Panel on Health Services

Updated background brief prepared by the Legislative Council Secretariat
for the meeting on 20 January 2014

Resources allocation among hospital clusters by the Hospital Authority

Purpose

This paper gives an account of the past discussions by the Panel on Health Services ("the Panel") on issues relating to resources allocation among hospital clusters by the Hospital Authority ("HA").

Background

2. HA is a statutory body established under the Hospital Authority Ordinance (Cap. 113) in December 1990, responsible for managing the public hospital system in Hong Kong. The Ordinance includes provisions specifying that HA should use the resources efficiently to provide hospital services of high quality. At present, HA provides public healthcare services for the territory through seven hospital clusters, namely, Hong Kong East ("HKE") Cluster, Hong Kong West ("HKW") Cluster, Kowloon Central Cluster, Kowloon East ("KE") Cluster, Kowloon West Cluster, New Territories East Cluster and New Territories West ("NTW") Cluster. Each hospital cluster comprises a mix of acute and convalescent or rehabilitation hospitals to provide a full range of healthcare services. HA relies almost entirely on annual subvention from the Government to support and finance the delivery of these services. The recurrent subvention for HA in 2013-2014 is $44.4 billion, representing an increase of 5.9% as compared to the revised estimate of $41.9 billion in 2012-2013.

1 HA currently manages 42 public hospitals and institutions, 48 Specialist Outpatient Clinics ("SOPC") and 73 General Outpatient Clinics. These facilities are organized into the seven hospital clusters according to their geographical locations.

2 Apart from the allocation to hospital clusters, this funding also covered various corporate-wide centralized services of HA.
3. HA manages its internal resources allocation on the basis of hospital clusters. The allocation of resources is basically premised on the annual plans drawn up at cluster level, which set out the strategies, major initiatives and service targets to meet the demands of the communities covered by their respective catchment area. Prior to financial year 2009-2010, HA allocated funding to hospital clusters based upon a historical budget approach that was largely built upon an age-adjusted population model implemented since 2003-2004. To improve the fairness and transparency of its internal resource allocation, HA introduced a "Pay for Performance" funding model in 2009-2010. Under this model, hospital clusters are given additional funding for service growth in areas of greatest needs; improvement in patient safety and quality; and service enhancement through staff development and technology advancement. A Diagnosis Related Groups ("DRG")-based casemix system on acute inpatient services has been developed to measure hospital performance and guide the hospital clusters' baseline budget adjustment (i.e. reduction in baseline budget for those hospital clusters with higher than expected casemix-adjusted cost, and vice versa), and allocate funding for service growth in targeted acute inpatient service areas based upon the casemix price. In classifying patients into different DRG, HA measures the workload of hospitals with the number of cases treated by the hospitals, adjusted by the complexity of the cases. Under the principle of "same service, same funding", unit costs of clinical services form a basis for resources allocation. A set of cost weights has been developed to measure the relativity of resource requirements across patients of different DRG. The more complex the patient episode, the higher the value of cost weight.

4. A summary of resource utilized by the hospital clusters from 2009-2010 to 2011-2012 and the budget allocation in 2012-2013 is in Appendix I.

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3 Examples of service growth in areas of greatest needs include opening of additional beds in under-supplied areas, enhancement of service for treatment of life threatening diseases, and addressing waiting time for priority disease groups, etc.

4 Examples of improvement in patient safety and quality include enhancing drug quality and safety, and strengthening safety and risk management, etc.

5 Examples of service improvement through technology advancement and staff development include further expansion of the HA Drug Formulary, and replacement of ageing medical equipment, etc.

6 Casemix refers to a way of describing the number and type of patients treated by acute hospitals adjusted for complexity according to clinical diagnosis and procedures performed. The casemix model adopted by HA is built upon the DRG system, which is an internationally-adopted patient classification system.

7 The costs of HA's clinical services include: (a) the direct costs of clinical specialties; (b) the costs of various clinical support services (e.g. anaesthesia service, pharmacy, pathology, diagnostic radiology and allied health services); (c) the costs of various non-clinical supporting services and daily expenses of hospitals (e.g. meals for patients, utility expenses, repair and maintenance of medical equipment and machinery); (d) some institutional items (e.g. insurance costs and information technology support for clinical computer systems); (e) the administrative costs of clusters and the HA Head Office; and (f) some charges for services provided by Government Departments to HA (e.g. building maintenance services provided by the Architectural Services Department). The average unit cost of a particular type of service is calculated with reference to the total costs of provision of such service and the corresponding volume of activities.
Deliberations of the Panel

5. The Panel held two meetings in 2008 and 2009 to discuss resources allocation among hospital clusters by HA, and received views of deputations at one of these meetings. The issue was further discussed in the context of the wastage of doctors in HA and waiting time management for SOPCs in HA at two Panel meetings held in 2011 and 2013 respectively. The deliberations and concerns of members are summarized below.

