

**For information
on 20 January 2014**

LEGISLATIVE COUNCIL PANEL ON HEALTH SERVICES

Resource Management in the Hospital Authority

PURPOSE

This paper sets out the framework of resource management in the Hospital Authority (HA), including matters relating to resources allocation and the related monitoring arrangement.

BACKGROUND

2. Like many other healthcare providers around the world, HA strives to manage the ever-rising service demand with limited resources. To cope with the continuous emergence of challenges and changing healthcare service environment, HA's resource management has been evolving over the past 20 years to align resource allocation with areas of need based on the following three major premises:

- (i) ***Government Policy***
No person should be prevented, through lack of means, from obtaining adequate medical treatment¹;
- (ii) ***Government Funding***
To dovetail with the Government funding philosophy and arrangement for HA; and
- (iii) ***Corporate Strategy on Internal Resource Allocation***
To ensure public resources are used efficiently to provide services of the highest possible standard within resources obtainable², as well as to deliver output/outcome-focused care.

¹ Section 4(d) of the Hospital Authority Ordinance (Cap 113) stipulates that –
“The [Hospital] Authority shall -

(d) recommend to the Secretary for Food and Health, for the purposes of section 18, appropriate policies on fees for the use of hospital services by the public, having regard to the principle that no person should be prevented, through lack of means, from obtaining adequate medical treatment”

² Section 4(c)(i) of the Hospital Authority Ordinance (Cap 113) stipulates that

VALUES UPHELD IN RESOURCE MANAGEMENT

Patient-centred: Continuum of Care and Effectiveness of Care

3. To fulfill its statutory obligation, HA always strives to uphold its key values in resource management – to facilitate service provision not only to achieve **continuum of care** within the same geographical proximity for patients seeking medical support, but also to optimise **effectiveness of care** for patients receiving medical services at HA.

4. With a view to achieving continuum of care, local communities are provided with a comprehensive range of core primary and secondary care services organised into respective cluster networks of medical facilities and services, including 24-hour accident and emergency care, inpatient services supported by different specialties, day services, outpatient services and rehabilitation and community services.

5. On the other hand, to optimise the effectiveness of medical services from a professional viewpoint, resources have to be deployed for the betterment of total patient care. Within each care episode, individual patients may require services from a number of clinical specialties to cater for their different needs throughout the course of their illness, i.e. from an acute phase to convalescence and rehabilitation, and community after-care. There are also highly specialised services which require advanced technological support and special scarce expertise (i.e. specialty service networking). These services are operating across clusters on a territory-wide basis (tertiary level services) and are centralised at designated centres to facilitate effective pooling of expertise and resources. Examples of such services are neurosurgery, oncology, organ transplants (kidney, liver, heart, lung), bone marrow transplant and burn management services.

6. Furthermore, in driving for better clinical outcome and efficiency gain, some medical services have been put under the management of a single cluster for serving the whole Hong Kong population. These include the Blood Transfusion Service at Kowloon Central Cluster for ensuring sufficient supply of safe and high-quality

“The [Hospital] Authority shall -

(c) manage and develop the public hospitals system in ways which are conducive to achieving the following objectives-

(i) to use hospital beds, staff, equipment and other resources efficiently to provide hospital services of the highest possible standard within the resources obtainable”

blood and blood components for all hospitals' use, and the Infectious Disease Block at Kowloon West Cluster, which was constructed following the 2003 SARS epidemic to better prepare Hong Kong for any future emergent infectious diseases.

7. To uphold the above patient-centred values, resource allocation and utilisation among clusters in HA have all along been driven by its planning of patient services, which in turn has led to the consequential pattern of resource allocation across cluster.

EVOLUTION OF HA'S INTERNAL RESOURCE ALLOCATION MODEL

8. Resource allocation in HA is always an integral part of its service planning. In addition to dovetailing with the Government's evolving funding arrangement with HA, HA's Internal Resource Allocation (IRA) models are developed and refined not only to support its patient service planning, but also to strive for an objective means in aligning resources to areas of need.

