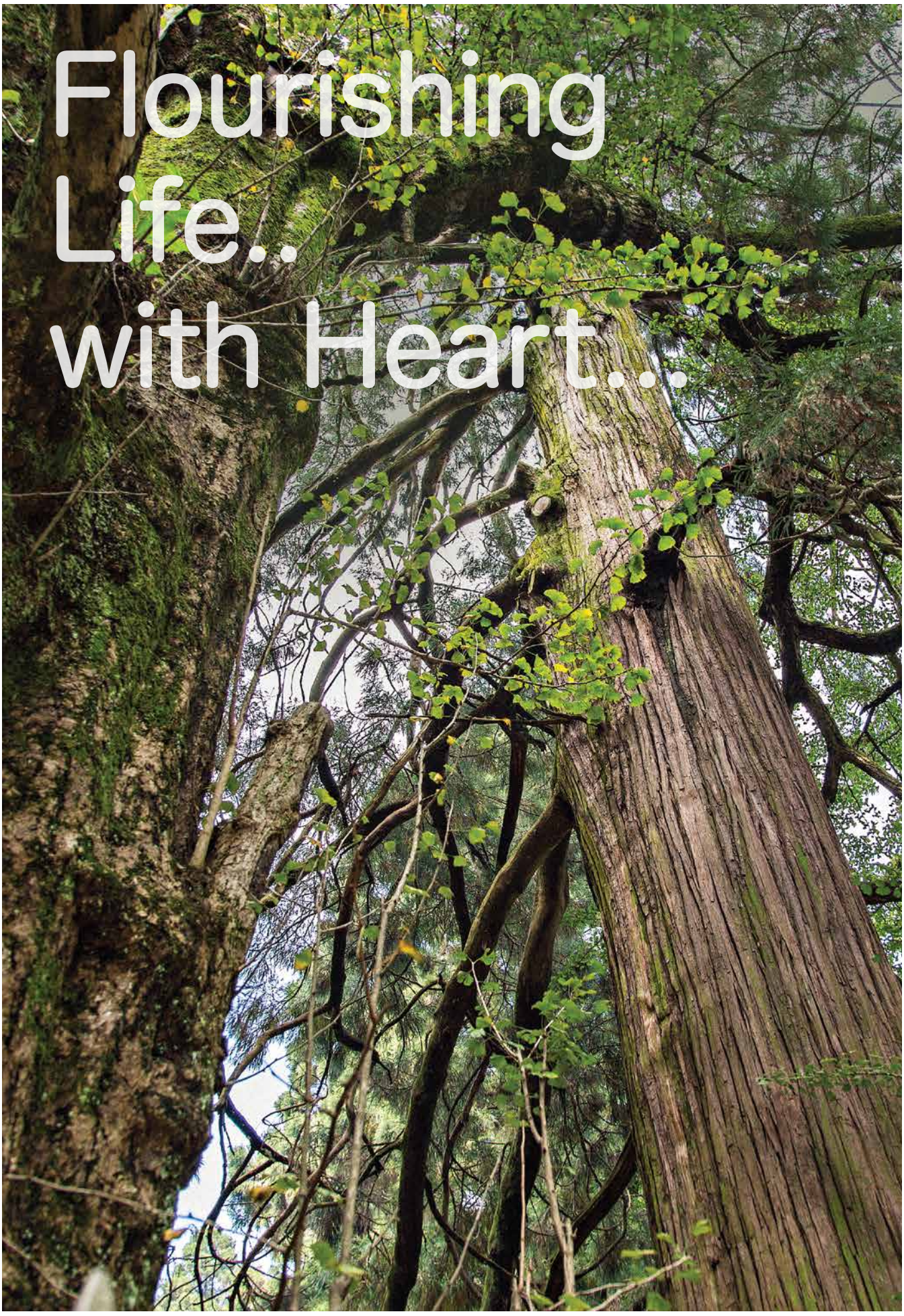
醫院管理局
HOSPITAL AUTHORITY

CLINICAL SERVICES PLAN

for the Redevelopment of Kwai Chung Hospital

Planning Tomorrow's Hospital


Flourishing
Life..
with Heart...

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Preface

This Clinical Services Plan for the redevelopment of Kwai Chung Hospital has been prepared by hospital clinicians, senior management and executives of Kwai Chung Hospital, and by Head Office staff in the Strategy & Planning Division. This Clinical Services Plan will form an integral part of the Master Development Plan for the hospital. It is in line with the HA's Mental Health Service Plan for Adults 2010-15 and supports the HA mission of helping people stay healthy. The plan demonstrates the commitment and vision of Kwai Chung Hospital to improve its facilities to support its provision of quality and holistic care for the mentally ill. The ultimate aim is to deliver personalised psychiatric services to patients through an integrated multi-disciplinary team approach, in collaboration with district community partners.

Many who are professionally concerned with the needs of people with mental illness have contributed to the development of this Clinical Services Plan. We would particularly like to acknowledge the Project Steering Committee which was chaired by the Cluster Chief Executive of Kowloon West Cluster, and the Core Planning Group of Kwai Chung Hospital. We are also particularly grateful to members of the Joint Working Group from Kwai Chung Hospital and the Strategy & Planning Division, who have had overall responsibility for the final development of this Clinical Services Plan.

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Executive Summary

This report presents the Clinical Services Plan (CSP) for the redevelopment of Kwai Chung Hospital (KCH), a major psychiatric hospital in Hong Kong. The plan outlines the model of service delivery, based on effective person-centred care, which is holistic and promotes recovery of the individual. The plan considers the design implications of the service delivery strategies and informs the design process, which will guide the redevelopment of KCH.

Kwai Chung Hospital is currently a 920-bed, multi-disciplinary, psychiatric hospital located in the Kowloon West Cluster (KWC) of Hong Kong, under management of the Hospital Authority (HA). The hospital provides psychiatric care to those with mental health problems in Kwai Chung, Tsing Yi, Tsuen Wan and North Lantau districts, as well as Mong Kok, Sham Shui Po and Wong Tai Sin districts.

KCH was built in 1981 with principles and models of care which focused heavily on the institutional custody of patients with mental illness. Since establishment, the health service delivery model at KCH has undergone significant changes, reflecting evolving global trends in treatment and management, with emphasis on safe psychiatric care from early detection to treatment and rehabilitation into the community.

Kwai Chung Hospital's main activity is general adult psychiatry, with both acute and chronic services. Over the years, the hospital has developed psychiatric specialty services including Child and Adolescent Psychiatric Services, Psychogeriatric Services, Substance Abuse Assessment Services, and services for learning disabilities. Community-based services, such as Community Psychiatry, Psychiatric Consultation Liaison and Child and Adolescent Mental Health Support Programmes, are also integral components of the current KCH's approach to psychiatric service delivery.

However, the hospital has not undergone any major renovation or refurbishment since it opened. Conditions of the facilities and physical setting at KCH have become outdated and lack the capability to facilitate delivery of modern psychiatric care and training of professionals. The current institutional setting of KCH does not effectively facilitate rehabilitation, recovery and inclusion. Moreover, it compromises service quality and safety with ward overcrowding, mixed age and gender wards, inappropriate space provision for delivery of ambulatory services and the challenge of infection control issues.

Planning Process

This CSP has been produced in consideration of the overall HA strategies and directions, as well as the HA Mental Health Service Plan for Adults 2010-15, to ensure coherence of service direction.

The review for the CSP examined each clinical service available at KCH and how its models and delivery of psychiatric care would need to change in the future. Stakeholder consultations through briefing sessions, surveys and group interviews were conducted. Projections of future demand for psychiatric services informed the psychiatric bed projection.

Planning Services and Capacity

KCH will elicit the existing model of "whole-person" care, with the strengthening of community-based psychiatric care, reduction in avoidable hospital stay, provision of a less restrictive, more relaxed and homely environments for patients, as well as a progressive shift toward coordinated and personalised treatment, recovery and community integration.

KCH services should gear towards:

1) Minimization of in-patient hospitalization and enhancement of the therapeutic environment, through:

   i) Facilitation of individualised case management and psychiatric consultation liaison;
   ii) Strengthening ambulatory psychiatric services and enhanced carer support;
   iii) Expansion and development of community mental health services;
   iv) Modernization of psychiatric out-patient services;
   v) Enhancement of primary mental health care management; and

2) Enhancement of clinical sub-specialization, by:

   i) Improvement of child and adolescent mental health services;
   ii) Enhancement of psychogeriatric services, substance abuse management services, and psychiatric services for persons with learning disabilities.

With regards to capacity, the age-and disease-specific bed demand projection model suggested a bed requirement of around 1000 beds in 2026.

Principal Recommendations

Consultations in the form of briefings, surveys and interviews suggested two principal recommendations:

1) KCH should continue as a major psychiatric hospital in HA with its existing repertoire of services;

2) There should be a major redevelopment of the hospital campus and upgrade of facilities to support efficient and effective service delivery allowing patient recovery and rehabilitation, through:

   i) Minimizing and rationalizing bed-based services with an aim to shift towards integrated multi-disciplinary care;
   ii) Providing adequate flexible space and zoning for ambulatory care, as well as in-reach services by partner organisations at KCH; and
   iii) Providing physical flexibilities for new advances in psychiatric care and changes in service demand.

Design Implications

KCH will focus on the patient's journey to recovery and ensure that each step is carefully designed and patient-centred. The vision is that of a therapeutic village campus, where patients with a range of mental disorders can live, receive treatment, visit and work with staff, NGOs and volunteers, while recovering and moving towards re-integration with mainstream society. Such design implications include:

- Simulation of real life in the environment, offering various choices of activity spaces while retaining a feeling of personal safety, security and fundamental dignity.
- Provision of identifiable areas for residential in-patient care, ambulatory care, community integration and leisure activities in the design of the KCH campus.
- Integration and connection of physical setting with Princess Margaret Hospital (PMH). It should be seamless to facilitate the needs of patients and staff, as well as to enhance inclusive engagement with the wider community.
- Separation of in-patient areas for adults, adolescents and children, which shall be expressed in a variety of identifiable residential design forms.
- Utilization of large floor plates in ambulatory, community and leisure facilities, wherever possible, to enhance the sense of space and freedom for patients to make choices and decisions.
- Use of green external space and integration with nature as an essential provision throughout the campus.

In subsequent stages of the project, the design principles for the preferred strategies outlined in the CSP should become the basis for the final design proposals.

Concluding Remarks

The emphasis of modern psychiatric care has shifted from institutional hospital care to integration with community-based care. Modern flexible facilities will be vital to support the delivery of updated, modern psychiatric care to patients, ensure the future proofing of service delivery and support the many professionals that strive to provide the best possible care to patients.

During the course of developing this CSP, the importance and benefits of holistic patient care were apparent through the close collaboration of KCH with other hospitals in the cluster, particularly PMH. Although it is beyond the scope of this review to make recommendations in relation to other hospitals, the redevelopment of KCH should be seen in the wider context of the KCH-PMH campus and also the impact of the Clinical Services Plans of other cluster hospitals.

Aspiring to serve as an exemplar translation of psychiatric care in Hong Kong, the redevelopment of KCH will facilitate its modernised model of high quality, integrated, person-centred care by offering a campus with upgraded facilities for more effective treatment and recovery of patients.

摘要

葵涌醫院是香港主要的精神科醫院之一。本報告概述醫院重建的臨床服務計劃（臨床服務計劃）。我們提出的服務模式，建基於以人為本、全人護理以及促進病人康復的信念。構思本計劃時，我們詳細考慮不同服務策略對設計理念的影響，引導重建葵涌醫院的設計方案。

葵涌醫院由醫院管理局（醫管局）管理，是九龍西醫院聯網（九龍西聯網）的跨專業精神科醫院，設有920張病床，為葵涌、青衣、荃灣、北大嶼山、旺角、深水　及黃大仙區的精神病患者提供精神科服務。

葵涌醫院於1981年落成。建院初期的護理原則和服務模式，是以住院監護精神病患者為主。隨着世界各地對精神科治療及管理概念的演變，葵涌醫院的精神健康服務模式亦屢經變革，強調及早察覺以至治療及社區康復的服務模式，為精神病患者提供全面及安全的精神科服務。

葵涌醫院主要提供為急性及長期精神科病患的成人精神科服務。經過多年發展，醫院亦逐步開展其他精神科專科服務，包括兒童及青少年精神健康服務、老人精神科服務、藥物誤用評估服務及精神科智力障礙服務。另提供社區為本服務，包括精神科社區外展服務、精神科諮詢會診和兒童及青少年精神健康社區支援計劃等。

然而，葵涌醫院自啟用以來從未進行任何重大的裝修或翻新工程。經過數十年的耗用，該院的設施和環境已經變得殘舊過時，不單難以應付現今精神科服務及專業培訓的需求，亦無法配合病人在療養、復康及融入社會方面的要求。此外，由於病房過於擠迫、不同年紀和性別的病人入住同一病房、缺少適合地方提供日間醫療服務，以及難以達致傳染病防治標準等，均影響了服務質素和安全。

規劃過程

制訂本計劃時，我們充分考慮醫管局的整體策略和方向，以及《醫管局2010-2015年成年人精神健康服務計劃》，以確保一致服務路向。本計劃除檢討葵涌醫院現有的臨床服務外，亦包括未來精神科服務模式與提供的改善方法。本計劃制訂期間，我們透過簡介會、問卷調查及小組討論收集持份者意見，亦透過預測服務需求來評估將來所需的精神科病床數量。

規劃服務模式及服務量

展望將來，葵涌醫院將繼續推動現行的「全人護理」模式，並加強社區精神科服務、減少可避免的住院需要，以及提供限制較少而舒適的家居式治療環境，希望能逐步邁向有序而個人化的治療、復康護理及社區融入服務。

葵涌醫院的服務將朝以下方向發展：

1) 盡可能減少入院治療，改善治療環境：

   i) 推動個人化的個案管理及精神科諮詢會診；
   ii) 加強日間精神科服務及對照顧者的支援；
   iii) 擴展社區精神科健康服務；
   iv) 提供現代化的精神科門診服務；
   v) 強化基層精神健康護理；及

2) 強化附屬專科臨床服務：

   i) 提升兒童及青少年精神健康服務；
   ii) 加強老人精神科服務、藥物誤用評估中心及智力障礙的精神科服務。

在服務量方面，根據年齡及疾病分類需求預測，葵涌醫院至2026年約需要1,000張病床。

主要建議

透過簡介會、問卷調查及小組討論收集到的意見，我們總結出以下兩項主要建議：

1) 葵涌醫院應繼續作為醫管局轄下主要的精神科醫院，延續現有的服務；

2) 葵涌醫院應作出全面重建及設施提升，以提供更快捷及有效的服務，協助病人療養及康復：

   i) 服務模式轉以綜合跨專業服務為主，盡量減少住院需求；
   ii) 在院內提供充裕的空間和靈活的間隔，以配合日間醫療服務的需求和協助夥伴組織推行內展服務；
   iii) 彈性預留空間以應付不斷進步與改變的精神科治療及服務需求。

