to enhance the CGAT support for patients in RCHes by providing 1 520 additional geriatric outreach attendances.	1Q23
• Recruit an additional case manager at KEC to provide services for 300 additional psychiatric outreach attendances to increase support for mental health patients in the community.	1Q23
• Provide five additional patient capacity for the new generation home haemodialysis model at KEC.	1Q23
• Provide services for 2 540 additional nurse clinic attendances in SOPC.	1Q23
Develop Smart Hospitals	
• Roll out the phase one eAED service model to the A&E department of UCH.	1Q23
• Strengthen the manpower to support the smart hospital initiatives at KEC.	1Q23

Nurture Smart Workforce

• Enhance nursing manpower for general inpatient wards, as well as A&E, Intensive Care Unit, infection control, and peri-operative services.	1Q23
• Recruit an additional orthoptist to provide 500 additional joint clinic consultations.	1Q23
• Enhance allied health manpower to support clinical stream coordinator (allied health) and succession planning at KEC.	1Q23
• Enhance the HA's complaints management system by establishing a cluster-based, patient relations office structure at KEC.	3Q22
• Provide 420 training places for clinical staff to undergo resuscitation training.	1Q23
• Recruit 11 full-time equivalent advanced practice nurses as part-time clinical preceptors for junior nurses.	1Q23

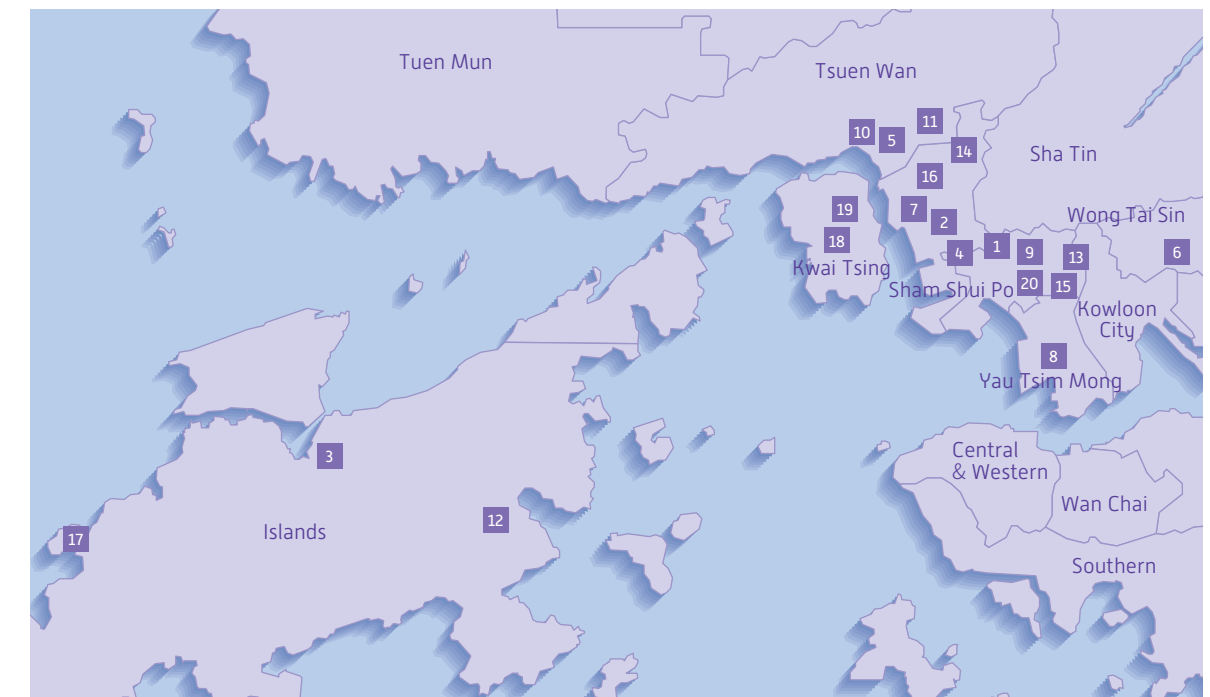
Enhance Service Supply

• Recruit additional clinical and non-clinical staff in preparation for the commissioning of new Ambulatory Block of UCH.	1Q23
• Recruit additional administrative staff for the operation of the new hospital block of HHH.	1Q23
• Prepare for the commissioning of oncology services at KEC by building capacity for 1 200 additional laboratory tests and provide services for 500 additional SOPC new case attendances.	1Q23
• Provide 26 additional acute medical beds at UCH.	3Q22
• Provide 10 additional acute medical beds at TKOH.	3Q22
• Provide 40 additional extended care beds at HHH.	3Q22
• Provide seven additional OT sessions per week at UCH.	1Q23
• Provide five additional OT sessions per week at TKOH for robotic surgery services.	4Q22
• Increase the GOPC quota by 2 375 at KEC.	1Q23

Enhance Service Supply

• Enhance service capacity of SOPC at KEC by providing 625 additional SOPC new case attendances.	1Q23
• Implement clinical pharmacy services on discharge medication management for patients admitted to acute medical wards at UCH and TKOH.	4Q22
• Enhance oncology services at KEC by providing 1 330 additional day inpatient attendances for chemotherapy.	1Q23
• Provide 12 additional hospital haemodialysis places for patients suffering from end-stage renal disease at KEC.	1Q23
• Enhance child and adolescent psychiatric services by providing 500 additional triage and assessment by nurses.	1Q23
• Strengthen manpower to enhance ICU services at TKOH.	3Q22
• Strengthen manpower to enhance clinical microbiology and infection control services at KEC.	1Q23
• Build capacity for the provision of services to 150 additional patients with respiratory diseases in HHH.	1Q23
• Enhance capacity by providing services for 990 additional intravitreal injections at KEC.	1Q23
• Enhance cardiac services at TKOH by providing two additional CCU beds and two additional Cardiac Catheterisation Laboratory sessions per week.	3Q22

Kowloon West Cluster



As at 31 Mar 2021		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 2021		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 2021, KWC provided a total of 4 906 beds; of which 3 633 were for acute, convalescent and rehabilitation care, 196 for infirmary care, 157 for mentally handicapped care and 920 for psychiatric care.

