



中華人民共和國香港特別行政區政府總部食物及衛生局  
Food and Health Bureau, Government Secretariat  
The Government of the Hong Kong Special Administrative Region  
The People's Republic of China

Our Ref : FHB/H/24/28  
Your Ref : CB2/PL/HS

Tel : 3509 8684  
Fax : 2840 0467

23 October 2020

Ms Maisie LAM  
Clerk to Panel  
Legislative Council Panel on Health Services  
Legislative Council Complex,  
1 Legislative Council Road,  
Hong Kong  
(Fax: 2185 7845)

Dear Ms LAM,

**Panel on Health Services**

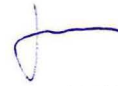
**Evaluation on the Integrated  
Chinese-Western Medicine Pilot Programme**

With reference to the list of follow-up actions in respect of the Panel on Health Services, I am writing to provide the report on the evaluation of the Integrated Chinese-Western Medicine (ICWM) Pilot Programme for Members' reference.

As discussed at the meeting of the Subcommittee on Issues Relating to the Development of Chinese Medicine on 4 May 2020, the Hospital Authority has appointed an external organisation to conduct an evaluation study of the programme to serve as reference for the future development of ICWM services and the Chinese Medicine Hospital. The

study has been completed and the full report is enclosed in Annex.

Yours sincerely,

A handwritten signature in blue ink, appearing to be 'James LAM', written in a cursive style.

(James LAM)

for Secretary for Food and Health

c.c.

Chief Executive, Hospital Authority (Attn: Ms Rowena WONG)

**Report of**  
**Evaluation on the Integrated Chinese-Western**  
**Medicine (ICWM) Pilot Programme**

March 2019

Prepared by Ipsos Healthcare

**CONTENT**

<b>EXECUTIVE SUMMARY .....</b>	<b>i</b>
<b>CHAPTER 1 INTRODUCTION.....</b>	<b>1</b>
<b>CHAPTER 2 PROGRAMME DESIGN.....</b>	<b>3</b>
<b>CHAPTER 3 GOVERNANCE STRUCTURE.....</b>	<b>6</b>
<b>CHAPTER 4 CLINICAL FRAMEWORK.....</b>	<b>10</b>
<b>CHAPTER 5 OPERATIONAL FRAMEWORK.....</b>	<b>21</b>
<b>CHAPTER 6 TRAINING .....</b>	<b>30</b>
<b>CHAPTER 7 CONCLUSION .....</b>	<b>33</b>
<b>ANNEX 1 STUDY METHODOLOGY.....</b>	<b>34</b>



## EXECUTIVE SUMMARY

### BACKGROUND

1. As advised by Food and Health Bureau (FHB), HA commissioned an external market surveying company to carry out evaluation on the Integrated Chinese-Western Medicine (ICWM) Pilot Programme (“Pilot Programme”). The objective is to identify lessons learnt with suggestions to improve and further the development of ICWM service and CM hospital (CMH), and to provide suggestions on the CM development and postgraduate training.

2. Three disease-based programmes of the ICWM Pilot Programme have been developed by phases for implementation at seven public hospitals. Three hospitals, namely Tung Wah Hospital (TWH), Tuen Mun Hospital (TMH), and Pamela Youde Nethersole Eastern Hospital (PYNEH) joined the Phase I implementation starting from September 2014 to December 2015. Phase II included four additional hospitals namely Kwong Wah Hospital (KWH), Princess Margaret Hospital (PMH), Prince of Wales Hospital (PWH) and Shatin Hospital (SH), and commenced service in December 2015. A summary of the three disease-based pilot programmes is as follows:

Programme	Hospital	Chinese Medicine Centres for Training and Research (CMCTR)
Stroke care	*TWH	Tung Wah Hospital - The University of Hong Kong Clinical Centre for Teaching and Research in Chinese Medicine
	#SH and #PWH	Pok Oi Hospital - The Chinese University of Hong Kong Chinese Medicine Centre for Training and Research (Sha Tin)
Cancer palliative care	*TMH	Yan Oi Tong - The Chinese University of Hong Kong Chinese Medicine Centre for Training and Research (Tuen Mun)
	#PMH	Yan Chai Hospital cum Hong Kong Baptist University Chinese Medicine Clinic cum Training and Research Centre (Ha Kwai Chung)
Musculoskeletal Pain Management	*PYNEH	Tung Wah Group of Hospitals - The University of Hong Kong Clinical Centre for Teaching and Research in Chinese Medicine (Eastern)
	#KWH	Pok Oi Hospital - Hong Kong Baptist University Chinese Medicine Centre for Training and Research (Ho Man Tin)

\*Phase I hospitals # Phase II additional hospitals

3. The scope of evaluation includes both Phase I and II of Pilot Programme, with focus on the programme design, governance structure, implementation of clinical and operational frameworks as well as CM professional training. The key findings and suggestions on the ICWM Pilot Programme and CMH are summarized below.

### **Key Findings and Suggestions**

#### **ICWM Pilot Programme**

##### ***Programme Design***

4. The Pilot Programme has been built on existing tripartite collaboration of Chinese Medicine Centres for Training and Research (CMCTRs). Hospital CM service is an expanded service to HA with Non-Governmental Organizations (NGOs) as service providers. The ICWM service is an integrated care from two streams of medicine as well as with providers from different institutions. In order to provide the best available treatment to patients, it is suggested that communication between CM practitioners (CMPs) and Western Medicine (WM) professionals could be further strengthened to promote integration and coordination of service based on the stakeholders' feedback.

##### ***Governance Structure***

5. A well-defined governance structure is in place for Pilot Programme, with the Task Force on the Development of ICWM acting as the steering committee to oversee the ICWM development, together with various working groups to ensure the quality of service delivery. The current governance shall be maintained and regular reviews shall be conducted to ensure effective coordination on service delivery and development.

##### ***Clinical Framework***

###### ***Service Scope & Disease Selection***

6. Evidence-based approach is adopted for selecting diseases for Pilot Programme, based on best available evidence and anticipated patient load. For the future development of ICWM service to other disease areas, it is suggested that this approach should be maintained. Furthermore, research study on the clinical effectiveness of ICWM care should be explored in the long term.

### *Model of ICWM Intervention*

7. Disease-based protocols are formulated by Chinese Medicine Practitioners (CMPs) and WM doctors, and ICWM intervention for inpatient care is provided by CMPs through joining grand rounds and case conferences. Base on stakeholders' comments, it is proposed that communication channels between CMPs and WM professionals should be developed in the out-patient setting to support the continuity of patient care.

### *Risk Management*

8. "Recommendation on CM toxicities and herb-drug interaction (HDI)" is on paper format for reference of both WM and CM disciplines on drug safety. It is advised to explore the development of built-in electronic alerts on CM toxicities and herb-drug interaction in the medical information system to facilitate timely checking and clinical decision making.

### *Operational Framework*

#### *Operational Guidelines*

9. Roles and responsibilities of concerned parties, financial and incident management as well as other logistics workflow are clearly laid out in the "Operational Manual". Programme audit has been conducted regularly to ensure compliance with workflow and guidelines. The "Operational Manual" should be reviewed on a regular basis to ensure efficient and effective implementation of the programme.

#### *Sharing of Medical Record*

10. At present, CMPs have no access right to the CMS while WM professionals have no access right to CMIS for patients under the Pilot Programme. Medical information is shared via hard copy patient progress notes and HA forms. It is suggested that both CMPs and WM professionals should have access to all CM and WM medical information on patients under care.

#### *Incident Management*

11. Incidents related to ICWM patients in the in-patient setting are currently reported in HA Advance Incident Reporting System (AIRS). However, incident reports could not be conveyed to CMCTRs via the electronic system. In order to improve the incident

management, it is suggested to strengthen the communication of incidents between CMCTRs and hospital sites.

### ***Training***

12. Protocol briefings and workshops are conducted to facilitate mutual understanding of both streams of medicine. It is suggested by stakeholders that more in-depth CM training programmes should be developed for WM healthcare workers.

