# ITEM FOR FINANCE COMMITTEE

## HEAD 140 – GOVERNMENT SECRETARIAT: FOOD AND HEALTH BUREAU (HEALTH BRANCH)

Subhead 700 General non-recurrent New item "Preparation for service commencement of the Chinese Medicine Hospital"

# CAPITAL WORKS RESERVE FUND HEAD 710 – COMPUTERISATION

Government Secretariat: Food and Health Bureau (Health Branch) New Subhead "IT support for the new Chinese Medicine Hospital"

Members are invited to approve the creation of two new commitments for the Food and Health Bureau (Health Branch) –

- (a) a non-recurrent commitment of \$80.445 million under Head 140 Government Secretariat: Food and Health Bureau (Health Branch) Subhead 700 General non-recurrent for engaging experts and hiring services in preparation for the service commencement of the Chinese Medicine Hospital; and
- (b) a commitment of \$383.9 million under Capital Works Reserve Fund Head 710 Computerisation for developing and implementing information technology systems for the Chinese Medicine Hospital.

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### **PROBLEM**

The construction of the Chinese Medicine Hospital (CMH) is expected to be completed in 2025 and commence service by phases from the second quarter of 2025. To achieve this target, we need to engage relevant experts and hire services to support the work of the Chinese Medicine Hospital Project Office under the Food and Health Bureau (Health Branch) (FHB(H)) during the detailed design, construction and pre-commissioning stage. We also need to equip the CMH with the necessary information technology (IT) systems and infrastructure to support its round-the-clock operation upon commissioning.

#### **PROPOSAL**

2. The Secretary for Food and Health (SFH) proposes to create a non-recurrent commitment of \$80.445 million for engaging experts and hiring services in preparation for the service commencement of the CMH. SFH, with the support of the Government Chief Information Officer, also proposes to create a new commitment of \$383.9 million for developing and implementing IT systems for the CMH.

#### **JUSTIFICATION**

## **Positioning of the CMH**

- 3. The Government is committed to promoting the development of Chinese medicine in Hong Kong. Recognising that the provision of Chinese medicine inpatient services would enhance the professional standards of Chinese medicine practitioners and the quality of scientific research in Chinese medicine in Hong Kong, the Chief Executive announced in the 2017 Policy Address that the Government would finance the construction of the CMH and identify a non-profit-making organisation to manage, operate and maintain the CMH. Details of the relevant capital works project are stated in PWSC(2021-22)12.
- 4. In the 2018 Policy Address, the Government re-affirmed the positioning of Chinese medicine as an integral part of the healthcare system in Hong Kong. Specifically, the future CMH will provide subsidised inpatient and outpatient services; the 18 Chinese Medicine Clinics cum Training and Research Centres (CMCTR)<sup>1</sup> will offer government-subsidised outpatient services at the district level; and specific public hospitals of the Hospital Authority (HA) will continue to provide subsidised inpatient services with Integrated Chinese-Western Medicine (ICWM) treatment. These three components are complementary in terms of service areas, providing a comprehensive network for the delivery of subsidised Chinese medicine services.

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These centres were named as Chinese Medicine Centres for Training and Research before March 2020.

5. The CMH will serve as a flagship Chinese medicine institution leading the development of Chinese medicine (including Chinese medicine drugs) in Hong Kong. As an integral part of the healthcare system of Hong Kong, it will provide quality Chinese medicine services including inpatient, day-patient, outpatient and community services. Its services will cover primary, secondary and tertiary care. In addition, the CMH will establish a referral system with existing Chinese medicine and western medicine service providers to strengthen collaboration.

6. Apart from providing specialised Chinese medicine services, the CMH also aims to promote Chinese medicine education, training, innovation and research. It will collaborate with the academia and other related institutions to enhance and promote the development of Chinese medicine and new proprietary Chinese medicines. It will also identify specific priority disease areas where Chinese medicine has advantages for strategic development. Besides, through evidence-based research, the CMH will develop new clinical uses, widen clinical applications and extend clinical outcomes of Chinese medicine. In addition, it is also the CMH's aspiration to enhance the development of Chinese medicine in and outside Hong Kong. In this regard, it will establish partnership and collaboration with relevant parties in the healthcare and non-healthcare sectors in the Mainland of China as well as overseas.