Actual Patients Served

In 2020–21, approximately 648 900 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 2020–21 according to district of residence

District of residence	No. of patients [^] #	Distribution [#]
Kwai Tsing	217 500	34%
Sham Shui Po	141 700	22%
Tsuen Wan	105 600	16%
Islands	56 200	9%
Others*	127 900	20%
KWC Total	648 900	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

The ongoing outbreak of COVID-19 pandemic has been a great challenge to KWC. The Hospital Authority Infectious Disease Centre at PMH and the NLTH Hong Kong Infection Control Centre operated by KWC admitted and treated most of the patients with COVID-19. The persistent pandemic has posed tremendous demand for manpower, isolation facilities, laboratory tests, as well as infection control management. Facing wave after wave of pandemic and the threat of variants, KWC will continue to stay vigilant and uphold stringent infection control strategies, as well as flexibly deploy manpower and resources to promptly respond to the volatile situation. In addition to combating the COVID-19, KWC is facing yet another challenge of infectious disease – *Candida auris*. The multi-drug resistant strain poses threat to the territory and currently, all cases are contained within KWC. The cluster has implemented isolation measures and stringent infection control to contain the spread of the organism. KWC will also strengthen measures to reduce the rate and emergency of multi-drug resistant organisms.

With challenges brought by the ageing and growing population mounting, there is an urgent need to increase service capacity. The cluster has accorded priority to providing additional beds and providing services for more attendances in various services. However, increase in capacity is limited by manpower supply. In this regard, KWC will encourage collaboration and coordination between disciplines and specialties, innovation in service model and invest heavily in information technology to improve efficiency, enhance workflow and improve patient experience.

Additional space is anticipated for the growing service demand. The cluster has been working on several capital works and renovation projects, including the Expansion of Lai King Building at PMH, and the Redevelopment of KCH, to enhance service capacity by better and effective utilisation of space. Nowadays, integration of smart initiatives in different clinical aspects is indispensable to modernised care. KWC has been incorporating new technology in service development while carrying out the capital projects with an aim to enhancing both patient and staff experience. Furthermore, KWC has been capitalising the Capital Work Reserve Fund to relocate and renovate wards and other healthcare facilities to optimise workflow and improve efficiency.

Major Initiatives in 2022-23

To align with the corporate objectives, KWC has formulated its 2022-23 Annual Plan with major initiatives highlighted as follows:

Provide Smart Care

- Enhance the coagulopathy genetics service network at KWC for Kowloon and New Territories, and build capacity for providing additional genetic tests at PMH.
- Roll out the restorative rehabilitation programme for stroke patients at YCH and provide services for an additional 1150 physiotherapy and 1150 occupational therapy attendances during weekends and public holidays.
- Adopt medical grade three-dimensional printing technology to provide services in the Orthopaedics and Traumatology (O&T) department at YCH.
- Set up Medical Ambulatory Care Centre and provide 24 additional day beds at YCH.
- Extend the service hour of the day surgical centre at PMH to enhance the capacity of day surgery services.
- Continue to enhance the Community Geriatric Assessment Team (CGAT) support for terminally ill patients in Residential Care Homes for the Elderly (RCHes) by providing 700 additional geriatric outreach attendances.
- Recruit an additional case manager at KWC to provide services for additional psychiatric outreach attendances to increase support for mental health patients in the community.
- Provide services for additional nurse clinic attendances in SOPC.

Develop Smart Hospitals

- Implement the aligned inpatient drug distribution model at KWC.
- Roll out the phase one eAED service model to the Accident & Emergency (A&E) department of PMH and the eResus service model to the A&E department of NLTH.
- Adopt e-Bed panel and e-Vital at KWC.
- Pilot telemedicine in specific patient groups.

Nurture Smart Workforce

- Enhance nursing manpower for general and psychiatric inpatient wards, as well as A&E, Intensive Care Unit, stroke and peri-operative services.
- Recruit an additional orthoptist to enhance the service coverage.
- Strengthen allied health manpower to support clinical stream coordinator (allied health) and succession planning at KWC.
- Strengthen manpower support to the patient relations office at KCH and provide additional training sessions for staff on complaint management.
- Strengthen manpower support to the corporate communication team at KWC.

Enhance Service Supply

- Recruit and train additional psychiatric nurses and supporting staff in preparation for the commissioning of the redevelopment of KCH, Phase 2.
- Additional acute and Cardiac Care Unit (CCU) beds will be provided at KWC. These include ten acute medical beds at PMH, 30 acute medical beds at CMC; and also two CCU beds at PMH.
- Provide additional emergency and elective Operating Theatre (OT) sessions, as well as additional Pre-Anaesthetic Assessment Clinic (PAAC) sessions and peri-operative medicine clinic sessions at PMH.
- Provide one additional PAAC session per week at CMC.
- Enhance urology service at KWC by providing two additional OT sessions per week at NLTH, and increasing service capacity for flexible cystoscopy and transperineal fusion prostate biopsy services at PMH.
- Provide additional OT sessions and additional SOPC doctor sessions for ENT services at YCH.
- Commence General Outpatient Clinic (GOPC) services at a new clinic in Sham Shui Po district to provide additional GOPC quota at KWC.
- Build capacity for additional polymerase chain reaction tests for Candida auris.
- Set up nurse-led low risk Penicillin Allergy Centre at KWC and provide additional day inpatient attendances.