設計理念

葵涌醫院將加倍注重病人的復康過程，並確保每個環節都經過悉心策劃及照顧到病人的個別需要。本計劃提出「治療村」的願景，讓不同的精神病患者生活其中、接受治療、探訪，以及與院內醫護人員、非政府機構及義工一起配合協作，讓他們在過程中逐步康復，最終重新融入主流社會。此設計理念包括：

- 治療村的環境將模擬現實生活環境，提供多種活動空間，予人安全放心、備受尊重的感覺。
- 醫院清楚劃分住院、日間醫療、社區融合及休閒活動等活動區域。
- 治療村與瑪嘉烈醫院貫通連結，既方便病人和職員的需要，亦可促進病人與社區共融。
- 安排住院的成人、青少年及兒童病人入住不同區域，並以不同的居住設計清楚劃分。
- 盡量將日間醫療、社區活動及休閒設施設於寬敞的樓面，為病人提供較廣闊的空間及選擇自由。
- 盡量善用戶外綠色空間，融合自然環境。

在重建的後期階段，本計劃載述的設計理念應成為最終設計方案的基礎。

總結

精神科服務已由過往以住院為主的護理演變為結合社區服務的綜合治理，因此醫院必須提供現代化的設施及靈活的安排來配合與時並進的精神科服務，以及支援盡心盡力為病人服務的醫護及其他專職人員。

在制訂這份計劃期間，葵涌醫院與瑪嘉烈醫院，以及九龍西醫院聯網內其他醫院的緊密合作，彰顯出全人護理的重要性和裨益。雖然本計劃並不包括就其他醫院的臨床服務作出建議，葵涌醫院的重建計劃應就葵涌-瑪嘉烈聯合設施、以及聯網內其他醫院的臨床服務計劃作通盤考慮。

葵涌醫院致力成為香港精神科醫療服務的典範，因此本重建方案將提供先進的院舍設施，配合高質素的全人綜合治理模式，促進病人早日康復。

Purpose of Plan

This document presents the CSP for the redevelopment of the KCH. Mapping out the planned future service directions of the hospital, it is the culmination of an intense, highly consultative, process with clinical and executive staff of KCH. This report considers the design implications of the preferred strategies. It is intended to inform the design process that will guide the redevelopment of KCH.

The report does not address workforce issues or change management strategies necessary to give effect to the models of care described, although the importance of these strategies cannot be understated.

About the Plan

The development of the CSP is set against the implementation of the HA Mental Health Service Plan for Adults 2010-2015. KCH is well positioned to develop a balanced and well integrated portfolio of hospital- and community-based psychiatric services for the population of the KWC.

This CSP is also guided by the HA Strategic Plan 2012-2017, which states:

> "…we will provide proactive individualised care for mental health patients by reinforcing community care, and enhancing the therapeutic environment and multi-disciplinary care in in-patient psychiatric services."[1]

The planning began with an examination of current models of care and an assessment of the impact that these modern treatments and technologies will have on psychiatric health care delivery in the foreseeable future. The philosophy adopted in this plan is one which begins with the consideration of the needs of patients. It informs the psychiatric service delivery model and the functional requirements of new buildings.

This CSP discusses the shift from focusing on institutional in-patient care to developing a multi-disciplinary approach in psychiatric care delivery with equal emphasis on in-patient, ambulatory and community care. It is consistent with HA strategies, including better managing growing service demand, ensuring service quality and safety, enhancing partnership with patients and community, ensuring adequate resources to meet service needs and supporting staff.

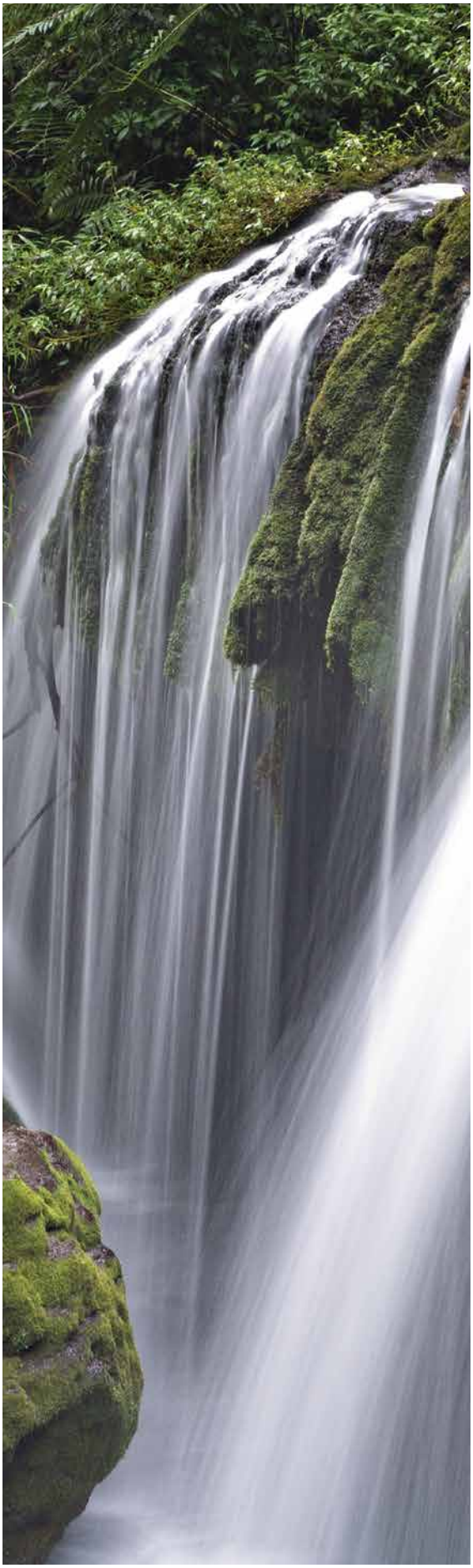
The Government has supported in principle the KCH redevelopment project, which entails complete re-provisioning

[1] Consolidating for Health: Hospital Authority Strategic Plan 2012-2017.

of services at the hospital site as part of the modernisation of mental health services in Hong Kong.[2] The CSP entails the construction of a modern therapeutic facility to facilitate a comprehensive range of mental health services for adults, as well as strong integration with community-based services. Specialty services for child, adolescents and older patients will also be enhanced.

Supported by the commitment of the wider community involved in psychiatric care, in line with the HA Mental Health Service Plan for Adults, the redevelopment of KCH as an exemplar of mental health facility in the KWC would enable continued realisation of "a person-centred service, based on effective treatment and recovery of the individual."[3]

The Hospital Authority Head Office, the KWC and KCH are committed to seeing that these principles are carried forward to subsequent stages of the redevelopment process, master planning, design and construction.



[2] HA Medical Services Development Committee Meeting, Paper 309, May 2012.
[3] HA Mental Health Service Plan for Adults 2010-15.

KCH Today

KCH is a 920-bed, 1,280-staff psychiatric hospital in the KWC.[4] It is one of the psychiatric hospitals in Hong Kong. Under the management of HA, KCH serves patients with mental health problems in the districts of Kwai Chung, Tsing Yi, Tsuen Wan, North Lantau, Mong Kok, Sham Shui Po and Wong Tai Sin.

The hospital was established in 1981, when principles and models of care focused heavily on the safe, institutional custody of patients with mental illness. Thus, KCH was designed primarily for in-patient services and its main activity was general adult psychiatry, with a bed capacity of 1622.

Since then, psychiatric services at KCH have undergone significant changes, reflecting global trends in treatment and management, with emphasis on safe psychiatric care from early detection and treatment to rehabilitation of patients into the community.

▲ KCH Opening Ceremony on 15 October 1981

[4] Figures updated September 2012.

Location

Geographically, KCH is located in the Kwai Tsing district of Hong Kong and is adjacent to Princess Margaret Hospital (PMH). KCH provides psychiatric support services to all general hospitals in the KWC, including PMH, Yan Chai Hospital (YCH), Caritas Medical Centre (CMC), Kwong Wah Hospital (KWH), Wong Tai Sin Hospital (WTSH) and Our Lady of Maryknoll Hospital (OLMH).

In addition to the main hospital site, psychiatric services are delivered to the community through satellite out-patient clinics, including:

- West Kowloon Psychiatric Centre
- East Kowloon Psychiatric Centre
- Yaumatei Child Psychiatric Centre
- Kwai Chung Child and Adolescent Psychiatric Centre
- Kwai Chung Psychogeriatric Out-patient Clinics
- Caritas Medical Centre Psychosomatic Clinic[5]

Figure 1 shows the location of KCH in relation to other hospitals and General Out-patient Clinics (GOPCs) in the KWC. Hospitals with Accident and Emergency (A&E) services are marked with the symbol + for easy identification.

▲ Blocks G & H in 1980s

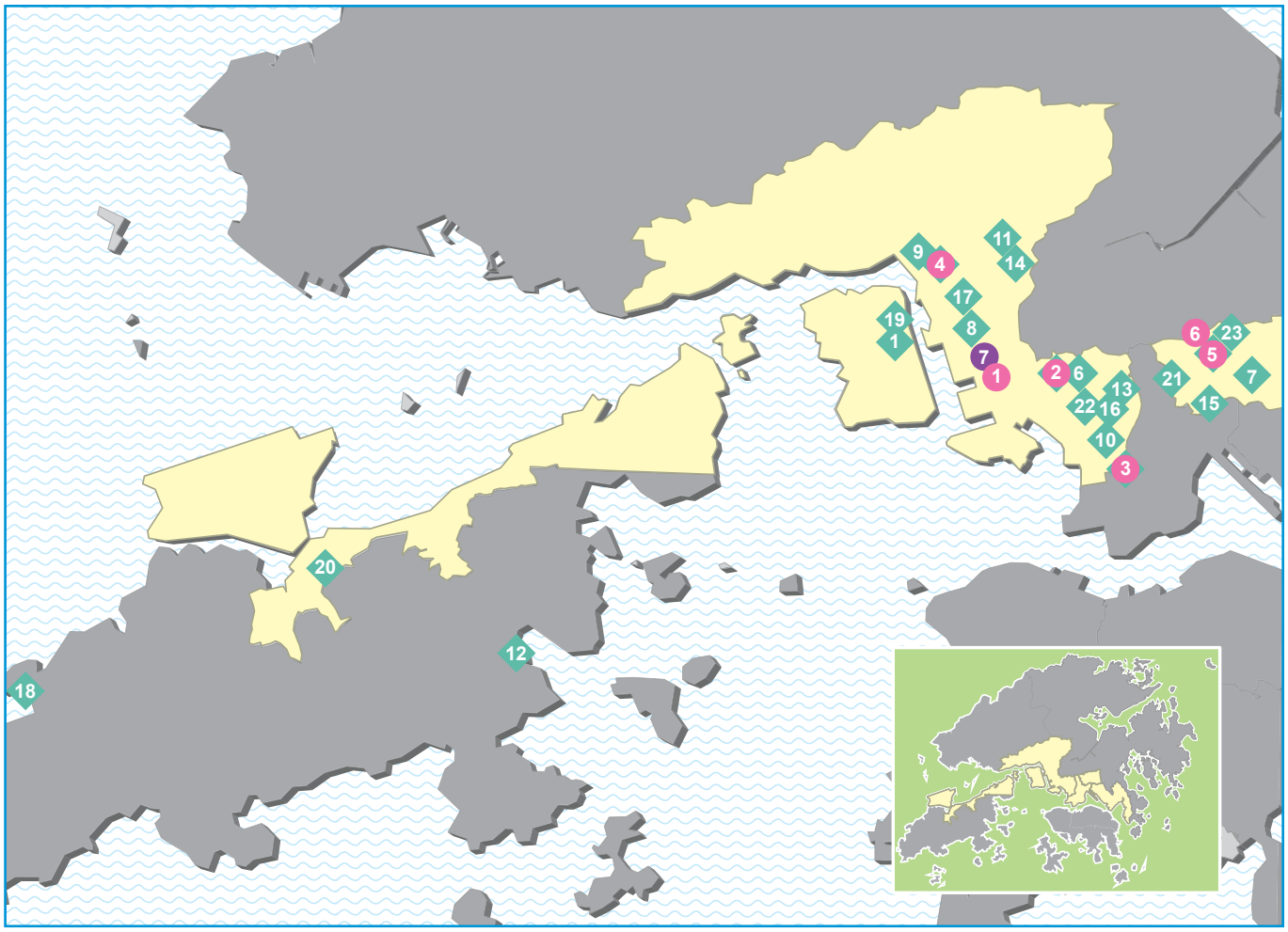
▼ Sunken Garden in 1980s

▼ Blocks L & M in 1980s

[5] Caritas Medical Centre Psychosomatic Clinic is a part-time clinic run by KCH clinicians.

Appendix 1 shows the demographic and socio-economic characteristics of districts in the KWC. The current campus map of KCH is at *Appendix 2.*

Figure 1. Location of KCH in the Kowloon West Cluster



Hospitals

1. Princess Margaret Hospital ✚
2. Caritas Medical Centre ✚
3. Kwong Wah Hospital ✚
4. Yan Chai Hospital ✚
5. Our Lady of Maryknoll Hospital
6. TWGHs Wong Tai Sin Hospital
7. **Kwai Chung Hospital**

General Out-patient Clinics

1. Tsing Yi Cheung Hong GOPC
2. Caritas Medical Centre
3. Kwong Wah Hospital
4. Yan Chai Hospital
5. Our Lady of Maryknoll Hospital
6. Cheung Sha Wan Jockey Club GOPC
7. East Kowloon GOPC
8. Ha Kwai Chung GOPC
9. Lady Trench GOPC
10. Li Po Chun GOPC
11. Mrs Wu York Yu GOPC
12. Mui Wo GOPC
13. Nam Shan GOPC
14. North Kwai Chung GOPC
15. Robert Black GOPC
16. Shek Kip Mei GOPC
17. South Kwai Chung Jockey Club GOPC
18. Tai O Jockey Club GOPC
19. Tsing Yi Town GOPC
20. Tung Chung GOPC
21. Wang Tau Hom Jockey Club GOPC
22. West Kowloon GOPC
23. Wu York Yu GOPC

Source: Hospital Authority Annual Plan 2012-2013

Existing Services

KCH delivers mental health services across a large geographical area and provides accessible mental health care within its current setting, which supports available community resource and liaison with cluster general hospitals and primary care providers. Patients are admitted on a referral basis via specialist out-patient clinics (SOPCs), Accident and Emergency Departments (AED), wards of general hospitals and other agencies which serve the KWC population.

The mental health problems, illnesses and disorders presented by patients are diverse with varying degrees of severity. The most common diagnoses at KCH are schizophrenia, delusional disorders, mood (affective) disorders, mental retardation and organic mental disorders, accounting for around 90% of all in-patients.