### **Operation of the CMH**

- 7. The CMH will adopt a public-private partnership model. The Government will finance its construction, provide the necessary furniture and equipment and set up the IT systems for the hospital. A non-profit-making organisation (the Contractor) possessing experience and expertise in providing Chinese medicine services will be selected through tendering to incorporate a company limited by guarantee (the Operator) to manage, operate and maintain the CMH.
- 8. The CMH, upon commissioning, will provide a wide range of services including the following
  - (a) services in inpatient, day-patient, outpatient, community outreach, rehabilitation, pharmacy supporting Chinese medicine and western medicine patient care;
  - (b) services in diagnostic, procedural and ancillary support including diagnostic radiology, pathology, electrophysiology, endoscopy, and minor operating procedures;

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- (c) services of specialised support including central sterile supplies; and
- (d) services in supporting Chinese medicine training and research including the conduct of clinical trials, clinical training of undergraduate and post-registration programmes of Chinese medicine and related healthcare professionals.

To support the operation of the CMH, other general supporting services including patient administration, management of medical records, hospital security, cleansing and laundry, hospital catering, etc. will also be provided by the Operator.

### Need for funding prior to the commissioning of the CMH

Preparation for service commencement of the CMH

- 9. While the Government will fund the construction<sup>2</sup> and the necessary infrastructure for setting up the CMH, it is of paramount importance that the facilities, systems and items to be provided by the Government match the services to be provided by the Operator when the CMH comes into operation. In drawing up the detailed user requirements, while the Contractor and Operator need to work in close collaboration with the Government, there may be areas that fall outside the expertise of all these parties. For instance, the CMH will adopt a fusion of Chinese medicine and western medicine in the delivery of medical services, which is a relatively novel area that requires expert input from the market. In addition, expertise in hospital operations would need to be brought in, apart from that in the provision of outpatient Chinese medicine services. Furthermore, as the CMH is the first of its kind and encompasses a wide range of disciplines as stated in paragraph 8 above, advice from multiple disciplines in addition to the Contractor and Operator is required. Therefore, the Government would also need to tap into the expertise and experience from relevant experts in preparation for the service commencement of the CMH. The Contractor and the Operator as well as the experts will play an essential complementary role and work closely with FHB(H) in achieving all tasks that are required to enable service commencement, including the drawing up of user requirements and procurement of necessary furniture, equipment and consumables.
- 10. To cover the costs for hiring the services of the Contractor, the Operator and other experts as explained above, a non-recurrent commitment of \$80.445 million is required over a five-year period from 2021-22 to 2025-26. Details of the tasks to be undertaken and the financial implications are at Enclosure 1. After commissioning, the recurrent cost for running the CMH (including costs for hiring services of the Operator) will be included in the draft Estimates of the relevant years in line with the established practice.

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Encl. 1

The funding proposal for the relevant capital works project is in PWSC(2021-22)12.

Encl. 2

IT support for the CMH

11. The CMH will be built as an intelligent hospital supported with smart workflow designs. Modern technologies for effective, safe, user-friendly, environmentally-friendly and efficient care delivery will be adopted. This involves the adoption of various automated systems for delivery and storage of medication and supplies, Chinese medicine and western medicine dispensaries and clinical patient monitoring. To enable the development of the required systems of the CMH, FHB(H) proposes to create a commitment of \$383.9 million under Capital Works Reserve Fund (CWRF) Head 710 Computerisation to take forward the development of the various systems. Details are at Enclosure 2.

## FINANCIAL IMPLICATIONS

12. Proposal (a) will involve a non-recurrent expenditure of \$80.445 million over five years from 2021-22 to 2025-26 and Proposal (b) will involve a total capital expenditure of \$383.9 million over six years from 2021-22 to 2026-27. Details are at Enclosures 1 and 2.

### **PUBLIC CONSULTATION**

- 13. We consulted the Subcommittee on Issues Relating to the Development of Chinese Medicine under the Legislative Council Panel on Health Services in May 2020 on the positioning of the CMH, its operational model, financial arrangement, service model and work progress of the CMH project. In addition, the Education, Health and Social Welfare Committee of the Sai Kung District Council was also consulted on 9 July 2020. Members of the two committees generally supported the project.
- 14. We consulted the Legislative Council Panel on Health Services on 9 April 2021 on the proposed capital works of the CMH, as well as the funding proposals for preparation for the service commencement and developing the IT systems for the CMH as set out in paragraph 2 above. Members supported the proposals. As for the capital works project, Members of the Public Works Subcommittee agreed at the meeting on 20 May 2021 to recommend to the Finance Committee to upgrade it to Category A at an estimated cost of \$8,620.0 million in money-of-the-day prices.