- Extend the service hours of radiotherapy at PMH to provide additional treatment attendances.
- Provide additional attendances for Magnetic Resonance Imaging (MRI) scan at PMH.
- Provide additional attendances for Computed Tomography (CT) scan at YCH.
- Implement clinical pharmacy services on discharge medication management for patients admitted to acute medical wards at PMH and CMC.
- Launch the drug refill services at YCH.
- Enhance oncology services at KWC by providing additional day inpatient attendances for chemotherapy services.
- Provide 15 additional hospital haemodialysis places for patients suffering from end-stage renal disease at KWC.
- Set up a mobile team at CMC to provide respiratory care to patients in the medical wards and designate four beds to support cases with respiratory complications.
- Enhance neuroscience services by providing additional patient attendances.
- Commence inpatient and outpatient consultation services for high risk and complicated diabetes mellitus cases at NLTH.
- Provide additional wound and stoma care inpatient attendances at KWC.
- Continue to support the operation of NLTH Hong Kong Infection Control Centre at KWC.
- Provide 24-hour Intra-arterial Mechanical Thrombectomy services for acute ischaemic stroke patients at KWC.
- Provide cluster-based 24-hour Primary Percutaneous Coronary Intervention (PPCI) for eligible patients with ST-Elevation Myocardial Infarction at KWC.
- Establish centre-based vascular surgical network at Kowloon and form a single team to provide coverage for emergency vascular surgery.

KWC Targets

Provide Smart Care	
• Enhance the coagulopathy genetics service network at KWC for Kowloon and New Territories, and build capacity for providing 200 additional genetic tests at PMH.	1Q23
• Roll out the restorative rehabilitation programme for stroke patients at YCH and provide services for an additional 1 150 physiotherapy and 1 150 occupational therapy attendances during weekends and public holidays.	1Q23
• Adopt medical grade three-dimensional printing technology to provide services in the O&T department at YCH.	1Q23
• Set up obstetrics & gynaecology ward and provide six additional day beds at PMH.	1Q23
• Set up Medical Ambulatory Care Centre and provide 24 additional day beds at YCH.	4Q22
• Extend the service hour of the day surgical centre at PMH to enhance the capacity of day surgery services.	1Q23
• Continue to enhance the CGAT Team support for terminally ill patients in RCHes by providing 700 additional geriatric outreach attendances.	1Q23
• Recruit an additional case manager at KWC to provide services for 300 additional psychiatric outreach attendances to increase support for mental health patients in the community.	1Q23
• Provide services for 880 additional nurse clinic attendances in SOPC.	1Q23
Develop Smart Hospitals	
• Implement the aligned inpatient drug distribution model at KWC.	1Q23
• Roll out the phase one eAED service model to the A&E department of PMH and the eResus service model to the A&E department of NLTH.	1Q23

Nurture Smart Workforce

• Enhance nursing manpower for general and psychiatric inpatient wards, as well as A&E, Intensive Care Unit, stroke and peri-operative services.	1Q23
• Recruit an additional orthoptist to enhance the service coverage.	1Q23
• Enhance allied health manpower to support clinical stream coordinator (allied health) and succession planning at KWC.	1Q23
• Strengthen manpower support to the patient relations office at KCH and provide additional training sessions for staff on complaint management.	1Q23
• Strengthen manpower support to the corporate communication team at KWC.	1Q23
• Conduct training on infection control and infectious diseases and other clinical training courses at the Simulation Training Centre of KWC.	1Q23
• Provide 2 400 training places for clinical staff to undergo resuscitation training.	1Q23
• Recruit 16 full-time equivalent advanced practice nurses as part-time clinical preceptors for junior nurses.	1Q23

Enhance Service Supply

• Recruit and train additional psychiatric nurses and supporting staff in preparation for the commissioning of the redevelopment of KCH, Phase 2.	1Q23
• Provide 10 additional acute medical beds at PMH.	4Q22
• Provide 30 additional acute medical beds at CMC.	4Q22
• Provide 14 additional emergency OT sessions and two additional elective OT sessions per week, as well as two additional PAAC sessions and two additional peri-operative medicine clinic sessions per week at PMH.	4Q22
• Provide one additional PAAC session per week at CMC.	4Q22

Enhance Service Supply

• Enhance urology service at KWC by providing two additional OT sessions per week at NLTH, and increasing service capacity for flexible cystoscopy and transperineal fusion prostate biopsy services at PMH.	4Q22
• Provide six additional OT sessions per week and four additional SOPC doctor sessions per week for ENT services at YCH.	4Q22
• Commence GOPC services at a new clinic in Sham Shui Po district to provide 1 580 additional GOPC quota at KWC.	1Q23
• Build capacity for 10 750 additional polymerase chain reaction tests for Candida auris.	1Q23
• Set up nurse-led low risk Penicillin Allergy Centre at KWC and provide services for 100 additional day inpatient attendances.	1Q23
• Extend the service hours of radiotherapy at PMH to provide services for 1 330 additional treatment attendances.	1Q23
• Provide services for 980 additional attendances for MRI scan at PMH.	1Q23
• Provide services for 730 additional attendances for CT scan at YCH.	1Q23
• Implement clinical pharmacy services on discharge medication management for patients admitted to acute medical wards at PMH and CMC.	4Q22
• Launch the drug refill services at YCH.	1Q23
• Enhance oncology services at KWC by providing 900 additional day inpatient attendances for chemotherapy services.	1Q23
• Provide 15 additional hospital haemodialysis places for patients suffering from end-stage renal disease at KWC.	1Q23
• Set up a mobile team at CMC to provide respiratory care to patients in the medical wards and designate four beds to support cases with respiratory complications.	1Q23
• Enhance neuroscience services by providing services for 210 additional patient attendances.	1Q23

Enhance Service Supply

• Commence inpatient and outpatient consultation services for high risk and complicated diabetes mellitus cases at NLTH.	4Q22
• Provide services for 500 additional wound and stoma care inpatient attendances at KWC.	1Q23
• Continue to support the operation of NLTH Hong Kong Infection Control Centre at KWC.	1Q23
• Provide 24-hour Intra-arterial Mechanical Thrombectomy services for acute ischaemic stroke patients at KWC.	1Q23
• Provide cluster-based 24-hour PPCI for eligible patients with ST-Elevation Myocardial Infarction at KWC.	1Q23
• Provide two additional CCU beds at PMH.	4Q22
• Enhance vascular surgical service in HA to maintain a sustainable structure of Kowloon vascular surgery network and provide coverage for emergency vascular surgery.	1Q23

New Territories East Cluster



As at 31 Mar 2021		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 2021, NTEC provided a total of 5 042 beds; of which 4 001 were for acute, convalescent and rehabilitation care, 517 for infirmary care and 524 for psychiatric care.

