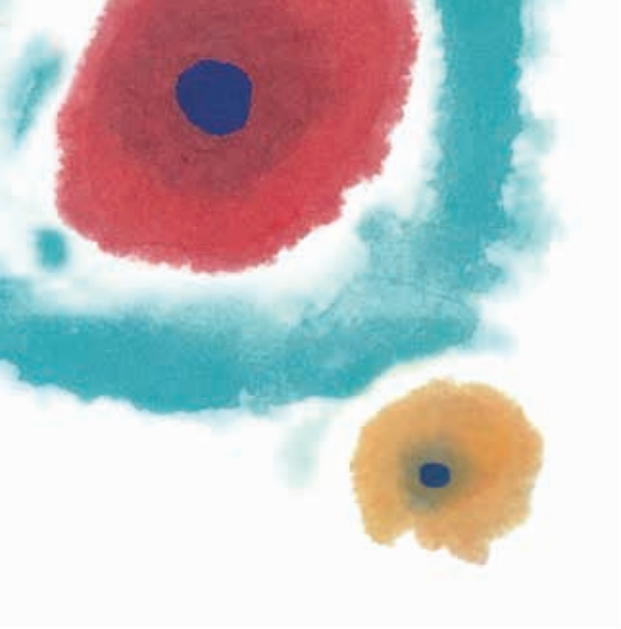
醫院管理局
HOSPITAL AUTHORITY

Hospital Authority

Strategic Service Framework for Rehabilitation Services



ABOUT THE COVER

The cover is an amalgamation of three pieces of artwork created by our patients during their rehabilitation journey.

The bright sun symbolises the light of hope. The fish swimming freely describes the wish of our patients to function independently in the community. The overall theme shows a lively environment reflecting the goal of rehabilitation for a better tomorrow.

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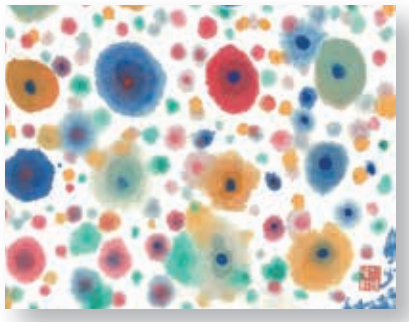
ACKNOWLEDGEMENT

We would like to thank our patients from Pamela Youde Nethersole Eastern Hospital, Kowloon Hospital and Princess Margaret Hospital for their contributions in providing the following art pieces for the publication of Strategic Service Framework for Rehabilitation Services. These drawings have demonstrated their resilience and ability to create beautiful artworks as they regain their function during rehabilitation therapy.














1 FOREWORD BY CHAIRMAN

The Hospital Authority (HA), being the largest healthcare provider in Hong Kong, is taking care of many patients suffering from disability due to injury or illness. Rehabilitation services play a crucial role in helping these patients, most of whom are elderly or chronically ill, to regain their independence and return to the community. With advances in medical science and technology, HA is facing a rising demand for rehabilitation services. Efforts have been made in recent years to strengthen our rehabilitation services, such as expanding the service capacity and adopting modern technology and equipment for rehabilitative care. While we are proud of our dedicated staff and the progress we have made, we realise there is still room for improvement in the service model and system infrastructure.

To address the challenges faced by HA and keep pace with international developments in rehabilitative care, we must be forward-thinking and plan ahead. It is therefore timely at this juncture for HA to publish and disseminate the Strategic Service Framework for Rehabilitation Services. This strategic document will guide and shape the ways HA develops our rehabilitation services in the coming years. It also signals HA's determination to provide better care to our patients along their journey to recovery.

I would like to express my heartfelt gratitude for the vast support from the wide range of clinical colleagues, patient groups, and my fellow Board members in the formulation of this Strategic Service Framework. Implementing this Framework requires collective participation in a process of change for service improvement, and I am glad to see that some of these changes have already begun. Building on this momentum and with our strong commitment, I am confident that we will continue to raise the standards of our rehabilitation services, and improve the health and well-being of our patients.

Prof John C Y LEONG
Chairman
Hospital Authority

2 FOREWORD BY CHIEF EXECUTIVE

The Hospital Authority (HA) is pleased to present a strategic document, Strategic Service Framework for Rehabilitation Services. It represents the fruit of the tremendous efforts from many of our colleagues, both in the Head Office and clusters. Being our fourth Strategic Service Framework, it highlights our commitment to improving the services of priority clinical areas through robust planning to meet the healthcare needs of the Hong Kong population.

The Framework describes a new working model for rehabilitation services in HA – one that aims at providing proactive and coordinated rehabilitation care to meet our patients' needs. While hospitalisation may be unavoidable at certain point for some patients with illness or injury, it is our goal that they can return to their normal lives as far as possible, with appropriate support in the community. Thus, the Framework covers the whole patient journey from hospital to community, with a focus on optimising patients' outcomes, facilitating their integration into the community, and improving service efficiency.

The Framework is an overarching blueprint to guide our clinicians and executives in aligning the rehabilitation service initiatives in our operation planning. Through the process, the Framework will be translated by phases into concrete actions which will benefit our patients, their families and the wider community. My sincere thanks go to all the staff and other stakeholders who have contributed to the development of this Framework, and I look forward to working with you all in the realisation of its strategies.

Dr P Y LEUNG
Chief Executive
Hospital Authority

3/ PREFACE

The Strategic Service Framework for Rehabilitation Services is going to guide the development of the Hospital Authority's rehabilitation services over the next five to ten years. It outlines the strategic directions that we will pursue to build up a sustainable service model and system infrastructure, so as to improve the quality of our rehabilitation services.

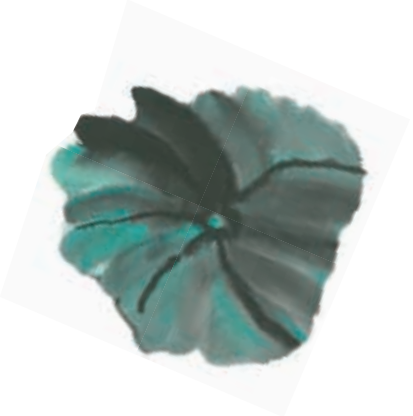
Through an intense process of data analysis, stakeholder engagement and collation of expert views on the development of our rehabilitation services, consensus has been reached on the areas for improvement and the strategic directions to address them. In accordance with the Framework, focused efforts on rehabilitation care will be made to increase its service coverage and accessibility, improve the appropriateness of care, enhance its community partnership, promote performance monitoring, strengthen its governance and develop key enablers for its effective implementation.

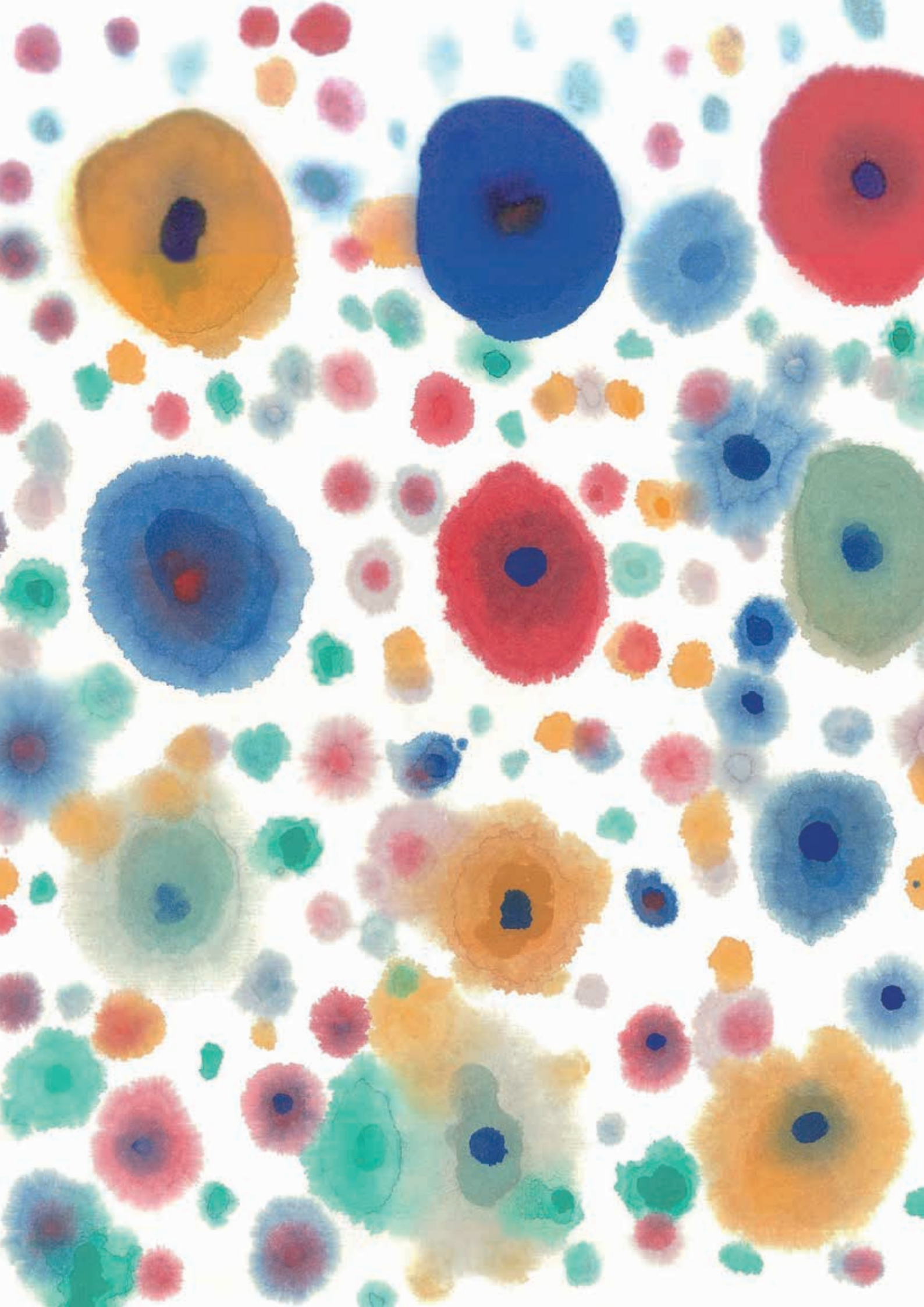
We are delighted to see the keen and active participation from our stakeholders during the formulation of the Framework, including our clinical frontline staff, Head Office and cluster executives as well as patient groups. In particular, we would like to thank the members of the Taskforce for their devotion and contribution, as well as the Working Group members for their expert input and advice. We would also like to extend our appreciation to everyone who provided suggestions and feedback on the draft Framework.

We look forward to implementing the Framework for achieving high quality rehabilitation services to meet the needs of our patients.

Dr S V LO
Director (Strategy & Planning)
Hospital Authority

Dr W L CHEUNG
Director (Cluster Services)
Hospital Authority





4 EXECUTIVE SUMMARY

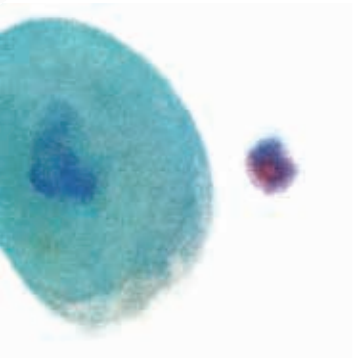
Introduction

The Strategic Service Framework for Rehabilitation Services (the Framework) is an overarching document developed by the Hospital Authority (HA) to guide the development of its rehabilitation services in the next five to ten years. It outlines the directions, strategies and key enablers for building up the service model and system infrastructure to meet the rising service demand and improve the quality of rehabilitation services in HA, particularly in terms of addressing service gaps and ensuring that appropriate levels of care are provided to patients with reference to their needs.

The Framework mainly targets at rehabilitation services of high intensity and complexity that require multi-disciplinary and cross-specialty collaboration. It covers the rehabilitation care pathway from hospital to community, including inpatient, ambulatory and community services. While focus is given to the role of HA, collaboration with community partners and the welfare sector is also addressed for facilitating patients' transition and integration to the community.

Planning Process

The development of the Framework commenced in October 2014. Under the policy directions and guidance of the Medical Services Development Committee (MSDC) and Directors' Meeting, a designated Taskforce was set up to oversee the formulation process. Under the Taskforce, two Working Groups were formed to review and advise on the rehabilitation care pathways in the medical and surgical streams respectively, using stroke and hip fracture as illustrative examples. Overall, a highly participative and broad engagement approach was adopted for the formulation process with contribution from clinical frontline staff, cluster management and Head Office executives, as well as patient groups.



Overseas exchange and literature review were included in the process so as to understand the international development and good practices. Statistical analysis was also carried out to evaluate the existing utilisation pattern of rehabilitation services in HA and identify potential service gaps and areas for improvement. This is supplemented by hospital visits in the clusters to observe first-hand the service operation and provision. In addition, two workshops facilitated by an overseas consultant were held with more than 100 participants including doctors, nurses, allied health (AH) professionals and executives to brainstorm on the aspired service model and identify opportunities for service improvement. Regular briefings and presentations were also made to relevant Coordinating Committees (COCs), Central Committees (CCs), their sub-committees and working groups, the Allied Health Professions Staff Group Consultative Committee, and the Patient Advisory Committee for feedback collection.

Consultation on the draft Framework was conducted between 1 and 26 February 2016. The responses and comments received were carefully considered and deliberated by the Taskforce. The refined Framework was submitted to the Directors' Meeting for endorsement and the MSDC for final approval.

Framework Strategies

The aim of the Framework is to build a sustainable care model from hospital to community, providing proactive and coordinated rehabilitation services to meet patients' needs. There are five strategic directions in the Framework for achieving the overall goals of optimising patients' outcomes, facilitating better integration of patients into the community, and improving system efficiency:

1. **Increase service coverage and enhance accessibility through a system approach**
2. **Ensure appropriateness of care to meet patients' needs**
3. **Enhance community partnership for better integration of patients into the community**

4. Promote performance monitoring for continuous quality improvement

5. Strengthen the governance and develop key enablers for effective implementation

Under each direction, strategies are formulated with reference to opportunities or identified areas for improvement in addressing the existing and anticipated service gaps of rehabilitation services in HA.

1. Increase Service Coverage and Enhance Accessibility through a System Approach

Opportunities for Improvement

With increased recognition of the important role of rehabilitation care in strengthening patients' functional independence, much effort has been made in recent years by hospitals and clusters in HA to enhance their rehabilitation services. However, without a unified approach or concerted strategies, the enhancements have been piecemeal. There are still considerable gaps in the service coverage and accessibility. Patients with the same condition may receive different levels of care despite having similar needs. Inpatient AH service is interrupted on weekends, early post-operative rehabilitation support is therefore not available if the patient receives the operation on a Friday. Moreover, the provision of day rehabilitation care is generally limited compared to inpatient service and the priority is given to elderly patients because currently, designated places are only available in the Geriatric Day Hospitals. Besides, special rehabilitation needs related to social support, psychological stress, return to work, driving and sexuality are not well addressed in the current system, especially for young patients.

Strategies

Hospitals are suggested to organise their rehabilitation services using a system approach through the cluster network. The aim is to enhance the patient experience of rehabilitation services by improving the service coverage and accessibility in the inpatient, ambulatory (day and outpatient) and community settings along the patient journey. Strategies include:

- Providing multiple access points to the rehabilitation services along the patient journey
- Expanding the coverage of AH service for inpatient rehabilitation especially on weekends and public holidays so as to speed up the rehabilitation progress and enhance service efficiency
- Increasing day rehabilitation service to facilitate timely discharge from hospital and relieve the demand pressure on inpatient service
- Improving the access of younger patients to rehabilitation services, particularly for addressing their special rehabilitation needs as well as requirement for day rehabilitation care
- Concentrating rehabilitation services for relatively low volume but high complexity cases at designated centres. By pooling expertise and experience, professional training, advanced technology as well as purpose-built facilities to manage these cases, better patient outcomes are expected

2. Ensure Appropriateness of Care to Meet Patients' Needs

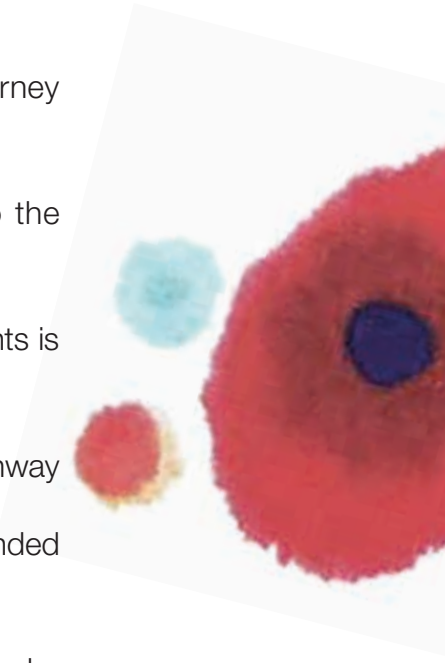
Opportunities for Improvement

Good rehabilitation services require the joint effort of different disciplines and specialties from various settings. There is, however, no common tool in HA to measure patients' rehabilitation potential or to monitor their rehabilitation progress along the patient pathway. Patients' rehabilitation needs are therefore not stratified and the rehabilitation care they receive is not readily adjusted according to changes in their needs along the pathway. There are also no well-defined transfer or referral criteria when patients move across different settings. Gaps are observed in linkages and care coordination between settings.

Strategies

Stratify the patients' rehabilitation needs so as to ensure that right care is delivered to the right patient at the right time and place. It is essential to formulate needs-specific care plan and improve care coordination with reference to an agreed common care protocol. Strategies include:

- Stratifying patients' rehabilitation needs at the beginning of care journey using a standardised assessment matrix
- Developing clinical pathway and early discharge plan according to the stratified needs
- Commencing early rehabilitation care once the acute condition of patients is stabilised
- Aligning patients' transfer and referral criteria along the rehabilitation pathway
- Designating link persons to bridge the gaps between acute and extended care settings, as well as from hospital to community
- Adopting co-management model of care among specialties, for example, orthopaedic and geriatric teams co-managing high risk elderly with musculoskeletal diseases



3. Enhance Community Partnership for Better Integration of Patients into the Community

Opportunities for Improvement

There are ongoing collaborations between hospitals/clusters in HA and community partners to facilitate patients' discharge and transition to the community. But there are variations in the practice among hospitals/clusters. Their capability in mobilising and coordinating community resources also varies. While some hospitals have established structured platforms for community partnership, others are at their early stage of development in this respect.

Strategies

HA is committed to enhancing community partnership so that better support and maintenance care are provided to patients after their discharge from hospital. The aim is to facilitate patients' return to and participation in the community with optimised functions. Strategies include:

- Strengthening partnerships with non-governmental organisations and patient groups through structured platforms to better mobilise and coordinate community resources for post-discharge rehabilitation, social support and long-term maintenance care
- Establishing cross-sectoral collaboration to link up the health and social care components in the rehabilitation care pathway to better facilitate patients' transition to the community
- Engaging and empowering patients and their carers to enhance their participation in the management of their own health or condition

4. Promote Performance Monitoring for Continuous Quality Improvement

Opportunities for Improvement

At present, data on the performance and outcome of rehabilitation services in HA are quite limited. Most of the existing data are captured manually according to the local criteria set by individual hospitals and clusters.

Strategies

Developing performance indicators on rehabilitation care to identify, evaluate and monitor clinical outcomes and service effectiveness is one of the key factors for improving the quality of rehabilitation services. Strategies include:

- Standardising data capture and analysis along the rehabilitation care pathway
- Developing clinical indicators and key performance indicators (KPIs) for continuous quality improvement in rehabilitation services

5. Strengthen the Governance and Develop Key Enablers for Effective Implementation

Opportunities for Improvement

Rehabilitation services span through acute to extended care and from hospital to community. A structured governance structure with clear and formal processes is of utmost importance in leading the service development and coordinating the rehabilitation care.

At the corporate level in HA, there are the Central Committee on Rehabilitation (CC(Rehab)) and various working groups on different rehabilitation service areas. However, their functions and linkages in the professional advisory role and executive role are not well defined. At the cluster level, although committees on rehabilitation services have been established, not all of them function actively in coordinating, planning, implementing and monitoring their rehabilitation services.

Besides, gaps were identified in the system infrastructure of rehabilitation services in relation to manpower, transportation, facilities and hospital design, medical technology and equipment, as well as information technology (IT) system support.

Strategies

Strengthening the governance for rehabilitation services at both the corporate and cluster levels is imperative:

- At the corporate level, the CC(Rehab) continues to oversee the development of rehabilitation services in HA. It collaborates with various working groups under COCs/CCs on the rehabilitation service model for specific diseases or conditions.
- At the cluster level, the existing committees on rehabilitation services are empowered to lead the service development in the cluster. Appointment of a Service Director of Rehabilitation under the cluster management structure is recommended. The Service Director is charged with the responsibility of overseeing the service planning, resources bidding, implementation and monitoring of rehabilitation services in the cluster.

At the same time, various key enablers will need to be developed to build up the system infrastructure for effective implementation of the strategies outlined in the Framework. They are:

- **Committed and Competent Workforce**

  Manpower planning, particularly for the provision of day rehabilitation service, is essential to develop a committed and competent workforce for the anticipated growing service demand. In particular, it is pertinent to define the roles and responsibilities of AH professionals in the provision of rehabilitation services. Some common tasks could be shared among disciplines in a trans-disciplinary approach so as to foster patient-centered care and simplify patient flow. Training gaps should be filled for facilitating trans-disciplinary care as well as for delivering highly complex and specialised rehabilitation service.

- **Transportation**

  More than often, discharged patients with physical disability are discouraged by the challenges they face in travelling to the ambulatory rehabilitation facilities and drop out of the programme. The inconvenience becomes the impedance to maintaining or improving their functional capacity as a result. Hence, transport service or support is a prerequisite for enhancing ambulatory rehabilitation services.

- **Facilities and Hospital Design**

  The expansion and improvement of rehabilitation services are limited by the existing infrastructure. As a long-term initiative, HA strives to incorporate built-in facilities and physical design for supporting the delivery of rehabilitation care. Examples include co-location of a rehabilitation wing or block in acute hospitals, designated facilities for day rehabilitation service, ward-based or floor-based rehabilitation facilities, and adoption of elderly-friendly and barrier-free design to support patients' needs.

- **Medical Technology and Equipment**

  Medical equipment and assistive technologies are to be adopted and implemented in a timely and coordinated manner to support effective implementation of rehabilitation care.