KCH provides expert psychiatric assessment and consultation on referral, psychiatric in-patient observation, treatment and rehabilitation. Over the years, the hospital has developed psychiatric specialty services including Child and Adolescent Psychiatric Services, Psychogeriatric Services, Substance Abuse Assessment Services, and Psychiatric Service for Learning Disabilities. Community-based services such as Community Psychiatry, Psychiatric Consultation Liaison, and Child and Adolescent Mental Health Support Programmes are also integral components of KCH's modern mental health service.

In addition, KCH offers community-based teams and operates psychiatric out-patient clinics that have close links with half-way houses, sheltered workshops, Social Welfare Department (SWD) and other non-government organisations (NGOs) in rehabilitation, in order to provide coordinated support to patients and their families.

Many of the changes in approach to patient management at KCH can be attributed to the commitment and aspirations of

▲ Entrance of KCH in 2012

its medical, nursing, pharmacy and allied health professionals, including Physiotherapy, Occupational Therapy, Clinical Psychology, Medical Social Services, Dentistry, Dietetics and Podiatry.

In addition, KCH is a recognised training centre for psychiatric specialists in Hong Kong. Clinical attachments are provided for medical, nursing and allied health students from tertiary institutes.

Staffs aspire to deliver world-class, evidence-based psychiatric care. Modern flexible facilities would support this vision and enable KCH to be in the best position to respond to the challenges of mental illness in Hong Kong in the future.

Appendix 3 illustrates the organisational chart of KCH, while *Appendix 4* provides an overview of its existing services.

Physical Setting

Although the services have evolved from mainly institutional care to modern mental health care, the current physical setting at KCH remains unchanged. The hospital has not undergone any major renovation or refurbishment since construction, and requires frequent repair with resulting high maintenance costs after several decades of heavy utilisation. The physical setting of the hospital has become outdated and now lacks the capability to adopt modern mode of psychiatric care delivery.

KCH currently has 17 wards covering acute, sub-acute, long-stay and sub-specialty care for in-patients.[6] Among these wards, eight are "gazetted"[7] wards receiving committed and involuntary patients, and nine wards are provided for informal psychiatric patients. Wards are designed with large single-gender or mixed-gender dormitories of around 50-66 beds (in general adult wards), 18-48 beds (in sub-specialty wards), and daytime activity areas. The physical environment compromises privacy, dignity and free space for patients.

▲ Deteriorated finishing at ward corridor

▼ Congestion in the ward

[6] As at July 2010.

[7] Gazetted wards, or beds, are facilities for more severely mentally ill patients who are gazetted under the Mental Health Ordinance and some of them are compulsorily detained. In view of the more acute and serious nature of their conditions, gazetted patients normally require more intensive care.

Planning Process

Governance

The KCH Redevelopment Project, commencing in December 2008, was overseen by a Project Steering Committee, which was supported by a Core Planning Group comprising hospital senior management and executives who gave significant input on the formulation and design of this KCH CSP. In May 2010, a Joint Working Group comprising staffs from KCH and the HA Head Office was assembled to oversee the final development of the KCH CSP. Their respective terms of reference and membership are set out in *Appendix 5*.

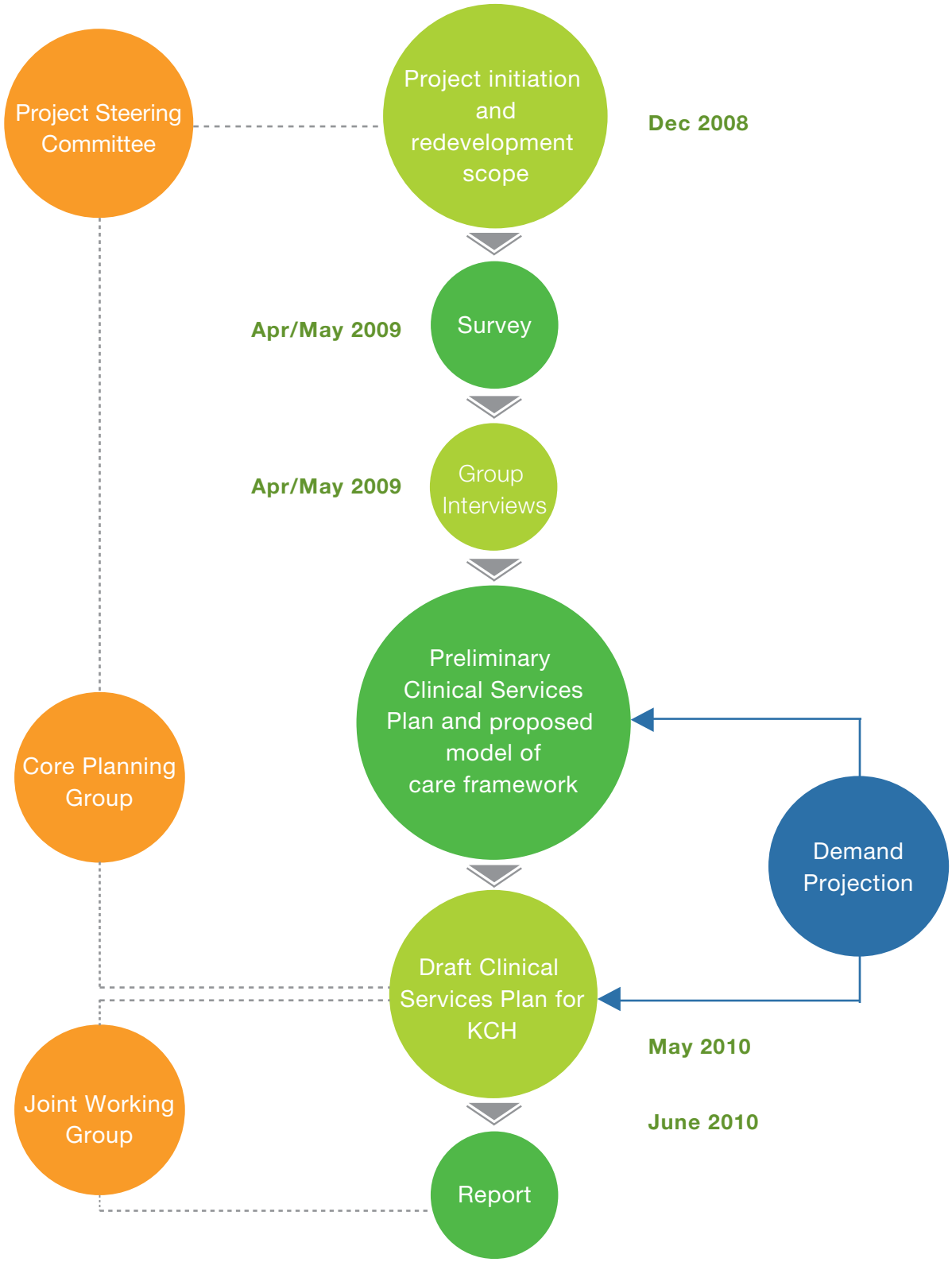
The Project Steering Committee reported to the HA Directors' Meeting (DM) for advice and sought approval for the CSP at the Medical Service Development Committee (MSDC) of the HA Board.

Methodology

The review for the CSP examined each clinical service available at KCH and how the present models and delivery of psychiatric care are likely to progress in the short, medium and long terms.

Figure 2 illustrates the methodology and process for the development of this CSP. Consultation was undertaken with stakeholders (KCH staff, patients and carers) through briefing sessions, surveys and group interviews, with an aim to develop an agreed model of care. Supplementary to stakeholder consultations, psychiatric bed projections also informed capacity planning.

Figure 2. KCH CSP development process



Stakeholder Briefing

Ten briefing sessions were conducted in March and April 2009 with clinical and non-clinical staff at KCH, including hospital management, senior and frontline medical, nursing, pharmacy and allied health staff, as well as community partners. Participants were informed about the project and its process, and were asked their views on sub-specialty development, in-patient services, out-patients services, day-patient care and community care.

Staff Survey

All department heads at KCH were briefed about the project and process before they were invited to complete a consultation survey in April 2009. The survey is a structured process to gather inputs from KCH staff on the model of care and the redevelopment of KCH. All medical staff (including Chiefs of Service, Consultants, Senior Medical Officers/Associate Consultants and Medical Officers/Residents), nursing staff (including General Manager, Department Operations Managers, Senior Nursing Officers/Advanced Practise Nurses, Ward Managers, Nursing Officers and random sampling of registered/enrolled nurses), pharmacists, as well as allied health professionals (including Occupational Therapists, Medical Social Workers, Clinical Psychologists, Radiographers, Dieticians and Podiatrists) were invited to participate.

A total of 235 staff surveys were sent out, with a 55.3% response. In particular, high response rate of around 80% was received from allied health professionals.

Staff Interviews

Following the completion of the staff survey phase, six group interviews were held in April 2009, with a total of 95 staff participated. Themes identified from the survey were explored, and staffs shared their views on modern evidence-based mental health services and the redevelopment of KCH.

Patient and Carer Survey

Patient and carer views were also considered important in developing the KCH CSP because of the highly participatory approach of rehabilitation. A bespoke survey was generated for psychiatric in-patients, out-patients, visitors and carers to share their views on existing hospital services, facilities and environment.

Survey for in-patient services was conducted in April 2009, with 710 surveys completed. Most surveys received were from patients (67%), followed by visitors and relatives (26%), and 7% remained unidentified.

Survey for out-patient services was conducted in May 2009, using random sampling of patients. Of the 198 surveys returned, most were completed by patients (57%), followed by visitor and relatives (33%), and 11% remained unidentified.

Demand Projection

Details of demand projection are documented in the Capacity Planning chapter of this CSP. Bed number projections were computed by members of the Core Planning Group and Joint Working Group, in consideration of service utilisation data and population change.

Drafting of the KCH CSP

Extensive consultation showed there was widespread support to progressive service transformation from existing services. Information from the consultation was evaluated by the Core Planning Group and used in combination with demand projections to draft this CSP and formulate recommendations. The Joint Working Group reviewed draft plans and a collaborative approach was adopted to refine details through an iterative process.

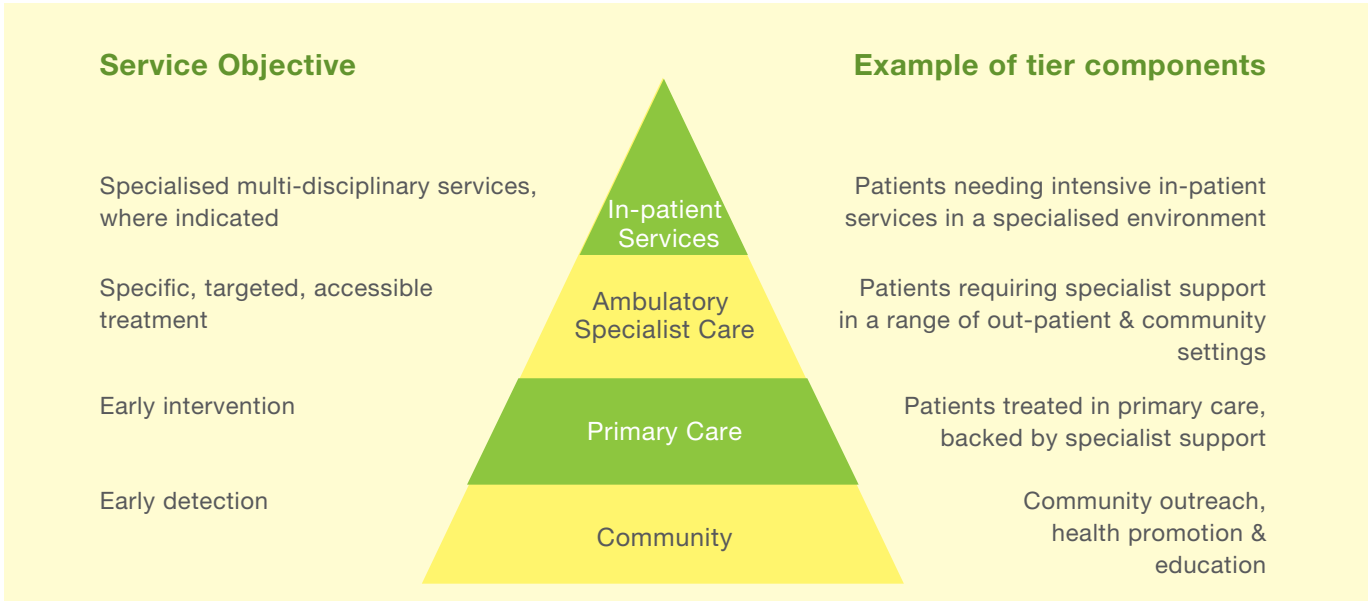
Planning Services

In line with HA strategic directions for mental health service, the goal for mental health services at KCH is of "high quality, person-centred care, based on effective treatment and recovery of the individual".[8]

The emphasis is on personalised holistic care, with the aim of recovery and social inclusion. Services will be integrated for the whole needs of patients, taking into account their strengths and aspirations. In-patient services will still be an integral part of KCH, to provide highly intensive, specialised, personalised and dignified psychiatric care for patients with severe mental illness. Patient recovery and support for those with enduring needs will be through enhanced integrated holistic services in ambulatory care and improved access to community care via collaboration with partner organisations.

Recognizing KCH is already in the process of transforming her service model, the redevelopment plan provides an opportunity to hasten this process. KCH will play significant roles at all levels of care, as shown in Figure 3.

Figure 3. Proposed service design model for psychiatric services in the KWC, of which KCH intends to be an exemplar in development



[8] HA Mental Health Service Plan for Adults 2010-15.

Building on this model, KCH can function as a campus hub in the provision, support, and co-ordination of a full range of individualised psychiatric care service activities in collaboration with the SWD, NGOs, GPs, family carers and other community partners including day hospital, out-patient and ambulatory care.

KCH will provide a holistic and therapeutic environment which supports all patients on their personal journey to recovery and reintegration into the community. For in-patients, KCH will be a "home away from home" for the duration of their stay. The hospital will be a clean, safe and welcoming setting, respecting the dignity and individuality of those with mental illness. Such setting will assist staff to provide opportunities for patients to safely navigate and negotiate daily activities and situations, as part of the rehabilitation process.

KCH should gear services towards:

1) Minimization of in-patient hospitalization and enhancement of the therapeutic environment, through:
   - i) Facilitation of individualised case management and psychiatric consultation liaison;
   - ii) Strengthening of ambulatory psychiatric services and enhancement of carer support;
   - iii) Expansion and development of community mental health services;
   - iv) Modernisation of psychiatric out-patient services;
   - v) Enhancement of primary mental health care management; and

2) Enhancement of clinical sub-specialization:
   - i) Improvement of child and adolescent mental health services;
   - ii) Enhancement of psychogeriatric services, substance abuse management services, and psychiatric services for persons with learning disabilities.

1) Minimization of In-patient Hospitalisation and Enhancement of the Therapeutic Environment

In-patient hospitalisation is an important component of an integrated acute care pathway, which should "provide a high standard of humane treatment and care in a safe and therapeutic setting for service users in the most acute and vulnerable stage of their illnesses".[9] Inevitably, due to the size and projected increase of the population served, KCH needs to modernise its specialised in-patient facilities to meet the needs of the community.