Actual Patients Served

In 2020-21, approximately 612 200 patients had utilised services in NTEC. Approximately 86% of them resided in the Sha Tin, North and Tai Po Districts.

Number and percentage distribution of patients ever utilised NTEC services in 2020-21 according to district of residence

District of residence	No. of patients [^] #	Distribution [#]
Sha Tin	265 700	43%
North	134 400	22%
Tai Po	124 600	20%
Others*	87 500	14%
NTEC Total	612 200	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

Persistent rising service demand derived from the population growth and ageing population continued to be the major challenge of NTEC. As the largest HA cluster in terms of geographic coverage, NTEC is serving a population of more than 1.3 million. Growing case complexity is anticipated for the ageing population and longer life expectancy of Hong Kong people. There is an urging need to augment service capacity and introduce efficient service models to alleviate long waiting time of various services.

In 2022-23, NTEC will enhance service capacity through providing additional inpatient and day beds and Operating Theatre (OT) sessions covering various surgical stream. To relieve the

need of inpatient beds, various ambulatory and outreach programmes will be implemented such as chronic disease model at PWH Medical Ambulatory Care Centre (MACC) while Enhanced Recovery After Surgery (ERAS) programme will be further extended to the ENT department. Besides, capacity of pathology, radiological and rehabilitation services will also be augmented.

NTEC is fully committed to provide quality services amid the immense challenges of escalating service demand, COVID-19 pandemic and staff turnover. The cluster will continue to follow the directions set out in the Clinical Services Plan for NTEC and HA Strategic Plan 2022 – 2027 in formulating initiatives to address the complex needs of patients.

Major Initiatives in 2022-23

Provide Smart Care

- Strengthen ambulatory services in NTEC through implementing MACC chronic disease model with 20 additional medical day beds at PWH and launching ERAS Programme in the ENT department.
- Augment geriatric services by providing focused geriatric assessments at Accident & Emergency (A&E) of AHNH and NDH, setting up acute geriatric fragility fracture nursing coordination services at AHNH, and extending the ortho-geriatric collaborative care model at NDH.
- Enhance rehabilitation services by rolling out the restorative rehabilitation programme for patients with lower limb fracture or arthroplasties at AHNH, providing early mobilisation treatment sessions to Intensive Care Unit (ICU) patients, and implementing exoskeleton in rehabilitation training for patients with spinal cord injury.
- Increase support to patients through outreach programmes such as recruiting an additional case manager for psychiatric outreach attendances and enhancing the Community Geriatric Assessment Team (CGAT) for geriatric outreach attendances for terminally ill patients in Residential Care Homes for the Elderly (RCHes).
- Set up multidisciplinary clinical genetic service team at NTEC and build capacity for panel tests.
- Support the development of Chimeric Antigen Receptor T (CAR-T) Cell Therapy services at PWH.

- Enhance Palliative Care (PC) services, as well as nurse clinic attendances for breast cancer survivorship and Chronic Obstructive Pulmonary Disease (COPD) at NTEC.
- Increase patient capacity for the new generation home haemodialysis model at NTEC.
- Build up laboratory capacity by providing additional breast cancer mutation tests for ovarian cancer patients.

Develop Smart Hospitals

- Roll out the phase one eAED service model in A&E departments at PWH and AHNH.

Nurture Smart Workforce

- Enhance nursing manpower for inpatient wards and various services and recruit advanced practice nurses as part-time clinical preceptors for junior nurses.
- Enhance allied health manpower to support clinical stream coordinator (allied health) and enhance manpower planning for allied health services.
- Provide training places for clinical staff to undergo resuscitation training.

Enhance Service Supply

- Commission 32 additional acute inpatient beds including 10 medical beds and 2 ICU beds at PWH and 20 surgical beds at NDH.
- Provide additional nine OT sessions to enhance surgical capacity covering gynaecological, liver-cancer surgery, spine surgery, and cardiovascular surgery services.
- Enhance the capacity of radiological services such as Magnetic Resonance Imaging (MRI) scan at PWH, Computed Tomography (CT) scan at AHNH, and Ultrasound scan.
- Strengthen ambulatory and outpatient services by setting up nurse-led low risk Penicillin Allergy Centre at NTEC and increasing general outpatient clinic quota.

NTEC Targets

Provide Smart Care	
• Prepare for the development of CAR-T Cell Therapy services at PWH.	1Q23
• Enhance geriatric support by providing services for an additional total of 1 500 focused geriatric assessments at the A&E departments of AHNH and NDH.	1Q23
• Set up acute geriatric fragility fracture nursing coordination services at AHNH.	1Q23
• Extend the ortho-geriatric collaborative care model to NDH for elderly patients with hip or other fragility fractures and provide support for 250 additional orthopaedic patients.	1Q23
• Implement the ERAS programme in the ENT department to provide services for 135 additional patients at PWH.	1Q23
• Build capacity for providing 200 additional breast cancer (BRCA) mutation tests for ovarian cancer patients at NTEC through HA service network model.	1Q23
• Set up multidisciplinary clinical genetic service team at NTEC and build capacity for providing 100 additional panel tests.	1Q23
• Roll out the restorative rehabilitation programme for patients with lower limb fracture or arthroplasties at AHNH and provide services for 1 150 additional physiotherapy attendances during weekends and public holidays.	1Q23
• Provide 1 250 additional early mobilisation treatment sessions by physiotherapists to 200 ICU patients at NTEC.	1Q23
• Implement exoskeleton in rehabilitation training at NTEC and provide 500 additional training sessions for patients with spinal cord injury.	1Q23
• Implement MACC chronic disease model and provide 20 additional medical day beds at PWH.	4Q22
• Continue to enhance the CGAT support for terminally ill patients in RCHes by providing 350 additional geriatric outreach attendances.	1Q23

Provide Smart Care

• Recruit an additional case manager at NTEC to provide services for 300 additional psychiatric outreach attendances to increase support for mental health patients in the community.	1Q23
• Enhance PC services at NTEC to provide 1 930 additional consultative visits.	1Q23
• Provide five additional patient capacity for the new generation home haemodialysis model at NTEC.	1Q23
• Provide services for 560 additional nurse clinic attendances in SOPC for breast cancer survivorship and 540 additional nurse clinic attendances in SOPC for COPD at NTEC.	1Q23