Uneven allocation of resources among hospital clusters

6. Members expressed grave concern that the amount of resources allocated to certain hospital clusters, such as KE and NTW Clusters, were disproportionately lower than other hospital clusters when compared in terms of their size of population. Members urged HA to conduct a comprehensive review on its resource allocation mechanism to address the uneven allocation of resources among hospital clusters. There were also concerns that those hospital clusters with higher service demand and heavier workload were disadvantaged in resource allocation under the prevailing resource allocation mechanism, and additional resources would only be provided for new services but not existing services even when the service had reached its maximum capacity.

7. HA advised that when allocating resources to individual hospital clusters, it took into consideration not only the population size in their catchment area, but also the population profile and their dependency on public healthcare services, HA's priority service areas, service needs of the community, provision of primary and specialist services, new service programmes, and resources required in updating facilities, purchasing drugs and staff training. In general, each cluster would be allocated annual provision on the basis of baseline resources in the previous year and additional funding growth to cater for new and improved services. Clusters with designated centres for the provision of those tertiary services with limited demand and required advanced and complex supporting equipment and healthcare professionals to deliver would have their allocation adjusted to reflect their specific resources requirements. The newly introduced "Pay for Performance" model would also enhance the fairness and transparency of resource allocation to hospital clusters as funding were tied with performance. It drove efficiency and productivity improvement through baseline redistribution and benchmarking among hospital clusters.

8. HA further clarified that partly due to the reason that the population of KE and NTW Clusters had long had a huge demand for public healthcare services, these Clusters were allocated with the largest proportion of resources, whereas HKE and HKW Clusters were allocated with the smallest proportion of resources. It was also worthy to note that patients could receive treatment in hospitals other than those in their own residential districts and cross-cluster utilization of services was rather common.
9. Some members were of the view that the uneven allocation of resources among hospital clusters was due to the existence of fiefdoms among hospital clusters. On the suggestion of rotating Hospital Chief Executives ("HCE") to concurrently serve as Cluster Chief Executive ("CCE") to prevent a CCE from favouring the hospital which he also served as HCE, the Administration advised that rotation of CCEs and HCEs had been progressively taken forward by HA.

10. At its meeting on 14 January 2008, the Panel passed a motion urging the Government to demand HA to reform its clustering arrangement so as to address the uneven distribution of resources among clusters and among hospitals within the same hospital cluster; allocate more funding to improve the serious shortage of resources in certain hospital clusters; and set up an independent committee comprising frontline staff and patients' groups to comprehensively review the effectiveness of the clustering arrangement.

Implementation of the "Pay for Performance" system

11. There was a concern that the adoption of a casemix approach under the "Pay for Performance" model would result in under-provision of funding to those hospitals which were less endowed to take up complicated cases.

12. The Administration advised that apart from allocating resources on the basis of the output and workload of hospitals, new recurrent funding would be allocated to specific programs and target areas, namely, funding for growth in targeted areas of need; funding for quality enhancement; and funding for service improvement, technology advancement and workforce supply. In addition, HA would refine its casemix system through consultation with stakeholders and clinical experts, so as to ensure that the system could provide a fair and objective means to measure the output and workload of hospitals.

13. Some members were concerned that the adoption of the casemix approach, which required classification of inpatient into different DRGs, would add to the already heavy workload of frontline doctors. There was a view that clinical coding should be performed by clerical staff, so as to prevent frontline doctors from deliberately classifying cases into more complicated DRGs in order to enable the hospitals to which they belonged to get more resources, and to ensure consistency in classification across hospitals.

14. According to the Administration, the casemix system was compatible with existing coding practice in HA's clinical information system. Classifying inpatients into different DRGs merely required frontline doctors to take one step further in the clinical documentation process and should not significantly increase their workload. HA would also assign administrative staff to verify and audit the coding.
Recent developments

Modernization of the internal resource allocation system

15. According to HA’s 2013-2014 Annual Plan, it will further modernize its internal resource allocation system through developing a model based on total patient journey that will facilitate more equitable resource allocation to priority areas of need. Its target is to develop a patient-based measure that assesses the total resource need, taking into account treatment complexity throughout the entire medical journey of each patient at HA, by the first quarter of 2014.