### **Chinese Medicine Hospital**

#### ***Programme Design***

13. As patients of the Pilot Programme come from HA hospitals, WM doctors have the ultimate autonomy on patient care. The existing model could not be fully applied to CMH in which CMPs would have a pre-dominant role. Upon evaluation, it is suggested that a new service model shall be worked out for CMH in which CMPs shall have pre-dominant role on clinical decision making. The new model could be tried out in an appropriate platform.

#### ***Governance Structure***

14. The existing Pilot Programme is owned by HA with clear governance structure and reporting line. The governance structure of CMH may take reference from the model of HA with input of CM features.

#### ***Clinical Framework***

##### ***Service Scope & Disease Selection***

15. There is limitation on the service scope and disease selection of the Pilot Programme under the HA setting. For future development of ICWM service in other disease areas at CMH, it is advised that CMH should have a wider scope of diseases that CM has manifest advantages, and evidence-based approach should be fostered in CMH.

##### ***Model of ICWM Intervention***

16. HA adopts disease-based protocol-driven approach in the Pilot Programme. To support the future CMH patient care, it is suggested that CMH follows this approach with integrated care pathways. In addition, pure CM practice should also be adopted in CMH. It is



suggested that clinical protocols used should be regularly reviewed by the clinical teams and respective Clinical Working Groups to ensure patient safety and smooth implementation.

### *Risk Management*

17. A series of risk mitigation measures to manage potential clinical risks associated with ICWM care are in place with HA. CMH should adopt similar strategies. Under the ICWM Pilot programme, emergency care for in-patients is provided by HA personnel. Resuscitation policy and referral mechanism with nearby acute hospitals should be set out in CMH. In addition, a more comprehensive herb-drug interaction database should be developed for drug safety.

### *Operational Framework*

#### *Collaboration*

18. Pilot Programme involves the tripartite collaboration of HA, NGOs and Universities for service delivery. The scope of collaboration for CMH would be further expanded such as inclusion of HA, CMCTRs and private sectors for case referrals and emergency referrals as well as liaison with local universities and overseas institutions for research and training. To facilitate future communication among different parties, it is suggested that proper communication channels should be established among various stakeholders to ensure efficient collaboration.

#### *Financial Model and Fees & Charges*

19. CM is currently not part of HA's highly subsidized public healthcare service, and patients enrolled in the Pilot Programme are charged by NGO on top of the prevailing HA hospital fees and charges. Therefore, it is suggested that the public expectation should be considered when determining fees and charges on services from CMH.

#### *Sharing of medical records*

20. HA and CMCTRs use two separate clinical computer systems for management of medical records under the Pilot Programme. Upon evaluation, it is advised to develop a unified ICWM medical record system which accommodates both CM and WM elements, and to develop both in and out-patient modules for CMH. It should also be connected to the

Electronic Health Record (eHR) sharing platform to facilitate collaboration between HA hospitals and private sectors.

***Training***

21. For the long term development of CM in HK, it is suggested that CMH to serve as the training hub for clinical practicum of CMPs in order to gain experience in the local in-patient setting. CMH should also serve as a platform for short-term clinical attachment of WM disciplines on ICWM care to promote WM and CM communication.

## CHAPTER 1 INTRODUCTION

### BACKGROUND OF THE PILOT PROGRAMME

1.1 The enactment of the Chinese Medicine Ordinance (Cap 549) in July 1999 sets out a statutory framework for the regulation of Chinese Medicine in Hong Kong (HK). In accordance with the Government's Policy Address in 2000, the Hospital Authority (HA) was tasked to set up a Chinese Medicine Centre for Training and Research (CMCTR) in each of the 18 administrative districts in HK. Upon the opening of the 18th CMCTR in 2014, all the 18 CMCTRs under the tripartite collaboration model have been put into operation. The 18 CMCTRs are operated by 10 non-governmental organizations (NGOs) and HA is accountable to the Government on the performance of CMCTRs through service contracts with the NGOs.