Develop Smart Hospitals

• Roll out the phase one eAED service model to the A&E departments of PWH and AHNH.	1Q23
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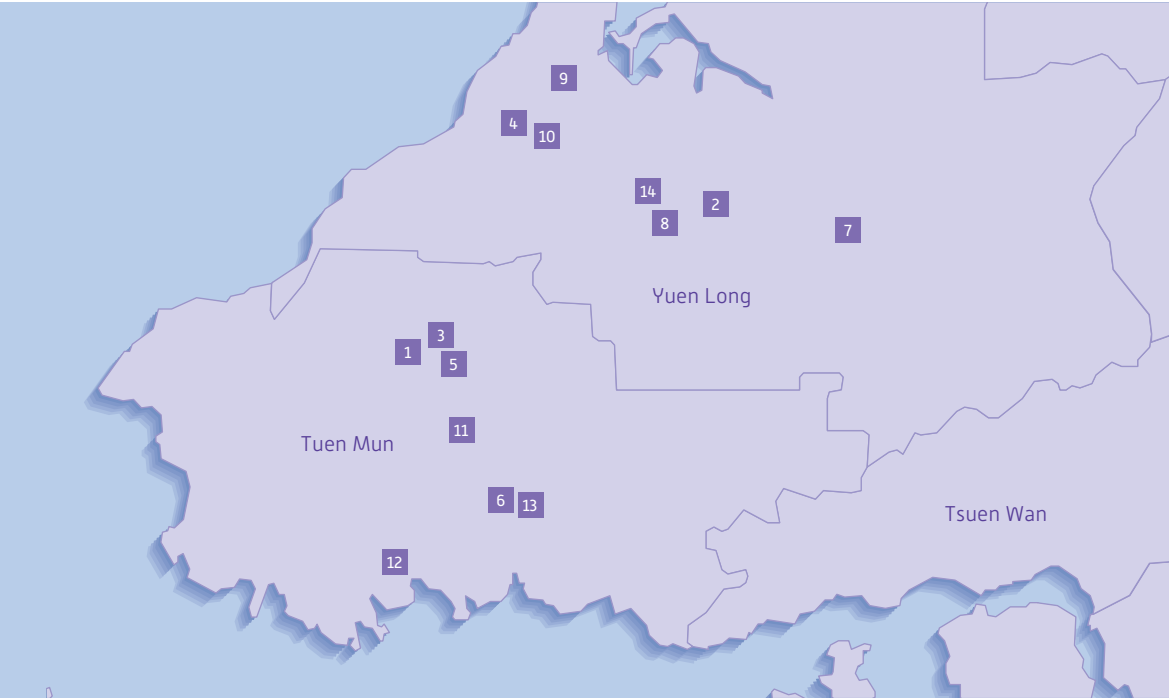
Nurture Smart Workforce

• Enhance nursing manpower for general and psychiatric inpatient wards, as well as A&E, ICU, infection control, stroke and peri-operative services.	1Q23
• Recruit an additional graduate prosthetist-orthotist at NTEC to enhance manpower planning for allied health services.	1Q23
• Enhance allied health manpower to support clinical stream coordinator (allied health) and succession planning at NTEC.	1Q23
• Provide 150 training places for clinical staff to undergo resuscitation training.	1Q23
• Recruit 16 full-time equivalent advanced practice nurses as part-time clinical preceptors for junior nurses.	1Q23

Enhance Service Supply

• Provide 10 additional acute medical beds at PWH.	4Q22
• Provide 20 acute surgical beds at NDH.	4Q22
• Provide two additional ICU beds at PWH.	4Q22
• Provide one additional OT session per week at PWH for gynaecological services.	4Q22
• Provide one additional OT session per week at NDH for liver cancer surgery services and enhance cluster-based hepato-biliary and pancreatic services.	4Q22
• Provide three additional OT sessions per week at NDH to enhance ambulatory spine surgery services.	4Q22
• Provide four additional OT sessions per week for cardiovascular surgery services.	4Q22
• Increase the general outpatient clinic quota by 2 375 at NTEC.	1Q23
• Set up nurse-led low risk Penicillin Allergy Centre at NTEC and provide services for 100 additional day inpatient attendances.	1Q23
• Provide services for 1 590 additional attendances for MRI scan, and provide MRI simulation services for the planning of radiotherapy at PWH.	1Q23
• Provide services for 2 060 additional attendances for CT scan at AHNH.	1Q23
• Provide services for 3 120 additional attendances for ultrasound scan at NDH.	1Q23
• Implement clinical pharmacy services on discharge medication management for patients admitted to acute medical wards at NDH.	4Q22
• Enhance clinical pharmacy services for chemotherapy prescription screening and new case counseling for haematology oncology patients at PWH.	1Q23
• Provide nine additional hospital haemodialysis places for patients suffering from end-stage renal disease at NTEC.	1Q23
• Build up consultant-led dermatology team at NTEC to provide services for 280 additional SOPC new case attendances.	1Q23
• Implement the integrated substance abuse service model for patients with complex substance abuse and severe comorbid conditions.	1Q23

New Territories West Cluster



As at 31 Mar 2021		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 2021, NTWC provided a total of 4 682 beds; of which 2 851 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 2020-21, approximately 524 400 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 2020-21 according to district of residence

District of residence	No. of patients^#	Distribution#
Yuen Long	269 900	51%
Tuen Mun	212 800	41%
Others*	41 700	8%
NTWC Total	524 400	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

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 2020¹ to 1.29 million in 2029¹, with significant increase in the elderly population (increased by 55% to 0.31 million). 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 to the highest priority in NTWC. Following the commissioning of Tin Shui Wai Hospital in 2016-17 and the expected completion of the new extension of Operating Theatre Block of Tuen Mun Hospital in 2022-23, the service capacity will continue to grow in the next few years. As the newly joined colleagues have constituted a significant portion of NTWC's total workforce, the Cluster needs to dedicate more resources to their supervision and training. In addition, the rapid increase in acute services has resulted in increasing 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.