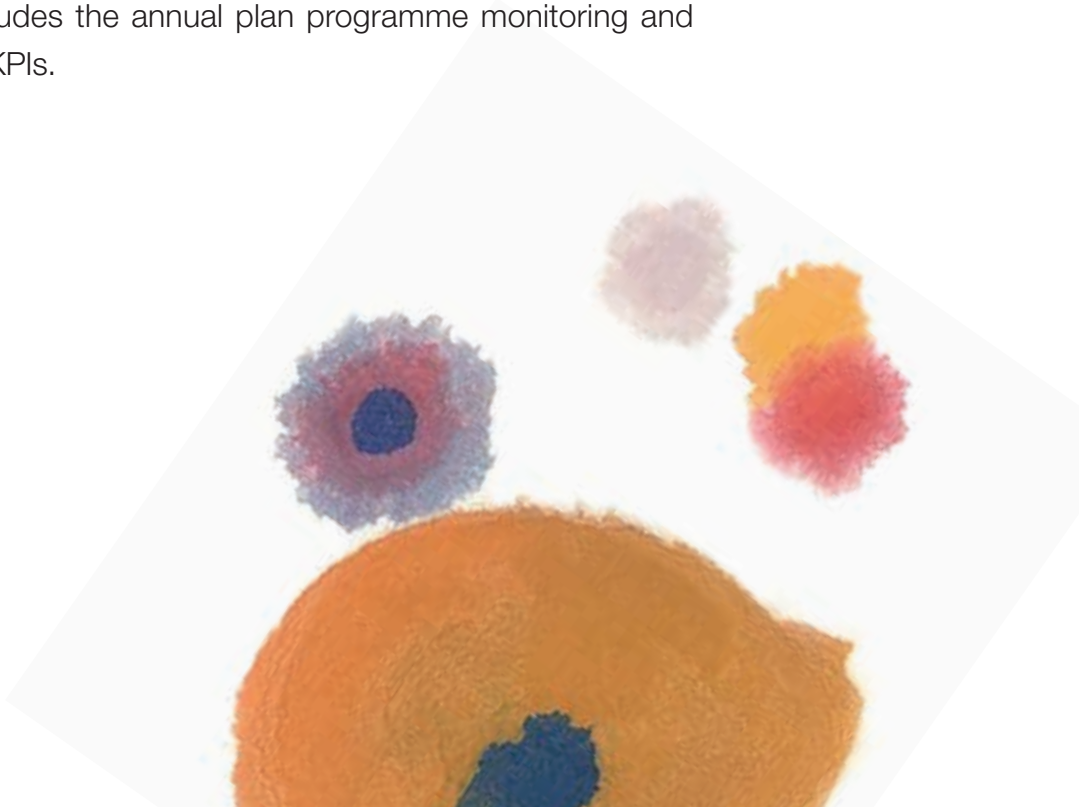
- **IT System Support**

  The Clinical Management System in HA hospitals is required to be enhanced for supporting the care protocol, clinical communication and performance monitoring of rehabilitation services. Development of tele-rehabilitation via mobile devices and smartphone applications should also be explored for better patient empowerment.

Implementation and Monitoring

Implementation of the Framework will require the collaboration of various stakeholders and leadership from clinical champions, cluster management and HA Head Office. The implementation should be incremental, taking into account the priority of service needs and readiness of key enablers at both the clinical and cluster levels. While some strategies incur additional resources, more of them require only clinical consensus. The latter includes development of an agreed clinical pathway, standardised assessment matrix and referral/transfer criteria between settings. The HA annual planning process is the mechanism through which resources could be sought to support implementation.

The implementation process will be monitored at different levels to ensure proper implementation of the strategies and effective use of resources. The monitoring of service ties in with the existing mechanism of performance measurement, which includes the annual plan programme monitoring and development of HA-wide KPIs.



Conclusion

With concerted efforts of various stakeholders, the Strategic Service Framework for Rehabilitation Services highlights a new model of rehabilitation services HA aspires to provide to our patients. Along the patient journey from hospital to community, proactive and coordinated rehabilitation care is provided to meet the changing needs of patients. This is carried out with a renewed focus on enhancing service accessibility, appropriateness of care, community partnership, performance monitoring, governance and system infrastructure (**Figure 1**).

Figure 1. New Model of HA Rehabilitation Services

摘要

引言

《康復服務策略》（服務策略）是醫院管理局（醫管局）訂立的一份策略性文件，為醫管局未來五至十年的康復服務發展提供指引。當中闡述康復服務的發展方向、策略以及相關的配套工作，旨在建立適切的服務模式和服務系統基礎設施，以應對與日俱增的服務需求和提升服務質素。我們尤其希望改善現時服務的不足之處，並確保能夠按照病人的需要提供適切的康復護理。

本服務策略主要針對高密度、高複雜性和需要跨專業及跨專科團隊合作的康復服務；並涵蓋醫院至社區的康復治理流程，包括住院、日間和社區服務。雖然服務策略著重描述醫管局的角色，當中亦包含與社區夥伴和社福界的合作，以協助病人順利融入社區。

規劃過程

制訂本服務策略的工作始於 2014 年 10 月。根據醫療服務發展委員會及總監會議的政策方向和指引，我們成立了專責小組，負責監督服務策略的制訂過程。專責小組轄下有兩個工作小組，以中風和髖關節骨折作為例子，分別檢視內科和外科的康復護理流程並提出建議。為了集思廣益，我們邀請了前線的臨床醫護人員、聯網的管理層、總辦事處的行政人員以及病人組織廣泛參與服務策略的制訂過程。

期間，我們進行了海外交流和文獻綜述，以了解國際間康復服務的發展和良好的操作方式；同時，亦進行了數據分析和走訪了各個聯網的醫院，評估醫管局現時的康復服務使用情況，觀察和了解康復服務實際的運作，並找出服

務的缺口和可以改善的範疇。此外，逾 100 名醫生、護士、專職醫療及行政人員參與了兩個由海外顧問帶領的工作坊，一同構思未來的康復服務模式和識別可以改善的範疇。我們亦定期向各相關的委員會作出簡介和收集意見，包括臨床統籌委員會和中央委員會及其附屬的小組委員會和工作小組、專職醫療組別協商委員會，以及病人諮詢委員會。

我們於 2016 年 2 月 1 至 26 日就服務策略的初稿展開了諮詢，專責小組在詳細分析和討論所得的意見後，優化了服務策略的內容，並提交總監會議審視以及醫療服務發展委員會通過。

服務策略

本服務策略旨在建立一個可持續發展的護理模式，涵蓋醫院至社區的康復服務，並透過提供積極和協調的康復護理，照顧不同病人的康復需要。透過服務策略裏的五個策略性方針，醫管局將致力改善病人的治理成效，協助他們順利融入社區，並提升整體服務的效率：

1. **通過整體的服務系統規劃和提供康復服務，擴大服務涵蓋範圍和提高便捷度**
2. **提供切合病人康復需要的護理**
3. **加強與社區夥伴的協作，以幫助病人癒後融入社區**
4. **加強服務監察，以持續改善康復服務的質素**
5. **加強管治和發展相關的配套，以有效地推行康復服務的發展**

就著以上的策略性方針和可以改善的範疇，我們制訂了相應的策略，應付醫管局康復服務現有和預計的服務缺口。

1. 通過整體的服務系統規劃和提供康復服務，擴大服務涵蓋範圍和提高便捷度

可改善的範疇

康復護理在提升病人自理能力方面擔演著重要的角色，因此各聯網和醫院近年均致力發展康復服務。但由於缺乏統一的策略和方針，相關的發展較為緩慢，因此康復服務的涵蓋範圍和便捷度仍然不足，而病情和服務需要相近的病人亦往往獲得不同的護理服務。再者，由於週末沒有住院的專職醫療康復服務，在星期五接受手術的病人未能盡早獲得康復支援。除此之外，日間康復服務比住院服務的供應相對有限。因老人科日間醫院有指定的名額給予長者，所以年長的病人較容易獲得日間康復服務。整體而言，現時的服務系統未能妥善照顧有特殊康復需要的病人，尤其缺乏對年輕病人的支援，包括有關社交支援、心理壓力、復職、駕駛和性生活方面的康復需要。

策略

醫院以整體服務系統為原則來規劃和提供康復服務，並建立以聯網為本的服務網絡。透過提升住院、非住院（包括日間和門診）以及社區康復服務的涵蓋範圍和便捷度，改善病人接受康復服務的體驗。策略包括：

- 在病人的康復治理流程中設立多個切入點，讓病人在不同階段也可以得到所需的服務
- 擴大住院專職醫療康復服務的涵蓋範圍，尤其是加強週末和公眾假期的服務，以加快病人的康復進度和提升服務效率
- 增加日間康復服務，讓病人能夠盡早出院，安在家中和社區治理及痊癒
- 為年輕病人提供更便捷的康復服務，並照顧他們特殊的康復需要和對日間康復服務的需求
- 集中在指定的醫院或中心提供數量較少但複雜性高的康復服務。透過集中醫護人員的專業知識、經驗、培訓以及先進科技和專用設施，給予病人更佳的醫療成效

2. 提供切合病人康復需要的護理

可改善的範疇

良好的康復服務有賴不同專業和不同專科的醫護人員群策群力。然而，我們缺乏統一的評估工具來量度病人的康復潛力和監測他們的康復進度；因此，往往未能將病人的康復需要分流，亦未能根據其康復需要的變化而提供相應的護理。病人會在其康復過程中在不同的護理設施接受治理，由於缺乏清晰的轉介準則，設施之間的服務聯繫和協調因而亦未如理想。

策略

按病人的康復需要作出分流，確保他們能夠在適當的時間和地點獲得適切的護理。我們須根據協定的臨床程序和指引，按病人的需要訂定護理計劃，並協調相關的服務。策略包括：

- 使用統一的評估工具，在治理流程開始的時候根據病人的康復需要作出分流
- 按病人的需要制定臨床流程和及早提供出院規劃
- 在病人的急症病情穩定後，盡早提供康復護理
- 就康復流程不同的階段制訂統一的轉介準則
- 由指定的聯繫人員負責統籌急症至延續護理以及醫院至社區的康復服務
- 採納跨專科的合作模式，例如由骨科和老人科的醫護團隊共同治理患有肌肉骨骼疾病而且風險較高的年長病人

3. 加強與社區夥伴的協作，以幫助病人癒後融入社區

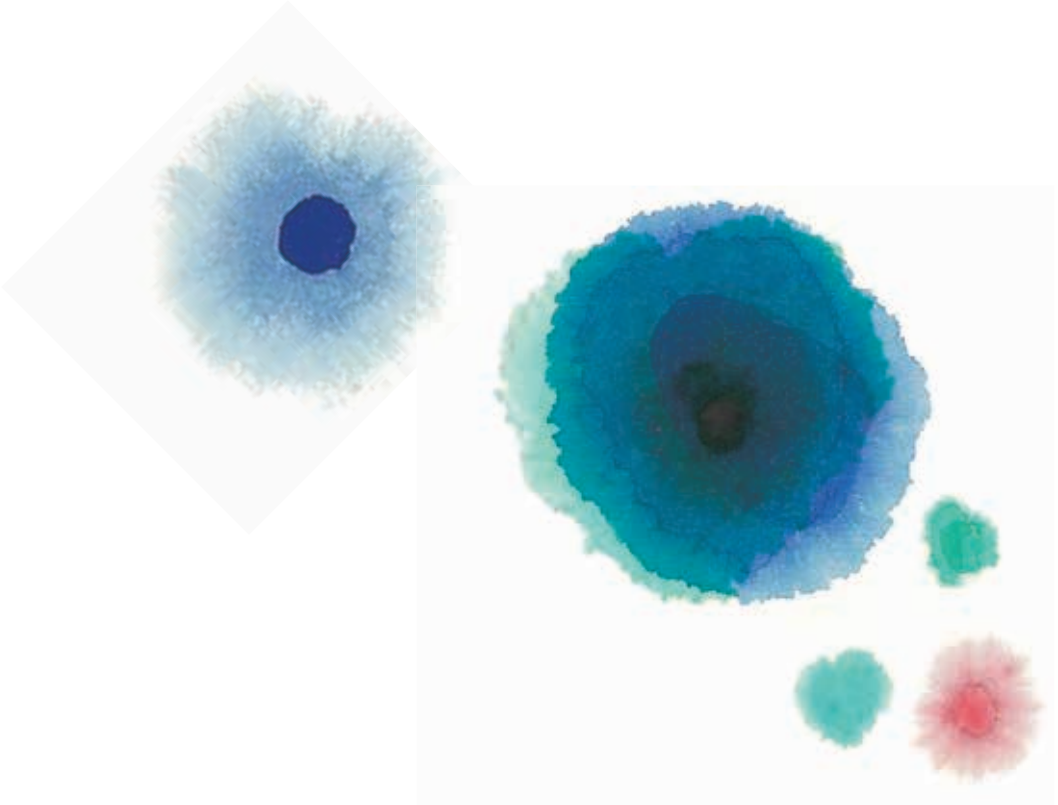
可改善的範疇

醫管局聯網和醫院一向與社區夥伴緊密合作，協助病人出院和重返社區生活。但是，有關的合作模式存在差異，各聯網和醫院在動用和協調社區資源方面的能力亦有所不同。雖然有些醫院已經就社區協作成立了既定的平台，部份醫院在這方面仍然處於早期的發展階段。

策略

醫管局致力加強與社區夥伴的協作，讓病人出院後能夠得到更好的支援和保健服務。我們希望盡量提升病人的活動能力和健康狀況，讓他們能夠重返社區生活。策略包括：

- 通過既定的平台加強與非政府機構和病人組織的合作，以更有效地運用和協調社區資源，提供出院後的康復服務、社區支援和長期的保健服務
- 促進跨部門和跨界別的合作，以加強醫療界和社福界於康復服務上的銜接，協助病人重返社區生活
- 視病人及其照顧者為合作夥伴，讓他們能夠積極參與自己的健康管理



4. 加強服務監察，以持續改善康復服務的質素

可改善的範疇

現時，關於醫管局康復服務表現和成效的數據有限。大部份現存的數據是根據個別聯網和醫院所訂立的準則去收集，並主要依靠員工以人手記錄。

策略

為改善康復服務的質素，我們必須制訂服務表現指標，以識別、評估和監察臨床成效和服務效能。策略包括：

- 統一康復護理流程中不同階段的數據收集和分析
- 制訂臨床指標和主要表現指標，以持續改善服務的質素

5. 加強管治和發展相關的配套，以有效地推行康復服務的發展

可改善的範疇

康復服務涉及不同的服務範疇，包括急症至延續護理及醫院至社區的服務。為有效領導服務的發展和協調不同的康復服務，清晰和明確的管治架構和程序至為重要。

就企業層面的管治，我們設立了康復服務中央委員會，就不同的康復服務範疇亦成立了工作小組。然而，中央委員會和各工作小組的角色、職能及連繫並不清晰。至於聯網層面，雖然各個聯網已經成立了康復服務委員會，但是在服務的協調、規劃、推行和監察各方面，並不是每一個委員會都能夠發揮其積極的作用。除此之外，康復服務的系統基建和配套亦有不足的地方，包括人手、交通安排、醫院和設施的設計、醫療科技和設備以及資訊科技系統的支援等。

策略

我們必須強化康復服務在企業和聯網層面的管治架構。

- 在企業層面，康復服務中央委員會將繼續監察醫管局康復服務的整體發展。委員會與各臨床統籌委員會和中央委員會轄下的工作小組合作，為特定的疾病或病況訂定康復服務模式。

- 在聯網層面，我們會強化現有的康復服務委員會之職權，以有效地領導聯網康復服務的發展為原則。我們建議各聯網在其管治架構下委任一位康復服務總監，負責帶領聯網康復服務的規劃、撥款申請，推行計劃和監察服務質素。

同時，為有效地落實上述各項策略，我們必須發展相關的配套和基建，包括：

- **人力資源**

  要建立敬業能幹的專業團隊應付增長的服務需求，就須作出長遠的人手規劃，例如配合日間康復服務發展所需要的人力資源。當中有必要清晰介定不同專職醫療人員的角色和職責，同時可透過跨專職模式，讓不同的專職醫療人員一起分擔某些共通的工作，有助促進以病人為中心的康復服務和簡化病人流程。除了發展跨專職護理的培訓，亦應加強複雜和特殊康復服務的培訓，以填補現時的不足。

- **交通安排**

  部份病人出院後需要前往日間中心接受日間康復服務。可是，有不少身體殘疾的病人會因為交通不便而放棄這些服務，因而未能在社區繼續改善他們的活動能力。由此可見，交通服務或支援是加強日間康復服務的先決條件之一。

- **醫院和設施的設計**

  康復服務的擴展和改善往往受到現存的基礎建設所限制。長遠而言，醫管局致力改善醫院和設施的設計，以更有效地提供康復服務。例如，我們提倡在急症醫院設立康復病房或大樓、設立特定的日間康復服務設施、在病房或病房的同一樓層設置康復服務設施，以及發展長者友善和無障礙設施，以配合病人的需要。

- **醫療科技和設備**

  為有效地推行康復服務，我們會協調並適時地採納和推行合適的醫療設備和輔助技術。

- **資訊科技系統**

  我們必須改善醫院的臨床管理系統，以支援臨床程序和指引的執行、臨床人員的溝通和服務的監察。此外，我們應考慮透過流動裝置和智能手機應用程式發展電子康復服務，以提升病人的健康管理能力。

推行和監察

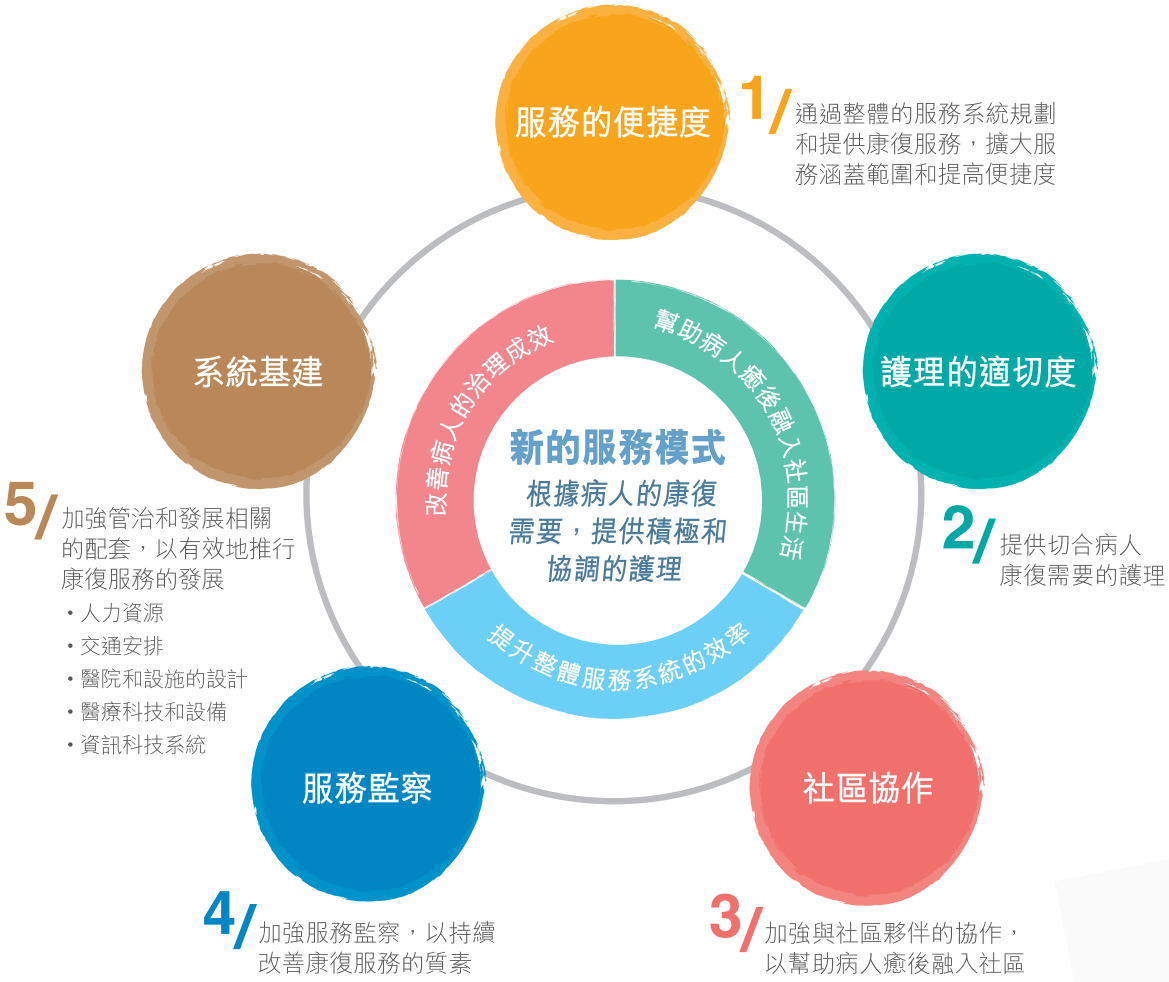
本服務策略的推行需要各持份者的通力合作，亦需要臨床領袖、聯網管理層和醫管局總辦事處的支持和領導。我們會因應服務需求的優先次序，以及臨床和聯網配套的成熟程度，以循序漸進的方式落實所述的策略。當中不少的服務策略只需透過建立臨床共識就能夠推行，例如制定共同的臨床流程和指引，以及統一病人的評估和轉介準則等。至於部份需要額外資源推行的策略，可透過醫管局周年工作計劃的機制，申撥所需資源。

我們會在不同的層面監察服務策略的推行，主要透過醫管局現有的服務監察機制，包括周年工作計劃的監察機制和主要表現指標的制訂，從而確保能有效地運用資源，適當地推行各項策略。

總結

透過各方的共同努力，《康復服務策略》闡述了醫管局期望為病人提供的新康復服務模式。由醫院至社區的各個康復治理階段，我們會因應病人不同的康復需要而提供適切的康復服務。同時，會透過加強康復服務的便捷度、適切度、社區協作、服務監察、管治以及系統基建和配套，實現這個新模式 (**圖 1**)。

圖 1 ：醫管局康復服務新的服務模式



5/ INTRODUCTION

Setting the Scene for Development of the Strategic Service Framework for Rehabilitation Services

Rehabilitation care is essential to enhance patients' functional independence and facilitate their participation and integration into the community. It plays an integral role in the healthcare system to support the patient journey across the healthcare continuum. Worldwide, it has been regarded as one of the top priorities in meeting the healthcare challenges, keeping people healthy and out of hospitals. In order to cope with the rising demand and improve the quality of our rehabilitation services, a comprehensive framework to guide the future service development is warranted in HA.

According to the World Health Organisation, rehabilitation is defined as a set of measures that assist individuals who experience, or are likely to experience, disability to achieve and maintain optimal functioning in interaction with their environments[1].

More than one billion people or about 15% of the world's population live with some form of disability[2]. Its prevalence is on the rise due to an ageing population and global increase in chronic diseases. Patients with disabilities suffer from impairments, activity limitations and participation restrictions resulting from the dynamic interaction between health conditions, personal and

1 *World report on disability. Geneva: World Health Organisation; 2011.*

2 *Ibid.*

environmental factors[3]. Rehabilitation enables them to maintain their maximum independence, full functional ability, and full participation in all aspects of life[4].

Evidence supports the benefits of better rehabilitation care at both patient and system levels. At the patient level, rehabilitation has been shown to improve functional outcomes, reduce patient mortality and shorten hospital length of stay. At the system level, it helps to relieve the pressure on acute hospital care, decrease the burden of disability in the community and lower the overall healthcare cost[5,6,7,8]. Development of rehabilitation services is therefore regarded as one of the top priorities worldwide to meet the healthcare challenges, keep people healthy and out of hospitals[9]. Global action has to be taken to meet the rehabilitation needs for people with disabilities[10].