Examples from around the world demonstrate that well thought-out innovative designs, which are developed in collaboration with psychiatric professionals, can produce facilities that meet the therapeutic needs of patients, staff and the wider community in delivering high quality, safe and effective care, without being large impersonal institutions. It is recommended that the architectural design of KCH refers to such examples.

Hospitalisation will only be reserved for individuals with severe mental illness, who require the highly specialised in-patient environment and services for recovery and rehabilitation which cannot be provided in the community. Each patient will receive a personalised care plan, developed in partnership with multi-disciplinary teams, to achieve progressive step-down of care to discharge and community integration.

Therapy starts at admission. Enhanced admission and reception experience through sympathetic design of space can reduce anxiety and make patients and carers feel welcome, fully informed and involved. From reception, patients

[9] Laying the Foundations for Better Acute Care (2008). Department of Health Estates and Facilities Division, UK.

should feel that the transition to in-patient areas is a seamless, uneventful process.

In modern facilities, multi-purpose individual/group activity space large and small that can accommodate therapeutic and recreational activities at various times, including evenings and weekends, allow opportunities for rehabilitation both on and off the ward. Close alignment of in-patient facilities with ambulatory, day treatment and specialist out-patient services would optimise access to a range of therapeutic and rehabilitation environments.

Similarly, shared space will be an important catalyst to facilitate in-reach to acute setting from local agencies that offer training, employment, housing and social support. By developing flexible space for a variety of activities, community partnership can be strengthened and reduce social exclusion that psychiatric patients may experience.

Maintenance of support networks, family and community connections are important when a person is admitted to hospital, which can be incorporated into the healing process. The redeveloped KCH will nurture these links and help to de-stigmatise mental illness.

Moreover, personal safety and security is essential to patient care and a fundamental requirement for dignity in care. Age-appropriate and gender-sensitive settings are important to achieving this goal. Flexible zoning of male and female areas will enable adaptation of space appropriate to patient and service needs, and respect the privacy and dignity of individuals. Access to specific areas also needs to be balanced between managing the patient setting and avoiding the creation of an over-custodial environment.

Case illustration: Severe mental illness

Six weeks ago, Miss A, a 28-year-old young woman, experienced her first psychotic episode with suicidal gestures. Living close to PMH, her family contacted the psychiatric hotline service. Community Psychiatric Team staff advised a visit to the AED where she was seen by the Psychiatric Advanced Practice Nurse (at the AED).

Upon arrival, Miss A and family were met by the nurse and taken to a nearby private room for consultation. After initial assessment, the nurse contacted the Psychiatric Consultation Liaison Service of KCH and a joint decision was made that Miss A should be admitted. Shortly, Miss A was voluntarily admitted to KCH.

The spacious admission entrance of KCH was welcoming to Miss A. Friendly staff greeted Miss A and invited her to a private space for further assessment and completion of admission procedures. Miss A was closely observed and assessed over the next few days in the assessment ward by a multi-disciplinary team. A care plan was developed around her needs, with her preferences taken into account. Her family regularly visited and was well informed of her care plan.

Miss A received individual counseling and drug treatment at KCH for her condition. She readily joined group therapy sessions, which were dispersed with recreation.

As her crisis lessened with symptom improvement, Miss A moved to the Psychiatric After-Care Unit where she continued rehabilitation through the day centre with specialised sessions tailored to her needs. Being away from the ward, these treatment sessions offered a change of environment, as part of her rehabilitation.

Through therapy sessions, Miss A gained insight into her emotional and mental functioning, her illness and its effects on relationship and daily living, and how to establish healthy ways of responding to the illness and daily stresses that affect her mental health. The therapies involved a multi-disciplinary team of mental health professionals including her case psychiatrist, clinical psychologist, psychiatric nurses, medical social workers, and activity and rehabilitation therapists. As Miss A recovered, the mental health care team gradually increased her control over the plan for discharge, as well as community-based services to help her recuperate while living at home.

After 5 weeks, Miss A was discharged home, with outreach support of her community mental health team. Miss A attends day treatment and specialist rehabilitation at the ambulatory care centre of the KCH campus, and it has become a normal part of her daily routine. The ambulatory care centre is easy to find. Her family had been there before, and they are familiar with the staff and the locations.

Miss A and her family have regular contact with the community recovery support team, who continue to support her at home and help the family further understand her illness and how to spot signs of future episodes.

i) Facilitation of Individualised Case Management and Psychiatric Consultation Liaison

KCH has been developing "whole patient-centred" care programmes which focus on enabling recovery and promote social inclusion. Therefore, collaborative individualised case management by multi-disciplinary teams needs to be strengthened to provide individualised continuing care and active support to patients in the community.

Individualised case management model will enable patient progress to be closely monitored by the multi-disciplinary team. It will also ensure a responsive care package with early identification of relapse and timely intervention.

Psychiatric consultation liaison plays an important role in supporting the care of in-patients with mental health problems in general hospitals. Multi-disciplinary teams comprising of psychiatrists, clinical psychologists and psychiatric nurses are currently providing specialised consultative service to in-patients in general wards, Emergency Medicine wards (EMW) and AED of general hospitals in the KWC, as well as a specialised liaison service to the Maternal & Child Health Centres within the KWC.

To take this service one step further, it is suggested to develop a collaborative clinic involving Psychiatry, Pain Management and Oncology specialties to provide an Integrated Pain-Oncology-Psychiatry service for patients in the KWC, subject to further consideration and under the context of HA strategic direction.

ii) Strengthening of Ambulatory Psychiatric Services and Enhancement of Carer Support

A fully integrated ambulatory care centre is needed on the redeveloped KCH therapeutic campus. It will embrace the philosophy that a range of clinical specialties, allied health professionals and multi-disciplinary teams can be brought together for in-patients, out-patients, patient groups and visitors in a setting orientated to the holistic needs of service users.

The ambulatory care centre can accommodate a range of therapeutic spaces and environments, which include individual counselling and multi-purpose large and small group activity areas. Flexible design will enable adaptation and zoning of specific areas for specialised clinics, day treatment and community mental health services. The centre can offer dynamic space and hold a varied timetable of activities. It can be a social area where normal activities of daily living take place.

The ambulatory care centre also needs to be accessible and culturally appropriate. It will have to be a safe, relaxed, welcoming environment which is family-friendly. Child-minding, food provision, education, information exchange and community focus are components that are equally important as the clinical services offered.

iii) Expansion and Development of Community Mental Health Services

Evidence suggests that the most positive outcomes are achieved with well integrated acute mental health services, which jointly manage and co-locate key service elements in local acute mental health services. Such outcomes include but are not limited to:

- Reduction in avoidable admissions
- Fewer delayed discharges and shorter duration of stay
- Improvement in understanding and flexibility of staff skills
- Better informed and coordinated care plans and risk management
- Improvement in cost-effectiveness

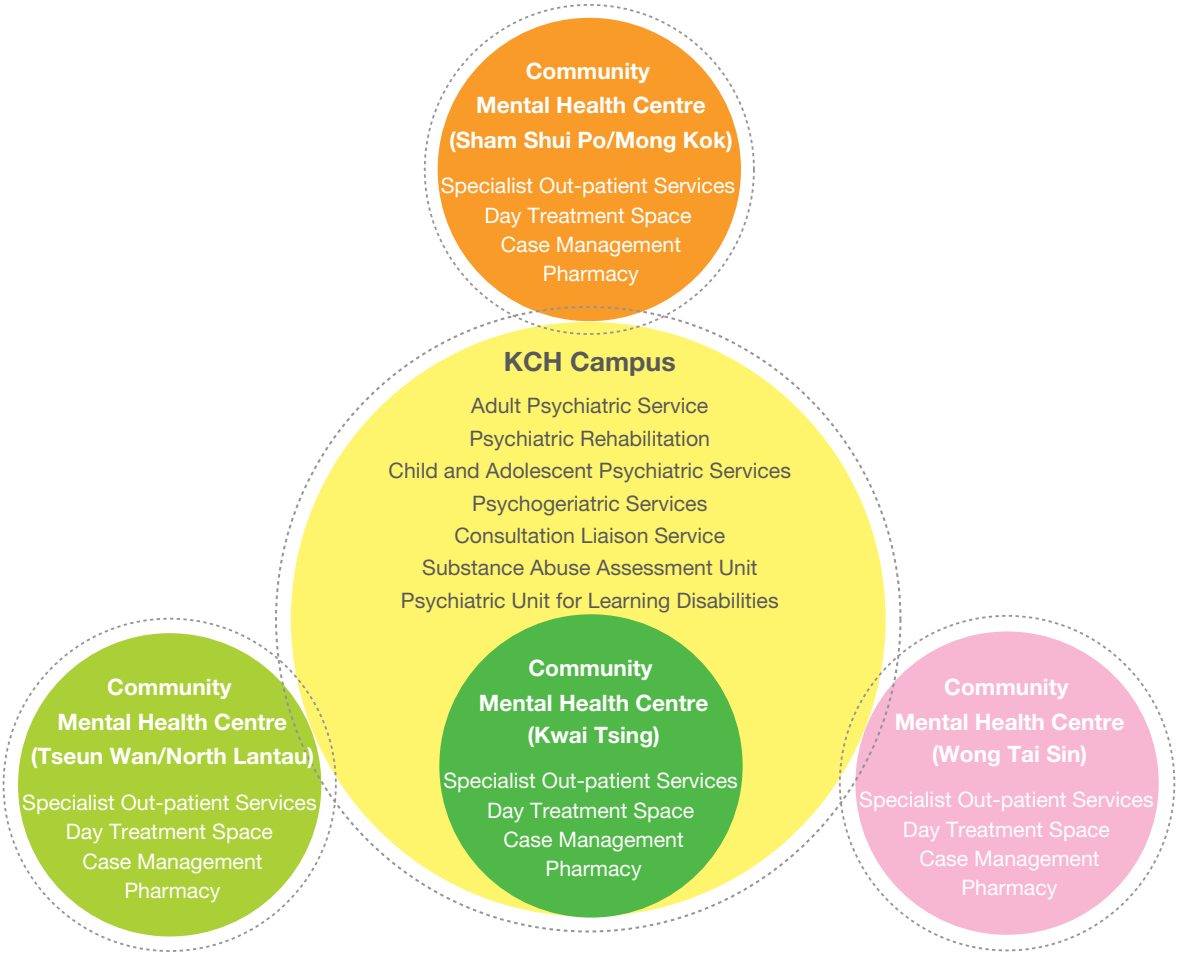
With this service model, dependence on acute in-patient psychiatric services will be reduced, where clinically appropriate. Over time, there will be a progressive shift towards strengthening mental health care within the community, through integrating, enhancing and broadening services at district level. Community Mental Health Centres, under the management and coordination of KCH, will be sought to achieve this.

Figure 4 shows the proposed new relationship between KCH campus and Community Mental Health Centres.

Currently, scattered community services are provided in the West Kowloon Psychiatric Centre at PMH (K10) and KCH (M2 and M7) for patients from Kwai Tsing, Sham Shui Po/Mong Kok and Tsuen Wan/North Lantau districts, plus the East Kowloon Psychiatric Centre at East Kowloon Polyclinic for patients from Wong Tai Sin district. Four Community Mental Health Centres are proposed to serve the districts of Kwai Tsing, Sham Shui Po/Mong Kok, Wong Tai Sin and Tsuen Wan/North Lantau.

The redeveloped KCH campus, together with the Community Mental Health Centres, will form a comprehensive and co-ordinated network of services and resources to meet the mental health needs of the KWC population.

Figure 4. Relationship of KCH campus and Community Mental Health Centres



The KCH ambulatory care centre and Community Mental Health Centres will offer one-stop service to patients and carers through multi-disciplinary collaboration, particularly to those with chronic or complex physical co-morbidities, such as the elderly. To further promote a holistic service, they can also provide in-reach access and facilities for local agencies that offer employment, health education, training, family and carer support, housing and social support.

As part of the development of the Community Mental Health Centres, KCH staff can then work closely with the District Liaison Committee, District Councils and the SWD to support the Integrated Community Centre for Mental Wellness at the district level. Greater collaboration with the SWD, NGOs, Family Medicine doctors, general practitioners and other local partners will be a fundamental element to support local mental health service delivery.

iv) Modernisation of Psychiatric Out-patient Services

Psychiatric out-patient services should provide age-appropriate facilities as well as Specialist Out-patient Services in district-level in Community Mental Health Centres. The aim should be to strengthen the assessment process and enhance service to improve support specifically to carers. These should also be geared towards integration with NGOs and community partners.

v) Enhancement of Primary Mental Health Care Management

Redevelopment of KCH presents a unique opportunity to explore the relationship of specialist mental health services with primary care and their respective roles in the new model of care.

Closer collaboration with primary care services can strengthen the assessment and management of people with common mental disorders through a shared care approach. Given the prevalence of common mental disorders in Hong Kong and potential service demand, primary care services are better positioned to manage this cohort of patients, allowing for more specialised services to care for patients with severe, complex or enduring mental health needs.

In order to facilitate collaboration, a district-based framework for working with Family Medicine/GOPCs and private practitioners is proposed to be developed. Agreed clinical guidelines and care pathways are required to ensure safety, appropriate care and timely intervention. Psychiatric consultation liaison will be enhanced in the primary care setting as part of the shared care model.

Similar service model could be found in three recent KCH programs:

1) Integrated Mental Health Program for early interventions and triage cases requiring psychiatric consultations and/or psychiatric specialty services at primary level was established in April 2012.

2) The Mobile Primary Mental Health Nurse Clinic for Elderly for promotion of primary mental health care for elderly in the community and keeping them out of hospital by shifting the focus toward prevention and early intervention in Tsuen Wan and Kwai Tsing Districts was kick-started in July 2011.

3) As a continuation of service, the Child and Adolescent Mental Health Community Support Project for prevention of mental health problems in children and adolescents aged 6 to 18 by early intervention was transferred from SWD in March 2009.

Case illustration: Common mental disorder

Mr B is a 60-year-old man with reduced mobility. He went to his private GP, Dr L, with feelings of depression and anxiety. Dr L had received additional mental health training from the Primary Mental Health Management Team and was able to diagnose Mr B's clinical problem. He started Mr B on appropriate treatment and arranged regular follow-up appointments to check progress.

Because of the enhanced links between his practice and specialist psychiatric services, Dr L felt empowered to manage Mr B, and a treatment plan was devised in consultation with the KCH Primary Mental Health Liaison Team. Mr B was pleased he did not have to travel far to receive care, as that would be difficult for him. Furthermore, Dr L was a familiar face and was trusted by Mr B.

On top of regular progress appointments, Mr B agreed to receive support from the Community Psychiatric Nursing Service. He also received a home visit from the Occupational Therapy Team that suggested ways for his home to adapt and assist in his daily living.