Major Initiatives in 2022-23

To align with the corporate objectives, NTWC's major initiatives for 2022-23 are as follows:

Provide Smart Care

- Provide 25 additional day beds at TSWH.
- Enhance geriatric services by providing additional focused geriatric assessments at Accident & Emergency (A&E) department of POH and setting up acute geriatric fragility fracture nursing coordination services at POH.
- Enhance community services by providing additional psychiatric and geriatric outreach attendances.
- Continue to provide services for 1 800 additional home visits, needs assessments and discharge planning for elderly patients to enhance transitional post-discharge support.
- Enhance SOPC services by providing additional nurse clinic and pharmacist clinic attendances and strengthening collaboration between Family Medicine (FM) and Orthopaedics and Traumatology (O&T), as well as FM and Surgery.
- Provide an additional physiotherapy inpatient attendances, speech therapy inpatient attendances, and allied health outpatient attendances by strengthening the allied health manpower.

Develop Smart Hospitals

- Strengthen manpower to support the smart hospital initiatives at NTWC.
- Roll out eAED and eResus service models in the A&E Departments of TMH and POH respectively.

¹ Based on "Projections of Population Distribution 2021-2029" published by Planning Department.

Nurture Smart Workforce

- Enhance nursing manpower for inpatients wards and different service units.
- Enhance allied health manpower to support clinical stream coordinator (allied health) and succession planning.
- Provide resuscitation training to clinical staff.
- Recruit advanced practice nurses as part-time clinical preceptors for junior nurses.
- Provide 12 places of clinical attachments to Palliative Care (PC) unit.

Enhance Service Supply

- Provide an additional two Intensive Care Unit (ICU) beds, 10 acute and 30 extended care beds at TMH, 40 acute surgical beds at POH and 20 extended care beds at TSWH.
- Enhance the capacity of Operating Theatre (OT) services to provide additional OT sessions at TMH.
- Commence service for the intra-operative Magnetic Resonance Imaging (MRI), hybrid OT and robotic assisted surgery at TMH.
- Increase General Outpatient Clinic (GOPC) quota.
- Enhance Ophthalmology services by providing additional SOPC new case attendances and intravitreal injections.
- Provide additional attendances for MRI scan and commence MR-Simulator service.
- Acquire a MR-guided Focused Ultrasound machine at NTWC.
- Implement clinical pharmacy services on discharge medication management at POH.
- Strengthen medical manpower to enhance pathology services.
- Provide case management services to patients newly diagnosed with urological cancer.
- Provide nine additional hospital haemodialysis places to enhance support for patients suffering from end-stage renal disease.
- Provide cluster-based 24-hour Primary Percutaneous Coronary Intervention (PPCI) services.

NTWC Targets

Provide Smart Care	
• Enhance geriatric support by providing services for 750 additional focused geriatric assessments at the A&E department of POH.	1Q23
• Set up acute geriatric fragility fracture nursing coordination services at POH.	1Q23
• Provide 25 additional day beds at TSWH.	4Q22
• Recruit an additional case manager at NTWC to provide services for 300 additional psychiatric outreach attendances to increase support for mental health patients in the community.	1Q23
• Continue to enhance the Community Geriatric Assessment Team support for terminally ill patients in Residential Care Homes for the Elderly by providing 350 additional geriatric outreach attendances.	1Q23
• Enhance transitional post-discharge support by providing services for 750 needs assessments and discharge planning for elderly patients, and 1 800 additional home visits by nurses and allied health professionals.	1Q23
• Provide services for 2 090 additional nurse clinic attendances in SOPC.	1Q23
• Provide services for 2 250 additional pharmacist clinic attendances on anti-coagulant therapy management at TMH.	1Q23
• Provide 2 000 additional Family Medicine Specialist Clinic (FMSC) attendances under the collaborative model for FM and O&T departments, and 2 000 additional FMSC attendances for FM and Surgery departments at NTWC.	1Q23
• Strengthen the allied health manpower to provide services for an additional 3 360 physiotherapy inpatient attendances, 1 430 speech therapy inpatient attendances and 130 allied health outpatient attendances.	1Q23

Develop Smart Hospitals

- | | |
|---|------|
| • Strengthen the manpower to support the smart hospital initiatives at NTWC | 1Q23 |
| • Roll out the phase one eAED service model to the A&E department of TMH and the eResus service model to the A&E department of POH. | 1Q23 |

Nurture Smart Workforce

- | | |
|---|------|
| • Enhance nursing manpower for general and psychiatric inpatient wards, as well as A&E, ICU, infection control, stroke and peri-operative services. | 1Q23 |
| • Enhance allied health manpower to support clinical stream coordinator [allied health] and succession planning at NTWC. | 1Q23 |
| • Provide 105 training places for clinical staff to undergo resuscitation training. | 1Q23 |
| • Recruit 16 full-time equivalent advanced practice nurses as part-time clinical preceptors for junior nurses. | 1Q23 |
| • Provide clinical attachments to 12 nurses to PC unit at NTWC. | 1Q23 |

Enhance Service Supply

- | | |
|---|------|
| • Provide 20 additional OT sessions at TMH. | 1Q23 |
| • Commence service for the intra-operative MRI at TMH. | 1Q23 |
| • Commence service for the hybrid OT and robotic assisted surgery services at TMH. | 4Q22 |
| • Provide 10 additional acute gynaecology beds and 30 additional extended care beds at TMH. | 4Q22 |
| • Provide two additional ICU beds at TMH. | 4Q22 |
| • Provide 40 additional acute surgical beds at POH. | 4Q22 |
| • Provide 20 additional extended care beds at TSWH. | 4Q22 |
| • Increase the GOPC quota by 4 750 at NTWC. | 1Q23 |