Currently, HA provides a wide range of rehabilitation services to patients suffering from disability after an injury or due to illnesses. The rehabilitation services include inpatient rehabilitation care in acute and extended care settings, ambulatory service comprising Geriatric Day Hospitals (GDHs), rehabilitation day programmes and allied health outpatient (AHOP) service, as well as community outreach service. However, considerable variations and gaps exist in the provision of rehabilitation services across HA.

HA is also challenged with a high demand for its rehabilitation services due to population growth and ageing, as well as increasing prevalence of chronic health conditions such as diabetes, hypertension, osteoporosis, stroke, pulmonary and coronary heart diseases. Traditional reliance on acute inpatient care with focus on treatment and procedures risks the sustainability of the healthcare service in coping with the rising service needs. Inadequate rehabilitation care results in prolonged hospital stay, barriers to discharge, poor integration into the community and growing pressure on our healthcare system. It has become the bottleneck affecting multiple care pathways,

3 *International classification of functioning, disability and health: ICF. Geneva: World Health Organisation; 2001.*

4 *Convention on the rights of persons with disabilities. New York: United Nations; 2006.*

5 *The national service framework for long term conditions. London: Department of Health; 2005.*

6 *Medical rehabilitation in 2011 and beyond. London: Royal College of Physicians; 2010.*

7 *Stott D, Handoll H. Rehabilitation of older people after hip (proximal femoral) fracture. Cochrane Database of Systemic Reviews. 2011;(8):ED000023.*

8 *New South Wales rehabilitation model of care. New South Wales Agency for Clinical Innovation; 2015.*

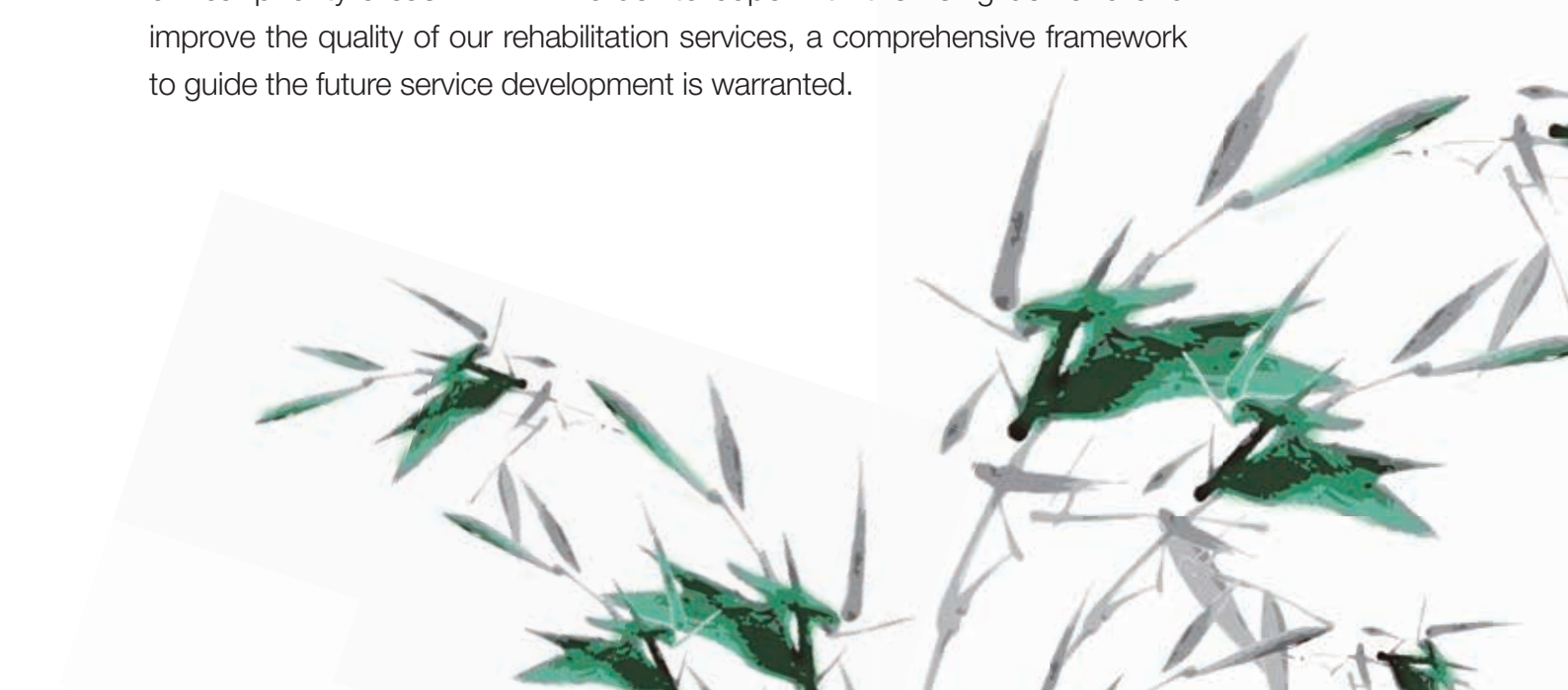
9 *Statewide rehabilitation service plan 2009-2017. Adelaide: Department of Health, South Australia; 2009.*

10 *Global disability action plan 2014-2021. Geneva: World Health Organisation; 2014.*

and recurring service gaps in rehabilitation care were identified during the formulation of previous HA Strategic Service Frameworks for Elderly Patients and Coronary Heart Disease.

Moreover, rehabilitation care is broad and complex, spanning through multiple disease pathways with multi-disciplinary and cross-specialty involvement. An effective service model and system infrastructure have to be developed so as to meet the rising service demand, ensure the delivery of appropriate level of care with reference to the patients' needs and improve the rehabilitation services in HA.

In this context, rehabilitation services are now considered one of the top clinical priority areas in HA. In order to cope with the rising demand and improve the quality of our rehabilitation services, a comprehensive framework to guide the future service development is warranted.



6/ SCOPE

What the Strategic Service Framework for Rehabilitation Services is about

The Strategic Service Framework for Rehabilitation Services aims to guide the development of HA rehabilitation services in the next five to ten years. It sets out the strategic directions and strategies for building up the service model and system infrastructure to address the existing and anticipated service gaps. With a focus on the role of HA, it will cover the rehabilitation care pathway from hospital to community.

The Framework sets out the strategic directions that HA will pursue to realise our aspirations for better quality rehabilitation services. It is mainly targeted at rehabilitation services of high intensity and complexity which require multi-disciplinary and cross-specialty collaboration. Stroke and hip fracture rehabilitation are selected as illustrative examples of the service model under the medical and surgical streams respectively. Besides multi-disciplinary and cross-specialty involvement, consideration has been taken to their relatively high patient volume, long hospital length of stay, high transfer rate to extended care, as well as high rehabilitation intensity and complexity.

The Framework covers the rehabilitation care pathway from hospital to community, including inpatient, ambulatory and community services. While focus is given to the role of HA, the importance of collaboration with community partners and the welfare sector is also emphasised and addressed for facilitating patients' transition to and integration into the community, especially for long-term maintenance care and social support.

As regards mental and paediatric rehabilitation services, in view of their uniqueness and importance, the published HA Mental Health Service Plan, and the ongoing discussion on paediatric service organisation in the context of development of the Hong Kong Children's Hospital, they are considered to be more appropriately addressed outside this Framework.

Although specific operational details for implementation are beyond the scope of this Framework, it provides an overarching blueprint for HA clinicians and executives to align and coordinate their service development initiatives on rehabilitation, and to translate the Framework into actions.

7 / PLANNING PROCESS

How We Develop the Strategic Service Framework for Rehabilitation Services

A designated Taskforce was set up to oversee the development of the Strategic Service Framework for Rehabilitation Services in HA. A highly participative and broad engagement approach was adopted for formulating the Framework, with views and inputs collected from our clinical frontline staff, cluster management and Head Office executives, as well as patient groups.

Project Governance

Under the policy directions and guidance of the Medical Services Development Committee (MSDC) and Directors' Meeting, a designated Taskforce was set up to oversee the development of the Framework. The Taskforce was under the co-chairmanship of the Director of Strategy and Planning and the Director of Cluster Services of HA. The terms of reference and membership of the Taskforce are set out in **Appendix 1**. Under the Taskforce, two Working Groups (**Appendix 2**) were formed to review and advise on the rehabilitation care pathways in the medical and surgical streams respectively, using stroke and hip fracture as illustrative examples. A project team from the Strategy and Planning Division was responsible for the coordination and executive support of the project.The overall governance structure of the project is illustrated in **Figure 2**.

Figure 2. Project Governance Structure

Formulation Process

The development of the Framework commenced in October 2014. The process consisted of a review on existing rehabilitation services, engagement of stakeholders, development and prioritisation of strategies, consultation and approval of the Framework. A highly participative and broad engagement approach was adopted with the involvement of clinical frontline staff, cluster management and Head Office executives, as well as patient groups.

During the formulation process, overseas exchange and literature review were conducted so as to understand the international development and good practices on rehabilitation services. In addition, the project team worked closely with clinical colleagues on the statistical analysis to evaluate the existing utilisation pattern of rehabilitation services in HA and identify potential service gaps.

Two workshops on medical and surgical stream rehabilitation services were held in November 2014, facilitated by an overseas consultant. The aim was to brainstorm on the aspired service model and identify opportunities for service improvement. More than 100 participants including doctors, nurses, AH professionals and executives attended the workshops. Based on initial ideas generated from the workshops, a series of Working Group and subgroup meetings were organised for detailed discussion on distinct parts of the rehabilitation care pathway.

Visits to all clusters were carried out in parallel, which covered facilities ranging from acute to extended care, and ambulatory to community care. Besides opportunities for the project team to meet the clinical frontline staff and cluster management, the visits also strengthened the team's understanding of the existing rehabilitation service network and provision. At the same time, regular briefings and presentations were made to relevant Coordinating Committees (COCs), Central Committees (CCs), their sub-committees and working groups, the Allied Health Professions Staff Group Consultative Committee as well as the Patient Advisory Committee (PAC) for feedback collection.

All the findings and recommendations were put forward to the Taskforce for formulating the Framework. Reports were also made to the Directors' Meeting and MSDC on a regular basis, with direction and advice sought from members.

Consultation on the draft Framework was conducted between 1 and 26 February 2016, to solicit feedback and suggestions from key stakeholders. These included senior management, frontline clinical staff, relevant COCs, CCs, their sub-committees and working groups, other relevant committees, the PAC as well as related patient groups. The responses and comments received were carefully considered and deliberated by the Taskforce. Subsequently, the refined Framework was submitted to the Directors' Meeting for endorsement and the MSDC for final approval.

8/ CURRENT REHABILITATION SERVICES IN HA

What We are Doing Now

The Central Committee on Rehabilitation (CC(Rehab)) sets up policy and oversees the development of rehabilitation services across HA, while the committees on rehabilitation services in each cluster develop and coordinate their respective rehabilitation services according to the policy overlay. Currently, HA provides a wide range of rehabilitation services including inpatient rehabilitation care in acute and extended care settings, ambulatory service as well as community outreach service. The services are provided by professionals including doctors, nurses and various AH disciplines.

HA provides rehabilitation services to patients suffering from disability after an injury or due to illnesses. Rehabilitation starts in the acute phase and may continue after discharge to the community. It aims at optimising and maintaining the functional capacity of patients, and maximising their independence for better integration into the community.

Service Arrangement

The arrangement of rehabilitation services differs in the seven clusters, due to historical reasons as well as variation in the availability of hospital physical space.

A mix of acute and convalescent/rehabilitation (C/R) wards within the same hospital block is found in hospitals such as Ruttonjee Hospital, United Christian Hospital and Pok Oi Hospital. Other hospitals like Tuen Mun Hospital and Caritas Medical Centre have co-located their rehabilitation block within the same hospital campus. In these hospitals, the same clinical team is responsible for the care of the patients from acute to rehabilitation phase.

There are also hospitals in HA mostly providing C/R services. These hospitals usually pair up with an acute hospital within the same cluster in providing continuum of care to the patients. When their condition is stabilised but still

requires inpatient rehabilitation care, the patient will be transferred from the acute hospital to the C/R hospital. For example, Tung Wah Eastern Hospital receives patients from Pamela Youde Nethersole Eastern Hospital for rehabilitation care, while Wong Tai Sin Hospital provides inpatient rehabilitation service for patients from Kwong Wah Hospital and Queen Elizabeth Hospital.

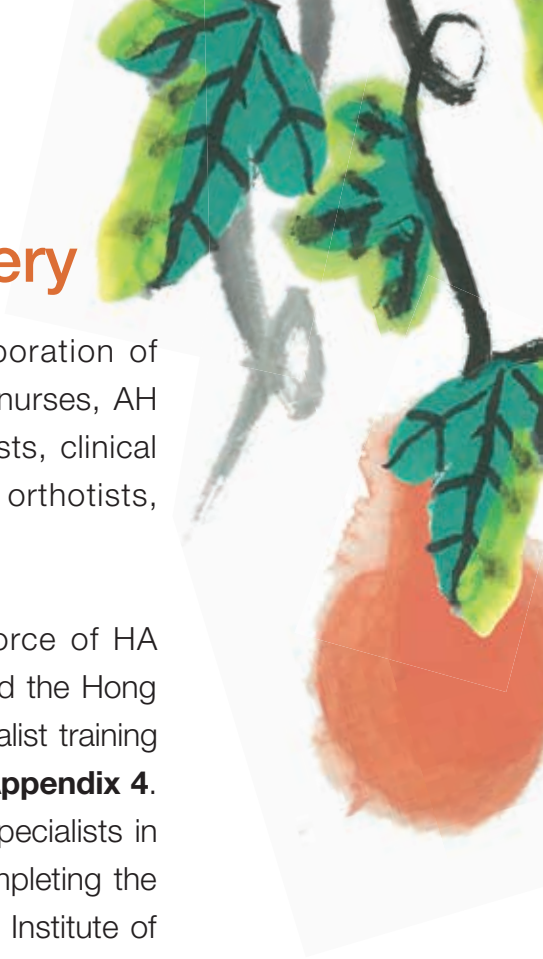
Sometimes, cross-cluster service arrangement is required due to physical constraints in some of the hospitals. For instance in the Kowloon Central Cluster, besides providing rehabilitation support for patients from Queen Elizabeth Hospital which is the only acute hospital in the cluster, Kowloon Hospital is also providing rehabilitation services to medical and orthopaedic patients from United Christian Hospital in the Kowloon East Cluster.

Meanwhile, service networking is in place for highly specialised and low volume rehabilitation services. For example, the MacLehose Medical Rehabilitation Centre, Kowloon Hospital and Tai Po Hospital are the designated spinal cord rehabilitation centres in HA.

Governance Structure

A two-tier structure is adopted to govern the provision of rehabilitation services in HA. The CC(Rehab) oversees the HA rehabilitation services. It comprises the Cluster Rehabilitation Service Coordinators, Cluster Clinical Stream Coordinators (Allied Health), nursing representatives and Head Office executives. Its membership and terms of reference are set out in **Appendix 3**.

At the cluster level, committees on rehabilitation services are in place to coordinate their respective rehabilitation services according to the policy overlay set by the CC(Rehab). Recently restructured in 2013, each of the cluster committee is led by a Cluster Rehabilitation Service Coordinator nominated by the respective Cluster Chief Executives (CCEs). Medical representatives from various rehabilitation programmes (e.g. cardiac, pulmonary, stroke, geriatric and orthopaedic rehabilitation), nurses as well as AH professionals are key members of the committees. At the same time, Cluster Clinical Stream Coordinators (Allied Health) are appointed to assist their CCEs in monitoring and planning the AH service.



Key Members in Service Delivery

The provision of rehabilitation services requires the collaboration of professionals from various disciplines. They include doctors, nurses, AH professionals such as physiotherapists, occupational therapists, clinical psychologists, dietitians, speech therapists, prosthetists & orthotists, podiatrists and medical social workers.

There is a wide range of training modalities for the workforce of HA rehabilitation services. The Hong Kong College of Physicians and the Hong Kong College of Orthopaedic Surgeons provide structured specialist training in rehabilitation. The accredited training centers are listed out in **Appendix 4**. Medical physicians or orthopedic surgeons are recognised as specialists in rehabilitation by the Hong Kong Academy of Medicine after completing the sub-specialty training in their respective college. For nurses, the Institute of Advanced Nursing Studies in HA organises post-registration certificate course in rehabilitation nursing, as well as regular short courses and seminars for continuous nursing education in rehabilitation. As regards AH professionals, continuous training programmes are provided by HA's Institute of Advanced Allied Health Studies, with a focus on multi-dimensional competence training on various diseases and treatment modalities in rehabilitation.

Social Welfare Department (SWD) is one of our major external partners in rehabilitation services. Various community support services for people with disabilities or chronic illness are provided to assist them in developing their physical, mental and social capabilities and promoting their integration into the community. Non-governmental organisations (NGOs) and volunteers are also our key partners in providing rehabilitation services, especially when patients are discharged back to the community.

Service Scope

A wide range of rehabilitation services is provided in HA. There are three main components including inpatient, ambulatory and community rehabilitation services. Inpatient rehabilitation is provided in acute and extended care settings. Ambulatory service comprises GDHs, rehabilitation day programmes and AHOP service, while community rehabilitation care includes outreach service and the programme of Integrated Care Model (ICM) for High Risk Elders.

Inpatient Rehabilitation Service

Patients receive inpatient rehabilitation service, when necessary, early in the acute phase of their illness. If further intensive rehabilitation is required to improve the functional state, patients are transferred to extended care settings after stabilisation of their acute condition.

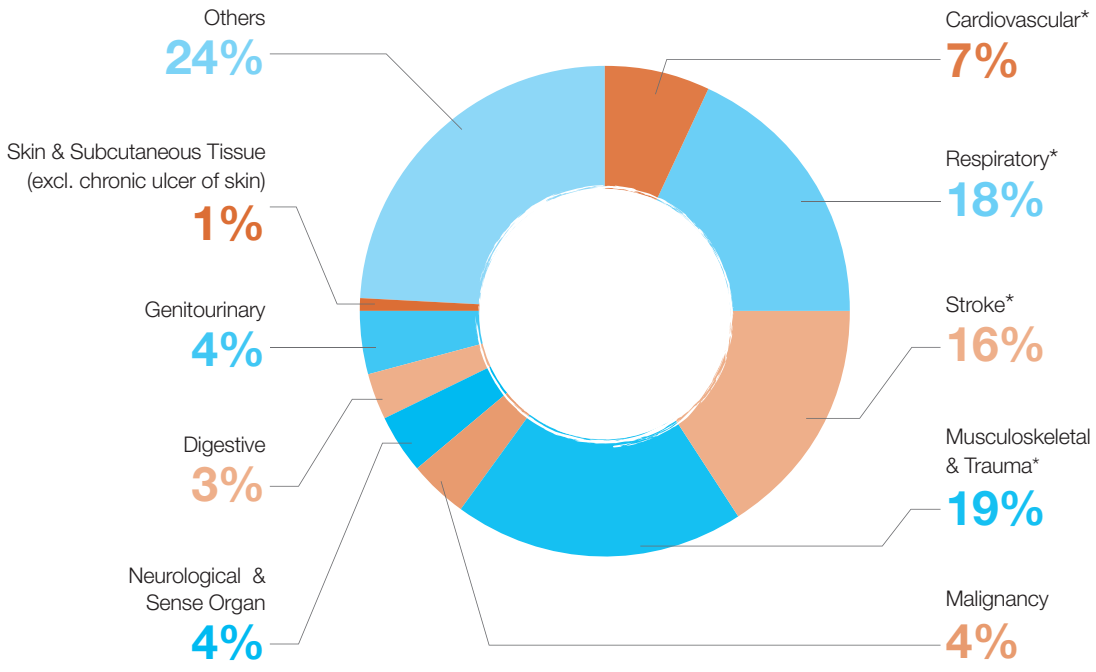
As at March 2015, there were in total 15 987 acute care beds and 4 524 C/R beds in HA (**Figure 3**). The average length of stay was 4.6 days for acute care beds and 17.6 days for C/R beds in 2014/15. The occupancy rates for acute and C/R beds were 87.3% and 87.9% respectively. Among the C/R beds, 88% were managed under the Medicine, Orthopaedics or Rehabilitation specialties. In 2013, among those episodes that the patients were transferred from acute to extended care and subsequently discharged, around 60% of the extended care bed days were occupied by patients of four major diseases groups, namely stroke, cardiovascular diseases, respiratory diseases, and musculoskeletal diseases & trauma (**Figure 4**).

Figure 3. Number of Scheduled Beds in HA

Cluster	Number of Scheduled Beds as at 31 Mar 2015	
	Acute General	Convalescent/ Rehabilitation
Hong Kong East Cluster	1 606	408
Hong Kong West Cluster	2 189	425
Kowloon Central Cluster	1 982	967 Note 1
Kowloon East Cluster	1 799	440
Kowloon West Cluster	3 846	928
New Territories East Cluster	2 721	854
New Territories West Cluster	1 844	502
TOTAL	**15 987**	**4 524**

Note 1: Around 186 C/R beds were for supporting Kowloon East Cluster

Figure 4. Major Disease Groups Utilising Extended Care Beds, 2013



* Musculoskeletal diseases & trauma, respiratory diseases, stroke and cardiovascular diseases are the four major disease groups

Ambulatory Rehabilitation Service

Ambulatory rehabilitation service includes GDHs, rehabilitation day programmes and AHOP service. It mainly provides rehabilitation support to patients after their hospital discharge. Referrals are also received from the Accident and Emergency (A&E) Departments, general outpatient clinics (GOPCs) and specialist outpatient clinics (SOPCs).

GDHs are designated ambulatory healthcare facilities in the hospitals. They play a significant role in facilitating hospital discharge by providing one-stop multi-disciplinary care and rehabilitation to help elderly patients recover from motor, functional and cognitive problems. Among the seven clusters there are a total of 899 GDH places in 19 hospitals, providing around 189 900 attendances in 2014/15. Either a full or half-day programme is provided for each day place, and transport support service is arranged by the hospitals for patients attending the GDHs.

Rehabilitation day programmes, on the other hand, target at patients suffering from a particular kind of disease or condition. The scope and coverage of service vary in the seven clusters. Examples of rehabilitation day programmes include cardiac and pulmonary rehabilitation programmes that provide multi-disciplinary rehabilitation services in day care settings. In 2014/15, the total attendance of rehabilitation day programmes was around 75 000. There are currently no designated facilities or places for these programmes.

At the same time, AH professionals of different disciplines provide outpatient rehabilitation service at AH clinics. In 2014/15, there were over 2 300 000 AHOP attendances in HA. The referral sources for AHOP service include the A&E Department, discharged inpatients or day patients, GOPCs, SOPCs, Department of Health, other government departments as well as the private sector.

