Hospital Authority's management of public hospital projects

The Audit Commission ("Audit") conducted a review of the Hospital Authority ("HA")'s management of public hospital projects. The review examined two major public hospital projects¹ completed during the past five years and minor hospital projects.

- 2. As of September 2017, HA managed 42 public hospitals and institutions (providing a total of about 28 000 beds) under seven clusters. These hospital buildings covered a total floor area of 2.7 million square metres ("m²") and 59% of the floor area had been in use for more than 30 years. HA has undertaken public hospital projects to meet growing demand for healthcare services, modernize the public hospitals and make them safer. From 2012-2013 to 2016-2017, six major hospital projects with Approved Project Estimate totalling \$12.5 billion had been completed. From 2014-2015 to 2016-2017, HA initiated a total of 1 092 minor works projects and, as of March 2017, the total expenditure was \$3.3 billion. The 2016 Policy Address announced a 10-year Hospital Development Plan costing \$200 billion to meet new demand and improve existing services.
- 3. The Committee noted the following findings from the Director of Audit's Report:

The redevelopment of Caritas Medical Centre ("CMC") (Phase 2)

in May 2007, the Legislative Council Finance Committee ("FC") approved funding of \$1,218.1 million for implementing the redevelopment of CMC Phase 2. HA invited tenders in July 2007, but this tender exercise was eventually cancelled in November 2007 due to the higher-than-expected tender prices of all conforming tenders received by HA. In June 2011, the Food and Health Bureau ("FHB") resubmitted a funding application and FC approved increasing Approved Project Estimate of CMC Phase 2 by 41% to \$1,719.6 million, mainly due to the increase in construction costs and higher provision for price adjustment. According to FHB and HA, one of the reasons for the higher-than-expected tender prices was that HA's project consultants might not have adequately gauged the rapid upsurge in construction prices and fully taken into account the prevailing market sentiments;

The two projects are the Redevelopment of Caritas Medical Centre (Phase 2) and the North Lantau Hospital (Phase 1).

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- owing to the higher-than-expected tender prices, HA and its consultants conducted a design review from November 2007 to October 2008 to identify savings in respect of the project design, project specifications and contract strategy. The design review identified cost savings of at least \$236 million by revising the building design and contract strategy (i.e. splitting the works into three (instead of one) works contracts);
- during the construction period, the accident frequency rate of a contractor was 0.92 reportable accident per 100 000 man-hours worked, which was significantly higher than the limits set by HA and the Development Bureau. According to the contract provisions, the above contractor should submit a monthly report to HA at the meeting of the Site Safety and Environmental Management Committee. However, three reportable accidents which occurred during the construction period involving three workers employed respectively by three sub-contractors of the above contractor were not included in the pertinent monthly reports. HA management had not reported most of the related accident statistics of its hospital projects during January 2012 to October 2013 to HA Board or HA's Capital Works Subcommittee;
- the new hospital block and the rehabilitation garden were completed in November 2013 and October 2015 respectively, 27 months and 43 months later than the original target completion dates. 10 091 defect items were identified. All except nine defect items had been rectified as of end September 2017, while the remaining nine outstanding defect items would be rectified by end October 2017;

Commissioning of facilities of the North Lantau Hospital ("NLTH") Phase 1

- according to the HA, the annual recurrent expenditure of \$300 million provided to the Legislative Council Public Works Subcommittee in December 2009 was a rough estimation based on the latest cost data at that time. In 2011, the hospital management estimated that an annual recurrent expenditure of \$476 million would be required for full operation of NLTH Phase 1;

According to HA, the number of reportable accidents refers to the number of workers involved in fatal cases or injury with incapacity for more than three days. In April 2012, HA stipulated a limit on accident frequency rate for each of its work project at 0.5 reportable accident per 100 000 man-hours worked. As for the Development Bureau, it has set the limit at 0.6 reportable accident per 100 000 man-hours worked for public works projects carried out by the Government.

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- five types of medical services³ were commissioned later than the dates proposed by HA management. As of June 2017, only 40 beds (22% of the planned 180 beds) were commissioned to provide services for the 123 000 Lantau residents; three types of medical services⁴ had not yet been commissioned due to manpower shortage and competing needs across HA and the anticipated timeline for commissioning the above three medical services had not been reported to HA Board and FHB;
- as of June 2017, 2 867 m² (21% of the total area of 13 729 m²) of the hospital building were vacant or had not been utilized for the intended functions;
- since the commissioning of NLTH Phase 1 in 2013, HA had procured 10 major medical equipment items at a total cost of \$32.7 million. In 2016, the utilization rates of three items had exceeded 100%, while the utilization rates of the remaining seven items ranged from 6% to 58%. As of June 2017, HA had not yet put into use some other medical equipment items (each costing less than \$1 million) since their procurement, and the warranty periods of all such items had expired;

Management of minor hospital projects

- according to HA's internal guidelines, at least 90% of the new minor works projects initiated during a financial year should be planned projects included in the 3-year rolling plan⁵ approved in March of the year preceding the last financial year. During 2014-2015 to 2016-2017, only 64% to 77% of the new minor works projects initiated each year had been included in the relevant approved 3-year rolling plan. Meanwhile, HA's seven clusters had not provided the survey results of building condition of public hospitals to the HA Chief Executive for his vetting and approval of the 3-year rolling plan;

The three types of medical services were: (i) specialist out-patient services for gynaecology and paediatrics; (ii) 20 day-beds for day-surgery patients; and (iii) a total of 120 in-patient beds.

The five types of medical services were: (i) 24-hour accident and emergency service; (ii) day rehabilitation centre; (iii) specialist out-patient clinics on orthopaedics and traumatology and surgery; (iv) day surgery centre; and (v) 20 in-patient beds.

⁵ In August each year, HA's seven clusters would each submit a tentative list of minor works projects for the current and the next two financial years to the Strategy and Planning Division for vetting.

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- in December 2013, FHB informed FC that HA could annually initiate around 500 new minor works projects from 2014-2015 to 2023-2024. However, only 1 092 projects were initiated from 2014-2015 to 2016-2017, representing an average of 364 projects per year. As of August 2017, only 62 (12% of HA's estimate of 500) wards had been renovated, and 9 (17% of HA's estimate of 52) electrical installations and 13 (4% of the HA's estimate of 364) lifts had been upgraded; and
- there were delays in completing 303 (46%) of the 654 works orders issued to HA minor-works contractors⁶ in 2015-2016 and 2016-2017, while 219 (72%) of the delayed works orders were carried out by term contractors, and the progress of works orders carried out by two term contractors was less than satisfactory.
- 4. The Committee did not hold any public hearing on this subject. Instead, it asked for written responses regarding the planning of NLTH Phase 1, minor hospital projects and the redevelopment of CMC Phase 2; measures to ensure construction safety of hospital projects, to put vacant areas at NLTH Phase 1 into gainful uses in the interim period and to prevent delays in future hospital projects; and the conditions of the medical equipment in NLTH Phase 1 The consolidated replies from **Secretary for Food and Health** and **Chief Executive of the Hospital Authority** are in *Appendix 29*.
- 5. The Committee wishes to be kept informed of the progress made in implementing the various recommendations made by Audit.

⁶ HA has appointed four term contractors, four term maintenance surveyors and four term quantity surveyors for carrying out minor works projects.