Through such partnership, Mr B understands his illness and ways to help manage and spot it when he becomes depressed and anxious, so that he can seek the support he needs. He is also in regular contact with NGOs that have helped him retain his independence at home.

2) Enhancement of Clinical Sub-specialization:

i) Improving Child and Adolescent Mental Health Services

Similar to adult services, a key aspiration will be personalised treatment and rehabilitation within the community to optimise every child and adolescent's developmental potential. Hospitalisation will be reserved only for children and adolescents with severe mental illness, who require the highly specialised in-patient environment and individualised case management services for recovery and rehabilitation.

Personalised care programmes, developed by multi-disciplinary teams, will seek to achieve recovery and reintegration into the community, as soon as clinically appropriate. Strengthening services to help children and adolescents remain in mainstream education and at home, if possible, are important priorities.

A key driver for change is to improve the safety and quality of mental health services to young people with mental disorders. The KCH child and adolescent psychiatric services should be supported by age and developmentally-appropriate in-patient, out-patient, ambulatory and community space organised within a dedicated purpose-built facility.

The environment should be non-institutional, welcoming and homely. Flexible space for multi-purpose individual and group therapy, as well as learning, playing and recreational activities that can accommodate a varied timetable are proposed.

For children and adolescents, maintenance of links with family, friends and carers are essential components of recovery and rehabilitation. Services should actively nurture and strengthen these community connections as part of normalisation.

The enhanced KCH Child and Adolescent Mental Health Service will bring together expert multi-disciplinary teams from a range of professional backgrounds to provide holistic "whole-person" care.

Case illustration: Child and adolescent mental health

Miss J is a 10-year-old girl with problems at school, such as getting into trouble, having poor grades, and increasingly having problems in socialising with other students. Both parents and the school are concerned.

The School Social Worker contacted the Child and Adolescent Mental Health Service and was able to advise the parents to attend an out-patient assessment appointment at KCH. Arriving at KCH, her parents could easily identify the Child and Adolescent Unit. They were relieved to receive a dedicated welcome with relaxed activities for Miss J, while they waited to see the Specialist Nurse.

The assessment was conducted with privacy and Miss J was diagnosed with Attention Deficit Hyperactivity Disorder (ADHD). She was given a fast-track referral to a specialised ADHD clinic, which tailored a care plan that was agreed with her parents. Miss J received newer drug treatment as well as day hospital treatment with intensive individual and group training. Her parents also undertook a course on how to support Miss J.

Because of early intervention, improvement was swift and Miss J was discharged with community support, and successfully continued in school. The KCH Child & Adolescent Mental Health Community Support Service (CAMcom) also liaised with the School Social Worker to support individualised case management of Miss J.

ii) Enhancement of Sub-specialty Services

Psychogeriatric Services

Over the next decade and beyond, the number of elderly in the population will grow. Psychogeriatric mental health services will need to develop to meet the projected need of those with mental illness who are aging, and those who develop mental illness as a result of aging.

A key concept for psychogeriatric services is "aging in place" within the community. Sub-specialty case managers, in collaboration with multi-disciplinary community care teams, will work closely with partner organisations such as NGOs, government departments, GPs, Family Medicine doctors and old age homes to provide comprehensive planned and coordinated care to older patients. Early identification of crisis or relapse will also allow appropriate intervention.

Case illustration:
Early-onset dementia

Mr F, a 62-year-old man, regularly attends the Specialist Out-patient Clinic (SOPC) for diabetes. Over the last few months, SOPC staff began to recognise his increasing forgetfulness, agitated state and unpredictable behaviour. Staff at the SOPC persuaded Mr F to contact the Community Psychogeriatric Team.

Triage arrangements were made for a psychogeriatric out-patient appointment the following week. It was quickly established that Mr F had early onset dementia, and a treatment and management programme was developed. His treatment included attending psychogeriatric day care at his nearby Community Mental Health Centre, under the Community Care Dementia Programme and with support from the Day Care Dementia Unit at KCH, where his wife attended a carer support and training programme.

With the help of his wife, who had new knowledge and skills in handling her husband's condition, Mr F rapidly found that he could begin undertaking tasks he struggled with before. Staffs at SOPC also felt that they were able to continue managing his diabetic care.

Substance Abuse Assessment Services

Problems arising from substance abuse relate closely with mental illness. Treatment needs to be collaborative with counselling centres for psychotropic substance abusers, methadone clinics, residential drug rehabilitation centres, social service agencies, health care institutions, probation officers, other government departments and community partners in the care of substance abusers.

At KCH, patients with drug-related problems are managed by a sub-specialty team of professionals. In-patient treatment will be provided with short-term detoxification and treatment of severe psychiatric co-morbidities. In addition, a specialised day treatment and out-patient services will provide day detoxification, treatment, rehabilitation and follow-up services.

Case illustration: Problematic drug use

Mr I, a 23-year-old man, was detained by the Police and identified as a drug user. During custody police quickly realised that Mr I also had psychiatric disturbance.

The Police escorted Mr I to the nearest AED where the Psychiatric Consultation Liaison Team was contacted. After emergency assessment, Mr I was disorientated; decision was made to admit him to KCH for observation.

Mr I underwent 2 weeks of detoxifications, drug treatment of his psychiatric complication plus intensive individual and group therapy sessions. He was discharged from KCH where he attended the day hospital for substance abuse assessment services to continue his rehabilitation.

During this time he was encouraged to develop links with community support services and NGOs to help him feel more empowered and to turn his life around. As the severity of his condition improved, his care was stepped down to mainly community outreach support, with periodic follow-up appointments for progress checks. NGOs were able to assist Mr I in gaining employment, and over time, in integrating into community.

During his initial discharge from KCH, close monitoring and support at home was provided to ensure Mr I did not slip back into old habits. It was also reassuring for Mr I to know that a Specialist Psychiatric Team was available at any time if he needed professional support.

Psychiatric Service for Learning Disabilities

Further development of mental health services for individuals with learning disabilities will take place in the KWC. Key clients are those with superimposed mental illness, challenging behaviour, forensic problems and other associated physical handicaps resulting in poor social adaptation and risk of developing psychiatric disorders.

In order to meet the needs of these individuals, high quality, coordinated and comprehensive psychiatric services will be strengthened by multi-disciplinary collaboration, based on the principles of normalisation and community integration. The sub-specialty service will continue to strengthen its partnerships with relatives, hostels, workshops, day activities centres, special schools, social workers and other community organisations to enable service users to fulfil their potentials.

Case illustration: Learning disabilities and mental health

Miss C, a 23-year-old woman who lives in NGO-supported housing, has learning disabilities and a super-imposed personality disorder. Recently staff at the supported home noticed Miss C's behaviour was becoming quite challenging. The staff contacted the Community Learning Disabilities Service and Miss C was assessed by a multi-disciplinary team within the Psychiatric Service for Learning Disabilities at KCH.

Miss C was initially observed and ultimately assessed as not requiring in-patient care, since out-patient and community services were available to provide a planned care programme to help her in developing her daily living and social skills. Initially Miss C attended individual training and rehabilitation sessions at the day treatment centre for learning disabilities. These provided a safe, relaxed and confidence-building environment for Miss C to expand her living and social skills.

Miss C now receives regular community follow-up at her home. NGO staff can received training on how best to support Miss C and other residents in their care. Now they feel confident in being able to identify development of behavioral problems and to intervene. In addition, in collaboration with KCH, the NGO has developed staff training on mental illness and learning disabilities.

Capacity Planning

A key factor underpinning the formulation of this CSP is the projected demand for psychiatric services at KCH. It forms the basis for capacity planning. This chapter gives an overview of capacity planning for the number of beds required to be provided at KCH.

Methodology

Demand modelling techniques were carried out by the Core Planning Group and the Joint Working Group to determine the future bed capacity required for KCH.

Using 2010 as base year, the projection modelled up to year 2026 and took into account population growth with consideration of cross-border entitled persons (EP), demographic changes, age- and disease-specific service utilisation rates, and anticipated impact with the expansion of community services shifting from in-patient care to community-based care.

By necessity, methodology of this CSP was tailored to consider specialist psychiatric services, which required a variation of approach to that previously undertaken for general hospital CSPs. However, conceptually the methodology adopted is similar to prior CSPs.

Data Source

The projections were based on data from:

- Service utilisation data for Hong Kong, the KWC and KCH was obtained from the Executive Information System (EIS) and the HA Integrated Patient Administration System (IPAS).
- Population estimates and projections for Hong Kong and the KWC, from 2010 to 2026, were obtained from the government's Census and Statistics Department and Planning Department.
- International data on beds for mental illness were obtained from the Department of Health (England) and the Department of Health and Ageing (Australia).

Planning Parameters

Modelling was used to project bed requirement for KCH based on age- and disease-specific utilisations, comprising 16 sub-groups that are age- and disease-specific, as shown in the following table.

Table 1. Age- and disease-specific psychiatric sub-groups used in demand projection modelling

Age group (years)	Diagnosis group
<18	■ Psychosis (F20-29) ■ Disorders of psychological development/Mental retardation (F80-89, F70-79) ■ Affective disorders (F30-39) ■ Disruptive behavioral disorders (F90-92) ■ Emotional disorders (F93-94, F40-48) ■ Others
18-64	■ Schizophrenia (F20-29) ■ Affective disorder (F30-39) ■ Neurotic, stress-related and somatoform disorders (F40-48) ■ Mental and behavioral disorders due to psychoactive substance use (F10-19) ■ Others
≥ 65	■ Dementia (F00-03, G30) ■ Schizophrenia (F20-29) ■ Affective disorder (F30-39) ■ Neurotic, stress-related and somatoform disorders (F40-48) ■ Others

Diagnosis groups based on consultation with representative psychiatrists in Hong Kong and WHO ICD-10 codes.

Bed projection model

The demand for hospital beds at KCH was projected using HA-wide age- and disease-specific admission rates and average length of stay (ALOS).

To cross-check with over- or under-estimation of the required capacity, past available bed number trends for Hong Kong and international comparisons of psychiatric bed numbers per capita were examined. Mental health service planning has developed in Australia and England to recognise the importance of well integrated and supported acute psychiatric in-patient and community services. Service directions of these countries are oriented to refine the components and mix of mental health services to best meet the needs of their communities and promote equitable access and patient choice.[10,11]

[10] New Horizons: A Shared Vision for Mental Health. Cross-government strategy: Mental Health Division, England (2009).
[11] Fourth National Mental Health Plan: An Agenda for Collaborative Government Action in Mental Health. 2009-2014. Australian Government (2009).

Age- and disease-specific demand projection

In the projection of bed requirement for KCH, the volume and mix of expected service demand from residents were calculated, taking into account population and aging in 2010, as well as the age- and disease-specific hospital service utilisation from 2008 to 2010.

The projection framework was developed on a headcount basis using 2010 as base year. It includes all patients in HA, namely: old cases brought forward from last year, new cases and re-activated cases. Based on the average utilisation rate from 2008 to 2010, the model was applied to project service demand for the 16 sub-groups previously mentioned. The projected headcounts for the 16 sub-groups were then applied to the age- and disease-specific ALOS data at base-year to obtain the projected bed days up to 2026.

Using the base-year data on cross-district hospital flow for bed days, as well as the projected population at district level, the hospital patronage pattern was computed. Demand for KCH was derived by applying the pattern specifically for KCH.

Assumptions for bed projection

The projection model described provided a basis to demonstrate the nature and volume of work to be expected for KCH in 2026, assuming patient mix and volume, referral patterns and policy remain the same. The model covered in-patient, specialist out-patient and community services. The projected bed days were translated into the number of beds required by assuming an optimum occupancy rate of 85%.

Other assumptions for the projection include:

- Unchanged market share of HA service (i.e., public-private split).
- No major shift in the population catchment area served by KCH.

Bed requirement

The projected bed requirements for KCH for 2016 and 2026 are summarised in Table 2.

Table 2. Projected bed number for KCH for 2016 and 2026, based on age- and disease-specific bed demand projection model

Projected number of beds required for KCH *	2016	2026
Expert scenario	870	1000

* Assumes patient cross-district hospital flow in 2010

In summary, the age- and disease- specific bed demand projection model suggested a bed requirement of around 1000 beds in 2026.

Principal Recommendations

The Core Planning Group and Joint Working Group recommend that KCH continues its role as the psychiatric hospital for the KWC. KCH is well positioned to develop a more integrated patient-centred service with hospital- and community-based care that is balanced and complementary. The proposed model of care will enable services to better manage growing demand, deliver better quality, safe services and nurture a skilled multi-disciplinary workforce.

The existing repertoire of services is expected to continue. The major shift will be in delivery, with the strengthening of community-based psychiatric care and reduction in avoidable hospital stay. In-patient care will remain an important component of psychiatric service delivery for those with severe mental illness who will benefit from the highly specialised hospital setting. This and other principal recommendations are set out below.

1) Holistic Care

KCH will firmly establish the model of "whole-patient-centred" care. A balance in in-patient service, ambulatory care, community outreach services and in-reach of partner organisations to patients will facilitate a coordinated approach to rehabilitation and community integration, addressing the social, spiritual and physical needs of patients. For special groups such as children and adolescents, optimising their developmental potential is an important objective.

Improving the safety and quality of mental health services to young people with mental disorders is a priority. KCH child and adolescent psychiatric services will be supported by age- and developmentally appropriate in-patient, out-patient, ambulatory and community space organised in a dedicated purpose-built facility.

The close proximity of KCH to PMH provides a solid foundation for developing the quality of healthcare of psychiatric patients, and continued improvement in service delivery is recommended.

2) In-patient Care

The key is to provide better personalised treatment and further promotion of rehabilitation in the community, with hospitalisation reserved for severely mentally ill people who require highly specialised in-patient settings.

Institutional to Therapeutic Environment

In-patient wards need to be re-designed to provide less restrictive, more relaxed and homely environments for psychiatric patients, where appropriate. Respect for patients, and patient privacy and dignity are key components of the model of care. However, this needs to be balanced with security and isolation facilities to ensure the safety of patients, staff and visitors.

Flexible multi-purpose spaces for a range of therapeutic and recreational activities are also suggested, with good access to in-patient accommodation. KCH is located almost at the top of a hill and therefore benefits from spectacular views. Capitalising on its location and incorporation of outside space as part of the therapeutic environment are strongly recommended.

3) Ambulatory Care

The ambulatory care centre will provide dynamic space for a range of clinical specialties and multi-disciplinary teams, as well as replicating the normal activities of daily living for different patient groups.

With the shift of psychiatric services towards a community model, the ambulatory care centre will become an increasingly important thorough-fare of activity and point of contact within the KCH campus. The ambulatory care centre will facilitate support and education to families and carers and provide an accessible link between KCH and the wider community.

4) Strengthening Community-based Care

Under the new care model, hospitalisations and bed-based psychiatric services at KCH will be optimally utilised. Mental health services with orientation towards the community, which strengthen support to patients through an individualised case management approach, will enhance patients' recovery.