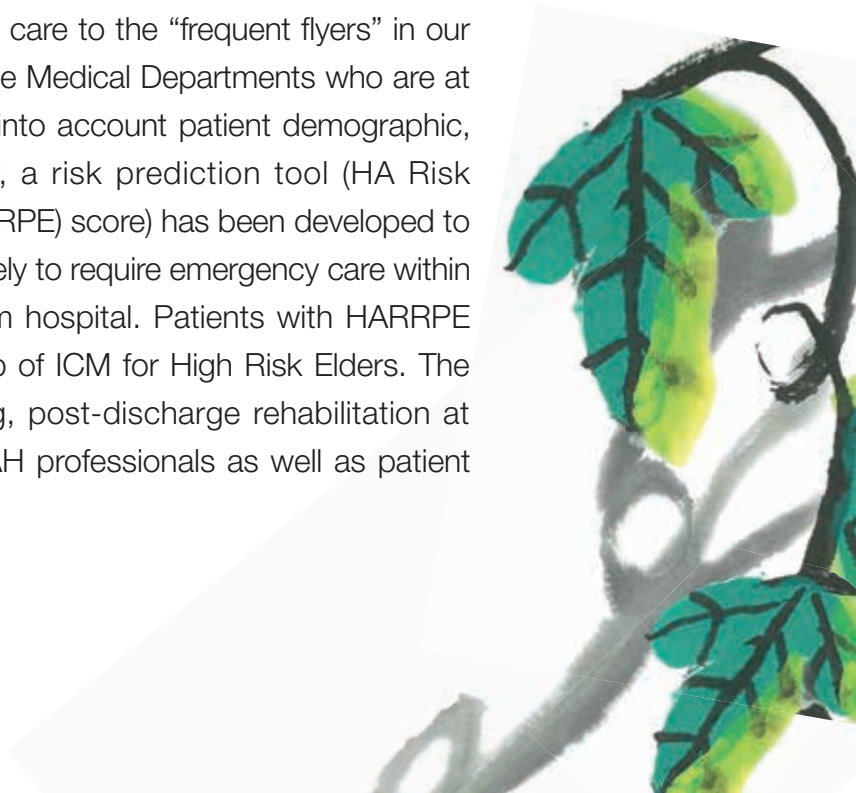
Community Rehabilitation Service

The community rehabilitation service in HA aims to enhance patients' daily living skills and facilitate their re-integration into the community. There are different forms of outreach service provided by the hospital teams in the community, such as AH community service, Community Nursing Service (CNS) and Community Geriatric Assessment Team (CGAT). The target patients are those who are either too frail for ambulatory rehabilitation or in need of specific assessment at the home or work environment. The latter usually require lifestyle changes to accommodate their functional incapability.

On AH community service, there were around 32 500 outreach visits conducted by AH professionals in 2014/15, comprising pre-discharge visits for assessment and modification of home or work environment, as well as post-discharge rehabilitation training and case management.

CGAT is a community-based geriatric service that provides outreach medical consultations, case management, nursing care and rehabilitation interventions at old age homes. On the other hand, CNS offers a wide range of services to enhance patients' self-care ability; empower patients and carers towards self-reliance on illness management; as well as promote rehabilitation through active liaison with supportive network across clusters and the community.

Since 2011/12, HA has implemented the ICM for High Risk Elders after a successful pilot of the Integrated Discharge Support Programme for Elderly Patients from 2008 to 2010. The ICM for High Risk Elders aims at providing integrated, comprehensive and continuous care to the "frequent flyers" in our system. Its targets are elderly patients in the Medical Departments who are at high risk of hospital readmissions. Taking into account patient demographic, clinical and hospital attendance history, a risk prediction tool (HA Risk Reduction Programme for the Elderly (HARRPE) score) has been developed to identify high risk elderly patients who are likely to require emergency care within a relatively short time after discharge from hospital. Patients with HARRPE score higher than 0.2 are the target group of ICM for High Risk Elders. The service includes early discharge planning, post-discharge rehabilitation at GDHs, outreach service by nursing and AH professionals as well as patient



and carer empowerment. Collaboration is also forged with NGOs to provide home support service for these high-risk elderly patients after hospital discharge. An evaluation of the pilot programme demonstrated that for every 1 000 patients recruited into the programme over a 90-day post-discharge period, there were 16% reduction in the number of A&E attendance as well as in emergency admissions to medical wards, and 15% reduction in the acute bed days in medical wards. The ICM for High Risk Elders is now implemented in 15 hospitals among all the clusters in HA. It is recently extended to cover some of the elderly patients in the Orthopaedic departments with clinical needs on integrated care planning for post-discharge rehabilitation and social support.

Apart from these, our patients also receive community rehabilitation care from various NGOs through subvention by the SWD. For example, the Community Rehabilitation Day Centres run by NGOs provide time-defined centre-based individual or group rehabilitation training programmes to patients discharged from hospital. They also provide home-based training service, carers training and support as well as day respite care service. Eligible patients are referred by the clinical team of HA for the service. Another example is the Community Rehabilitation Network (CRN) managed by the Hong Kong Society for Rehabilitation, which also provides rehabilitation services for patients in the community, such as rehabilitation courses, therapeutic groups and education seminars. Patients can approach

CRN directly for the services. In general, there are high variations in the scope, capacity and quality of these community rehabilitation services. Formal communication between these service centres and HA is not in place for service arrangement and development.

Other Supportive Services

There are 39 Patient Resource Centres (PRCs) / Health Resource Centres (HRCs) in HA, working closely with more than 200 patient groups in promoting psychosocial support and community integration for patients and carers, establishing platforms for patient and carer empowerment and self-management, as well as acting as an interface in HA's partnership with patients, carers, volunteers and community organisations.

PRCs/HRCs support rehabilitation care through the following core services:

Patient/Carer Empowerment and Support

PRCs/HRCs coordinate and facilitate the collaboration of ex-patients, patient groups and volunteers with healthcare professionals in hospital. Visits are made to patients in the ward and at home to understand their social needs. Empowerment workshops on self-care practices to cope with chronic diseases are also regularly run by PRCs/HRCs and patient groups, particularly for patients with stroke, diabetes, dementia, cancer, renal, cardiac and rheumatic diseases.

Support to Patient Groups

PRCs/HRCs nurture the formation and development of new patient groups. They connect patients or their carers and the relevant patient groups to form a mutual support network. For those more established groups, PRCs/HRCs equip their members as “peer volunteers” through a series of training on communication skills, patient empowerment and psychosocial support. PRCs/HRCs also recruit relevant patient groups to run Patient Support Stations within the hospitals, especially at areas with busy patient traffic such as SOPCs or hospital lobbies, to provide information on community resources as well as assisting patients in finding their way in the hospital.

Volunteer Service and Development

PRCs/HRCs recruit members of patient groups as volunteers to provide psychosocial support to our chronic disease patients and patients requiring rehabilitation. For example, volunteers share thddeir past experiences with the patients and conduct support group activities, enabling new patients to build confidence in their care management and better preparing them for the patient journey in the care continuum.

Community Engagement and Partnership

In order to facilitate better re-integration of patients into the community after their hospital discharge, PRCs/HRCs enhance interfacing and partner with patient groups and NGOs in operating and strengthening the community support network for patients.

9/ REVIEW ON CURRENT PRACTICE

Where We are

The current rehabilitation services in HA are reviewed through data analysis of the service activities, a series of workshops and hospital visits, and discussion through two Working Groups.

A comprehensive review on HA rehabilitation services has been carried out to facilitate the formulation of a strategic service framework. Service gaps as well as good practices are identified during the process, providing a strong basis for developing the framework. Delineated in this chapter are key observations from the analysis pertaining to service accessibility, appropriateness of care, community partnership, performance monitoring, and system infrastructure.

Service Accessibility

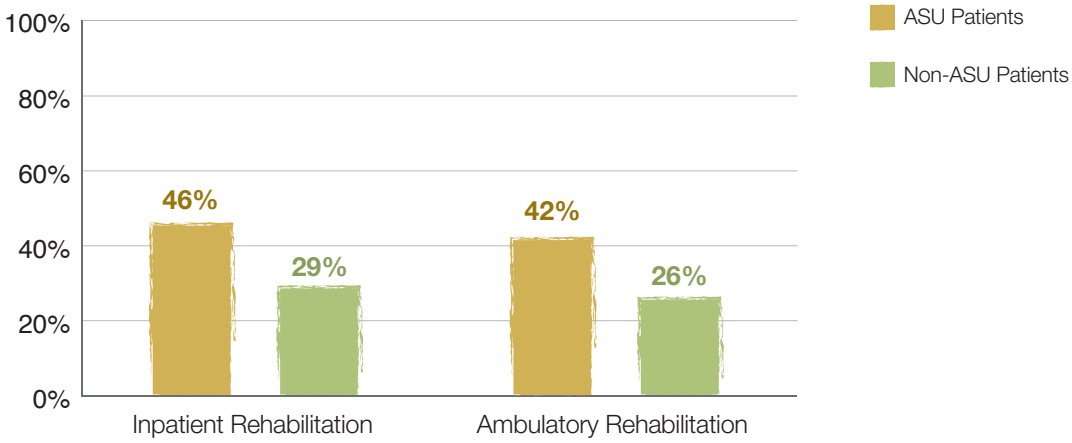
There are variations in the scope and comprehensiveness of rehabilitation services among hospitals and clusters, with considerable gaps in service coverage and accessibility noted in general. The variation in facilities, bed provision, service arrangement and clinical workflow impacts on the equity of access to rehabilitation care in HA.

Access to Rehabilitation Services is Limited by Entry to the Medical Service

Patients with the same disease or condition may receive different levels of care despite having similar needs. Entry to the medical service is often one of the many factors affecting patients' access to rehabilitation care. Using stroke as an illustration, it was found that only half of the stroke patients in HA were ever treated in Acute Stroke Units (ASUs) and the rest were admitted to general wards. ASUs provide multi-disciplinary protocol-driven care to stroke patients, ranging from acute treatment to early rehabilitation and discharge planning. In contrast, care provision in the general wards is generally less structured and not protocol-driven. As a result, the access of patients in the general ward to rehabilitation services is limited as compared to those who are ever treated in ASUs.

In a cohort study on HA stroke service that was conducted with data from January to June 2013, services provided to patients who were ever treated in ASUs and to those who were not admitted to ASUs were compared. The risk factors were not controlled for the two groups of patients due to limitation in the data availability. It was observed that the transfer rate to inpatient rehabilitation was 46% for patients who were treated in ASUs while only 29% for the other group. The referral rate to ambulatory rehabilitation services was 42% for the ASU patients, and 26% for those who did not have access to ASUs (**Figure 5**).

Figure 5. Rehabilitation Service Utilisation of ASU and Non-ASU Patients, January to June 2013



Limited Coverage for Inpatient Rehabilitation During Weekends and Public Holidays

AH professionals play an essential role in the delivery of rehabilitation services. However, their services are very limited during weekends and public holidays in both acute and extended care settings. Only life-saving maintenance therapy is provided on these days, e.g. chest physiotherapy for patients with severe chest infection in intensive care units. As a result, rehabilitation therapy for incapacitated patients is interrupted during the weekends and public holidays. Besides affecting patients' recovery, the interruption also contributes to service inefficiency by unnecessarily prolonging the idle time for inpatient rehabilitation service. For example in the acute orthopedic ward, early mobilisation is recommended to commence on the first day after a patient has undergone a hip fracture operation. However, those with operations done near weekends and public holidays may not have timely access to inpatient rehabilitation therapy because of the current service arrangement.

Patients receiving inpatient rehabilitation in the extended care setting are also affected. Based on the service cohort of HA's hip fracture patients in January to June 2013, the patients had attended only an average of 16 physiotherapy sessions and 14 occupational therapy sessions during their average 24 hospital days in extended care. In other words, less than one physiotherapy or occupational therapy session per day was provided to the patients admitted for inpatient rehabilitation. This is accounted for by the limited availability of AH service during weekends and public holidays. The situation lessens the efficiency of extended care service and may also impede patient flow along the clinical pathway.

Growing Pressure on Inpatient Rehabilitation Service

The current development of rehabilitation services and manpower provision are prioritised to inpatient care. Using stroke as an example, in 2013 up to 86% of HA's stroke patients had received inpatient rehabilitation service in an acute or extended care setting as compared to only 20% and 19% receiving

day and outpatient rehabilitation service respectively. Likewise for hip fracture patients, up to 98% of them had undergone inpatient rehabilitation while only 26% and 17% had access to day and outpatient rehabilitation respectively. The heavy reliance on inpatient care for rehabilitation imposes a significant risk on service sustainability.

In 2013, there were around 18 000 and 6 100 acute admissions of stroke and hip fracture patients in HA respectively. As illustrated in **Figure 6**, the average length of stay of stroke patients was 6.6 days for those who received only acute care. On the other hand, 38% of stroke patients were transferred to extended care, and their total length of stay was up to 46.3 days on average. Meanwhile, hip fracture patients had an average length of stay of 13.2 days when they received only acute care. 70% of them were transferred to extended care and the total length of stay was 35.3 days on average (**Figure 7**).

Figure 6. Average Length of Stay of Stroke Patients, 2013

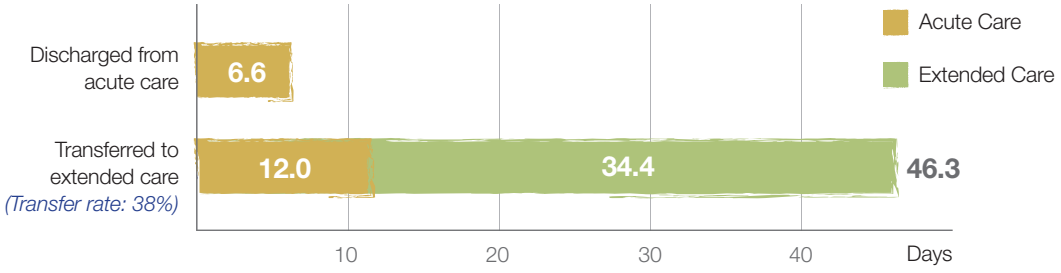
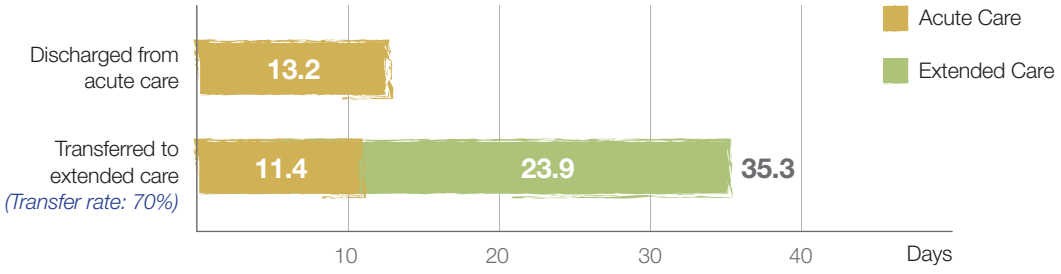


Figure 7. Average Length of Stay of Hip Fracture Patients, 2013



There is strong evidence on the deterioration of physical functions for elderly patients with prolonged hospitalisation[11,12]. The current heavy reliance on inpatient service jeopardises the re-integration of patients into the community and further incapacitates their participation in activities of daily living. Furthermore, the anticipated growing service demand arising from ageing population and increasing prevalence of chronic diseases requires significant increase in the number of inpatient beds, risking the sustainability of the healthcare service. Therefore, it is necessary to revisit the service model and formulate strategies in lessening the burden on inpatient service.

Inadequate Ambulatory Rehabilitation Service as Barrier for Patients' Transition to Community

The access to ambulatory rehabilitation service including day and outpatient rehabilitation is relatively low as shown previously. In this context, ambulatory service may not be readily available to support patients who are ready for discharge but in need of further rehabilitation care, thus creating barriers to their transition back to the community and contributing to unnecessarily long length of stay in hospital. Patients who cannot be discharged from acute care setting due to unavailability of day rehabilitation service will mostly be transferred to extended care for rehabilitation, adding unnecessary pressure on the inpatient rehabilitation service. For patients who are discharged without access to day rehabilitation support, their functional capability may not be optimised which may hinder their ability to integrate into or participate in the community, leading to risks of hospital readmission.

At the same time, it is observed that the role and referral criteria of day and outpatient rehabilitation services are not well defined. There are overlaps in the scope of service and target groups among the GDHs, rehabilitation day programmes and AHOP clinics, indicating that the resources are not efficiently used to cover a wider range of patients.

11 *Ehlenbach WJ, Larson EB, Randall Curtis J, Hough CL. Physical function and disability after acute care and critical illness hospitalizations in a prospective cohort of older adults. Journal of the American Geriatrics Society. 2015;63(10):2061-9.*

12 *Covinsky KE, Palmer RM, Fortinsky RH, et al. Loss of independence in activities of daily living in older adults hospitalized with medical illnesses: increased vulnerability with age. Journal of the American Geriatrics Society. 2003;51(4):451-8.*

The provision of day rehabilitation service other than those in GDHs is also relatively less structured. While geriatric day rehabilitation is led by geriatricians and provided in designated facilities and places in GDHs, the provision of other day rehabilitation service is highly variable. They are developed separately by various specialties, with difference in service provision and target groups noted within and across clusters even for the same type of service. There is also no structured facility and manpower provision for their development.

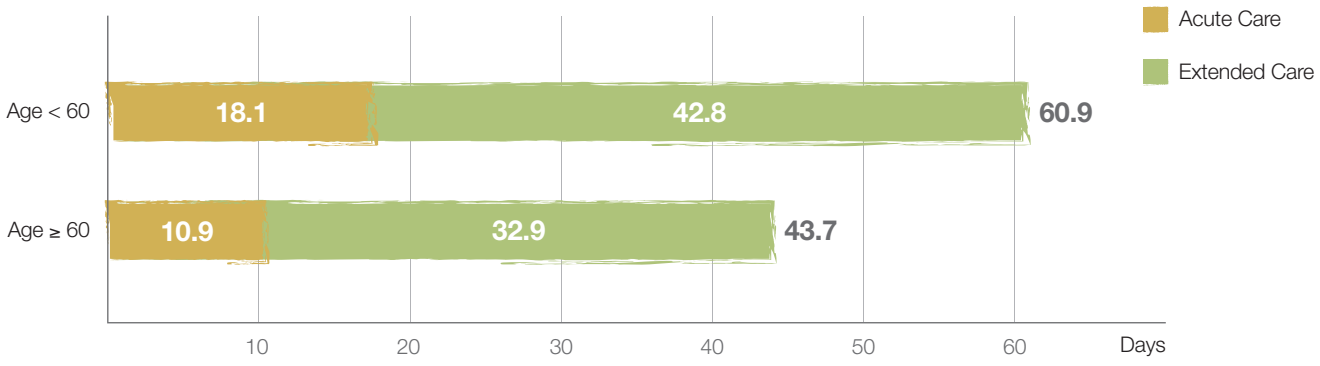
Rehabilitation Needs of Younger Patients are Not Well Addressed

There are considerable numbers of non-elderly or younger age group patients who require rehabilitation services, but their service demands are often underestimated. Specifically, a considerable proportion of around 30% of stroke patients in HA are below the age of 65, while around 20% are under 60 years old. It is noted that younger patients often have difficulties in accessing the rehabilitation services. They often have special rehabilitation needs related to social support, psychological stress, return to work, driving and sexuality issues, which are less likely to be provided in the current system.

Due to a lack of designated day rehabilitation service for younger patients, they usually stay in the hospital for rehabilitation therapy. This contributes to a prolonged length of hospital stay. In 2013, the average length of stay for younger stroke patients (aged below 60 years) was 60.9 days compared to 43.7 days for those aged 60 years or over (**Figure 8**). A proportion of young stroke patients are referred to GDHs upon discharge in the absence of other ambulatory support. However, the capacity in GDHs for younger patients is limited because its priority is given to elderly patients aged 65 years or over. Furthermore, GDHs might not provide the most appropriate care to younger patients, particularly in terms of addressing their special needs, like returning to work.

Therefore, most of the younger patients are either discharged without rehabilitation support or occasionally referred to various discipline-specific AHOP clinics. In 2013, only 15% and 26% of the younger stroke patients received day and outpatient rehabilitation services respectively. Among those referred to AHOP clinics, more than one-third of them attended two or more AH clinics run by different disciplines. Besides frequent travelling for patients to attend the various clinics which may deter their participation in the rehabilitation regimen, inadequate integration and collaboration among disciplines also means that a comprehensive and seamless rehabilitation service could not be provided to the patients.

Figure 8. Average Length of Stay of Stroke Patients Transferred to Extended Care, 2013



Appropriateness of Care

Rehabilitation care involves different specialties and disciplines and occurs in different care settings. Gaps are observed in care coordination along the patient journey, which affect the appropriateness of care and the overall quality of rehabilitation services in HA.

No Common Assessment Tool or Criteria to Stratify Patients' Needs for Rehabilitation

There is no common or structured assessment tool or criterion in HA to stratify patients' needs for rehabilitation, so it is difficult for the clinical team to understand the specific needs of patients and formulate patient-centered care plan. Hence, patients are often transferred to an extended care setting without first having their needs for rehabilitation care differentiated from convalescent care.

The selection of patients for inpatient rehabilitation in extended care settings as well as the timing of the transfer/referral also varies among hospitals and clusters. Some patients receiving inpatient rehabilitation care in hospital may actually be suitable for discharge home with adequate support by ambulatory rehabilitation service. Patients may not be managed at the right place as a result.

Although many hospitals have recently developed their own care protocols, alignment is lacking within or among the clusters. In consequence, patients with the same rehabilitation needs are treated differently. This happens in clusters with more than one extended care hospital receiving patients with the same disease or conditions. Despite that they receive patients from the same acute hospital or from the respective acute units with which they paired up in the clusters, these extended care hospitals are often managed by different clinical teams, and thus separate protocols are developed and adopted. The lack of a common standard of assessment or transfer criteria among the hospital-based protocols has given rise to inconsistency of care in HA.

Cluster-based Orthopaedic Rehabilitation Service in New Territories East Cluster

Orthopaedic rehabilitation service in New Territories East Cluster is arranged as cluster-based, with a Consultant-in-charge appointed to oversee and coordinate the service, as well as well-defined roles for different hospitals. Programme-based care protocols are also put in place so that the acute and rehabilitation teams could work closely together to facilitate smooth patient flow and ensure consistency of care along the care continuum. Protocol-driven care is delivered through a multi-disciplinary team approach involving orthopaedic surgeons, nurses, physiotherapists, occupational therapists, prosthetists & orthotists, dietitians and medical social workers.

Under the arrangement, Tai Po Hospital (TPH) is the designated orthopaedic rehabilitation centre in the cluster. For patients with hip fracture, the operation is carried out at one of the three acute hospitals (i.e. Prince of Wales Hospital (PWH), Alice Ho Miu Ling Nethersole Hospital (AHNH) or North District Hospital (NDH)) before they are transferred to TPH for inpatient rehabilitation if needed. Apart from daily ward round by the orthopaedic surgeons, multi-disciplinary ward rounds and case conferences are conducted on a weekly basis to formulate care and discharge plans. Patients' family members are sometimes invited to join the case conference, particularly when the patients have complex needs or discharge problems. When day rehabilitation service is needed after discharge, it is provided by AHNH, NDH, and Shatin Hospital (for PWH patients). The team also collaborates and networks with community partners and mobilises suitable community resources to support the patients in self-management.