9. To support the patient-centred resource management philosophy, HA's IRA models have been evolving over the past 20 years, moving from historical-based prior to the inception of HA to Hospital Plan-based in the early 1990s, where resources were allocated according to the agreed service level and targets of hospitals. In the early 2000s, to align with the Government's change in funding arrangement to population-based, HA adopted a population-based model where resources were allocated based on population/community needs with suitable adjustment to cater for cross-cluster utilisation of secondary and tertiary services. In 2009, HA's IRA model was refined under the concept of Pay-for-Performance (P4P) with a view to further promoting productivity and quality improvement while ensuring that resources were deployed to targeted areas of need³. In August 2012, HA initiated an internal examination on this P4P model aiming to further reinforce its effectiveness in aligning resources allocation with its service plan.

³ Details of the Pay-for-Performance model was discussed at the Legislative Council Panel on Health Services on 9 February 2009 (LC Paper No. CB(2)774/08-09(05))

FRAMEWORK OF RESOURCE MANAGEMENT

10. Under the objective of providing continuum of care for patients, HA's longer term objective is to enable local population of the respective clusters to seek public primary and secondary healthcare services within the cluster where they reside. It should however be recognised that there is unevenness among the clusters in terms of the population size of the catchment districts and their needs for public healthcare services, given the different and changing demographic characteristics and economic status of the population in each cluster. On the other hand, the level and scope of services, facilities and expertise available in different clusters also varies. This is because the portfolio of hospitals, many of which pre-exist before the cluster arrangement was adopted, was not originally planned on a cluster basis and not all clusters started at the same level. Against this background, there exists in some clusters certain level of mismatch between the supply of and demand for hospital facilities. Over the years, HA has made strenuous efforts to address this mismatch through careful service planning, including building of new hospitals and facilities, expansion of clinical services and development of new services. Such service planning in turn determines how resources are allocated across clusters.

Internal Resource Allocation To Support Service Planning

(a) Strategic service planning and resource allocation

11. In 2012, HA published its latest Strategic Plan 2012 – 2017 to set out its strategies and priorities for the next five years. The development of this document was led by the HA Board involving extensive consultation and discussion with both internal and external stakeholders. Through extensive examination of HA's internal and external environment, key outstanding issues and gaps across different aspects of the organisation, such as service needs, patients' expectation, medical technology and facilities requirement etc., were identified. Medium term strategies and directions were accordingly mapped out to guide HA's annual service planning process (Annual Planning). The strategies and directions would then be implemented through appropriate allocation of additional resources to targeted areas of need during the Annual Planning.

(b) Resource allocation to clusters

12. The Annual Planning process itself is a participative approach with bottom-up and top-down contributions throughout HA, including the collection of views from frontline clinical staff, cluster management and

Head Office executives. Every year, the resource requirements for new services as well as that for specific pressure areas of individual departments at hospital level are submitted for consideration of additional funding through the Annual Planning exercises of respective clusters. All proposed programmes submitted by clusters, and those from clinical/specialty groups and Head Office, will be deliberated at the Annual Planning Forums where inputs from stakeholders across all clusters will also be considered.

13. Based on the above Annual Planning process, HA will formulate its Annual Plan, incorporating all new programmes that are approved for implementation for the year, including territory-wide and specialty-based programmes, as well as cluster/hospital/department-specific initiatives. HA will also set targets for its Annual Plan targets for necessary monitoring.

14. With the Government's notification of the total recurrent funding available to HA for a year, HA will determine the resource allocation to clusters (including manpower, equipment, facilities and other operating needs) having regard to the following considerations:-

- (i) the resources needed to sustain the baseline operations of respective clusters, including their core primary and secondary services as well as any specialised or centralised services under their management;
- (ii) additional resources required to deliver the new services that have been supported during the annual service planning process ;
and
- (iii) any other resources needed to address specific pressure areas/gaps.

15. Within the agreed parameters and targets set under the Annual Plan, cluster management is responsible for ensuring operational efficiency. They will likewise work out a service plan for its cluster taking into account the baseline operations that need to be maintained, new services to be introduced and pressure areas of its hospitals/departments that need to be enhanced, and make necessary service reorganisation and rationalisation to deliver the agreed Annual Plan targets while ensuring optimal deployment of resources.

16. Resource allocation is indeed a complicated matter where no single formula could flexibly meet the needs of the ever-changing

healthcare circumstances. While a basket of factors have been considered in totality when resources are allocated, the following table serves to summarise the recurrent funding allocated across clusters for 2013-14 and other relevant information for illustration.