Greater collaboration with SWD, NGOs, Family Medicine doctors, general practitioners and other local partners will be a fundamental element to enhance patient care and optimise resources.

5) Mental Health Campus and Local Community Mental Health Centres

It is proposed that mental health services are delivered via a hybrid model of hospital campus and district-level Community Mental Health Centres.

KCH campus will form a hub to provide, support and coordinate a full range of individualised patient care activities in collaboration with allied health professionals and partner organisations. Community Mental Health Centres under the management, coordination and support of KCH will provide more local services. The KCH campus and Community Mental Health Centres will bring together a range of integrated and coordinated multi-disciplinary teams, within flexible settings, aimed at the holistic needs of service users.

Summary

The KCH campus will enhance the capacity, range and access of psychiatric services delivered in a specialised therapeutic setting. Supported by Community Mental Health Centres, psychiatric services based on a whole patient care pathway approach to rehabilitation and community reintegration will be adopted.

Adult in-patient services will remain an important component of KCH and will be supported by community-based services. Child and adolescent services will be strengthened through a purpose-built facility within the redeveloped KCH campus. The ambulatory care centre will complement these in-patient services and provide flexible space for a range of psychiatric services, service users, as well as allied health and partner organisations.

Enhanced collaboration between specialist psychiatric services and primary care to strengthen the assessment and management of people with common mental disorders in the community, through a shared care approach, will be important. Given the prevalence of common mental disorders, primary care partners are well positioned to meet the needs of this group with support, allowing specialist resources to focus more efficiently on patients with severe, complex and enduring psychiatric illness.

Key Recommendations

Under the principal recommendations, there are suggestions in each clinical area to further improve the services at KCH. Psychiatric services covered in this section include:

- Adult Psychiatric Services
- Psychiatric Rehabilitation
- Community Psychiatry
- Child and Adolescent Psychiatric Services
- Psychogeriatric Services
- Psychiatric Consultation Liaison Service
- Substance Abuse Assessment Services
- Psychiatric Services for Learning Disabilities
- Primary Mental Health Management
- Allied Health Services

Adult Psychiatric Services

The main activity at KCH is general adult psychiatry. It provides a comprehensive range of psychiatric services including early interventions of patients with early psychosis to the population of the KWC.

Recommended Service Enhancements

- Minimise avoidable in-patient hospitalisation and length of stay.
- Enhance the in-patient therapeutic environment.
- Strengthen the holistic "whole-patient-centred" care model with emphasis on recovery and social inclusion as part of a planned programme of rehabilitation.
- Enhance flexible space for multi-purpose individual, small- or large-group therapeutic and recreational activities.
- Enhance carer support services.
- Improve isolation facilities for infection control.

Ambulatory Care Centre Component

- The ambulatory care centre is a suitable location for a range of clinical psychiatric specialties for in-patient, out-patient, patient groups and visitors.
- Provide accommodation for specialised clinics, day hospital, treatment and community mental health services.
- Enhance flexible space for multi-purpose individual, small- or large-group therapeutic and recreational activities.
- Allow flexible zoning for in-reach services provided by allied health professionals and partner organisations, such as the SWD and NGOs.
- Enhance personalised patient-centred service with a multi-disciplinary holistic approach to care, through the "one-stop shop" concept.

Demand Management

Adopt effective evidence-based treatments and coordinated care programmes, which are supported by strengthened ambulatory and community-based services, to contribute to reducing in-patient stay, shifting service demand.

Design Issues

- Provide in-patient units that should be domestic in scale and nature, with a sense of personal safety and security. They should be containing, therapeutic, reassuring and non-threatening.
- Provide a variety of therapeutic and leisure activity spaces, both within and outside the in-patient setting.
- Provide dedicated and safe family rooms for visiting children to meet their parents or carers. Located adjacent to in-patient units, these spaces should be homely, inviting and well provided with play materials.
- Provide generous circulation spaces to reduce perception of stress and restriction.
- Provide access to nature and outdoor areas.
- Consider gender segregation for in-patient areas and social spaces.
- Allow direct access from a common area, not through another unit.

Psychiatric Rehabilitation

This service provides comprehensive training and treatment plans for adult patients, to enable attainment of an appropriate level of self-maintenance, social functioning and independent living in the community before discharge from KCH. A key initiative of the service is the EXITERS project.[12]

Recommended Service Enhancement

- Enhance rehabilitation and pre-discharge services and facilities to support the transition of patients to normalisation and independent living – as a "stepping stone" to community integration.

Ambulatory Care Centre Component

- Provide a significant proportion of day patient services within the ambulatory care centre – particularly educational, community re-entry and assisted living programmes.
- Provide a family-friendly environment at the ambulatory care centre for rehabilitation programmes involving patients, their families and carers.

Demand Management

- Contribute to the overall service direction of reducing avoidable in-patient stay, as the shift in service design model is likely to place an increasingly important role on rehabilitation services.
- Expand ambulatory aspects of the service and co-locate complementary services within the ambulatory care centre to provide some offset to the increase in service demand.

Design Issues

- Allow rehabilitation spaces that should be varied in size and nature.
- Provide flexibility for activities which can foster community use and assist in reducing stigma and social exclusion.
- Provide easy access from central atrium circulation.
- Adopt a non-institutional design with natural daylight and interaction with green areas and the external environment.

[12] EXITERS: Extended-Care Patients Intensive Treatment: Early Diversion and Rehabilitation Stepping-Stone Project.

Community Psychiatry

Community Psychiatry is a community-based service providing direct care to patients through collaboration with other community rehabilitation agencies. The essence is to assist with reintegration of patients into the community and maximise their independence.

Services provided include psychiatric individualised case management, community psychiatric assessment, supportive counselling and family work, telephone consultation, hotline enquiry, mental health education and promotion. The multi-disciplinary team plays a key role in emergency crisis intervention. The service has office bases at KCH and psychiatric out-patient clinics to meet the needs of in-patients and those in the community.

Recommended Service Enhancement

- Strengthen staff space at KCH and Community Mental Health Centres to support the service which is orientated around visiting patients within the community setting.
- Integrate closely with Community Mental Health Centres to provide a network of district-level support, with higher specialist services as required, providing sharing of expertise and service resilience.

Demand Management

- Consider adequate space for expansion of the service, as effects of population growth and changes in service direction are likely to increase service demand for community psychiatric services.
- Utilise technology to reduce unnecessary physical records and maximise space, while also employ intelligent ways of working to help meet increased service demand.

Child and Adolescent Psychiatric Service

This service at KCH provides assessment, diagnosis, treatment and rehabilitation of young people with mental, emotional, behavioural and developmental disturbances. In addition, it provides liaison and consultation to hospitals, schools and other child and adolescent health care agencies. The service also supports territory-wide programmes, such as Early Assessment Service for Youth with psychosis (EASY) and a specialist unit for eating disorder.

Recommended Service Enhancement

- Develop the Child and Adolescent Mental Health Service, further integrating in-patient, out-patient, and ambulatory services for the KWC.
- Locate child and adolescent services in a dedicated purpose-built facility at KCH.
- Provide age- and developmentally-appropriate therapeutic environment and ward space.
- Provide flexible space for multi-purpose individual, small- or large-group therapeutic, play and recreational activities.
- Provide child- and family-friendly space and visiting areas.
- Offer in-reach services for child and adolescent patients, their families and carers.
- Enhance services to support children and adolescents to remain in the community, mainstream education and at home.
- Explore development of a Paediatric Consultation Liaison Service to other KWC hospitals.

Ambulatory Care Centre Component

- Co-locate potentially the ambulatory day treatment component of child and adolescent services in the child and adolescent facility, with dedicated entrance and waiting areas.
- Adopt a multi-disciplinary, holistic approach to care, through the “one-stop shop” concept to enhance personalised patient-centred service.

Demand Management

- Adopt effective evidence-based treatments and coordinated care programmes, supported by strengthened ambulatory and community-based services to contribute to reducing in-patient stay, shifting service demand.

Design Issues

- Accommodate children and adolescents in separate units which provide both in-patient and ambulatory care, which shall also be able to operate independently, where co-located, while utilising common facilities.
- Offer an environment that should be domestic both in scale and nature.
- Provide facilities for age-appropriate activities, including classrooms.
- Provide outdoor play space.

Psychogeriatric Service

The Psychogeriatric Service provides comprehensive psychogeriatric assessment, treatment and rehabilitation programmes for clients aged over 65 years. Services provided include in-patient, out-patient, day hospital, community services and elderly suicide prevention.

Recommended Service Enhancement

- Strengthen in-patient psychogeriatric services.
- Minimise avoidable in-patient hospitalisation and length of stay.
- Enhance the therapeutic environment with age-appropriate consideration.
- Strengthen the holistic "whole-patient-centred" care model, with emphasis on recovery and social inclusion as part of a planned programme of rehabilitation to achieve "aging in place".
- Enhance appropriate flexible space for multi-purpose individual, small- or large-group therapeutic and recreational activities.
- Strengthen dedicated psychogeriatric services at district-level Community Mental Health Centres and specialist clinics.
- Enhance carer support services.
- Improve isolation facilities for infection control.

Ambulatory Care Centre Component

- Offer a suitable location for a range of clinical psychogeriatric services for in-patients, out-patients, other patient groups and visitors.
- Accommodate specialised clinics, day hospital, treatment and community mental health services, e.g. Memory Clinic, Mild Cognitive Impairment Clinic, Mood Disorder Clinic, Psychogeriatric Outreaching Nursing service to private old age homes, Community Psychogeriatric Nursing Service and Dementia Resources Centre.
- Offer flexible space for multi-purpose, individual, small- or large-group therapeutic and recreational activities that should consider the needs of psychogeriatric patients.
- Accommodate in-reach services relevant to patients and their families and carers.
- Adopt a multi-disciplinary holistic approach to care, through the "one-stop shop" concept to enhance personalised patient-centred service.

Demand Management

- Expand the capacity of psychogeriatric services, particularly those community-based, to cater for future demand and counter the effect of an increasing aging population.
- Co-locate psychogeriatric services with those of general adult to optimise resource utilisation.

Design Issues

- Design requirements should meet those for adult facilities.
- Offer a home-like and elderly-friendly environment with enhanced visual and spatial way-finding to maximise patient comfort and orientation.
- Enhance acoustic design to reduce disturbance from internal and external noise sources.
- Design facilities for patients with significant locomotive disabilities.

Psychiatric Consultation Liaison Service

Services are provided by the clinical team at KCH to general hospitals in the KWC. Psychiatric Consultation Liaison team provides timely psychiatric consultation to in-patients in general hospitals that need psychiatric care, particularly for those with psychosomatic problems, psychosocial crisis and psychiatric emergency.

After assessment, patients are referred for follow-up management either as psychiatric in-patients or out-patients, as clinically appropriate. A responsive consultation service is also provided to EMW/AEDs of the general hospitals in the KWC, which may also result in patient admission to KCH or referral to psychiatric out-patient clinics.

Recommended Service Enhancement

- Strengthen this service to enhance access and gate-keeping to psychiatric services.
- Multi-disciplinary input into the Integrated Pain-Oncology-Psychiatry service for patients in the KWC.
- Further reduce the service gap between general hospitals and psychiatric out-patient services to ensure appropriate patient follow-up.
- Provide multi-disciplinary input into the Comprehensive Child Development Services in the KWC.
- Work with obstetrics and gynaecology and paediatric services to provide post-natal depression care.

Demand Management

- With the enhancement of A&E services and establishment of EMWs, service demand is likely to increase for the Psychiatric Consultation Liaison Service.
- Strengthen community psychiatric services to help offset increases in A&E psychiatric presentations.
- Enhance the overall provision of psychiatric consultation liaison by KCH, but this should be under the context of a review of future service demand and direction.

Substance Abuse Assessment Service

This unit aims to assist clients with drug-related problem to abstain from the use of illicit substances and promote their mental health through assessment, detoxification, rehabilitation and abstinence maintenance, in collaboration with other agencies.

The service provides in-patient beds, a day hospital, SOPC and outreach care, in collaboration with NGOs and community partners.

Recommended Service Enhancement

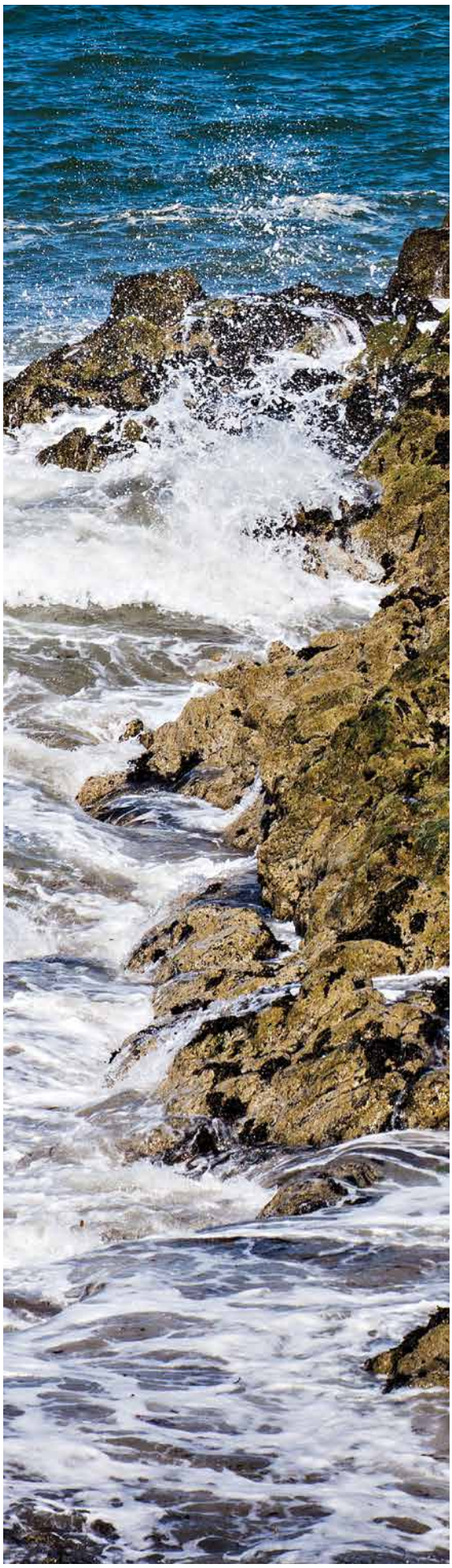
- Establish a Substance Abuse Assessment and Treatment Unit in KCH to provide assessment, in-patient, specialist out-patient, day hospital and ambulatory services.
- Incorporate a community outreach team within the unit to strengthen community-based care.
- Provide a dedicated entrance and welcome area for service users.

Demand Management

- Service demand will be affected by future changes in service direction, population growth and catchment population.

Design Issues

- Design requirements should meet those for adult facilities.



Psychiatric Services for Learning Disabilities

The service is to meet the mental health needs of people over 18 years old with learning disabilities and psychiatric morbidities, through principles of normalization and integration. The service provides in-patient, specialist out-patient and community outreach services.