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## **BACKGROUND**

15. With a decade of experience in providing Chinese medicine services through the CMCTRs and the ICWM Pilot Programme run by the HA, the establishment of the CMH together with the collaborating network with the CMCTRs, the universities concerned, the ICWM programme developed in the HA hospitals and the Chinese medicine sector as a whole will constitute a new platform to further drive Chinese medicine development.

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Food and Health Bureau June 2021

# Preparation for service commencement of the Chinese Medicine Hospital (CMH)

Since the planning for the service commissioning of the CMH is highly specialised and complicated, to ensure smooth service delivery, Food and Health Bureau (Health Branch) (FHB(H)) seeks a non-recurrent commitment of \$80.445 million during the detailed design, construction and pre-commissioning stage for the following purposes –

- I. Engage experts in various specialised areas (\$24 million); and
- II. Hire of services of the Contractor and the Operator as well as procurement of equipment and consumables (\$56.445 million).
- I. Engage experts in various specialised areas
- 2. The CMH is the first of its kind and offers a wide range of services. In addition, expertise required in the planning and construction of a hospital may not be possessed by the Contractor and the Operator. Therefore, while the Contractor and the Operator will be responsible for assisting FHB(H) on the overall planning and future operations of the CMH, to ensure that the hospital is ready for service commencement as planned, FHB(H) requires additional expert advice in drawing up the user requirements for the detailed design of the CMH, procuring furniture and equipment, and setting up the information technology (IT) systems.
  - (a) Advice required on drawing up of user requirements for the detailed design

The capital works of the CMH adopt a design and construction approach, of which detailed design will be refined in the course of the construction work. In order to draw up the user requirements for various service units for the detailed design, CMH has to take into account a host of factors. For instance, it has to determine the configuration of the service units, as well as map out the required supporting facilities or provisions for each room having regard to the functions, the overall operational flow, patient flow, staff flow and material flow of the service units concerned and their inter-relationship with other units. As each service unit is highly specialised, FHB(H) needs to engage experts in various fields to provide advice on the specific requirements. Such requirements will

then be passed to the building contractor for incorporation into the design to ensure that the hospital is built to support patient care and enable smooth operation. For example, we need to engage expert(s) in the field of pathology to advise us on the detailed design of the core laboratory of the pathology department to support direct patient care.

### (b) Advice required on procurement of furniture and equipment

FHB(H) needs to work out the detailed list of furniture and equipment items for each service unit of the CMH by making reference to the functions required for each service unit in supporting the overall function of the hospital, as well as the service scope and scale of individual service units. For the procurement of each equipment item, FHB(H) has to define the specifications such as the required functions, level of technology, special terms and conditions required from the suppliers to ensure satisfactory operation within the life cycle of the equipment items. In this regard, we need to engage experts specialised in specific fields to advise on the requirements and specifications, and to provide support on assessment of offers according to the service needs of individual service areas. example, we need to engage experts in the field of radiology to advise us on the specification requirements for the procurement of Computerised Tomography Scan and Magnetic Resonance Imaging Scan to support clinical diagnosis and assessment of patients.

### (c) Advice required on setting up of the CMH IT systems

FHB(H) has to set out the service requirements of each IT sub-system to suit the unique operation flow, information flow, reporting needs, workflow and procedures of each service unit. In this regard, we need to engage experts specialised in specific fields to advise on the user requirements of different IT sub-systems with respect to specific service and operational needs. Such requirements will be passed on to the IT system contractor to develop hospital IT systems. For example, we need to engage experts in the field of Chinese medicine and western medicine pharmacy to advise on the requirements of the Pharmacy IT sub-system in supporting the whole pharmacy operation from clinician prescription, medication dispensing, decoction, medicine medication compounding, medication Chinese administration to patients, risk management and pharmacy stock management.

