For discussion on 25 April 2017

Legislative Council Panel on Health Services

Extension of Operating Theatre Block of Tuen Mun Hospital

- Main Works

Purpose

This paper briefs Members on the proposed main works of the project on the extension of the Operating Theatre (OT) Block of Tuen Mun Hospital (TMH).

Background

2. At present, the Hospital Authority (HA) provides public hospital services for Tuen Mun and Yuen Long districts through its New Territories West Cluster (NTWC), which comprises TMH, Pok Oi Hospital, Castle Peak Hospital, Siu Lam Hospital and Tin Shui Wai Hospital. TMH, established in 1989, provides a comprehensive range of specialty services at secondary and tertiary levels. Over the years, the population of Tuen Mun and Yuen Long districts has grown rapidly. According to the latest projection of the Census and Statistics Department and the Planning Department, the total population of the two districts was 1 117 500 in mid-2015 and is projected to reach 1 241 300 by mid-2024, representing an increase of 11%. While there has been continuous expansion in service capacity in NTWC in the past few years 1 to strengthen the provision of medical services to the

Namely the commissioning of additional beds at TMH and Pok Oi Hospital, opening of Tin Shui Wai (Tin Yip Road) Community Health Centre, and commissioning of Tin Shui Wai Hospital in phases from early

local community, there is a genuine need to expand the OT facilities, accident and emergency (A&E) department and radiology department of TMH in view of the projected population growth and TMH's status as the major acute hospital and tertiary referral centre for the NTWC.

- 3. TMH runs a 24-hour A&E department and provides a full range of acute, ambulatory, extended care and community medical services. It also serves as a tertiary referral centre for trauma and neurosurgery of NTWC. Most of the ultramajor and major operations performed in the operating theatres² (including main theatre and day surgery centre) of NTWC are carried out in TMH. Demand for the services of TMH, in particular surgical services, has been constantly high. In 2015-16, there were around 24 800 inpatient and day inpatient discharges and deaths in the surgical specialty of TMH, which was the fifth highest among HA hospitals. Over 40% of the operations performed at the OTs of TMH are emergency surgeries in 2016, resulting in long waiting time for elective surgery of surgical and orthopaedic specialties. Furthermore, among the 11 existing OTs, ten of them have an area of around 40 square metres (m²) each only, as compared with the international standard of 60 m². To cope with the anticipated growth in service demand as well as to upgrade the OT facilities comparable to international standard, we plan to extend the existing OT Block to accommodate 20 OTs up to modern standard to meet the rising demand for surgical services in TMH.
- 4. No major renovation of the A&E department in TMH has been conducted since its establishment in 1990. We plan to expand TMH's A&E department to cater for the large number of A&E attendances which was around 222 000 in 2015-16 and was the highest among all HA acute hospitals. Besides, as

2017.

[&]quot;Operating Theatre" is operationally defined within HA as a designated area where operations are performed under anaesthesia and which can meet all physical requirements in terms of air ventilation, air filter and patient preparation/recovery space.

many patients seeking emergency care require radiology examinations, it is also imperative to expand the adjoining radiology department to better manage the high patient volume.

Proposed Extension of OT Block of TMH

- 5. The project proposes to construct an extension of around 21 900 m² construction floor area (CFA), mainly to the existing OT Block in the open car parking area to provide 20 OTs of modern standard and to expand the existing A&E department and radiology department on the ground floor of Block D (located north of the site of the proposed OT extension block). The expanded OT area allows installation of major equipment for surgery to meet modern standard, hence improving the surgical quality. The recovery area on each floor with OTs will be increased as a whole to accommodate more patients after operations, which will in turn improve the operational efficiency of OTs in TMH.
- 6. Regarding the expansion of the A&E department and radiology department, the CFA of the A&E department will be increased from around 1 900 m² to around 3 800 m². The expansion will provide sufficient space and upgraded facilities to meet the overwhelming demand as well as modern standards for the delivery of emergency care. The CFA of the radiology department will be increased from around 2 400 m² to around 2 800 m². The expansion will facilitate prompt diagnosis for patients who require radiological examinations such as computed tomography scan or magnetic resonance imaging at the A&E department. Upon completion of the extension works, the existing A&E department and radiology department will be refurbished for delivery of coherent patient care and treatment.
- 7. The proposed extension of the OT Block of TMH is one of the projects covered by the Ten-year Hospital Development Plan (HDP) deliberated at

this Panel on 18 January 2016 (Paper Ref: LC Paper No. CB(2)652/15-16(04)). The extension will provide nine additional OTs under the HDP. With the support of the Panel on 18 May 2015, the Finance Committee (FC) of the Legislative Council approved on 22 April 2016 to upgrade part of the proposed project to Category A at an approved project estimate of \$167.2 million in money-of-the-day (MOD) prices to carry out the substructure and utilities diversion works. The works have commenced since May 2016 with good progress and are expected to be completed by end of 2017.

Project Implementation

- 8. We plan to seek funding approval from the FC to upgrade the main works to Category A which comprise -
 - (a) construction of an OT extension block in the open car parking area to accommodate 20 OTs, intensive care unit and associated supporting areas;
 - (b) construction of a link bridge to connect the extension block with the existing OT Block;
 - (c) expansion of the existing A&E department and radiology department at the OT extension block and ground floor of Block D of TMH respectively, as well as refurbishment of the existing OT Block and the existing A&E department and radiology department located on the ground floor of Block D of TMH to integrate with the extension block for coherent workflows;
 - (d) construction of a new Electrical Building for the relocation of existing transformer rooms located at the ground floor of the existing OT Block; and

- (e) construction of an additional Dangerous Goods Building for the OT extension block.
- 9. A site plan showing the location of the OT extension block is at **Enclosure**.
- 10. The estimated cost of the proposed main works is in the order of \$2,980.8 million in MOD prices³. We plan to seek funding support and approval from the Public Works Subcommittee and FC respectively for the main works as described in paragraph 8 above in the second/third quarter of 2017 tentatively. Subject to FC's funding approval, we aim to commence the main works immediately afterwards for completion of the whole project in 2021. TMH will remain functional at all times during the works and any disruption of services, if unavoidable, will be kept to a minimum.

Public Consultation

11. HA consulted the Social Services Committee (SSC) of the Tuen Mun District Council (TMDC) on the proposed project on 12 May 2015 and updated the SSC of TMDC on the current status of the project on 10 January 2017. Members of the SSC of TMDC supported the proposed project.

Advice Sought

12. Members are invited to comment on the proposed project as outlined in this paper.

³ This figure represents the latest estimate of capital cost pending tender return. We will update the cost estimate before submission to the Public Works Subcommittee.

Food and Health Bureau Hospital Authority April 2017