Recommended Service Enhancement

- Strengthen out-patient and community-based services to support the proposed model of care.
- Enhance collaboration with allied health professions as well as community partners.

Ambulatory Care Centre Component

- The ambulatory care centre is a suitable location with out-patient, day treatment and community services to support patients with learning disabilities.
- A multi-disciplinary holistic approach to care through the “one-stop shop” concept will enhance personalised patient-centred service.

Demand Management

- Service demand will be affected by future changes in service direction, population growth and catchment population.

Design Issues

- Meet design requirements of those for adult facilities.

Primary Mental Health Care Management

The Primary Mental Health Care Management Service is proposed to enhance the collaboration between specialist psychiatric services and primary care. It will strengthen the assessment and management of people with common mental disorders in the community through a shared care approach.

Recommended Service Enhancement

- Develop a Primary Mental Health Care Management Liaison Team in the KWC.
- Develop a district-based framework and clinical protocols for working with Family Medicine, GOPC and private practitioners.

Demand Management

- Strengthen primary care management of common mental disorders to release specialist resources for the assessment, treatment and management of patients with severe, complex and enduring psychiatric illness.
- Identify mental illness early will provide better opportunity for community-based management and potentially reduce the risk of escalation to more severe mental illness, reducing the need for in-patient admission or emergency crisis intervention.

Allied Health Services

With KCH's preferred model of care, allied health services will have an integrated and collaborative role to play in in-patient, out-patient and community-based services for psychiatric patients. A holistic patient-centred approach to care is promoted.

As noted previously, the proposed model of care will evolve over a number of years, as services progressively orientate to a more community-based focus, with the support of specialised in-patient facilities. KCH will need to have flexibility about how future care involving the whole healthcare team can be delivered.

Allied health and other patient services include, but are not limited to:

- Occupational Therapy
- Physiotherapy
- Clinical Psychology
- Medical Social Services
- Dietetics
- Pharmacy
- Radiology
- Podiatry
- Dentistry
- Patient Resources and Social Centre

Conceptual Design

The existing KCH building form is that of an institution. Its location near the top of a steep hill further suggests an isolated facility disconnected from the community and relatively inaccessible. To patients, relatives and the wider community, it gives an impression that emotional and psychiatric disorders should be placed “out of sight, out of mind”. The environment is custodial and fails to offer an unstressed sanctuary where patients can move on their journey to recovery.

To meet the preferred model of care, the redeveloped hospital must aspire to facilitate each step on this patient journey.

The institutional model will be replaced with that of a therapeutic village which meets the needs of patients, offering a simulation of activities which play a part in real life and can aid re-integration into society. The therapeutic village, as with any village, would be a series of places or events linked by a circulation system, where people are free to move and can actively make decisions on their destinations.

Included in this village would be residential pavilions for adult, children and adolescent in-patients, areas for ambulatory and day care, opportunities for food outlets, shops, child care and leisure activities, as well as community functions all linked by a clear system of “roadways” and ”streets”. It will also link with the existing facilities of PMH.

Adult In-patient Units

Where possible, in-patient units should be accessible from the external circulation system, not accessed through other areas of the hospital. There should be one point of entry to the unit for patients and visitors.

The in-patient units are likely to be a significant part of the redevelopment in terms of required floor area. These units should be domestic in scale and nature, replicating residential pavilions with therapeutic spaces for activities and leisure, including access to external garden or terrace areas. There should also be provision of infection control facilities.

The individual nursing units would have a reasonable proportion of single-bed rooms and can be grouped into residential pavilions throughout the KCH campus. The approach to the design of the in-patient accommodation should be very much the same as the approach for a hotel. The accommodation should meet the key requirements of anyone who has to stay away home:

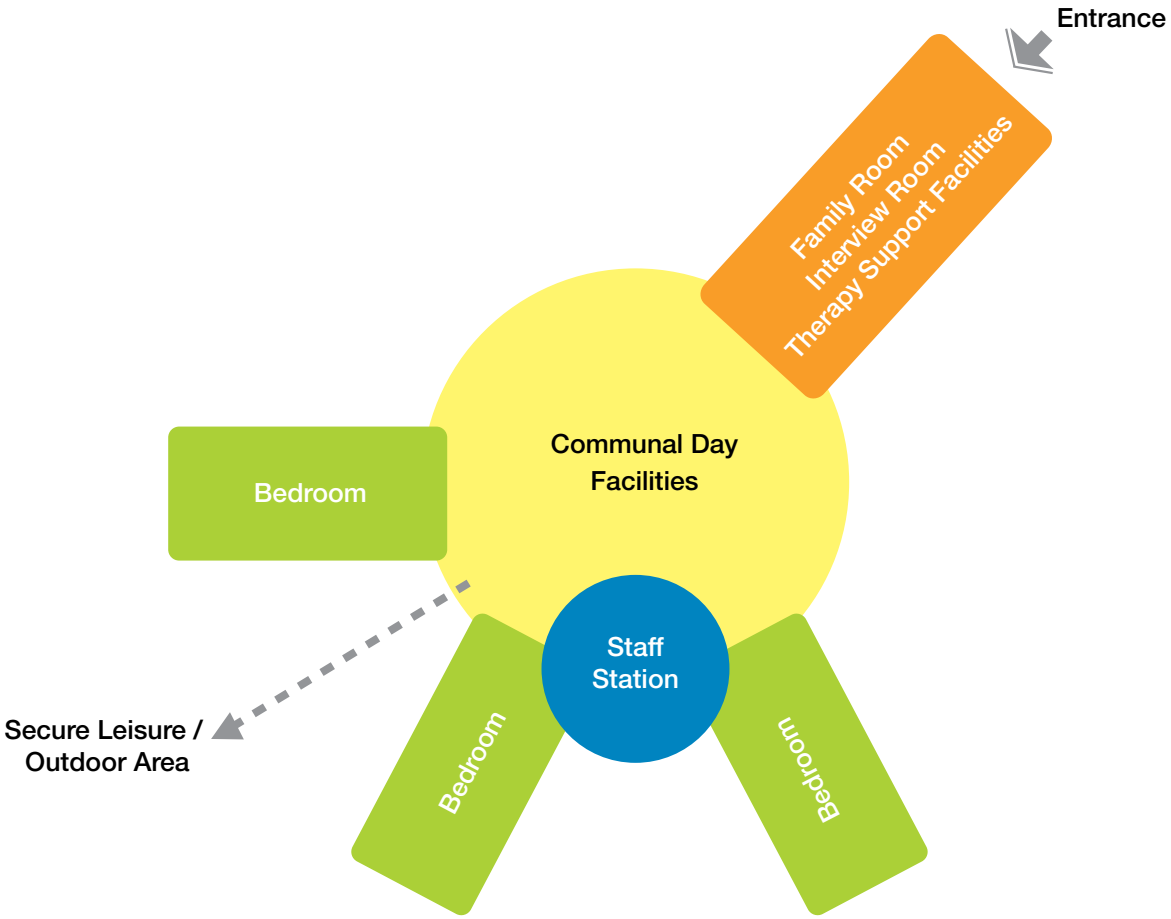
- Clearly defined and welcoming reception area.
- Maximised use of natural lighting.
- *En suite* bedrooms.
- Environmental control.
- Access to active, leisure and outdoor spaces.
- Safe and secure environment.
- Clear observation throughout the unit.
- 24-hour access to food and drinks.

On arrival at the in-patient unit there would be a children's visiting room and a series of therapy and activity rooms. Beyond this area, small groups of bedrooms would be centred around a nurse base. Each one of these bedroom wings could facilitate gender separation as required.

Social gathering spaces would be grouped around this central nurse base. Corridors should be short and with no hidden areas. Natural daylight should be incorporated to all areas.

The environment must incorporate necessary security and safety design with anti-ligature provisions throughout. However, these provisions should be finally integrated and carefully designed to avoid a custodial atmosphere.

Figure 5. Adult in-patient area concept



Child In-patient Units

The design requirements are similar in many ways to the adult in-patient units. However the homely environment is even more important and should be child-friendly throughout. There should be provision for school classrooms, which should be divided into at least three different age groups to ensure that children can receive age-appropriate care. External and internal play areas should be provided with the opportunity for physical play.

Adolescent In-patient Units

Again, there are many similarities to that of the adult in-patient accommodation. However, the provision of activity spaces and leisure opportunities should be carefully designed.

Ambulatory Care Centre and Community Integration

This area will form the hub of the campus. A large footprint utilising atrium space with generous circulation spaces and maximising natural light would be ideal.

This atrium space would provide part of the “road” network linking essential day care and ambulatory care facilities with other leisure and therapeutic facilities, including child care, food outlets and shops. This would effectively become an activity centre which would also be easily accessed from the residential in-patient areas.

Integration with PMH would further enhance inclusive engagement with the wider community and address issues of stigma. Evening and weekend activities would encourage community in-reach and assist patients with reintegration into society following discharge.

In subsequent stages of the project, including the Technical Feasibility Statement (TFS) and the Master Development Plan (MDP), the design principles for the preferred strategies outlined in the CSP should become the basis for the final design proposals.

Concluding Remarks

The way psychiatric care is provided has changed since the establishment of KCH and is likely to continue to do so in the coming decades. As it sustains the test of time, KCH embraces a vision of mental health services that is holistic, patient-centred and which emphasises safe and dignified support of patients within the community for recovery and social inclusion.

Much emphasis of psychiatric care is now placed on community-based settings, in addition to hospital services. This CSP relates to the redevelopment of the KCH site only. However, the future of psychiatric service delivery and demands of KCH will be inextricably linked to the evolving development of community infrastructure, resources and allied health services. Modern flexible facilities will be vital to support the challenge of these changes and ensure the future proofing of service delivery, supporting the many professional staff that strive everyday to provide the best possible care to their patients.

KCH will be a modern mental health campus which is developed in parallel with a new network of Community Mental Health Centres to provide high quality, integrated, person-centred care, based on effective treatment and recovery of the individual.

During the course of developing this CSP, the importance and benefits of holistic patient care, through the close collaboration of KCH with other hospitals in the cluster (in particular PMH), are apparent. Although it is beyond the scope of this review to make recommendations in relation to other hospitals, the redevelopment of KCH should be seen in the wider context of the KCH-PMH campus and also the impact of the Clinical Services Plans of other cluster hospitals, such as KWH.

Aspiring to serve as an exemplar translation of psychiatric care in Hong Kong, the redevelopment of KCH will facilitate its modernised model of high quality, integrated, person-centred care by offering a campus with upgraded facilities for more effective treatment and recovery of patients.

Appendices

Appendix 1: Demographic and Socio-economic Characteristics of Districts in the KWC

	Districts in Kowloon West Cluster (KWC)						KWC Catchment	Hong Kong Overall
Year 2010	**Wong Tai Sin**	**Yau Tsim Mong ***	**Sham Shui Po**	**Kwai Tsing**	**Tsuen Wan**	**North Lantau**		
Population	421 500	307 600	373 700	516 200	295 400	82 300	1 874 500	7 065 900
Proportion of population age ≥ 65	17.6%	13.6%	16.7%	14.1%	12.4%	6.6%	14.8%	12.9%
Year 2019								
Projected population	416 900	353 600	442 900	491 900	301 300	100 500	1 962 700	7 658 500
Proportion of population age ≥ 65	19.5%	19.8%	18.8%	18.4%	17.7%	9.8%	18.3%	17.4%

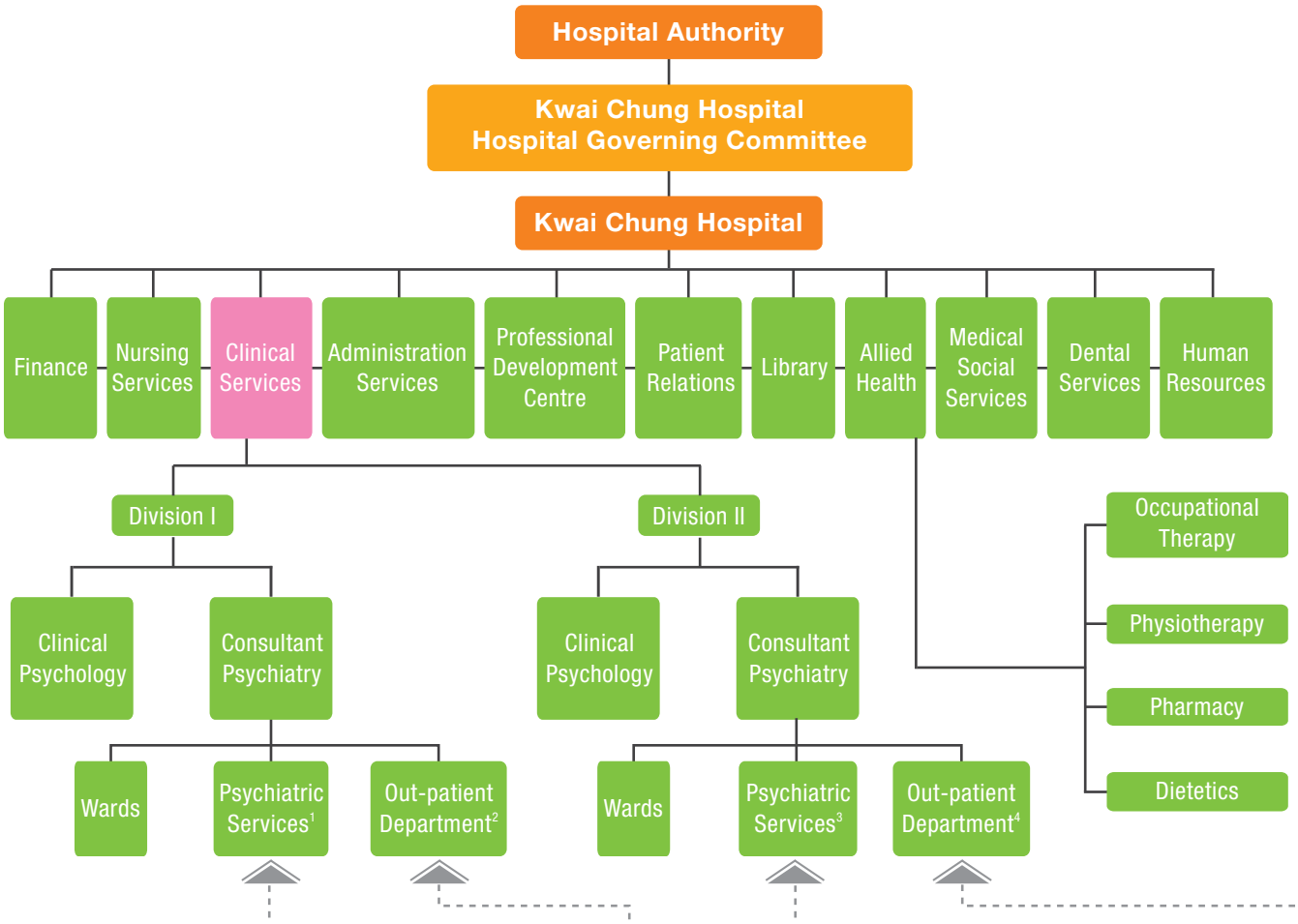
* Figures include Yau Tsim Mong district population which is not under the catchment of the KWC