- The service areas as mentioned in paragraph 2(a), (b) and (c) above relating to clinical care and specialised supporting services are highly specialised The expertise required for the essential preparation work for the commencement of hospital services include Chinese medicine clinical experts of various fields, Chinese medicines experts, western medicine clinical experts of various fields, western medicine pharmacy experts, nursing experts of various fields, various allied health professional experts and various hospital administration experts.
- To enable FHB(H) to engage the relevant experts, a non-recurrent funding of \$24 million is required. In arriving at the estimates, reference has been made to the experience in pre-commissioning preparation for public hospitals of a comparable scale of service.
- II.Hire of services of the Contractor and the Operator as well as procurement of equipment and consumables
- As mentioned above, to pave way for the smooth operation of CMH in the future, the Contractor and the Operator are required to collaborate with FHB(H) and the experts to take forward preparatory work in a complementary fashion. Thus, FHB(H) will hire services from the Contractor and the Operator for such preparation work. Apart from participating in the formulation of user requirements, some of the other specific tasks that they will undertake are as follows -
  - Functions and tasks to be carried out by the Contractor (a)
    - (i) To incorporate a company limited by guarantee as the Operator, set up and support the required governance structure of the Operator;
    - (ii) To provide a project team to support the Government in the planning, designing and setting up of the hospital; and
    - (iii) To procure essential furniture and equipment not covered in the relevant capital works project, and establish stock of consumables and materials necessary for the commencement of the hospital services Note.

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Note The funding of \$56.445 million will cover, among others, the procurement of the items not covered under the capital works project vote, such as office equipment, stock items of Chinese medicines, drugs, clinical consumables, non-clinical consumables, uniform and linen. Items covered under the capital works project vote will be procured by FHB(H).

- (b) Functions and tasks to be carried out by the Operator
  - (i) To establish the structure and system of the hospital and devise policies, plans and conditions related to the operation of the hospital;
  - (ii) To obtain all licences necessary for commencement of the hospital services;
  - (iii) To employ staff for the hospital and provide necessary staff training;
  - (iv) To negotiate contracts necessary for the operation of the CMH after commissioning; and
  - (v) To provide supporting services (such as security, maintenance and cleansing) during the pre-commissioning period to tie in with the opening of the hospital.
- 6. To enable FHB(H) to hire services from the Contract and the Operator, a non-recurrent funding of \$56.445 million is required.

## FINANCIAL IMPLICATION

7. The estimated total non-recurrent cost for engaging experts and hiring services to take forward the preparation work for the service commencement of the CMH is \$80.445 million for five years from 2021-22. The cost breakdown is as follows –

		\$'000
I.	Engage experts in various specialised areas	24,000
II.	Hire of services of the Contractor and the Operator as well as procurement of equipment and consumables	56,445
	Total	80,445

8. The estimated cash flow requirements are as follows –

Financial Year	\$000		
2021 22		4.010	
2021-22		4,810	
2022-23		8,400	
2023-24		8,400	
2024-25		53,065	
2025-26	<u>-</u>	5,770	
	Total	80,445	

## **IMPLEMENTATION PLAN**

9. Subject to the funding approval, we will proceed to engage the experts as well as the Contractor and the Operator to kick start the preparation for service commencement of the CMH.

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# Information Technology (IT) Support for the new Chinese Medicine Hospital (CMH)

To support the functions and operation of CMH, we need to –

- (a) develop necessary application systems including clinical, clinical supporting and business supporting systems;
- (b) set up IT infrastructure including network equipment, server platform and data centres;
- (c) provide workstations and peripherals, mobile devices and laptops; and
- (d) connect medical and non-medical equipment with IT systems.
- 2. We propose to develop the following application systems for the CMH –

### Clinical Systems

- (a) Hospital Information System supports inpatient, day-patient, outpatient and community outreach settings of patient care management for both Chinese medicine and western medicine such as diagnosis, procedures, interventions, medications and other clinical documentation:
- (b) Patient Administration System captures patient demographics, visit history, appointment bookings, registration, queueing, billing and revenue collection, and admission and discharge details;
- (c) Pharmacy Management System supports the vetting, dispensing, production and management of Chinese medicines and western drugs;
- (d) Laboratory Information System supports laboratory investigation process from specimen registration, results entry to report endorsement;
- (e) Radiology Information System supports radiology examination workflow from appointment, patient registration, attendance to examination reporting;