Triaged Rehabilitation Care for Stroke Patients in Kowloon East Cluster

Kowloon East Cluster has developed their own protocol and guideline for triaging stroke patients for clinical management, together with well-defined roles for different hospitals. Functional predictive scores including Barthel Index and Modified Rivermead Mobility Index are used to predict the requirement of hospital stay for stroke patients.

The predicted length of stay (LOS) informs the formulation of care plan. Fast track stroke rehabilitation service is provided by United Christian Hospital for patients with predicted LOS of less than two weeks, and Haven of Hope Hospital for those with two to four weeks. Slow track stroke rehabilitation, on the other hand, is provided at designated beds in Kowloon Hospital for patients with predicted LOS of more than four weeks. The aligned transfer criteria and arrangement have provided a clear patient pathway and facilitated the transition from acute to rehabilitation team. The expectations of patients and their carers were also better managed with a clear care plan.

Inadequate Care Coordination along the Patient Journey

In stroke management, all clusters have designated stroke nurses to provide expert care to the patients from acute phase to rehabilitation. However, their focus is usually on acute stroke care, e.g. assessment for thrombolytic therapy and services in the ASUs. Their roles in linking up various components along the patient journey, from acute to rehabilitation care and from hospitals to community, are not well achieved. Furthermore, the service model and manpower provision of stroke nurses differ among hospitals, leading to variations in the effectiveness and efficiency of the services in delivering appropriate rehabilitation care to meet patients' needs.

Stroke Nurse in Caritas Medical Centre Linking Acute and Rehabilitation Care

In Caritas Medical Centre (CMC), the stroke nurse plays an active role in the management of stroke patients, including immediate patient assessment at the A&E Department or ASU and screening for suitability to thrombolytic therapy. If patients are admitted to general medical wards, the stroke nurse will assess them and arrange admission to ASU when indicated. Data of the CMC stroke cohort in 2014 showed that 74% of the patients were ever treated in ASUs, which was significantly higher than the HA average of around 50%. All the stroke patients in CMC, no matter where they are admitted to, receive the same level of care in accordance with the stroke protocol. The stroke nurse is the key catalyst for the consistency.

Working under the same team of acute and rehabilitation services and taking advantage of the close proximity of the acute ward and rehabilitation block in CMC, the stroke nurse links up the medical teams and members from different disciplines to provide seamless patient care. Apart from direct patient care, the stroke nurse also supports staff training and patient/carer engagement, is actively involved in the community health education and serves as the link person for community resources to support discharged patients.

Meanwhile, multiple AH disciplines provide services to incapacitated patients along their patient journey. It is observed, however, that communication, coordination and collaboration among the disciplines are not adequate to ensure good quality and seamless rehabilitation services. For example, stroke patients are usually provided with physical therapy for ambulation training and occupational therapy for enhancing their ability to perform daily activities, with both therapies serving the same purpose of strengthening the patients' functional capacity to lead an independent and dignified life. However, it is not uncommon for the physiotherapists and occupational therapists to work separately on their assessment, treatment and documentation, without sharing information with each other, which is not conducive to patient-centered care. Furthermore, traditional professional boundaries of different AH disciplines prevent the development of a broader skill-set for the workforce. Patients often need to wait for consultation by multiple AH disciplines, resulting in prolonged hospital stay, or need to come back to the hospital frequently for multiple visits to various AH clinics.

Lack of Formal Collaboration across Specialties

According to 2013 data, the majority of hip fracture patients are elderly, with more than 90% of them aged 65 years or over. Most of them are frail elderly patients suffering from multiple co-morbidities such as diabetes and hypertension and having polypharmacy. Besides orthopaedic surgeons providing surgical and rehabilitation services to these patients, inputs are also required from geriatricians to manage their medical co-morbidities. Various models of collaboration have been attempted. In general, geriatricians' involvement in peri-operative and rehabilitation care for these patients is often inadequate even though the medical condition of patients who have multiple co-morbidities need to be optimised before the operation. Hence, not having timely medical input means a delay to the surgery. Likewise, during the post-operative phase, patients wait in the orthopedic units to be seen by the geriatricians to stabilise their medical condition, often resulting in unnecessarily prolonged length of hospital stay and delay in the referral to extended care unit for rehabilitation.

Community Partnership

Variation in the Collaboration with NGOs and Patient Groups

There are ongoing collaborations in different hospitals and clusters with community partners e.g. patient groups and NGOs to facilitate patients' discharge and transition to the community. But there are variations in the practice. Some hospitals have established structured platforms for regular collaboration with NGOs to support their patients in the community. Other hospitals, however, are in the early phase of community partnership, so patients will need to navigate through different systems on their own to obtain the required community support and resources. Consequently, patients of these hospitals are often less supported in the community which affects their ability to lead an active life in the community.

Inadequate Patient and Carer Empowerment

Patient/carer empowerment emphasises on information sharing, transfer of responsibility and enhancement of patients' ability to manage their own health. It brings about more active participation and improves the satisfaction of both patients and their carers along the patient journey. Patient empowerment programmes have been introduced in HA in the past few years, but they are mainly targeted at patients with specific chronic diseases e.g. diabetes and hypertension, and their capacity is limited.

PRCs/HRCs in the hospitals also play an important role in patient/carer empowerment. Each hospital has their specific target groups, depending on the patient population they are serving and the scope of their hospital service. Some of the centres provide a wide range of services, while others are limited by physical constraints. The services vary, ranging from purely information dissemination to a comprehensive scope of service that includes volunteer service, patient education as well as support for lifestyle changes. It is not a common practice for hospitals to set up a governance structure for the PRCs/HRCs, which may account for underdevelopment of the service.

Structured Platforms for Community Partnership in Hong Kong East Cluster

Hong Kong East Cluster takes a proactive approach in partnering with its community stakeholders to support patient discharge. Besides setting up a cluster-level Community Services Committee, chaired by the Service Director (Primary & Community Health Care), to oversee the community service arrangement and the development of PRCs in different hospitals, structured platforms and panels are also put in place to advise the Committee on developing services that cater for different patients' needs. Tailor-made programmes for patients are put together by the healthcare professionals and community partners such as patient groups, NGOs, welfare services, district council, local bodies, schools and volunteers. The structured and joint effort improves patient access to a wide range of community support services.

Performance Monitoring

Data regarding the outcome and effectiveness of rehabilitation services in HA are currently quite limited. Existing data are mostly local measurements captured manually in the Clinical Management System (CMS), which are not standardised across the continuum of rehabilitation care. In the absence of agreed assessment tools along the patient journey, there are little incentives for compliance with data entry, so the input rate is low, especially with regard to long-term outcome data. There are also no indicators or systematic analysis for monitoring the quality and performance of HA rehabilitation services.

Outcome Monitoring of Orthopaedic Rehabilitation Service in Kowloon West Cluster

In 2013, Caritas Medical Centre was designated as the orthopaedic rehabilitation centre in Kowloon West Cluster (KWC) after a reorganisation of the cluster's convalescent and rehabilitation services. Since then, regular clinical audits have been conducted to monitor the clinical outcome of orthopaedic rehabilitation care. A progress report on KWC orthopaedic rehabilitation service is published regularly to share the findings at the cluster level. One of the outcome measurements is the incidence rate of patients discharged back to their usual residence (by comparing their place of residence before admission and their discharge destination), which acts as a proxy for regaining the functional ability. Besides performance monitoring, the systematic data collection and analysis also facilitates service planning for better patient care.

System Infrastructure

A number of gaps related to the system infrastructure of rehabilitation services have been identified, including those pertaining to the governance structure for leading the overall service development, manpower arrangement, transportation, physical facilities, and information technology (IT) support.

Governance

At the corporate level, the CC(Rehab) is in place to advise on the clinical standards, service development, training and manpower planning of rehabilitation services. Its membership comprises representatives from the seven clusters, including rehabilitation specialists, nursing and AH professionals, and Hospital Chief Executives of some extended care hospitals with rehabilitation services, as well as Head Office executives (**Appendix 3**). In recent years, several working groups have also been formed to discuss the rehabilitation care models of specific service areas, such as the Joint Working Group on Cardiac Rehabilitation and the Working Group on Pulmonary

Rehabilitation Programme. However, their functions and linkages in terms of professional advisory role and executive role are not well defined. The structure and process for the development of rehabilitation services also need to be reviewed.

At the cluster level, committees on rehabilitation services have been established. However, the committees are generally inactive and meetings are not held regularly. Their function as the platform for coordinating the specialties, disciplines and care settings has not been well demonstrated, and there is still little alignment across hospitals within the cluster. Although the Cluster Rehabilitation Service Coordinators who are leading the committees are nominated by the CCEs, most of them are not part of the cluster management structure. Their responsibilities and reporting line are also not clearly defined.

Manpower

There is an ongoing exercise to review the doctor, nursing and AH manpower across hospitals and clusters. In the process, manpower reference ratio covering doctors, nurses and AH professionals has been developed for both acute and extended care settings. Specifically in recent years, additional manpower has been allocated through the HA annual planning process to support the opening of convalescent and rehabilitation beds. More supporting staff were also recruited to share out simple routine tasks and relieve the clerical workload of AH professionals.

However, the focus has been on enhancing the inpatient rehabilitation services during weekdays. On weekends and public holidays, the coverage of inpatient AH service are limited to maintenance service for high-risk patients, like chest physiotherapy in the intensive care unit. Moreover, there is no coordinated planning or manpower reference for the development of day rehabilitation service. Consequently, the manpower provision for day service across the different units may not be adequate to meet the actual service needs.

Transportation

Non-emergency transport services are currently available in HA. They include Non-emergency Ambulance Transfer Service (NEATS) and Elderly Transport

Service (ETS). NEATS mainly provides point-to-point transfer service for patients with significant mobility impairment who are unable to use public transport during discharge or inter-hospital transfer. ETS, on the other hand, is targeted at elderly patients who have transport problems in attending ambulatory care service.

However, in the light of growing service demand especially during surge periods, the capacity of transportation support for accessing day rehabilitation service is not sufficient to meet the demand. Patients often need to make their own arrangements such as using Rehabus or public transport. For patients who are physically disabled, inadequate transportation support poses significant barrier for them to attend ambulatory rehabilitation service in the hospitals so there is a high chance of them dropping out from the programmes; or they would be reluctant to be discharged from hospital, thereby unnecessarily lengthening their hospital stay. This situation is even more common among the younger group of patients because the age eligibility for ETS is 60 or above, which limits the transportation support for younger patients.

Physical Design and Facilities

Extended care hospitals like Kowloon Hospital and Tung Wah Eastern Hospital have purpose-built facilities for rehabilitation services. Similarly for acute hospitals with a rehabilitation block, such as Tuen Mun Hospital and Caritas Medical Centre, there are accessible facilities for rehabilitation care in close proximity to the acute wards. However, in other acute hospitals there are generally limited facilities to support early rehabilitation. Patients in these hospitals often have to be transferred from one place to another within the hospital to receive rehabilitation services, so their therapy time is often compromised due to the time spent on waiting for the transfer as well as on the transferral.

On the other hand, for patients in stand-alone rehabilitation facilities with relatively low level of medical support, they might need to be transferred or re-admitted to acute hospitals when their medical conditions change. Sometimes, the transfers to acute hospitals are simply for diagnostic investigations which are not available in the extended care settings. These have created unnecessary workload and increased the pressure on acute care.

Co-location of Acute and Rehabilitation Blocks at Tuen Mun Hospital

In contrast to stand-alone rehabilitation hospitals, the Rehabilitation Block of Tuen Mun Hospital (TMH) co-locates with the acute inpatient facilities in the same hospital campus. Established in 2007, the TMH Rehabilitation Block, with a capacity of 512 beds, also accommodates ambulatory care facilities. It provides both rehabilitation and convalescent care services and caters to patients who require intensive inpatient rehabilitation or continuous treatment after their conditions are stabilised in the acute care setting. There is a link bridge to the rehabilitation block, so patients could be transferred directly from the acute ward in the main block without the need for transportation support like NEATS and ETS. This model of hospital design facilitates continuity of care as well as sharing of major facilities between the acute and extended care settings.

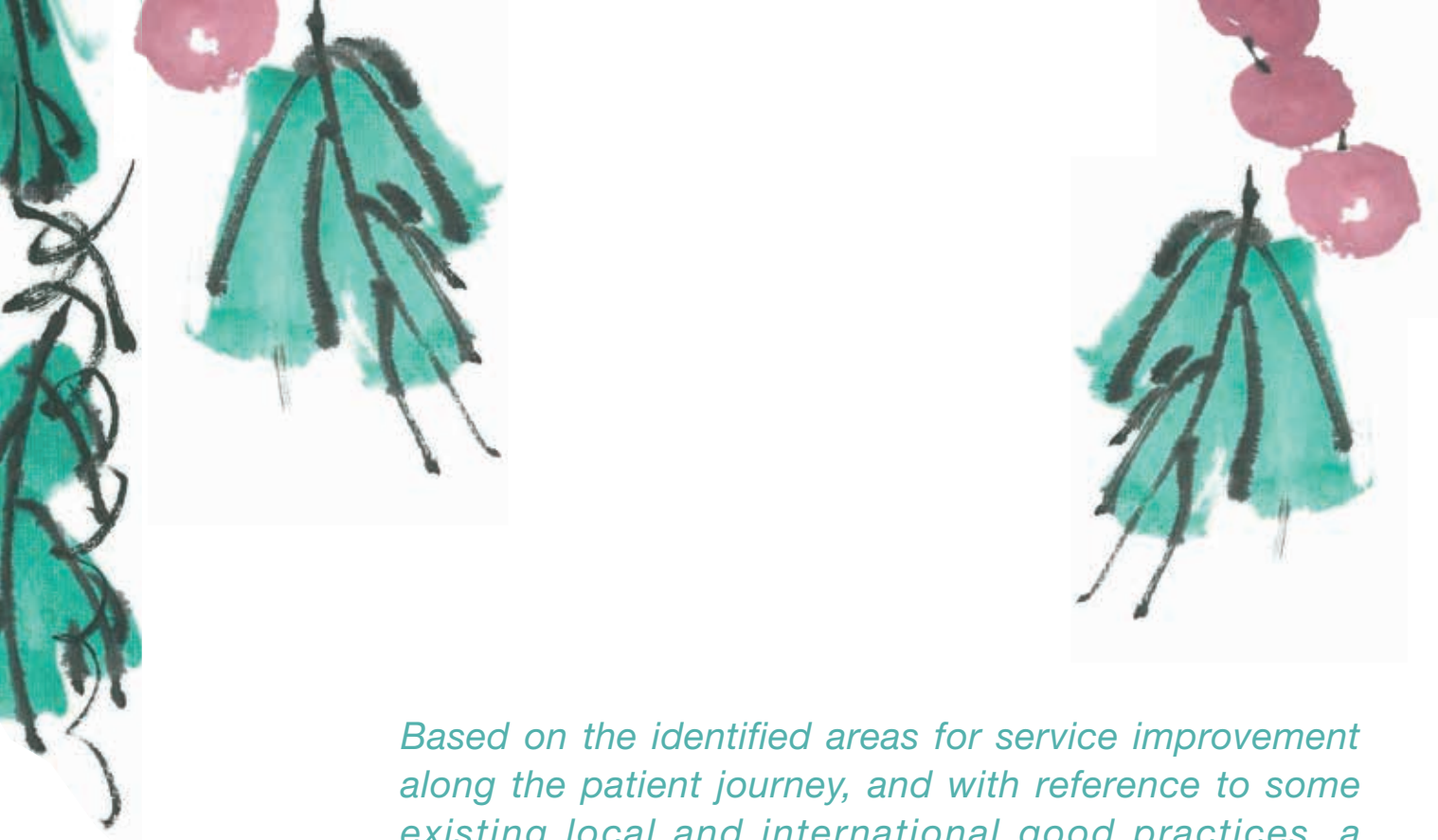
At the same time, at TMH the Chiefs of Service of the Department of Medicine & Geriatrics and the Department of Orthopaedics & Traumatology oversee both acute and rehabilitation services . There are shared protocols and direct booking mechanism using pre-defined transfer criteria between the acute and rehabilitation teams in order to enhance patient flow. This helps to relieve the pressure of acute ward, particularly during the surge period. According to the local survey in TMH in 2014, the acute medical ward admitted about 100 patients from the A&E Department and transferred around 14 patients to the Rehabilitation Block each day on average.

IT Support

While mobile IT support has been established for community service to facilitate clinical workflow and information sharing, clinical information on rehabilitation care at the hospital settings, including patient assessment and execution of care protocol, is mostly captured manually. There is also no tailor-made or integrated platform in the HA's CMS to facilitate communication among the multi-disciplinary teams or outcome monitoring. The data input rate is thus low for those AH clinical documentation functions in the CMS.

10 / STRATEGIC SERVICE FRAMEWORK FOR REHABILITATION SERVICES

What We are Going to Do



Based on the identified areas for service improvement along the patient journey, and with reference to some existing local and international good practices, a comprehensive strategic service framework is formulated. Under this Framework, HA is moving towards the directions of increasing service accessibility, improving appropriateness of care, enhancing community partnership, promoting performance monitoring, strengthening governance and developing implementation enablers. The aim of this Framework is to build a sustainable model of care from hospital to community, providing proactive and coordinated rehabilitation services to meet patients' needs.

Strategic Framework

There are five strategic directions in the Framework. Under each direction, strategies are formulated to address the existing and anticipated service gaps of the rehabilitation services in HA. The Framework is summarised in the following table, while details of the strategic directions and strategies are outlined in the subsequent sections of this chapter.

Identified Areas for Service Improvement (What we can do better)	**Strategic Directions** (Where we are going)	**Strategies** (How we will get there)
Service Accessibility	Increase service coverage and enhance accessibility through a system approach	• Promote cluster network model with multiple access points to rehabilitation services along the patient journey • Expand coverage of AH service for inpatient rehabilitation especially on weekends and public holidays • Increase day rehabilitation service to facilitate timely discharge and relieve demand on inpatient service • Improve access of younger patients to rehabilitation services, particularly to address their special rehabilitation needs • Concentrate rehabilitation services for relatively low volume but high complexity cases at designated centres
Appropriateness of Care	Ensure appropriateness of care to meet patients' needs	• Stratify patients' rehabilitation needs through a standardised assessment matrix • Set up clinical pathway tailored to patients' needs and discharge plan • Start early rehabilitation care once patients' acute condition is stabilised • Align patients' transfer and referral criteria to rehabilitation services • Designate link persons to bridge the gaps between acute and extended care settings, as well as from hospital to community • Adopt co-management model of care by various specialties

Community Partnership	Enhance community partnership for better integration of patients into the community	• Strengthen community partnership with NGOs and patient groups • Establish cross-sectoral collaboration to link up the health and social care components of the rehabilitation pathway • Engage and empower patients and their carers for self-management and active participation in the community
Performance Monitoring	Promote performance monitoring for continuous quality improvement	• Standardise data capture for clinical outcome monitoring along the care pathway • Develop clinical indicators and key performance indicators (KPIs) for continuous quality improvement
System Infrastructure	Strengthen the governance and develop key enablers for effective implementation	• Strengthen the governance structure and process at corporate and cluster levels • Support effective implementation by enhancing workforce planning, transportation support, facilities design, medical equipment and IT support

Strategic Direction 1:

Increase Service Coverage and Enhance Accessibility through a System Approach

It is suggested to organise the rehabilitation services using a system approach through the cluster network. The aim is to enhance the service access and coverage along the patient journey through the key components of inpatient, ambulatory (day and outpatient) and community rehabilitation services. The emphasis is on providing adequate rehabilitation services specific to patients' rehabilitation needs.

Under the system approach, different service components are provided in the inpatient, ambulatory and community settings for delivering rehabilitation care. Their delineated roles and defined scope are set out in the table below, while the strategies for pursuing the strategic direction of enhancing their service coverage and accessibility are outlined in the subsequent paragraphs.

Care Settings	Service Components	Roles and Scope in Rehabilitation Care
Inpatient	Acute Care	• To provide acute treatment, stabilise patients' conditions, and commence early rehabilitation interventions in acute setting
	Extended Care	• To provide intensive inpatient rehabilitation care • Differentiation is required between the use of rehabilitation and convalescent services in extended care setting with reference to the patients' needs. Specifically, patients require more AH service during the rehabilitation phase, while more nursing care is warranted for convalescent service

Ambulatory	Day Rehabilitation	• To provide intensive, time-limited and multi-disciplinary integrated rehabilitation training sessions for patients requiring therapy from two or more AH disciplines • Examples of day rehabilitation service are GDHs and specific day rehabilitation programmes for cardiac, pulmonary, neurological and musculoskeletal conditions
	Outpatient Rehabilitation	• To provide discipline-specific rehabilitation therapy or consultation service in an outpatient clinic setting
Community	Outreach Service	• To support patients' discharge and integration into the community through assessment and modification of the environment, carer training as well as trans-disciplinary care in outreach service • Examples of outreach service are AH Outreach, CNS and CGAT
	Tele-care Support	• To provide post-discharge support and maintenance care through phone follow-up or other tele-communication means • Examples include post-discharge support service by the HA Community Health Call Centre, upcoming IT innovations and mobile applications
	Primary Care	• To support patients with chronic diseases by providing patient education, secondary prevention and long-term maintenance care in the community • Provision of AH service is also available in the Community Health Centres to support the service needs in the local community
	Community Partnership	• To provide community rehabilitation service, social support and home care service, as well as empower patients and their carers, by partnering with NGOs and patient groups

Promote Cluster Network Model with Multiple Access Points to Rehabilitation Services along the Patient Journey

Each cluster organises their services in a system approach to deliver rehabilitation care along the patient journey from hospitals to the community. There is a need to define the role and service profile of each hospital in the clusters, with a view to establishing multiple access points to the rehabilitation services, so that patients' access to rehabilitation services is independent of where they first present to the medical system. For example, stroke patients who are not admitted to ASUs have the same access to rehabilitation services as those who are admitted, given that their rehabilitation needs are similar.

Expand Coverage of AH Service for Inpatient Rehabilitation Especially on Weekends and Public Holidays

Early initiation of rehabilitation care in acute setting has been shown to maximise patients' recovery potential and functional restoration[13,14]. Providing additional AH service on weekends is also found to be associated with improved functional independence, better health-related quality of life and reduced length of hospital stay[15,16,17]. Furthermore, increasing AH service coverage on weekends and public holidays enables patients to have timely access to inpatient rehabilitation care once their acute conditions are stabilised. For instance, hip fracture patients with operation on Fridays can commence their rehabilitation programme at the weekend. This not only increases the operational efficiency of the operating theatre by having more surgeries done on Fridays, it also reduces the idle time of patients waiting for rehabilitation during weekends or public holidays. It is envisaged that patients' length of stay in hospitals can be reduced accordingly. Training and counselling to patients' families and carers could also be conducted on weekends and public holidays to suit the schedules of those who have to work on weekdays. This helps to reduce time spent on waiting, prevent unnecessary delay in rehabilitation progress and promote early discharge of patients, therefore easing the bottleneck in patient flow across the healthcare continuum.