Source: Hospital Authority Annual Plan 2012-2013

Appendix 2: Current Site Map of KCH

Admin Block	–	Administrative Offices
Service Block	–	Allied Health and Supporting Services
Kitchen Block	–	Main Kitchen
Block D	–	Pre-discharge Annex *(Service terminated since 2007. Now vacated.)*
Blocks G & H	–	Ward and Psychogeriatric Day Hospital
Block J	–	Offices and Staff Accommodation *(Call Room & Overnight Room)*
Blocks L & M	–	Ward, Psychogeriatric Ambulatory Care Centre / Out-patient Department, Electroconvulsive Therapy, Patient Resource and Social Centre, Community Psychiatric Services, Substance Abuse Assessment Service and Psychiatric Consultation Liaison Services
Block N	–	EXITERS

Appendix 3: Organisational Chart of KCH



1. Psychiatric Services (Division I):

- Recovery Support Outreach Team I
- Early Intervention Team
- Psychiatric Consultation Liaison Team
- Comprehensive Child Development Service
- Community Psychogeriatric Team
- Day Care Unit for Dementia
- Psychogeriatric Ambulatory Care Centre
- Psychogeriatric Day Hospital
- Child and Adolescent Mental Health Community Support Project

2. Out-patient Department (Division I):

- East Kowloon Psychiatric Centre
- Kwai Chung Child and Adolescent Psychiatric Centre
- Kwai Chung Psychogeriatric Out-patient Department
- Yaumatei Child Psychiatric Centre

3. Psychiatric Services (Division II):

- Personalised Care Programme (Kwai Tsing & Sham Shui Po)
- Community Psychiatric Nursing Service
- Intensive Care Team
- EXITERS
- Psychiatric Unit for Learning Disabilities
- Rehabilitation Activities Centre
- Substance Abuse Assessment Unit

4. Out-patient Department (Division II):

- West Kowloon Psychiatric Centre

Organizational chart as at September 2012

Appendix 4: Current Services at KCH

KCH cares for acute and chronic psychiatric patients and provides a number of psychiatric sub-specialty and allied health services. It is also dedicated to developing community-based outreach teams and operates psychiatric out-patient clinics. KCH works in collaboration with half-way houses, sheltered workshops, the SWD and other NGOs in rehabilitation to ensure care continuity and community reintegration for patients who are mentally ill.

The scope of current services offered includes:

Specialties

- Adult Psychiatry
- Community Psychiatry
- Psychiatric Rehabilitation
- Child and Adolescent Psychiatry
- Psychogeriatrics
- Psychiatric Consultation Liaison
- Substance Abuse
- Services for Mentally-ill People with Learning Disabilities

Others

- Psychiatric Outreach Service
- Supported Employment Service
- Occupational Therapy
- Clinical Psychology Service
- Physiotherapy
- Dietary Service
- Pharmacy
- Medical Social Service
- Red Cross School
- Dental Service
- Podiatry Service

Overview of Current Services

General Adult Psychiatric Services

Patients served:	Provisions:
For in-patients suffering from acute psychiatric problems requiring hospital treatment	▪ 8 Psychiatric Intensive Care Units
For in-patients who need continuing treatment & extended rehabilitation	▪ 4 Psychiatric After-Care Units to support the above units
For out-patients who need psychiatric consultation follow-up	▪ **Ambulatory** service with 2 psychiatric SOPCs-cum-psychiatric day hospitals: • West Kowloon Psychiatric Centre • East Kowloon Psychiatric Centre
For discharged patients	▪ **Outreach** Community Psychiatric Nurses, Occupational Therapists & Medical Social Workers
For patients in the community	▪ Different programmes for enhanced care in the community, e.g.: • **Personalised Care Program** -- for patients with severe mental illness • **Early Intervention Team** -- for patients aged 15-64 with first episode psychosis

Community Psychiatric Service

Patients served:	Provisions:
For patients to be integrated into community	▪ Psychiatric treatment & comprehensive rehabilitation to attain appropriate levels of self-maintenance, social functioning & independent living in the community, e.g.: • **EXITERS Project** --- Patients who need extended care are placed in supported group homes converted from vacant hospital quarters for treatment & support programmes for community re-integration
For patients who reside in the catchment area of the KWC and in need of intensive support	▪ **Intensive Care Team** delivers intensive community individualised case management ▪ **Community care**, including: • Crisis intervention • Psychiatric individualised case management • Community psychiatric assessment • Supportive counselling & family work • Telephone consultation & hotline enquiry • Mental health education & promotion

Child and Adolescent Psychiatry Service

Patients served:	Provisions:
For children & adolescents under 18 years old who live in the KCC & KWC	▪ **In-patient care** with psychiatric observation & assessment,diagnosis & treatment, therapeutic interventions & education services ▪ **Day patient & out-patient care** with diagnostic, therapeutic & educative services further supported by mental health education, parenting skills training & counselling services ▪ Psychiatric consultative service by KCH Child Psychiatrists to Adolescent Medical Centres of QEH & PMH, as well as paediatric in-patients in QEH, PMH, KWH, YCH & CMC
For triaged patients & their carers	▪ One-stop-service at Nurse Clinic for pre-consultation support ▪ 2 clinics for patients with Autistic Spectrum Disorder & Attention Deficit and Hyperactive Disorder ▪ Pre-consultation psychosocial intervention service by Occupational Therapists to triaged cases
For patients with eating disorders	▪ In-patient admission & behavioural programmes ▪ Psychiatric observation & assessment, diagnosis & treatment, therapeutic interventions & education
For parents of autistic patients & children with Attention Deficit and Hyperactive Disorder	▪ Parent groups in primary, secondary & special schools to reduce parental stress & improve family functioning
For students with sub-clinical anxiety & depressive symptoms	▪ Child and Adolescent Mental Health Community Support Project (CAMcom), a territory-wide child & adolescent project coordinated by KCH

Psychogeriatric Service

Patients served:	Provisions:
For patients over 65 years old	▪ Comprehensive assessment, treatment & rehabilitation programmes: • In-patient beds for acute & respite care • Day care services • Specialist out-patient department with Mild Cognitive Impairment Clinic & Nurse Clinic • Outreach services to subvented & private old aged homes, as well as patients' homes within districts of the KWC
Extended services for elderly patients and carers	▪ Mobile Psychogeriatric Nurse Clinic in elderly centres in the community ▪ Carer support with mental health education, caring skills training & counseling services by Psychogeriatric Nurses & other multi-disciplinary staff ▪ Peer support groups

Psychiatric Consultation Liaison Service

Patients served:	Provisions:
All general hospitals of the KWC, including PMH, YCH, CMC, KWH, WTSH & OLMH	▪ Psychiatric assessment & management of patients in EMWs/AED of general hospitals by a KCH team of Psychiatrists, Clinical Psychologists & Psychiatric Nurses: • Psychosomatic clinic • Psychosexual clinic • Clinical psychology clinic in general hospitals • 3 perinatal clinics in both general hospitals & out-patient clinics
For pregnant & perinatal women	▪ Comprehensive Child Development Service (CCDS) in 9 Maternal & Child Health Centres (in Sham Shui Po, Kwai Tsing, Tsuen Wan, Wong Tai Sin & North Lantau Districts)

Substance Abuse Assessment Service

Patients served:	Provisions:
For patients with drug-related problems	▪ Assistance for patients to abstain from the use of illicit substances & to promote their mental health ▪ Assessment, treatment, detoxification, rehabilitation & abstinence maintenance in collaboration with other community agencies: • In-patient beds • Day services • SOPC • Outreach care in collaboration with NGOs & community partners

Psychiatric Unit for Learning Disabilities

Patients served:	Provisions:
For adults with learning disabilities & psychiatric co-morbidities	▪ A high quality, coordinated & comprehensive psychiatric service incorporating the principles of normalisation & integration, to develop patients' individual abilities & widen their repertoire of skills: • In-patient care • Outreach services to institutions, hostels & SOPC, for community & ambulatory care

Appendix 5: Committees and Working Group

KCH Redevelopment Project Steering Committee

Terms of Reference	
1	To monitor progress of the project against a master program, identify potential delays and decide action to be taken
2	To monitor financial progress of furniture and equipment against approved budget, identify variances and initiate remedial action
3	To monitor performance of various functional working groups within the hospital
4	To endorse the project design
5	To approve any subsequent variations to the project as proposed by the hospital

Membership (as at July 2012)	
Chairman	
Dr Lily CHIU	Cluster Chief Executive, Kowloon West Cluster *(up to Mar 2009)*
Dr Nancy TUNG	Cluster Chief Executive, Kowloon West Cluster *(to Feb 2012)*
Dr T L LO	Hospital Chief Executive, KCH *(from Mar 2012)*
Members	
Mrs Marigold LAU	Director of Architectural Services *(up to Oct 2011)*
Dr S V LO	Director (Strategy and Planning), HA Head Office *(from Jul 2012)*
Mr Donald LI	Chief Manager (Capital Planning), HA Head Office
Dr Nancy TUNG	Cluster Chief Executive, Kowloon West Cluster *(from Mar 2012)*
Dr S F HUNG	Hospital Chief Executive, KCH *(up to Feb 2012)*
Dr T L LO	Chief of Service Div I, KCH *(up to Feb 2012)*
Dr Patrick KWONG	Chief of Service Div II, KCH *(up to Feb 2012)*
Ms Kit YEUNG	Cluster General Manager (Administrative Services), Kowloon West Cluster *(from Jul 2012)*
Mrs Wena PANG	General Manager (Administrative Services), KCH *(up to Jun 2012)*
Mr Andy LO	General Manager (Administrative Services), KCH *(from Jul 2012)*
Secretary	
Mr Andy LO	Senior Hospital Administrator, KCH *(up to Jun 2012)*
Ms Vivian WONG	Senior Hospital Administrator, KCH *(from Jul 2012)*

KCH Redevelopment Core Planning Group

Terms of Reference	
1	To advise the Hospital Management Executive Committee on planning and commissioning of the master redevelopment project of KCH
2	To monitor and report the progress of the project against a master program
3	To report financial progress of furniture and equipment against an approved budget
4	To consolidate user departments' feedback on design planning
5	To review and recommend subsequent variations to the project, as proposed by user departments
6	To review and monitor any logistical arrangements arising from the project

Membership (as at July 2012)	
Chairman	
Dr S F HUNG	Hospital Chief Executive, KCH *(up to Feb 2012)*
Dr T L LO	Hospital Chief Executive, KCH *(from Mar 2012)*
Members	
Dr T L LO	Chief of Services Div I, KCH *(up to Feb 2012)*
Dr Patrick KWONG	Chief of Service Div II, KCH
Mrs Wena PANG	General Manager (Administrative Service), KCH *(up to Jun 2012)*
Mr Andy LO	General Manager (Administrative Service), KCH *(from Jul 2012)*
Ms Betty KU	General Manager (Nursing), KCH
Mr S W PANG	Department Operations Manager, KCH
Secretary	
Ms Vivian WONG	Hospital Administrator, KCH *(up to Jun 2012)* Senior Hospital Administrator, KCH *(from Jul 2012)*

KCH Clinical Services Plan Joint Working Group

Terms of Reference	
1	To guide, steer and formulate the development of the Clinical Services Plan for the redevelopment of KCH
2	To scrutinise and advise on the principles, assumptions, model of care and key recommendations proposed by KCH for inclusion in the Clinical Services Plan
3	To produce a final Clinical Services Plan for the redevelopment of KCH

Membership (as at July 2012)	
Chairman	
Dr S V LO	Director (Strategy and Planning), HA Head Office
Members	
Dr S F HUNG	Hospital Chief Executive, KCH *(up to Feb 2012)*
Dr T L LO	Chief of Service Div I, KCH *(up to Feb 2012)* Hospital Chief Executive, KCH *(from Mar 2012)*
Mr S W PANG	Department Operations Manager, KCH
Ms Vivian WONG	Hospital Administrator, KCH *(up to Jun 2012)* Senior Hospital Administrator, KCH *(from Jul 2012)*
Dr Tony KO	Chief Manager (Strategy, Service Planning and Knowledge Management), HA Head Office *(up to Feb 2011)*
Dr Libby LEE	Chief Manager (Strategy, Service Planning and Knowledge Management), HA Head Office *(from March 2011)*
Ms Margaret TAY	Chief Manager (Integrated Care Programs), HA Head Office *(up to Jan 2012)*
Mr Ian WYLIE	Senior Manager (Service Planning and Development), HA Head Office *(up to Sep 2010)*
Mrs Sheila MAIR	Deputising Senior Manager (Planning and Development), HA Head Office *(up to 17 Oct 2010)* Senior Manager (Planning and Development), HA Head Office *(from 18 Oct 2010)*
Dr Pauline WOO	Manager (Service Planning), HA Head Office *(up to May 2012)* Senior Statistician (Healthcare Planning and Strategic Review), HA Head Office *(from Jun 2012)*
Dr Douglas WEST	Project Executive (Service Planning and Development), HA Head Office *(up to Aug 2010)* Manager (Strategy and Service Planning), HA Head Office *(from Nov 2010)*

Appendix 6: Abbreviations

AED	Accident and Emergency Department
ALOS	Average Length of Stay
CAMcom	Child and Adolescent Mental Health Community Support Project
CCDS	Comprehensive Child Development Services
CCE	Cluster Chief Executive
CLT	Consultation Liaison Team
CMC	Caritas Medical Centre
EASY	Early Assessment Service for Young People with Psychosis
EMW	Emergency Medicine Ward
EXITERS	Extended-Care Patients Intensive Treatment: Early Diversion and Rehabilitation Stepping-Stone Project
FHB	Food and Health Bureau
GOPC	General Out-patient Clinic
GPs	General Practitioners
HA	Hospital Authority
HGC	Hospital Governing Committee
KCH	Kwai Chung Hospital
KWC	Kowloon West Cluster
KWH	Kwong Wah Hospital
NGOs	Non-Governmental Organisations
OLMH	Our Lady of Maryknoll Hospital
PACU	Post-Admission Care Unit
PICU	Psychiatric Intensive Care Unit
PMH	Princess Margaret Hospital
QEH	Queen Elizabeth Hospital
SOPC	Specialist Out-patient Clinic
SWD	Social Welfare Department
WTSH	Wong Tai Sin Hospital
YCH	Yan Chai Hospital

Acknowledgements:
*Special thanks to **Dr Patrick KWONG**, KCH Chief of Service, and*
***Mr Patrick LEE**, KCH Occupational Therapist I, for the photographs in the inside pages.*

Planning Tomorrow's Hospital

Published by:
The Strategy & Planning Division
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Hospital Authority Building
147B Argyle Street
Kowloon, Hong Kong

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