Hospital Authority Review Steering Committee

16. The Chief Executive announced in his 2013 Policy Address that in view of the ageing population and the changing public needs for healthcare services, a steering committee would be set up to conduct a comprehensive review of the operation of HA to explore viable measures for enhancing the cost-effectiveness and quality of its services. The Hospital Authority Review Steering Committee ("the Steering Committee") was established on 21 August 2013. The review is aimed to complete in around one year.

17. Issues relating to cluster arrangement and resource management system within HA were discussed at the second meeting of the Steering Committee on 6 December 2013. The Steering Committee agreed that the cluster arrangement had its pros and cons, and on balance the arrangement was still considered an effective model for delivery of public healthcare services in Hong Kong. Given the geography and scale of operation in a hospital cluster, the total number of seven hospital clusters was also thought to be appropriate. There was however a need to adjust the coverage of certain hospital clusters. The Steering Committee also discussed the existing resources management model vis-a-vis the population based model, and agreed to study the subject further. Taking into consideration that cluster arrangement, resource management and human resource management are interrelated, it is the plan of the Steering Committee to examine these subjects in tandem at its future meetings.

Relevant papers

18. A list of the relevant papers on the Legislative Council website is in Appendix II.
### Resource utilization/budget allocation in respect of each hospital cluster of HA for the period of 2009-2010 to 2012-2013

<table>
<thead>
<tr>
<th>Hospital cluster</th>
<th>Catchment area</th>
<th>Catchment population in mid-2012</th>
<th>Resource utilization ($ billion)</th>
<th>Budget allocation ($ billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hong Kong East Cluster</td>
<td>Eastern, Wanchai and Islands (apart from North Lantau) areas</td>
<td>825 400</td>
<td>3.45 3.46 4.29</td>
<td>4.37</td>
</tr>
<tr>
<td>Hong Kong West Cluster</td>
<td>Central and Western, and Southern districts of the Hong Kong Island</td>
<td>544 100</td>
<td>3.65 3.77 4.76</td>
<td>4.51</td>
</tr>
<tr>
<td>Kowloon Central Cluster</td>
<td>Yau Ma Tei, Tsim Sha Tsui and Kowloon City districts</td>
<td>503 200</td>
<td>4.28 4.44 5.45</td>
<td>5.45</td>
</tr>
<tr>
<td>Kowloon East Cluster</td>
<td>Kwun Tung, Tseung Kwan O and part of the Sai Kung districts</td>
<td>1 012 000</td>
<td>3.09 3.18 3.90</td>
<td>4.10</td>
</tr>
<tr>
<td>Kowloon West Cluster</td>
<td>Districts of Wong Tai Sin, Mong Kok, Sham Shui Po, Kwai Tsing, Tsuen Wan and North Lantau</td>
<td>1 887 600</td>
<td>7.14 7.30 8.69</td>
<td>8.96</td>
</tr>
<tr>
<td>New Territories East Cluster</td>
<td>Sha Tin, Tai Po, North and part of the Sai Kung districts</td>
<td>1 321 300</td>
<td>5.09 5.24 6.40</td>
<td>6.50</td>
</tr>
<tr>
<td>New Territories West Cluster</td>
<td>Tuen Mun and Yuen Long districts</td>
<td>1 085 300</td>
<td>3.98 4.15 4.99</td>
<td>5.18</td>
</tr>
</tbody>
</table>

**Sources:**
- Hospital Authority Annual Reports 2009-2010 to 2011-2012
- Hospital Authority Annual Plan 2013-2014
- Administration’s replies to Members' initial written questions during the examination of estimates of expenditure 2013-2014
## Relevant papers on the resources allocation among hospital clusters by the Hospital Authority

<table>
<thead>
<tr>
<th>Committee</th>
<th>Date of meeting</th>
<th>Paper</th>
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</thead>
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<tr>
<td>Panel on Health Services</td>
<td>14.1.2008 (Item IV)</td>
<td><a href="#">Agenda Minutes</a></td>
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<td>9.2.2009 (Item V)</td>
<td><a href="#">Agenda Minutes</a></td>
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<td>11.4.2011 (Item IV)</td>
<td><a href="#">Agenda Minutes</a></td>
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<td>17.6.2013 (Item III)</td>
<td><a href="#">Agenda Minutes</a></td>
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