### Clinical Supporting Systems

- (f) Incident Reporting System enables reporting of hospital related incidents pertaining to patients, clinical services, equipment and environment and supports follow-up actions for subsequent incident management;
- (g) Dietetics and Catering Management System supports meal ordering, meal planning by dietitians and facilitates meal preparation at kitchen and canteen management;
- (h) Central Sterile Management System manages the process of sterilisation, storage, assembly and distribution of medical supplies for the CMH;
- (i) Telemedicine System enables remote consultation with patients via internet channels;
- (j) Automatic Dispatching System manages daily dispatching service, including healthcare related materials and equipment portering;

### **Business Supporting Systems**

- (k) Enterprise Resources Planning System streamlines and integrates business processes across finance, human resources, procurement and asset management;
- (l) Email and Office System facilitates information exchange and communication of staff with appropriate level of security and protection;
- (m) Building Maintenance System enables management of hospital maintenance activities by facilitating placing of works orders, maintenance scheduling, tracking of maintenance history and costs; and
- (n) Business Intelligence integrates all clinical and non-clinical systems to collect data for analysis and perform data-mining to support risk management, forward planning and resource utilisation.
- 3. To provide a smooth and streamlined workflow, we will develop an integration platform, which provides standard protocols for systems and equipment interfacing, and message queue handling such as validation, mapping, and acknowledgement.

- 4. We will set up a robust and secured IT infrastructure including primary and secondary data centres to safeguard the security of personal and clinical data, as well as server platform and network equipment. The replication and redundancy at the secondary data centre can ensure high availability and uninterrupted hospital services.
- 5. Given the popularity of mobile devices in Hong Kong, in addition to application software, we plan to develop mobile applications for healthcare providers and staff of CMH, as well as patients and their carers. The implementation of mobile applications can enhance work efficiency, quality of service and patients' experience.
- 6. To align with the Government's policy to implement territory-wide electronic health record sharing for better continuity of healthcare services, the repository of patient records of CMH will be compatible with the Electronic Health Record Sharing System (eHRSS)<sup>1</sup>. The interface with eHRSS will enable staff of CMH to view and share electronic health records within the sharable scope with other participating healthcare providers in the public and private sectors, including the Hospital Authority.

### **Anticipated Benefits of the Proposed System**

7. We anticipate that the IT systems will link patient, clinical, administrative and financial workflows and make information sharing easy among various disciplines of the CMH. The implementation of the proposal is expected to bring about the following benefits –

### (a) Improve operational efficiency

Digitising documents and providing a direct interface between IT systems and medical equipment can increase the degree of workflow automation and remove tedious and time-consuming manual procedures. It allows healthcare providers to spend more time in the provision of healthcare service and improve operational efficiency.

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The Government-led eHRSS was launched in March 2016 for healthcare providers in the public and private sectors to share and view patients' health data and records on a "need-to-know" basis, subject to patients' express and informed consent. It aims to promote public-private collaboration, facilitate continuity of care and improve the quality and cost-effectiveness of healthcare.

### (b) Reduction in medication and transcribing errors

The direct interface between application systems and equipment removes error-prone process of manual procedures, reduces redundant data entries, and unnecessary transcribing errors. It allows healthcare providers to obtain more accurate information and the frequency and scale of medication errors will be reduced.

### (c) Easier retrieval of patients' medical records

The IT systems enable healthcare providers to retrieve a systematic and comprehensive medical history of individual patients for planning appropriate medical care and subsequent treatment and judgement. The clinical decision support functions with the support of data analytics technique and business intelligence tool can assist clinicians to make informed decisions and improve the accuracy of diagnosis and patient management.

## (d) Enhance service quality

The implementation of IT systems will obviate the need for processing excessive paper work. It allows clinicians to spend more time to utilize their medical expertise and deliver quality patient care. It also enables healthcare providers to conduct health checks and monitor vital sign data in a timely manner.

### (e) Enhance data analytics capabilities

The standardised and structured data will facilitate the collection and analysis of clinical and management data. The generated statistics and analytics will be useful for improving healthcare services, planning healthcare policies and initiatives, and facilitating risk management, forward planning and resource utilisation.

## (f) Reduction of cost on manual documentation

The implementation of IT systems and the streamlined workflow allow CMH to operate under a seamless IT environment and remove unnecessary manual procedures. Costs for manual processing and storage of physical medical records can be reduced.

8. The anticipated benefits listed above cannot be achieved without the introduction of the proposed IT systems. Failure to develop and implement the IT systems would jeopardise the operation and efficiency of services of CMH.