13 *Paolucci S, Antonucci G, Grasso MG et al. Early versus delayed inpatient stroke rehabilitation: a matched comparison conducted in Italy. Archives of Physical Medicine and Rehabilitation. 2000;81(6):695-700.*

14 *Maulden SA, Gassaway J, Horn SD, Smout RJ, DeJong G. Timing of initiation of rehabilitation after stroke. Archives of Physical Medicine and Rehabilitation. 2005;86(12 Suppl 2):34–40.*

15 *Peiris CL, Shields N, Brusco NK, Watts JJ, Taylor NF. Additional Saturday rehabilitation improves functional independence and quality of life and reduces length of stay: a randomized controlled trial. BMC Medicine. 2013;11:198.*

16 *Brusco NK, Watts JJ, Shields N, Taylor NF. Are weekend inpatient rehabilitation services value for money? An economic evaluation alongside a randomized controlled trial with a 30 day follow up. BMC Medicine. 2014;12:89.*

17 *Maidment ZL, Hordacre BG, Barr CJ. Effect of weekend physiotherapy provision on physiotherapy and hospital length of stay after total knee and total hip replacement. Australian Health Review. 2014;38(3):265-70.*

Increase Day Rehabilitation Service to Facilitate Timely Discharge and Relieve Demand on Inpatient Service

To support timely discharge and reduce the heavy reliance on inpatient rehabilitation service, development of day and outpatient rehabilitation services should be enhanced. Day rehabilitation service provides one-stop integrated multi-disciplinary care in day setting while AH discipline-specific therapy or consultation is provided in outpatient clinic setting. It is essential to plan the service provision, manpower requirement and facility set-up together with those of inpatient rehabilitation service so that patients' needs could be better addressed. The day rehabilitation service is provided in sessions covering geriatric rehabilitation for elderly patients and other day rehabilitation programmes for patients of all age groups with specific needs, e.g. neurological, cardiac, pulmonary and musculoskeletal rehabilitation programmes.

Clear referral criteria should be in place to ensure appropriate access to the day rehabilitation programmes. For instance, geriatric rehabilitation provided in the GDHs targets frail elderly patients with co-morbidities and polypharmacy. It covers generic rehabilitation training on motor, cognitive, socio-behavioral and other functions such as fall prevention and continence care. Regaining of mobility and self-care ability for daily living are the goals, and the service is led by geriatricians.

The other rehabilitation day programmes, while also involve multiple disciplines to provide an integrated service, do not have age limit for admission. These programmes are disease or condition-specific for complex cases and patients with special rehabilitation needs. The intensity of rehabilitation services is relatively higher than that of GDHs. Collaborative approach between rehabilitation specialists and the respective specialists, e.g. cardiologists, neurologists and respiratory physicians is adopted to lead the service development.

Ideally, the programmes should take place in the same physical location to share expertise and technologies for efficiency. Sessions are used as the common planning parameter for coordinated service and resources planning. Reference could be made to the existing practice in operating theatres or SOPCs which involve shared use of facilities among different specialties. The fees and charges for day rehabilitation service should also be aligned among clusters.

Improve Access of Younger Patients to Rehabilitation Services

Improving the access of younger patients to rehabilitation services is pertinent. This group of patients usually has special rehabilitation needs related to social support, psychological stress, return to work, driving and sexuality. Day rehabilitation care is strengthened to meet their service demands in an integrated approach through multi-disciplinary support. Enhancement of transport support service must go hand in hand with the improvement of day rehabilitation service.

Concentrate Rehabilitation Services for Relatively Low Volume but High Complexity Cases at Designated Centres

Rehabilitation service provision is defined by the level of complexity and specialisation[18,19]. Relatively low volume but highly complex conditions such as spinal cord injury, polytrauma and degenerative neurological diseases; as well as special rehabilitation needs such as driving and sexual rehabilitation should only be provided at designated centres in HA. Given the small caseload, centralising the expertise with support from advanced technology and purpose-built facilities can improve patient outcomes. Structured referral system and defined referral criteria should be in place to facilitate patients' access.

Strategic Direction 2:

Ensure Appropriateness of Care to Meet Patients' Needs

To ensure delivery of the right care to the right patient at the right time and place, patients' rehabilitation needs are stratified to inform their subsequent care plan according to a common care protocol. For example, patients with complex rehabilitation needs may benefit from more inpatient rehabilitation, while those with less complex needs may require ambulatory rehabilitation service. The strategies are delineated below.

Stratify Patients' Rehabilitation Needs through a Standardised Assessment Matrix

At the beginning of the care pathway, a comprehensive rehabilitation needs stratification is conducted for each patient suffering from disability after an injury or onset of illnesses. Three key assessment domains could be used, including:

- **Mobility/Functional Deficits**

  It reflects the degree of physical and functional disability as well as rehabilitation potential. Modified Barthel Index (MBI) is generally recommended as an assessment tool for functional independence in terms of activities of daily living. National Institutes of Health Stroke Scale and

18 *Medical rehabilitation in 2011 and beyond. Report of a working party. London: Royal College of Physicians; 2010.*

19 *The 9th World Congress of the International Society of Physical and Rehabilitation Medicine. Berlin. 2015.*

Modified Functional Ambulation Classification are also recommended for assessment in the stroke and hip fracture pathways respectively.

- **Cognitive Function**

  It reflects the ability to follow commands in rehabilitation training. Mini-mental State Examination (MMSE) is an example of measurement tool on this aspect.

- **Social Support**

  Considerations should be taken to patients' social support. It is essential to determine the level of support that patients and their carers require in the community when the patients are discharged to their place of residence.

The matrix of these three domains stratifies patients' rehabilitation needs into the following categories (**Figure 9**):

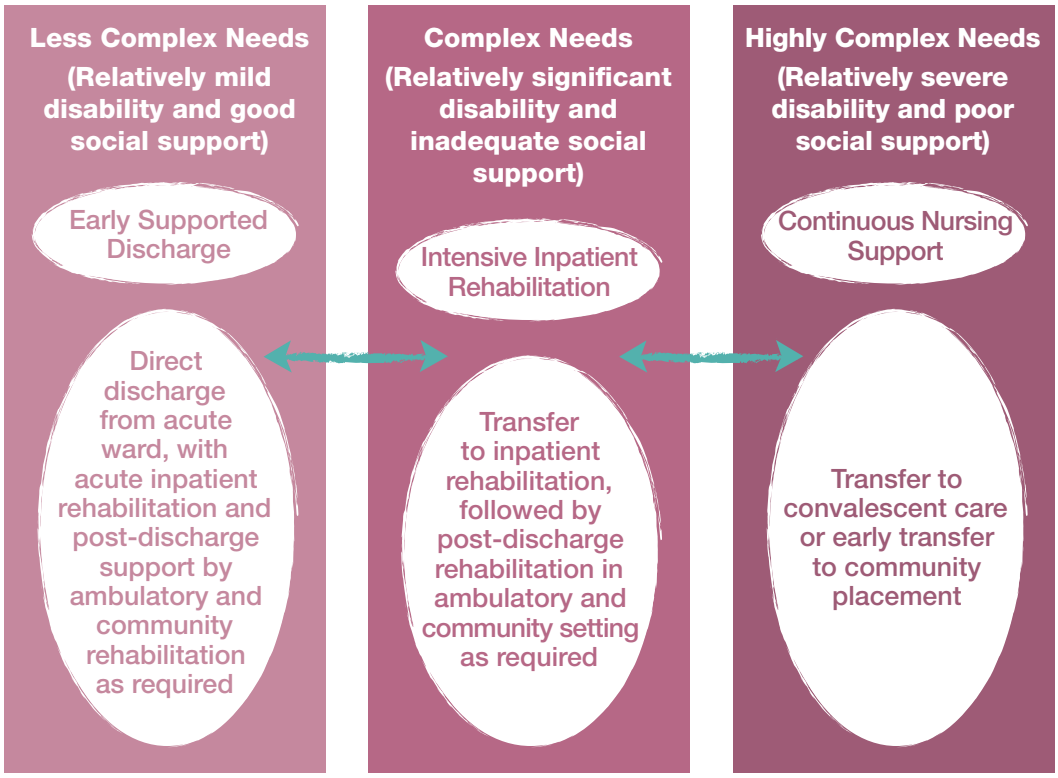
Figure 9. Stratification of Rehabilitation Needs

Since the needs stratification guides the subsequent provision of rehabilitation care, it should be performed in a timely manner starting early in the acute phase of disease. The recommended timeframe for needs stratification is within three days of acute care for stroke patients and within three days after operation for hip fracture patients. Recognising the possible change in patients' conditions that affects their level of disability and requirement for social support, a review mechanism is paramount to reassess and stratify patients' needs along the care journey.

Set Up Clinical Pathway Tailored to Patients' Needs and Discharge Plan

Needs-specific care pathway has to be developed at the clinical level by the relevant working groups on rehabilitation services so that the appropriate level of rehabilitation care could be provided with reference to the patients' stratified needs. The specific care pathways aim at maximising patients' function, preparing them for returning to the community and leading an active life as far as possible. The details are set out in **Figure 10** below:

Figure 10. Needs-specific Care Pathway



Start Early Rehabilitation Care Once Patients' Acute Condition is Stabilised

Timely introduction of rehabilitation care has been shown to be a significant factor in maximising patients' recovery potential and functional restoration[20, 21]. Studies have demonstrated that early onset of rehabilitation for stroke patients is associated with greater improvement in activities of daily living. Time to ambulation after hip fracture surgery is also shown to impact the frequency of

20 *Paolucci S, Antonucci G, Grasso MG et al. Early versus delayed inpatient stroke rehabilitation: a matched comparison conducted in Italy. Archives of Physical Medicine and Rehabilitation. 2000;81(6):695-700.*

21 *Kamel HK, Iqbal MA, Mogallapu R, Maas D, Hoffmann RG. Time to ambulation after hip fracture surgery: relation to hospitalization outcomes. The Journals of Gerontology. Series A, Biological Sciences and Medical Sciences. 2003;58(11):1042–5.*

post-operative complications and length of hospital stay. Delayed ambulation after hip fracture surgery is related to the development of new onset delirium and pneumonia post-operatively as well as increased length of hospital stay.

Hence, rehabilitation has to be introduced in a timely manner once the patient's acute condition is stabilised. Also, mobilisation should be started early after operation for surgical stream rehabilitation in order to maintain functioning, minimise the loss of function and avoid complications.

Align Patients' Transfer and Referral Criteria to Rehabilitation Services

Criteria on the transfer and referral of patients are to be clearly defined in the care protocol. These criteria are agreed by the clinical teams and used within the cluster. It aims to align the selection and timing for transfer or referral of patients, so that patients could be managed in the right place for the right care according to their rehabilitation needs. It also helps to facilitate patient flow across care settings in the cluster and form the basis for planning of resources.

Designate Link Persons to Bridge the Gaps between Acute and Extended Care Settings, as well as from Hospital to Community

As different stakeholders are involved in the rehabilitation services, coordination and communication are essential success factors for the service model. There should be designated link persons to coordinate the care provided by professional teams, facilitate communication and improve linkages of key service partners across the care continuum. It is particularly important for the management of complex cases, such as stroke, hip fracture, spinal cord injury etc. The linkage between acute and C/R services is crucial. The link persons are responsible for ensuring early notification to the C/R team on potential patient transfers from acute care, proper handover, streamlined workflow without service duplication and execution of care plan as initially agreed. They play an important role in the transition of care to the community, facilitating patients' discharge and integration to the community according to the agreed care plan.

As illustrated by stroke rehabilitation, the roles of existing stroke nurses have to be strengthened to act as the link persons in the patient journey. In addition to their current focus on acute thrombolytic treatment and care in ASUs, they should actively identify all the stroke patients who are not admitted to ASUs,

for example in general medical wards or neurosurgical wards. Follow-up of these patients should be made to ensure the execution of the common care protocol. The stroke nurses coordinate with team members from different disciplines for early needs stratification and formulation of care and discharge plan. They have close liaison with the rehabilitation teams for transferring patients to inpatient rehabilitation service, and linking up the ambulatory and community rehabilitation services for post-discharge support.

Adopt Co-management Model of Care by Various Specialties

Co-management model of care by various specialties is adopted to address patients' needs. The need for cross-specialty collaboration is best illustrated by the hip fracture pathway. Majority of the hip fracture cases are elderly patients. They are usually frail elders suffering from multiple medical problems who have polypharmacy. Proactive liaison between orthopaedic surgeons and geriatricians is shown to be the key success factor for good quality service for patients with fragility fracture[22,23,24] . These patients are co-managed by orthopaedic surgeons and geriatricians in an ortho-geriatric ward. Instead of providing passive consultation-based service support, geriatricians proactively see the high-risk patients regularly and provide specialist medical input for maximising their medical condition based on an agreed protocol. Regular and structured collaboration platforms such as regular joint-rounds and case conferences are established by the orthopaedic surgeons and geriatricians.

22 *The care of patients with fragility fracture. London: British Orthopaedic Association; 2007.*

23 *Models of care for orthopaedic rehabilitation-fragility fractures, general orthopaedic trauma and arthroplasty. Adelaide: Department of Health, South Australia; 2011.*

24 *Orthogeriatric model of care. Perth: Aged Care Network, Department of Health, Western Australia; 2008.*

Strategic Direction 3:

Enhance Community Partnership for Better Integration of Patients into the Community

The ultimate aim of rehabilitation is to facilitate patients' return to the community with the best possible functioning ability and participation. Partnership with various community stakeholders is the key strategy to enhance support to the patients after their discharge. The strategies are outlined in the ensuing paragraphs.

Strengthen Community Partnership with NGOs and Patient Groups

Partnership with NGOs and patient groups support better transition of care when patients are discharged. The collaboration provides maintenance rehabilitation in the community, social care, home care service, loan service of rehabilitation aids and devices, as well as patient and carer empowerment. This involves early identification and recruitment of patients at their inpatient phase. Peer group support can be offered at the early stage of the disease so that patients can have better anticipation of their disease progress, options of care, availability of resources and potential changes in lifestyle when they return to the community. The role of PRCs/HRCs is strengthened to facilitate this proactive approach.

Establish Cross-sectoral Collaboration to Link Up the Health and Social Care Components of the Rehabilitation Pathway

Medical and social support are equally important for patients to lead an active and enjoyable life in the community, especially for those who are disabled by their illness. Learning from the experience of the ICM for High Risk Elders, further collaboration with the SWD and NGOs is explored through strengthening of communication platforms to support patients after they have finished their active treatment in the hospital. Examples of home support service provided by NGOs include personal care, home-making and modification, provision of meals, transportation and escort, 'elder sitter' and transitional respite residential care service. They are important for patients' transition and their long-term maintenance care in the community.

Engage and Empower Patients and their Carers for Self-management and Active Participation in the Community

Early engagement and empowerment of patients and their carers allows better acquisition of coping skills and self-care for patients with chronic diseases. Patients are engaged to be part of the medical team in determining their treatment options. Active participation of patients and carers in their own rehabilitation care plan could improve patient experience and compliance to the subsequent care. In order to better equip our patients for taking up the responsibilities and active role in their health decisions, the function of PRCs/HRCs is enhanced. Core functions should include establishing a close linkage with the clinical teams to understand the patients' needs, providing support to self-help and peer support groups, developing the support service through recruitment and training of volunteers, as well as collaborating with community partners. Examples of the volunteer support service coordinated by PRCs/HRCs are peer sharing and workshops, mutual support classes, ward or home visits, patient support stations at outpatient clinics and various indoor and outdoor activities for patient and carer empowerment.

Strategic Direction 4:

Promote Performance Monitoring for Continuous Quality Improvement

There are aligned parameters to evaluate the processes and outcomes of rehabilitation services. These inform the service gaps and prompt continuous quality improvement in our rehabilitation services. Strategies include standardising data capture for clinical outcome monitoring, and developing clinical indicators and KPIs.

Standardise Data Capture for Clinical Outcome Monitoring along the Care Pathway

Measuring parameters and tools are standardised and captured systematically along the care pathway. Validity, sensitivity to change, training requirement, cost-effectiveness as well as local and international comparability and recognition are the principles in selecting measuring tools and parameters. MBI is generally recommended as a minimal requirement for monitoring the functional outcome in terms of activities of daily living, while MMSE could be used to measure the cognitive status. Instrumental Activities of Daily Living Scale can also be considered as a tool to assess patients' independent living skills and hence the degree of participation in the community. Besides, other disease-specific tools are expected to be developed where appropriate. These parameters are measured on admission, upon discharge and in long-term follow-up. These parameters provide information along the patient journey, support clinical audits, and allow the identification of service gaps for subsequent improvement.

Develop Clinical Indicators and KPIs for Continuous Quality Improvement

When the measuring parameters and tools are mature and widely adopted, they can be used as clinical indicators and KPIs. Process and outcome indicators are included for the performance measurement. Timely assessment, care planning, waiting time and length of stay are examples of process indicators, while readmission rate and comparison between pre-admission place of residence and discharge destination are examples of outcome indicators to be explored for development.

Strategic Direction 5:

Strengthen the Governance and Develop Key Enablers for Effective Implementation

Rehabilitation services span through acute to extended care and from hospital to community. A structured governance for the defined processes is of utmost importance in leading the service development. The existing structure has to be further strengthened at both corporate and cluster levels, to a two-tier structure.

Governance

The CC(Rehab) continues its role in overseeing the development of rehabilitation services at the corporate level. Its function and membership should be reviewed for a better execution of its professional advisory and executive roles in rehabilitation services development and monitoring.

Various working groups under the existing COCs and CCs are set up to discuss the rehabilitation service models for specific diseases and conditions, e.g. cardiac and pulmonary rehabilitation. For other diseases and conditions involving more than one specialty, for example fragility fracture, an ortho-geriatric working group is formed to discuss the care model for better coordination. These groups also focus on identifying gaps and advising the CC(Rehab) on the training needs. They report to their respective COCs/CCs and the CC(Rehab). The CC(Rehab) discusses the proposed service model, aligns and prioritises the agreed rehabilitation service operation plans.

Meanwhile, the existing committees on rehabilitation services in clusters have to be empowered, with their role and accountability strengthened. Appointment of a Service Director of Rehabilitation under the cluster management structure is suggested. The role of the Service Director is to lead the rehabilitation committee in the cluster and to oversee the service planning, resources bidding, implementation and monitoring of rehabilitation services.

Moreover, communication and linkage between the governance structure at the corporate and cluster levels should be enhanced. Invitation for clusters' Service Directors of Rehabilitation to join the CC(Rehab) should also be considered.

At the same time, various key enablers are identified and are expected to be developed in order to support effective implementation of the strategies outlined in the Framework. They are set out in the ensuing paragraphs.

Committed and Competent Workforce

Workforce planning on medical, nursing and AH professionals is essential to address the anticipated growing demand on rehabilitation services. In particular, workload estimation is pertinent for projecting the manpower requirement for the care model. Meanwhile, there should be role delineation between the acute care physicians and rehabilitation specialists in different care pathways. The role of nurses in rehabilitation is also defined, particularly as link persons for coordinating the patient journeys of different disease groups. Detailed responsibility, reporting line and career path are delineated to facilitate the planning of nursing workforce and their professional development. At the same time, the AH manpower is enhanced to support the development of day rehabilitation service as well as the expansion of service coverage for inpatient rehabilitation on weekends and public holidays. In order to increase the capacity of the skilled workforce, supporting staff are trained as AH assistants to facilitate the service delivery.

Regarding the skill-mix of our workforce, trans-disciplinary training is recommended. The aim is to promote sharing of skills and knowledge across discipline boundaries so as to improve communication and collaboration among the team members, thereby building a cohesive team. Instead of working on isolated tasks, the team could provide integrated interventions and reach for the common goal of improving patient outcomes. With trans-disciplinary training, more integrated and effective care protocols could be developed. Redundancy or fragmentation of service are thus minimised and service efficiency would be enhanced by simplifying the patient journey. For example, trans-disciplinary training is important for community outreach service so as to better equip individual staff members for case management and addressing different needs of the patients. It could avoid the need for visits by multiple disciplines of healthcare professionals. Topics of trans-disciplinary training that are applicable in various care settings (i.e., inpatient, day and community) include basic information gathering and standardised screening tests for identifying patients' needs in various functional domains; basic education to empower patients and carers with knowledge and skills in managing various functions and needs related to disabilities; liaison

of community resources; crisis management and emergency handling; preparation and maintenance of equipment and aids. Existing training programmes for AH professionals on chronic disease management, palliative care and trauma could also serve as references on trans-disciplinary training. Following the same rationale, the trans-disciplinary approach should also be applied to the training of supporting staff in assisting the delivery of rehabilitation care.

At the same time, specialised training for healthcare professionals are strengthened to address the highly complex and special rehabilitation needs of some patients. The respective COCs/CCs and working groups in the governance of rehabilitation services are responsible for identifying the skill/ knowledge gaps and formulating training plans with reference to the service needs.

Transportation

To support the development of day rehabilitation service, enhancement of transportation service is crucial. Better transportation support improves the convenience for patients to attend the day rehabilitation sessions, thereby encouraging better utilisation and compliance. Also, unnecessary prolongation of hospitalisation could be avoided as patients are likely to be more receptive to discharge with improved transport support and access to day rehabilitation service.

The capacity of the existing NEATS in HA is to be increased for meeting the escalating service demand. The referral and selection mechanism are also made clear to ensure the service provision meets the patients' needs without using age as the cut-off. It is recommended to support both point-to-point and roadside pick-up service to cater for patients with different needs.

Facilities and Hospital Design

When developing new HA hospitals or redeveloping existing hospitals, co-location of a rehabilitation wing or block in acute hospitals is encouraged. This helps to facilitate patient flow and care transition from acute to rehabilitation settings, as well as ensuring medical support is readily available in case of patient deterioration in the rehabilitation setting. Designated facilities for day rehabilitation service are recommended to support the service development. Facilities and space for ward-based or floor-based rehabilitation care are incorporated in the future hospital design, to support early rehabilitation and minimise patient transfer. Elderly-friendly and barrier-free designs are also adopted to cater for the needs of elderly patients and patients with disability.

Medical Technology and Equipment

Medical equipment and assistive technologies are to be adopted and implemented in a timely and coordinated manner. The planning for technology adoption is coordinated by COCs and CCs through the established mechanism set up by the HA's Central Technology Office.

IT System Support

The CMS in HA hospitals is enhanced to support the execution of care protocol, documentation of assessment for needs stratification, facilitate communication among the multi-disciplinary teams as well as systematic data capture and analysis for performance monitoring. Development of tele-rehabilitation via mobile devices and smartphone applications should also be explored and pursued for tele-therapy, tele-monitoring and tele-education, with the aim of improving the overall access to rehabilitation services.