Enhance Service Supply

- | | |
|---|------|
| • Enhance ophthalmology services at NTWC by providing 500 additional SOPC new case attendances. | 1Q23 |
| • Enhance capacity by providing services for 990 additional intravitreal injections at NTWC. | 1Q23 |
| • Provide services for 665 additional attendances for MRI scan at TMH. | 1Q23 |
| • Commence MR-Simulator service and provide services for 440 additional attendances to enhance service quality of radiotherapy at TMH. | 1Q23 |
| • Acquire MR-guided Focused Ultrasound machine at NTWC and set up service model and referral network for such services. | 1Q23 |
| • Implement clinical pharmacy services on discharge medication management for patients admitted to acute medical wards at POH. | 4Q22 |
| • Strengthen the medical manpower to enhance pathology services at NTWC. | 1Q23 |
| • Enhance the quality of cancer care by providing case management services to 100 additional patients newly diagnosed with urological cancer. | 1Q23 |
| • Provide nine additional hospital haemodialysis places for patients suffering from end-stage renal disease at NTWC. | 1Q23 |
| • Provide cluster-based 24-hour PPCI for eligible patients with ST-Elevation Myocardial Infarction at NTWC. | 4Q22 |

Abbreviations

A&E	Accident & Emergency
ACIS	Anaesthesia Clinical Information System
APN	Advanced Practice Nurse
C&A	Child & Adolescent
CAR-T	Chimeric Antigen Receptor T
CC	Central Committee
CCU	Cardiac Care Unit
CGAT	Community Geriatric Assessment Team
CMS	Clinical Management System
COC	Coordinating Committee
COPD	Chronic Obstructive Pulmonary Disease
CSP	Clinical Services Plan
CT	Computed Tomography
eHR	Electronic Health Record
EA	Executive Assistant
ERAS	Enhanced Recovery After Surgery
FMSC	Family Medicine Specialist Clinic
GDH	Geriatric Day Hospital
GOPC	General Outpatient Clinic
HA	Hospital Authority
HBOT	Hyperbaric Oxygen Therapy
HDP	Hospital Development Plan
HDU	High Dependency Unit
ICU	Intensive Care Unit
IPMOE	Inpatient Medication Order Entry
IT	Information Technology
MACC	Medical Ambulatory Care Centre
MRI	Magnetic Resonance Imaging
NEATS	Non-Emergency Ambulance Transfer Service
O&T	Orthopaedics & Traumatology
OpA	Operation Assistant
OT	Operating Theatre
PAAC	Pre-anaesthetic Assessment Clinic
PC	Palliative Care
PCA	Patient Care Assistant
PPCI	Primary Percutaneous Coronary Intervention
PPP	Public-Private Partnership
RCHEs	Residential Care Homes for the Elderly
RN	Registered Nurse
SOPC	Specialist Outpatient Clinic
SRS	Staff Rostering System
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	
AHNH	Alice Ho Miu Ling Nethersole Hospital
BTS	Hong Kong Red Cross Blood Transfusion Service
CMC	Caritas Medical Centre
DKCH	The Duchess of Kent Children's Hospital at Sandy Bay
GH	Grantham Hospital
HHH	Haven of Hope Hospital
HKBH	Hong Kong Buddhist Hospital
HKCH	Hong Kong Children's 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
RTSKH	Ruttonjee and Tang Shiu Kin Hospitals
TKOH	Tseung Kwan O Hospital
TMH	Tuen Mun Hospital
TSWH	Tin Shui Wai Hospital
TWH	Tung Wah 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 2021	As at 31 March 2022 [Estimate]	As at 31 March 2023 [Plan/Estimate]
I. Access to services			
Inpatient services			
no. of hospital beds			
general (acute and convalescent)	23 525	23 843	24 257
mentally ill	3 647	3 675	3 675
mentally handicapped	677	675	675
infirmary	2 001	1 981	1 961
overall	29 850	30 174	30 568
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) [%]	80	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	703	703	727
psychiatric services			
no. of psychiatric day places	889	889	909

Indicators	Actual for 2020-2021	Estimate for 2021-2022	Estimate for 2022-2023
II. Delivery of services			
Inpatient services			
overall			
no. of patient days	7 526 207	8 253 000	8 769 000
bed occupancy rate (%)	79	79	79
no. of discharge episodes ^[Note 1]	961 912	1 137 470	1 239 270
general (acute and convalescent)			
no. of patient days	6 001 201	6 677 000	7 165 000
bed occupancy rate (%)	81	81	81
no. of discharge episodes ^[Note 1]	942 092	1 116 200	1 217 700
average length of stay (days) ^[Note 2]	6.4	6.4	6.4
mentally ill			
no. of patient days	896 713	925 000	947 000
bed occupancy rate (%)	69	69	69
no. of discharge episodes ^[Note 1]	16 597	17 600	18 000
average length of stay (days) ^[Note 2]	57	57	57
mentally handicapped			
no. of patient days	179 343	180 000	186 000
bed occupancy rate (%)	72	72	72
infirmery			
no. of patient days	448 950	471 000	471 000
bed occupancy rate (%)	82	82	82
Ambulatory and outreach services			
day inpatient services			
no. of discharge episodes ^[Note 1]	675 649	739 100	780 500
A&E services			
no. of A&E attendances	1 640 453	2 088 000	2 203 000
no. of A&E first attendances			
triage I	22 928	22 900	22 900
triage II	48 726	48 700	48 700
triage III	608 311	748 600	748 600
specialist outpatient services ^[Note 3]			
no. of specialist outpatient (clinical) first attendances	742 556	837 000	877 000
no. of specialist outpatient (clinical) follow-up attendances	6 731 110	7 256 000	7 274 000
total no. of specialist outpatient (clinical) attendances	7 473 666	8 093 000	8 151 000