### FINANCIAL IMPLICATIONS

## **Non-recurrent Expenditure**

9. We estimate that the implementation of the proposal will incur a total non-recurrent expenditure of \$383.9 million for six years from 2021-22. The indicative cost breakdown and estimated cash flow requirements by financial year are as follows –

					2025-26 and	
	2021-22	2022-23	2023-24	2024-25	beyond	Total
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
(a) Hardware	-	500	3,500	24,900	28,780	57,680
(b) Software	-	3,500	28,000	45,900	59,053	136,453
(c) Communication network	-	-	2,000	24,000	24,570	50,570
(d) Implementation services	-	5,000	14,500	20,000	22,082	61,582
(e) Professional services	3,000	4,000	4,000	4,000	8,990	23,990
(f) Site preparation	-	-	1,000	11,000	6,300	18,300
(g) Training	-	-	-	200	205	405
(h) Miscellaneous	-	-	-	-	20	20
Sub-total:	3,000	13,000	53,000	130,000	150,000	349,000
(i) Contingency	300	1,300	5,300	13,000	15,000	34,900
Total:	3,300	14,300	58,300	143,000	165,000	383,900

- 10. On paragraph 9(a) above, the estimate of \$57,680,000 is for the acquisition of computer hardware including servers, storage devices, workstations and peripheral equipment.
- 11. On paragraph 9(b) above, the estimate of \$136,453,000 is for the acquisition of computer software in relation to systems development, including application software, virtualisation software, database software, security software and other software items.
- 12. On paragraph 9(c) above, the estimate of \$50,570,000 is for the acquisition of network equipment for both wired and wireless networks at various facilities of CMH, installation of data ports and acquisition of network monitoring tool.

- 13. On paragraph 9(d) above, the estimate of \$61,582,000 is for the acquisition of implementation services including system analysis and design, development, interfacing, testing and installation.
- 14. On paragraph 9(e) above, the estimate of \$23,990,000 is for the procurement of professional IT services to assist in project implementation.
- 15. On paragraph 9(f) above, the estimate of \$18,300,000 is for the set up of primary and secondary data centres and facilities to be provided including server racks and cabling.
- 16. On paragraph 9(g) above, the estimate of \$405,000 is for training users and technical staff on application functions and system administration.
- 17. On paragraph 9(h) above, the estimate of \$20,000 is for other expenditure including the acquisition of related consumables, such as backup tapes.
- 18. On paragraph 9(i) above, the estimate of \$34,900,000 represents a 10% contingency on the items set out in paragraph 9(a) to (h) above.

### **Recurrent Expenditure**

19. We estimate that the recurrent expenditure arising from the project will be \$61,000,000 per annum after the commencement of services of CMH<sup>2</sup>. This expenditure covers hardware and software maintenance, hosting of the secondary data centre and hiring of contract staff. These estimates will be updated nearer the time in light of the actual functionalities and features required in CMH operations, pace of project development, technological advancement and market changes, etc.

#### **IMPLEMENTATION PLAN**

20. The proposal covers acquisition and installation of 14 application systems and a large number of computer hardware, software and network equipment for the development of the IT systems. In view of the scale and complexity, we plan to implement the IT systems by phases to dovetail with the progress of the construction works and phased service commencement of CMH.

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It is estimated that the annual recurrent cost will be \$15 million and \$40 million in 2024-25 and 2025-26 respectively, followed by full year recurrent cost of \$61 million from 2026-27 onwards.

The plan is to launch all the core functions by the second quarter of 2025 while other supporting systems and equipment interfaces will be in place from late 2025 till the first quarter of 2027. The proposed implementation timeframe is as follows –

	Related Work	Target Commencement Date	Target Completion Date
(a)	Acquisition and implementation of clinical related systems and interfaces with equipment	3rd quarter of 2021	1st quarter of 2027
	(Paragraph 2(a) to (j))		
(b)	Acquisition and implementation of Business Supporting Systems	4th quarter of 2022	3rd quarter of 2026
	(Paragraph 2(k) to (n))		
(c)	Setup of secondary data centre	3rd quarter of 2023	4th quarter of 2024
(d)	Network cabling	1st quarter of 2024	4th quarter of 2025
(e)	Setup of primary data centre	4th quarter of 2024	3rd quarter of 2025

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