The New Model of Rehabilitation Care

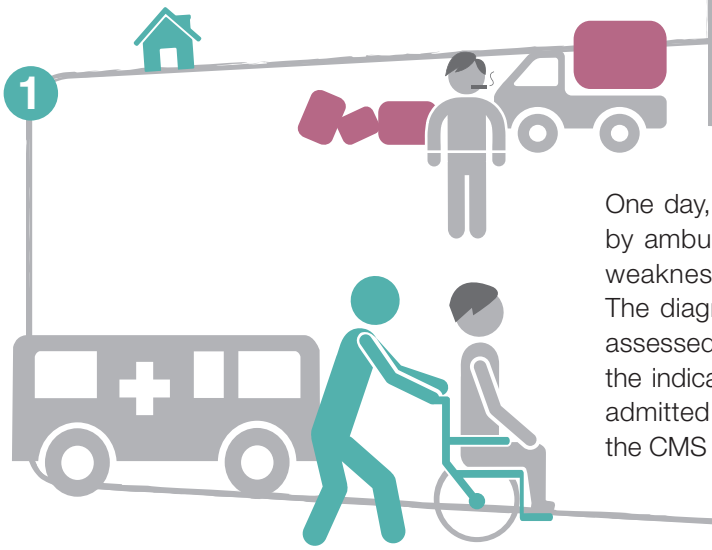
Under this Framework, HA is moving towards the directions of increasing the accessibility of its rehabilitation services, improving the appropriateness of care, enhancing community partnership, promoting performance monitoring and strengthening governance. Key enablers are developed to support implementation of the strategies. The aim of the Framework is to build a sustainable model of care from hospital to community. The new care model should be oriented towards a proactive approach in coordinating the rehabilitation services in order to meet the patients' needs along their care journey. Patients' outcomes could be optimised, facilitating their early and smooth integration into the community. From the system perspective, service efficiency could be improved with enhanced patient flow across the care continuum. The new model of rehabilitation care is illustrated in **Figure 11** below:

Figure 11. New Model of HA Rehabilitation Services

To provide better illustration of the rehabilitation model of care as set out in this Framework, two illustrative cases on the stroke and hip fracture rehabilitation care pathways are presented below.

Illustrative Case of Stroke Patient

Mr Chan is a 40-year-old smoker with a known history of diabetes. He lives with his wife and daughter in a private flat. He works as a shop supervisor and needs to drive and deliver goods to customers.



One day, Mr Chan was taken to the A&E Department by ambulance, with presenting symptoms of sudden weakness in his right limbs and slurring of speech. The diagnosis was acute stroke, and he was quickly assessed by a stroke nurse in A&E but did not meet the indication criteria for thrombolytic therapy. He was admitted to the ASU, and information registered into the CMS triggered the stroke care protocol for him.

In the ASU, Mr Chan received initial medical management and his condition was stabilised. Within 48 hours, a multi-disciplinary team assessed his functional/mobility, cognitive and social status. His MBI score was 65/100 and MMSE score was 28/30, indicating moderate functional impairment and mild cognitive impairment. Mr Chan was considered to benefit from intensive inpatient rehabilitation based on the needs stratification, which also took into account that his wife was at work and his daughter in school so Mr Chan would be alone at day time after discharge. The team formulated his care plan accordingly, and he received training in the ASU to strengthen his motor and swallowing function. On the fourth day, he was transferred to the rehabilitation block of the same hospital. The stroke nurse liaised with the rehabilitation team to ensure continuity of care.

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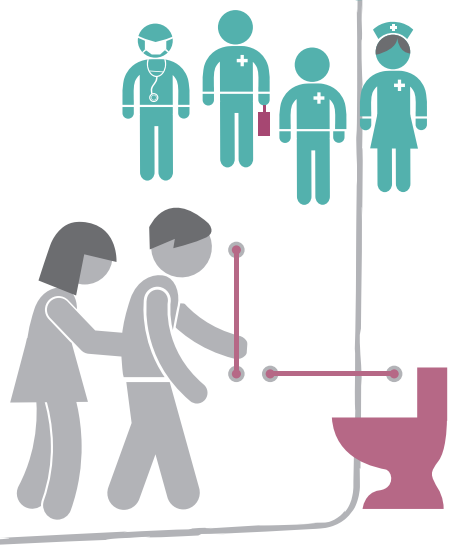
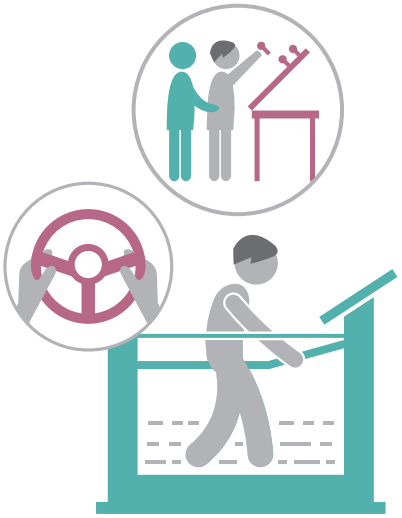
The rehabilitation team further assessed Mr Chan's bio-psycho-social functional status and found that, besides functional deficits, he was also in a depressive mood due to the sudden illness and worries over financial matters. Rehabilitation goals were set together with Mr Chan and his wife. In the short term, Mr Chan aimed to return home with family and social support. His mid-term goal was to be able to take care of himself, and the ultimate goal was returning to work. He received intensive rehabilitation training throughout the week, including walking, communication and basic activities of daily living such as operating his smartphone using his left hand. On weekends, his wife also received training on how to take care of him after discharge. At the same time, the rehabilitation team helped them to cope with their psychosocial difficulties, including applying for disability allowance. The outreach team also visited Mr Chan's flat and recommended some environmental modifications to better suit his functioning level. An early discharge plan was formulated through weekly multi-disciplinary team conferences.



4

After three weeks of rehabilitation, Mr Chan was ready for discharge and to continue his rehabilitation training in the day rehabilitation centre. The rehabilitation team arranged for him home care service provided by NGO. Mr Chan started his day rehabilitation therapy on the second day of discharge, with transportation arranged for him to attend the sessions. At the day rehabilitation centre, Mr Chan received integrated training with advanced rehabilitation technologies. The team also looked into his diabetic control and drug compliance. He made good progress so his care plan was constantly reviewed. To assist his return to work, the rehabilitation team assessed the skill set required for his work and provided intensive vocational training. Meanwhile, Mr Chan regained his driving skills at a designated centre for specialised rehabilitation, and the specialist there also helped him and his wife to address their hidden worry over sexual dysfunction.



5

After two months of day rehabilitation, Mr Chan achieved significant progress in his functional independence and was coping well with support from patient groups and NGO services. He was able to return to work and no longer required disability allowance. After one year, Mr Chan resumed his normal life with regular follow up consultations at the SOPC. Together with his family and the rehabilitation team, Mr Chan celebrated the success of the collaborative hard work which enabled him to enjoy his life again!

Key Points of Mr Chan's Journey:

- Early assessment for needs stratification and commencement of rehabilitation care
- Stroke nurse as the link person for care coordination
- Multi-disciplinary team approach with collaborative platforms for care and discharge planning
- Co-location of acute and rehabilitation facilities to enhance continuity of care
- Collaboration with community partners for social support after discharge
- Integrated training at day rehabilitation centre with transportation arrangement
- Specialised rehabilitation centre for driving and sexual rehabilitation

Illustrative Case of Hip Fracture Patient

Mrs Wong is a 74-year-old lady living alone in a public flat. She is on multiple medications for her long history of hypertension and diabetes.

1

After a fall at home which caused pain in her right leg and made her unable to walk, she was taken to the A&E by ambulance. The diagnosis was fracture right neck of femur and she was admitted to the acute orthopedic ward.

2

In the acute ward, Mrs Wong received joint care provided by the orthopaedic and geriatric teams. A designated geriatrician assessed and optimised her medical condition. Mrs Wong received an operation to fix her hip fracture on the following day. After the surgery, delirium prevention and pain management were initiated for her according to the care protocol. She received early mobilisation with lower limb exercise on the first day after the operation. Mrs Wong was then assessed by the multi-disciplinary team. Her MBI score was 70/100 and MMSE score was 23/30, reflecting moderate functional impairment and mild cognitive impairment. Mrs Wong was keen to go back home to her usual life. However, since her only daughter had to work and take care of her own family, inadequate support was foreseen after discharge.

3

Based on the needs stratification, Mrs Wong was considered to benefit from intensive inpatient rehabilitation and her care plan was formulated accordingly. On the fourth day of admission, Mrs Wong was transferred to the designated orthopaedic rehabilitation centre in the cluster. The collaboration between the acute and rehabilitation teams according to the common care protocol as well as information sharing through the CMS, facilitated a seamless transfer and ensured continuity of her care.

4

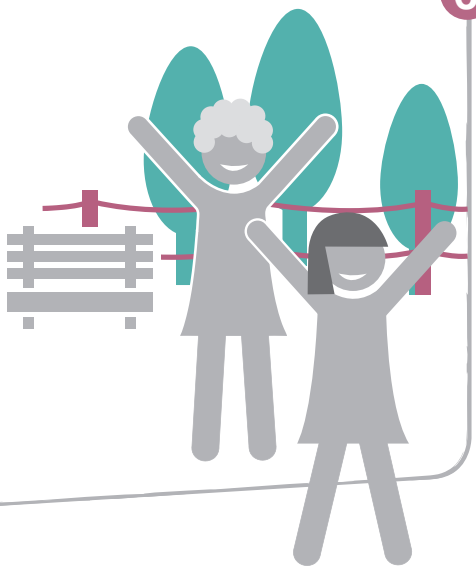
In the rehabilitation ward, training was started immediately focusing on improving Mrs Wong's mobility, coordination and balance, as well as encouraging activity independence and safety. The team monitored her progress and goal attainment and discussed it at the weekly multi-disciplinary team rounds joined by orthopaedic surgeon, geriatrician, nursing and AH team members. Mrs Wong's daughter was also interviewed to discuss the discharge plan. After two weeks of daily rehabilitation with satisfactory progress, Mrs Wong was able to go home. The designated link person coordinated the discharge planning, arranged NGOs to deliver home care service to Mrs Wong and carry out relevant home modifications.

5

Mrs Wong continued her rehabilitation care in the GDH after discharge. She used the pre-arranged transport service to attend the sessions of integrated rehabilitation training by the multi-disciplinary team. Geriatricians, who also solicited input from the orthopaedic team, reviewed her condition regularly. By the end of the six-week day rehabilitation programme, Mrs Wong had considerable improvement in her mobility and functional independence.

6

Mrs Wong was then stable enough to attend the community rehabilitation service operated by an NGO for maintenance training and care. With the concerted efforts of the hospital and NGO teams, Mrs Wong was eventually able to return to her normal life and to live independently in the community. She was seen by her primary care doctor for the control of her diabetes and hypertension and had commenced the osteoporosis management. Mrs Wong's daughter accessed the education materials on disease control and fall prevention through the mobile applications developed by the hospital and was able to take care of her mother. Mrs Wong and her family were delighted and impressed by the comprehensive services received in the care journey.



Key Points of Mrs Wong's Journey:

- Timely operation on hip fracture within 48 hours of admission
- Protocol-driven care with co-management by orthopaedic surgeons and geriatricians
- Early mobilisation after operation and timely needs stratification
- Transfer to designated orthopaedic rehabilitation centre in the cluster for inpatient rehabilitation
- Collaborative multi-disciplinary team approach for care and discharge planning
- Integrated care at GDH with transportation arrangement

11 / IMPLEMENTATION AND MONITORING

Realising the Plan -
Our Short, Medium and Long-term Goals

The Framework aims to improve the quality of care in HA rehabilitation services over the next five to ten years. Implementation of the strategies will require collaboration of various stakeholders and input of different resources. Service development should be steered by clinical leaders, cluster management and HA Head Office. While some of the strategies do not require additional resources, others will incur resources. The HA annual planning process is the mechanism through which resources could be sought to support the implementation of the Framework. Proposed stages of implementation are given below. The process of change should start now.

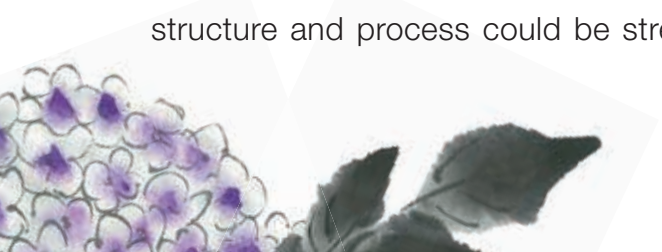
Rehabilitation services support multiple disease pathways, which occur in various care settings and involve different disciplines and specialties. Prioritisation of strategies is of paramount importance to implement the Framework and develop operational plans. Implementation should be incremental, taking into account the service needs and readiness for implementation at both clinical and cluster levels. Changes could begin in clinical areas and clusters which have greater service needs and are more ready for implementation. With accumulation of experience and progress in the development of key enablers, the Framework will be implemented in incremental steps across HA.

Prioritisation of Strategies

Short Term

Strengthen Governance

To successfully lead the implementation of the Framework in HA, strengthening the governance of rehabilitation services is the key initial step. The governance structure and process could be strengthened at both the corporate and



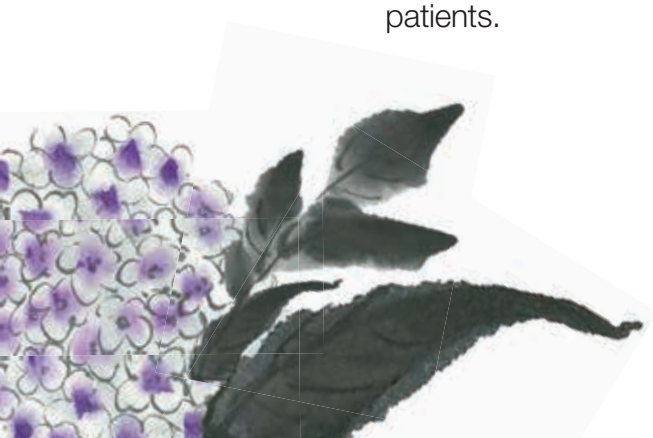
cluster levels. The CC(Rehab) continues to enhance its professional advisory and executive roles in coordinating the overall planning and monitoring of rehabilitation services in HA. Working groups are expected to be set up to advise on their respective rehabilitation service models. Clusters have to develop operational plans under the governance of their committees on rehabilitation services to address their local priorities.

Increase Coverage of AH Service for Inpatient Rehabilitation Especially on Weekends and Public Holidays

AH professionals play an essential role in rehabilitation services. Recognising the importance of early rehabilitation in optimising patient outcomes, AH service covering weekends and public holidays for supporting inpatient rehabilitation is of high priority in the short term. This aims to provide timely access to rehabilitation care, facilitate patient transfer and hospital discharge as well as improve overall system efficiency. Through the collection and analysis of data on existing manpower provision, detailed workforce planning could be formulated to address the needs of different clusters. Training of supporting staff is also considered to be essential to support the service delivery.

Enhance Day Rehabilitation Service

To share out the demand on inpatient rehabilitation service and enhance the sustainability of our healthcare system, day rehabilitation service is the priority for development to support patients' early discharge and integration to the community. In the new rehabilitation model, the care pathway is streamlined with reference to the patients' needs. Where appropriate, patients with relatively less complex needs are discharged from hospitals and supported by day rehabilitation care, thus avoiding unnecessary prolonged hospitalisation or hospital readmission due to inadequate support. Operational plans are formulated to promote the development of day rehabilitation service by the clusters, providing different types of multi-disciplinary rehabilitation programmes to meet the rehabilitation needs of both elderly and non-elderly patients.



Enhance Transportation Support

Transportation support is an essential enabler to support patients' access to the ambulatory and day services. Through review of HA's transport service arrangement and enhancement of capacity, we will be in a better position to meet the service demand from both elderly and non-elderly patients.

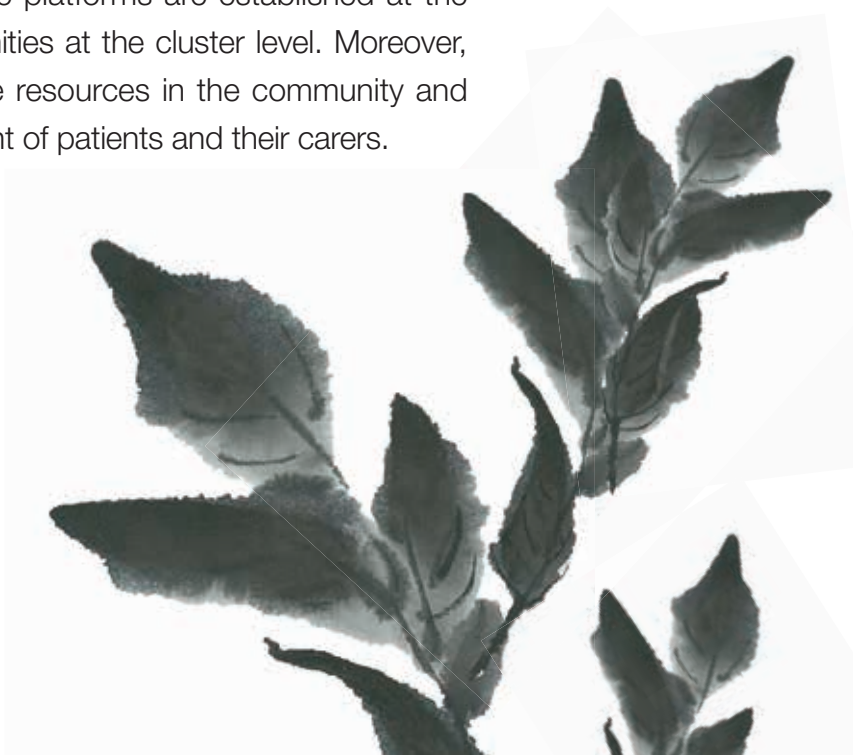
Improve Care Coordination

In parallel, service model needs to be reviewed and common care protocol developed with the inclusion of core components such as patients' needs stratification, formulation of needs-specific care plan, early commencement of rehabilitation care, close liaison between acute and rehabilitation teams, as well as collaboration across specialties such as co-care model between orthopaedic and geriatric teams for elderly patients with musculoskeletal diseases. The common protocol will help to ensure that appropriate care is provided to all patients with reference to their needs, regardless of their age or point of admission.

Medium Term

Establish Structured Platforms for Community Partnership and Cross-sectoral Collaboration

Leveraging on the experience of the ICM for High Risk Elders, the liaison with NGOs and SWD are strengthened to support the rehabilitation needs of patients of different ages and diseases in the community. In the coming three to five years, structured collaborative platforms are established at the corporate level as well as in local communities at the cluster level. Moreover, PRCs/HRCs are better utilised to mobilise resources in the community and support the engagement and empowerment of patients and their carers.



Develop KPIs for Performance Monitoring

With the standardisation of clinical pathways and alignment of care protocols, process and outcome data on rehabilitation services across HA can be captured, analysed and reported systematically in the medium term. Clinical indicators on rehabilitation services are subsequently developed as an objective tool, thereby making available HA-wide data for measuring the performance of rehabilitation services. Suitable clinical indicators will be identified and further developed into KPIs according to the mechanism in HA for benchmarking, accountability and continuous quality improvement.

Enhance IT Support

Many of the strategies outlined in the Framework require IT support for successful implementation, such as in the execution of care protocol, clinical information sharing among the multi-disciplinary teams and across care settings, data capture for performance monitoring, as well as development of innovative IT solutions for tele-care. Enhancement of IT support should be initiated immediately and carried out by phases as one of the medium goals, with consideration of the readiness of system technologies in meeting the user requirements.

Define Areas for Trans-disciplinary and Specialised Rehabilitation Training

For sustainable development of our rehabilitation services, continuous staff training is vital. It is essential to define services that could be provided in a trans-disciplinary approach. Trans-disciplinary training is provided to the rehabilitation teams in HA to facilitate better understanding of the roles and responsibilities of different team members, simplify the patient journey, and build trust among the teams. It will also help to support the sharing of knowledge and skills across different AH disciplines and further enhance service coordination for patient-centred care.

At the same time, our staff should be better equipped to provide specialised rehabilitation services to patients with highly complex and special conditions. Hence, specialised training programmes will also be designed and implemented in the medium term.

Long Term

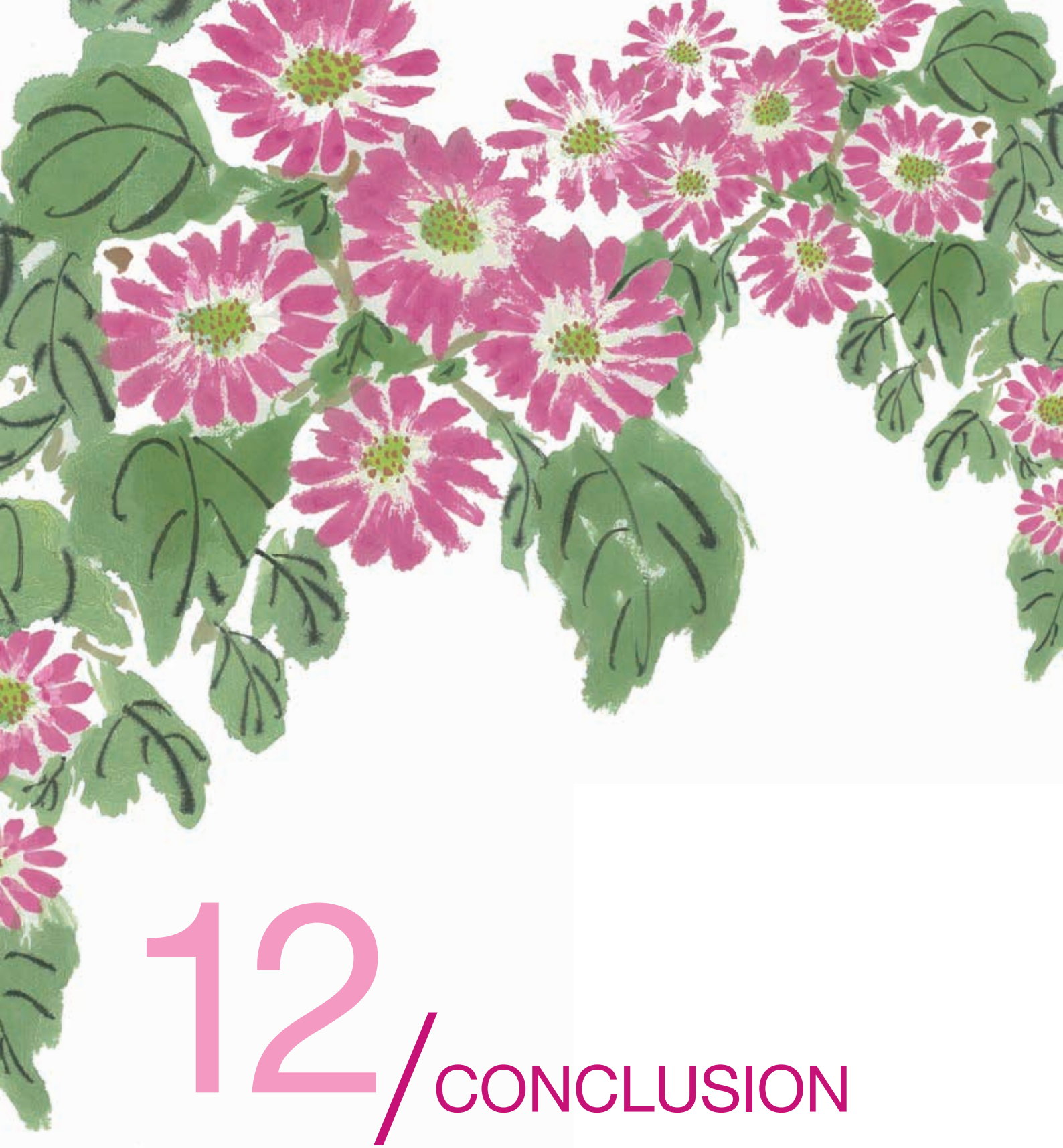
Incorporate Built-in Facilities and Tailor Physical Design to Support Delivery of Rehabilitation Care

In the long run, for hospitals being redeveloped as well as future new hospitals in HA, built-in facilities and physical design for supporting the delivery of rehabilitation care will be considered. Where feasible, rehabilitation wing or block will be co-located in the acute hospitals to facilitate patient flow, care transition and medical support. The hospital design will incorporate designated facilities for the development of day rehabilitation service. To address the needs of elderly patients and patients with disability, barrier-free and elderly-friendly design will also be adopted.