Indicators	Actual for 2020-2021	Estimate for 2021-2022	Estimate for 2022-2023
primary care services			
no. of general outpatient attendances	5 568 280	6 273 000	6 275 000
no. of family medicine specialist clinic attendances	313 065	318 300	332 600
total no. of primary care attendances	5 881 345	6 591 300	6 607 600
rehabilitation and palliative care services			
no. of rehabilitation day and palliative care day attendances	33 429	82 800	119 300
no. of community nurse attendances	900 059	903 000	939 000
no. of allied health (community) attendances	26 307	33 400	36 800
no. of allied health (outpatient) attendances	2 512 370	3 032 000	3 129 000
geriatric services			
no. of geriatric outreach attendances	732 985	747 000	768 600
no. of geriatric elderly persons assessed for infirmary care service	1 629	1 730	1 850
no. of geriatric day attendances	37 525	128 100	158 800
psychiatric services			
no. of psychiatric outreach attendances	158 826	282 900	326 700
no. of psychiatric day attendances	45 285	152 200	236 200
no. of psychogeriatric outreach attendances	67 983	100 600	114 600
III. Quality of services			
no. of hospital deaths per 1 000 population ^[Note 4]	2.7	2.7	2.7
unplanned readmission rate within 28 days for general inpatients (%)	11.0	11.0	11.0
IV. Cost of services			
Cost distribution			
cost distribution by service types (%)			
inpatient	54.0	54.2	54.5
ambulatory and outreach	46.0	45.8	45.5
cost of services for persons aged 65 or above			
share of cost of services (%)	50.2	51.5	51.5
cost of services per 1 000 population (\$m)	29.2	29.2	29.3
Unit costs			
inpatient services			
cost per patient day (\$)			
general (acute and convalescent)	7,240	6,640	6,620
mentally ill	3,560	3,520	3,620
mentally handicapped	2,140	2,150	2,190
infirmery	2,070	1,960	2,020

Indicators	Actual for 2020-2021	Estimate for 2021-2022	Estimate for 2022-2023
ambulatory and outreach services			
cost per A&E attendance (\$)	2,590	1,880	1,790
cost per specialist outpatient attendance (\$)	1,660	1,540	1,610
cost per general outpatient attendance (\$)	620	555	580
cost per family medicine specialist clinic attendance (\$)	1,370	1,400	1,430
cost per community nurse attendance (\$)	700	715	735
cost per psychiatric outreach attendance (\$)	3,310	1,940	1,770
cost per geriatric day attendance (\$)	5,310	2,400	2,430
Fee waivers			
total amount of waived fees (\$m)	992.8	1,080.0	1,170.2
percentage of Comprehensive Social Security Assistance fee waiver [%] ^[Note 5]	15.7	15.5	15.1
percentage of Higher Old Age Living Allowance fee waiver [%] ^[Note 5]	12.1 ^[Note 6]	11.6 ^[Note 6]	12.0 ^[Note 6]
percentage of other fee waiver [%] ^[Note 5]	7.7	7.6	7.5
V. Manpower (no. of full time equivalent staff as at 31 March)			
Medical			
doctor	6 457	6 540	6 630
specialist	3 418	3 380	3 370
non-specialist	3 039	3 160	3 260
intern	436	445	541
dentist	13	13	13
medical total	6 906	6 998	7 184
Nursing			
nurse	28 189	28 790	29 340
trainee	1 547	1 100	1 200
nursing total	29 736	29 890	30 540
Allied health	8 886	9 150	9 480
Others	43 162	45 160	46 450
total	88 690	91 198	93 654

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 The number of attendances includes consultations provided by honorary doctors, e.g. under the collaboration model between the Hospital Authority and the CUHK Medical Centre commencing 2021-22.

Note 4 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 5 Refers to the amount waived as percentage to total charge.

Note 6 For 2020-21 (Actual) and 2021-22 (Estimate), the medical fee waivers cover recipients of Higher OALA aged 75 or above. As announced in the 2021 Policy Address, the Normal and Higher OALA will be merged in the second half of 2022. As such, 2022-23 (Estimate) covers Higher OALA recipients aged 75 or above before merging but includes all OALA recipients aged 75 or above upon the merger.

Appendix 2 Service Estimates by Cluster

Service Estimates for 2022-23	HKEC	HKWC	KCC	KEC	KWC	NTEC	NTWC
Inpatient services							
general (acute and convalescent)							
no. of patient days	645 800	666 100	1 583 600	868 700	1 135 600	1 272 600	992 600
no. of discharge episodes ^[Note 1]	120 580	116 230	238 300	147 760	219 700	207 080	168 050
mentally ill							
no. of patient days	102 700	21 800	129 000	20 400	239 500	162 500	271 100
no. of discharge episodes ^[Note 1]	1 770	700	3 200	480	4 470	4 510	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	89 100	30 200
Ambulatory and outreach services							
day inpatient services							
no. of discharge episodes ^[Note 1]	77 310	105 000	155 620	82 930	102 830	146 450	110 360
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 ^[Note 2]							
no. of specialist outpatient (clinical) attendances	870 500	945 200	1 535 400	935 400	1 417 900	1 316 000	1 130 600
primary care services							
no. of primary care attendances	651 560	414 790	1 219 750	1 078 730	1 112 340	1 124 310	1 006 120
rehabilitation and palliative care services							
no. of rehabilitation day and palliative care day attendances	45 580	31 780	9 670	7 540	9 430	9 550	5 750
no. of community nurse attendances	100 500	57 500	187 900	183 000	164 300	141 500	104 300
no. of allied health (community) attendances	2 630	3 590	5 280	1 500	5 680	10 900	7 220
no. of allied health (outpatient) attendances	363 700	243 700	689 900	439 900	472 500	481 300	483 000

Service Estimates for 2022–23	HKEC	HKWC	KCC	KEC	KWC	NTEC	NTWC
geriatric services							
no. of geriatric outreach attendances	110 350	67 430	169 650	57 020	146 460	95 810	121 880
no. of geriatric day attendances	29 510	8 270	29 350	18 280	24 570	33 370	15 450
psychiatric services							
no. of psychiatric outreach attendances	25 290	22 630	20 820	34 700	109 900	46 480	66 880
no. of psychiatric day attendances	29 100	22 760	12 450	34 190	69 160	48 010	20 530
no. of psychogeriatric outreach attendances	12 740	18 320	10 690	11 380	31 900	14 810	14 760
Quality of services							
unplanned readmission rate within 28 days for general inpatients [%]	10.3	9.8	10.4	11.2	12.5	10.3	11.6

- Note 1Refers to discharges and deaths in the Controlling Officer’s Report (COR).
- Note 2The number of attendances includes consultations provided by honorary doctors, e.g. under the collaboration model between the Hospital Authority and the CUHK Medical Centre commencing 2021–22.

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