	HKEC	HKWC	KCC	KEC	KWC	NTEC	NTWC	Total
Recurrent Funding % ⁽¹⁾	11.0%	11.6%	13.9%	10.7%	23.2%	16.5%	13.2%	\$44.4B ⁽²⁾
Population % ⁽³⁾	11.3%	7.5%	7.1%	14.1%	26.6%	18.4%	15.1%	7.2M
Patient % ⁽⁴⁾	11.0%	8.6%	13.3%	13.1%	24.4%	16.5%	13.0%	3.1M
Complexity-adjusted acute inpatient workload ⁽⁵⁾	10.4%	12.8%	13.4%	11.0%	23.5%	16.7%	12.1%	1.5M

Notes to table

- (1) Represent respective cluster's share of the total allocation of recurrent funding to clusters.
- (2) \$44.4 B represents the total recurrent funding to HA per 2013-14 Estimate. Apart from the allocation to clusters, this funding also covered various corporate-wide centralised services.
- (3) Mid 2012 population excluding marine
- (4) Number of patients handled by respective clusters in 2012-13 totaled 3.6M. This was different from the total number of patient headcounts handled by HA as a whole (3.1M). Such difference was due to cross-cluster service utilisation (i.e. patients utilising services in more than one cluster).
- (5) Figures for 2012-13, measured in terms of Weighted Episode (WE). WE is a measurement of acute inpatients workload in terms of the number of episodes treated, adjusted by case complexity. For example, an episode of treating a patient of burn will consume 1 WE of resources, while that of patient with bone marrow transplant will consume 14 WE.

17. The first row of the table lists out the different level of recurrent funding allocated across clusters to meet their resource requirements determined by HA's service planning.

18. As indicated in the table, the percentages of population and patients treated vary in each cluster. Given the underlying differences in the demographic characteristics and economic status of the patients served in different clusters, the extent of service utilization, thus resource requirement, will vary across clusters. Moreover, cross-cluster utilization of service is not uncommon for various reasons. For example, some patients are referred to receive specialised tertiary services in other clusters; and some others who have moved to another district may still wish to seek services in the hospitals they used to attend so as to be followed up by the same team of medical staff. On the other hand, some cross-cluster utilization of services are centrally co-ordinated to ensure concentration of expertise and the economy of scale. Taking Kowloon Central Cluster (KCC) and Hong Kong West Cluster (HKWC) as examples, in 2011-12, these two clusters served the highest proportion of patients residing outside of their catchment districts at 63% and 30% respectively for inpatient services.

19. The last row of the above table shows that the percentage of acute inpatient services rendered in each cluster, with complexity of treatment and number of patient admissions being taken into consideration, is highly comparable to the percentage of funding provided. Given the resources consumed in acute inpatient services represent consistently around 50% of the total resources consumed across clusters, this observation illustrates that HA's resource allocation largely follows patient services.

Monitoring of resource utilisation

20. Performance monitoring is an essential aspect in HA's resource management process. In addition to targets defined in the Annual Plans, HA has also established Key Performance Indicators (KPIs) to facilitate tracking and measuring of progress towards organisational objectives and priorities. There is a well-defined framework for performance monitoring and accountability reporting in HA, both for internal management as well as external oversight.

21. Internally, an established structure is in place to provide regular monitoring and evaluation of resource utilisation at various management forums, including:

- (i) At the Board level – the Chief Executive (CE) of HA submits regular progress reports to the Board, including information on the achievements of Annual Plan targets, KPIs, operational, financial and manpower performance;
- (ii) At the Head Office level – monthly operational, manpower and financial performance are reported to the Directors' Meeting which provides the forum for CE and the senior executive management team (i.e. Directors, Heads and Cluster Chief Executives) to review the progress of achievements on HA's overall performance; and
- (iii) At the cluster level – the performance of hospitals within a cluster is reviewed against Annual Plan targets and KPIs at the respective Cluster Management Meeting. Hospital performance will also be regularly reported to respective Hospital Governing Committees.

22. On the external front, HA submits Quarterly Progress Reports to the Food and Health Bureau on its services provision and publishes its Annual Report with Audited Financial Statements on both its financial and non-financial performance. HA's Annual Report and statement of accounts are also tabled at the Legislative Council annually.

WAY FORWARD

23. Facing the ever changing environment driven by factors such as advancing medical science and escalating demand by the ageing population, HA will continue to keep its resource management framework under review with a view to further enhancing its efficiency and ensuring optimal use of public resources in the delivery of quality care.

Food and Health Bureau
Hospital Authority

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