Monitoring

The implementation of this Framework is a continuous process of developing and improving our rehabilitation services. Monitoring the process is the key to ensuring proper implementation of the strategies and effective use of resources. The success of the strategies in achieving the goals of service improvement will be evaluated. The monitoring will be carried out at several levels:

- Service deliverables tied in with resources bidding through the HA annual planning process will be monitored through the existing mechanism.
- Progress on the key implementation milestones mapped out in the operational plans of the Framework over the next five to ten years will be monitored by the CC(Rehab).
- Clinical indicators and KPIs will be developed as outlined in the strategies for benchmarking, accountability and continuous quality improvement of the overall rehabilitation services in HA.



12/ CONCLUSION

With concerted efforts of various stakeholders, the Strategic Service Framework for Rehabilitation Services is formulated to set out the strategic directions and strategies for improving the quality of HA rehabilitation services in the coming five to ten years.

A new model of rehabilitation care in HA is envisioned in the Framework. Along the patient journey from hospital to community, proactive and coordinated rehabilitation care is provided to meet our patients' needs. The aim is to optimise patients' outcomes, facilitate better integration into the community, and improve system efficiency with enhanced patient flow across the care continuum.

Under the Framework, a system approach facilitated by the cluster network model is adopted for the organisation of rehabilitation services in order to enhance service coverage and accessibility. At the same time, appropriateness of care is enhanced through stratification of patients' needs, formulation of needs-specific care plan, and improved care coordination. Development of day rehabilitation service and community partnership is also advocated to facilitate patients' discharge from hospitals and integration into the community. Across the system, performance monitoring is promoted through the alignment of parameters for continuous quality improvement. Overall, the governance structure for rehabilitation services has to be strengthened at both the corporate and cluster levels. Moreover, key enablers have to be developed to build up the system infrastructure for effective implementation of the Framework.

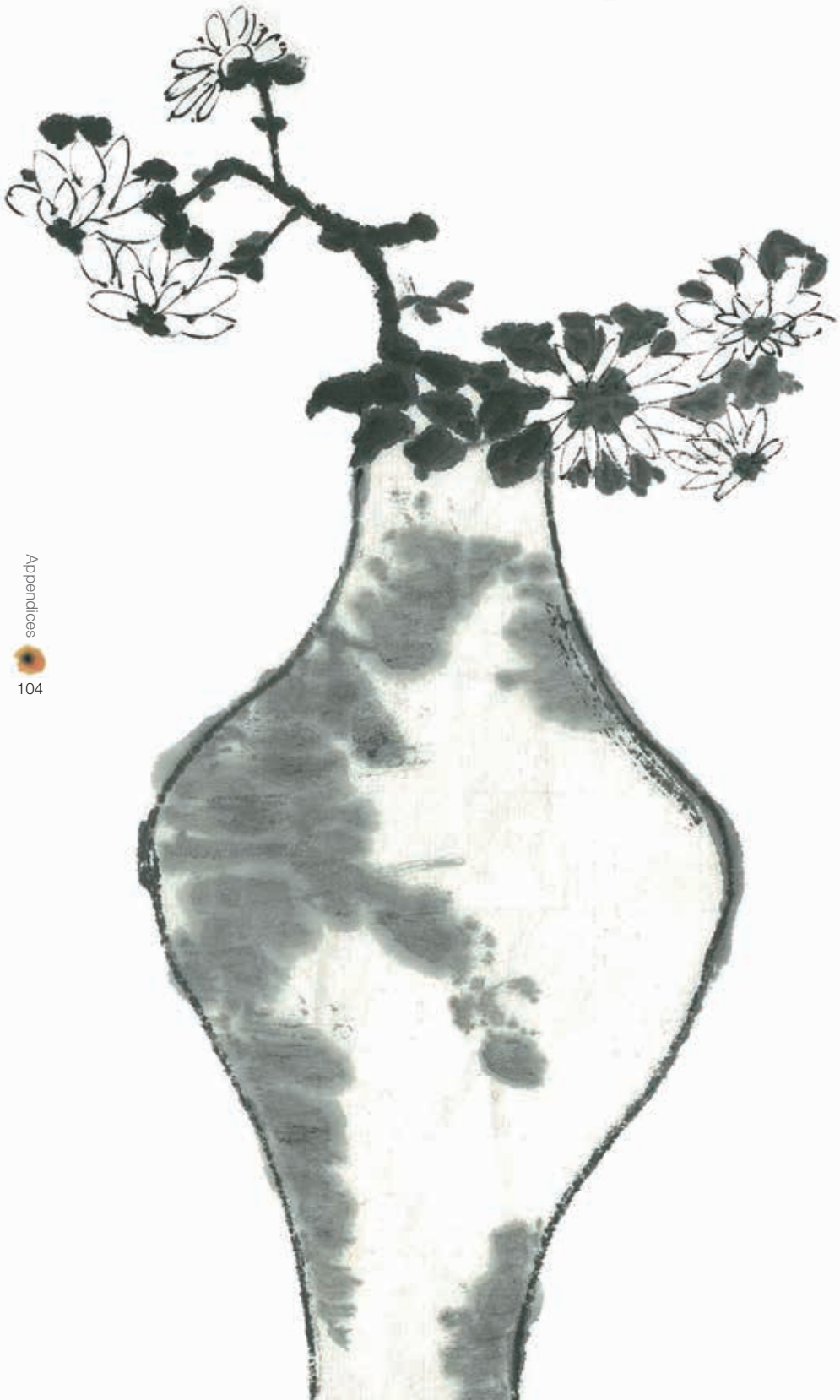
The development of this Framework is the start of a continuous process of improving our rehabilitation services. The momentum for service improvement has been built up among different specialties, disciplines and clusters. With the dedication and collaboration of our committed staff, the Framework is being translated into action by phases, for the benefit of our patients and the wider community.

13/ ABBREVIATIONS

A&E	Accident and Emergency
AH	Allied health
AHOP	Allied health outpatient
ASU	Acute Stroke Unit
CC	Central Committee
CMS	Clinical Management System
CCE	Cluster Chief Executive
CGAT	Community Geriatric Assessment Team
CNS	Community Nursing Service
CRN	Community Rehabilitation Network
C/R	Convalescent/Rehabilitation
COC	Coordinating Committee
ETS	Elderly Transport Service
GDH	Geriatric Day Hospital
GOPC	General outpatient clinic

HA	Hospital Authority
HARRPE	HA Risk Reduction Programme for the Elderly
ICM	Integrated Care Model
IT	Information Technology
KPI	Key performance indicator
LOS	Length of Stay
MSDC	Medical Services Development Committee
MMSE	Mini-mental State Examination
MBI	Modified Barthel Index
NEATS	Non-emergency Ambulance Transfer Service
NGO	Non-governmental organisation
PAC	Patient Advisory Committee
PRC/HRC	Patient Resource Centre / Health Resource Centre
SOPC	Specialist outpatient clinic
SWD	Social Welfare Department

14/ APPENDICES



Appendix 1:

Taskforce on the HA Strategic Service Framework for Rehabilitation Services

Terms of Reference

1. To review the current and future service needs for rehabilitation services in HA
2. To advise on the future service model(s) and system infrastructure for addressing the existing and anticipated gaps in HA rehabilitation services over the next five to ten years
3. To identify priority areas and develop strategies to enhance the quality and outcome of HA rehabilitation services
4. To formulate a strategic service framework for HA rehabilitation services for consideration by the members of the Directors' Meeting and Medical Services Development Committee

Membership (as at 10 Mar 2016)

Co-chairs	
Dr S V LO	Director (Strategy & Planning), HA Head Office
Dr W L CHEUNG	Director (Cluster Services), HA Head Office
Members	
Dr Theresa LI	Head (Human Resources), HA Head Office (up to 5 Feb 2016)
Dr David LAM	Clinical Stream Coordinator (Medical), Hong Kong East Cluster / Hospital Chief Executive, Ruttonjee, Tang Shiu Kin & Tung Wah Eastern Hospitals (up to 30 Nov 2015)
Dr K H YUEN	Chief of Service (Medicine & Rehabilitation), Tung Wah Eastern Hospital / Consultant (Medicine & Rehabilitation / Quality & Safety) (from 1 Dec 2015)
Dr Eddie CHOW	Consultant (Medicine & Geriatrics), Tuen Mun Hospital
Mr Lawrence FUNG	Cluster Service Coordinator (Allied Health), Kowloon West Cluster / Department Manager (Physiotherapy), Kwong Wah Hospital
Dr Leonard LI	Consultant (Medicine), Tung Wah Hospital
Dr S W LAW	Consultant (Orthopaedic Rehabilitation), Tai Po Hospital
Dr King CHAN	Cluster Coordinator (Chinese Medicine), Kowloon Central Cluster / Chief of Service (Family Medicine & Primary Health Care), Queen Elizabeth Hospital
Dr C K MOK	Cluster Coordinator (Medicine & Geriatrics), New Territories West Cluster / Chief of Service (Medicine & Geriatrics), Tuen Mun Hospital

Members	
Dr Libby LEE	Chief Manager (Strategy, Service Planning & Knowledge Management), HA Head Office
Dr Christina MAW	Chief Manager (Primary & Community Services), HA Head Office
Ms Ivis CHUNG	Chief Manager (Allied Health), HA Head Office
Mr Anthony LAU	Cluster Coordinator (Physiotherapy), New Territories East Cluster / Department Manager (Physiotherapy), Alice Ho Miu Ling Nethersole Hospital
Dr Serena NG	Department Manager (Occupational Therapy), Kowloon Hospital
Ms Y K TSOI	Department Manager (Medical Social Service), United Christian Hospital
Ms Jane LIU	Chief Manager (Nursing) / Chief Nursing Executive, HA Head Office
Ms Susanna LEE	Manager (Nursing) / Chief Nursing Officer, HA Head Office
Ms Eva TSUI	Chief Manager (Statistics & Workforce Planning), HA Head Office
Secretary	
Dr Sharon WONG	Senior Manager (Strategy & Service Planning), HA Head Office

Appendix 2:

Working Groups on the HA Strategic Service Framework for Rehabilitation Services

Medical Stream Working Group

Terms of Reference

1. To identify strength and weakness of current HA medical stream rehabilitation services along the care pathway
2. To suggest future model(s) of care and system infrastructure, and to propose priority areas and strategies for addressing the existing and anticipated gaps in HA medical stream rehabilitation services over the next five to ten years
3. To advise the Taskforce on Strategic Service Framework for Rehabilitation Services on the development of evidence-based, patient-centred and coordinated care for medical stream rehabilitation

Membership (as at 10 Mar 2016)

Co-chairs	
Dr C K MOK	Cluster Coordinator (Medicine & Geriatrics), New Territories West Cluster / Chief of Service (Medicine & Geriatrics), Tuen Mun Hospital
Dr Libby LEE	Chief Manager (Strategy, Service Planning & Knowledge Management), HA Head Office
Members	
Dr W C FONG	Consultant (Medicine), Queen Elizabeth Hospital
Dr P W NG	Chief of Service (Medicine & Geriatrics), United Christian Hospital
Dr Vincent PANG	Deputising Service Director (Quality & Safety), Hong Kong East Cluster / Consultant (Neurosurgery), Pamela Youde Nethersole Eastern Hospital
Dr W M LUI	Chief of Service (Neurosurgery), Queen Mary Hospital
Dr David LAM	Clinical Stream Coordinator (Medical), Hong Kong East Cluster / Hospital Chief Executive, Ruttonjee, Tang Shiu Kin & Tung Wah Eastern Hospitals (up to 30 Nov 2015)
Dr K H YUEN	Chief of Service (Medicine & Rehabilitation), Tung Wah Eastern Hospital / Consultant (Medicine & Rehabilitation / Quality & Safety) (from 1 Dec 2015)
Dr Eddie CHOW	Consultant (Medicine & Geriatrics), Tuen Mun Hospital
Dr Jennifer MYINT	Chief of Service (Rehabilitation), Kowloon Hospital
Dr Elsie HUI	Cluster Coordinator (Community Geriatric Assessment Team), New Territories East Cluster / Chief of Service (Medicine & Geriatrics), Shatin Hospital
Dr James LUK	Consultant (Geriatrics), Fung Yiu King Hospital
Dr Y K YIU	Chief of Service (Family Medicine & Primary Health Care), Kowloon West Cluster
Mr Hercy LI	Clinical Stream Coordinator (Allied Health), Hong Kong East Cluster / Allied Health Coordinator & Department Manager (Occupational Therapy), Ruttonjee & Tang Shiu Kin Hospitals
Ms Patricia LEE	Department Operations Manager (Medicine & Geriatrics), Shatin Hospital
Ms Patricia CHAN	Deputy Hospital Chief Executive, Rehabaid Centre
Dr Alexander CHIU	Chief Manager (Integrated Care Programmes), HA Head Office (up to 7 Aug 2015)

Members	
Dr Linda YU	Deputising Chief Manager (Integrated Care Programmes), HA Head Office (from 8 Jun 2015)
Dr Christina MAW	Chief Manager (Primary & Community Services), HA Head Office
Ms Ivis CHUNG	Chief Manager (Allied Health), HA Head Office
Ms Eva TSUI	Chief Manager (Statistics & Workforce Planning), HA Head Office

Surgical Stream Working Group

Terms of Reference

1. To identify strength and weakness of current HA surgical stream rehabilitation services along the care pathway
2. To suggest future model(s) of care and system infrastructure, and to propose priority areas and strategies for addressing the existing and anticipated gaps in HA surgical stream rehabilitation services over the next five to ten years
3. To advise the Taskforce on Strategic Service Framework for Rehabilitation Services on the development of evidence-based, patient-centred and coordinated care for surgical stream rehabilitation

Membership (as at 10 Mar 2016)

Co-chairs	
Dr S W LAW	Consultant (Orthopaedic Rehabilitation), Tai Po Hospital
Dr Libby LEE	Chief Manager (Strategy, Service Planning & Knowledge Management), HA Head Office
Members	
Dr Enoch CHEN	Consultant (Orthopaedics & Traumatology), Caritas Medical Centre
Dr C Y LAM	Consultant (Orthopaedics & Traumatology), Tuen Mun Hospital
Dr K H NG	Consultant (Orthopaedics & Traumatology), Queen Mary Hospital
Dr K B LEE	Consultant (Orthopaedics & Traumatology), Queen Elizabeth Hospital
Dr Steven WONG	Chief of Service (Anaesthesia & Operating Theatre Services), Queen Elizabeth Hospital
Dr Jennifer MYINT	Chief of Service (Rehabilitation), Kowloon Hospital
Dr Jenny LAM	Chief Manager (Service Planning & Transformation), Kowloon East Cluster / Deputy Hospital Chief Executive, United Christian Hospital

Members	
Dr T W AU YEUNG	Service Director (Primary & Community Health Care), New Territories West Cluster / Consultant (Medicine & Geriatrics), Pok Oi Hospital
Dr Carolyn KNG	Service Director (Primary & Community Health Care), Hong Kong East Cluster / Consultant (Integrated Medical Services) / Head of Department (Geriatrics), Ruttonjee & Tang Shiu Kin Hospitals
Dr David CHAO	Family Medicine Coordinator, Kowloon East Cluster / Chief of Service (Family Medicine & Primary Health Care), United Christian & Tseung Kwan O Hospitals
Mr Lawrence FUNG	Cluster Service Coordinator (Allied Health), Kowloon West Cluster / Department Manager (Physiotherapy), Kwong Wah Hospital
Ms S L WAN	Nurse Consultant (Orthopaedics & Traumatology), New Territories West Cluster
Ms Patricia CHAN	Deputy Hospital Chief Executive, Rehabaid Centre
Dr Rebecca LAM	Chief Manager (Patient Safety & Risk Management), HA Head Office (up to 3 Jan 2016)
Dr N C SIN	Chief Manager (Patient Safety & Risk Management), HA Head Office (from 4 Jan 2016)
Dr Christina MAW	Chief Manager (Primary & Community Services), HA Head Office
Ms Ivis CHUNG	Chief Manager (Allied Health), HA Head Office
Ms Eva TSUI	Chief Manager (Statistics & Workforce Planning), HA Head Office

Appendix 3:

HA Central Committee on Rehabilitation

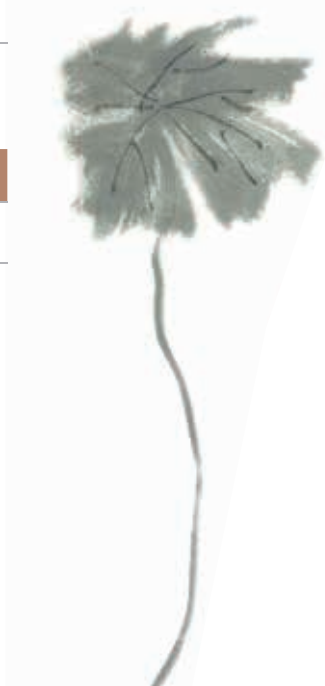
Terms of Reference

1. To advise the HA on the organisation, development and delivery of rehabilitation services to meet contemporary and future needs
2. To propose and set out the prioritisation of the rehabilitation service programme
3. To advise HA on workforce needs in rehabilitation, including skill mix, succession and manpower planning
4. To establish clinical standards for quality assurance and clinical indicators for performing monitoring

Membership (as at 10 Mar 2016)

Chairperson	
Dr Theresa LI	Head (Human Resources), HA Head Office (up to 5 Feb 2016)
Service Managers	
Dr Christina MAW	Chief Manager (Primary & Community Services), HA Head Office
Ms Ivis CHUNG	Chief Manager (Allied Health), HA Head Office
Cluster Rehabilitation Service Coordinators	
Dr David LAM	Clinical Stream Coordinator (Medical), Hong Kong East Cluster / Hospital Chief Executive, Ruttonjee, Tang Shiu Kin & Tung Wah Eastern Hospitals (up to 30 Nov 2015)
Dr K H YUEN	Chief of Service (Medicine & Rehabilitation), Tung Wah Eastern Hospital / Consultant (Medicine & Rehabilitation / Quality & Safety) (from 1 Dec 2015)
Dr Leonard LI	Consultant (Medicine), Tung Wah Hospital
Dr Jennifer MYINT	Chief of Service (Rehabilitation), Kowloon Hospital
Dr Jenny LAM	Chief Manager (Service Planning & Transformation), Kowloon East Cluster / Deputy Hospital Chief Executive, United Christian Hospital
Dr T C WONG	Service Director (Primary & Community Health Care), Kowloon West Cluster / Hospital Chief Executive, Our Lady of Maryknoll Hospital

Cluster Rehabilitation Service Coordinators	
Dr Herman LAU	Clinical Stream Coordinator (Allied Health Services), New Territories East Cluster / Hospital Chief Executive, Shatin Cheshire Home (up to 14 Oct 2015)
Dr Elsie HUI	Cluster Coordinator (Community Geriatric Assessment Team), New Territories East Cluster / Chief of Service (Medicine & Geriatrics), Shatin Hospital (from 15 Oct 2015)
Dr Eddie CHOW	Consultant (Medicine & Geriatrics), Tuen Mun Hospital
Nursing Representatives	
Ms Susanna LEE	Manager (Nursing) / Chief Nursing Officer, HA Head Office
Ms S W TANG	Ward Manager (Medicine), Tung Wah Eastern Hospital
Cluster Clinical Stream Coordinators (Allied Health)	
Mr Hercy LI	Clinical Stream Coordinator (Allied Health), Hong Kong East Cluster / Allied Health Coordinator & Department Manager (Occupational Therapy), Ruttonjee & Tang Shiu Kin Hospitals
Mr Kenneth WONG	Clinical Stream Coordinator (Allied Health), Hong Kong West Cluster / Department Manager (Prosthetic & Orthotic), Queen Mary Hospital
Mr K F LEUNG	Clinical Stream Coordinator (Allied Health) & Cluster Manager (Occupational Therapy), Kowloon Central Cluster / Department Manager (Occupational Therapy), Queen Elizabeth Hospital
Dr Peggy LEE	Clinical Stream Coordinator (Allied Health), Kowloon East Cluster & Department Manager (Dietetic), United Christian Hospital , Tseung Kwan O Hospital & Haven of Hope Hospital
Mr Lawrence FUNG	Cluster Service Coordinator (Allied Health), Kowloon West Cluster / Department Manager (Physiotherapy), Kwong Wah Hospital
Dr Herman LAU	Clinical Stream Coordinator (Allied Health Services), New Territories East Cluster / Hospital Chief Executive, Shatin Cheshire Home
Mr Raymond LAM	Clinical Stream Coordinator (Allied Health) / Cluster Coordinator (Prosthetic & Orthotic), New Territories West Cluster
Secretary	
Ms Alice WONG	Manager (Rehabilitation & Community Care), HA Head Office



Appendix 4:

Accredited Training Centres for Rehabilitation

Training Centres under the Hong Kong College of Physicians

- Alice Ho Miu Ling Nethersole Hospital
- Fung Yiu King Hospital
- Haven of Hope Hospital
- Kowloon Hospital
- McLehose Medical Rehabilitation Centre
- Princess Margaret Hospital / Lai King Building
- Ruttonjee Hospital
- Tai Po Hospital
- Tuen Mun Hospital
- Tung Wah Eastern Hospital
- Tung Wah Hospital
- United Christian Hospital
- Wong Tai Sin Hospital

Training Centres under the Hong Kong College of Orthopaedic Surgeons

- Alice Ho Miu Ling Nethersole Hospital / Tai Po Hospital
- Caritas Medical Centre
- Pamela Youde Nethersole Eastern Hospital
- Queen Elizabeth Hospital
- Queen Mary Hospital
- Tuen Mun Hospital
- United Christian Hospital

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