1.2 In accordance with the 2013 Policy Address, the Government establishes, under the Chinese Medicine Development Committee (CMDC), the Chinese Medicine Practice Subcommittee (CMPSC) in May 2013. The sub-committee, among others, is tasked to explore means to facilitate the collaboration of Chinese Medicine Practitioners (CMPs) and Western Medicine Practitioners (WMPs) in the provision of clinical services to patients; as well as means to expand the role of CMPs and Chinese Medicine (CM) in the public healthcare system.

1.3 In this regard, designated funding has been allocated by the Food and Health Bureau (FHB) for HA to support the development of the Pilot Project on Integrated Chinese-Western Medicine (ICWM) Programmes ("Pilot Programme"). Subsequently, HA proposed the operational and clinical frameworks with the objective to utilize ICWM for maximizing patient care and to gain experience for facilitating the development of CM in-patient service and hospital, as well as to facilitate postgraduate CM development and training. The proposed frameworks guided the development of an ICWM model via piloting ICWM programmes in HA hospitals.

1.4 According to the approved framework, three disease-based pilot programmes have been developed with seven hospital sites identified for the implementation. Three hospitals, namely Tung Wah Hospital (TWH), Tuen Mun Hospital (TMH), and Pamela Youde Nethersole Eastern Hospital (PYNEH) were identified to participate in the Phase I implementation taking place from September 2014 to December 2015. Phase II implementation

included four other hospitals of Kwong Wah Hospital (KWH), Princess Margaret Hospital (PMH), Prince of Wales Hospital (PWH) and Shatin Hospital (SH) and commenced in December 2015.

1.5 The CM component in the Pilot Programme was regarded as expanded service under the existing contracts with the NGOs operating the CMCTRs.

## **ICWM EVALUATION STUDY**

1.6 As advised by FHB, HA commissioned an external market surveying company to carry out evaluation on the Pilot Programme. The objective is to identify lessons learnt with suggestions to improve and further the development of ICWM service and CM hospital (CMH), and to provide suggestions on the CM development and postgraduate training.

1.7 The scope of evaluation includes both Phase I and II of Pilot Programme, with focus on the programme design, governance structure, implementation of clinical and operational frameworks as well as CM professional training.

1.8 The stakeholders that have been consulted in the evaluation study included patients who have participated in the Pilot Programme; university representatives from the University of Hong Kong (HKU), the Chinese University of Hong Kong (CUHK) and Hong Kong Baptist University (HKBU); WMPs and nurses of HA involved in the Pilot Programme, Cluster ICWM coordinators of HA; CMPs, Integrative Medicine (IM) coordinators and management executives of NGOs involved and HA Head Office (HAHO) representatives from Nursing Service Department, Chief Pharmacist's Office and IT Division. In terms of methodology, three data collection tools were utilized for the evaluation study, including patient survey, stakeholder in-depth interview and stakeholder focus group discussion (more details of the methodology are at **Annex 1**).

1.9 Interpretation and recommendation was drawn based on quantitative and qualitative analysis from data collected.

## CHAPTER 2 PROGRAMME DESIGN

### OVERVIEW

2.1 HA is tasked by the Government to commission NGOs in operating CMCTRs through a tripartite collaboration together with universities in HK. Under the tripartite collaboration, the CM services at CMCTRs are not HA services. HA is accountable to the Government on the performance of CM services by NGOs through managing service contracts.

2.2 The arrangement of CM care in the Pilot Programme follows the same arrangement of tripartite collaboration as CMCTR and is managed via service contracts with the NGOs as CM service providers. HA set up the framework and organize the ICWM service. Therefore, HA has the ultimate liability on the ICWM service from the patient's perspective.

2.3 The ICWM service is an integrated care of WM and CM which consists of the following parts:

- i. WM care to be provided by HA as a part of the highly subsidized public healthcare service
- ii. CM care to be organized by HA but provided by an external service provider, i.e. NGO under the tripartite arrangement
- iii. Academic expertise input and support from local universities as appropriate in the tripartite model

2.4 Based on the programme design, single tender exercise on CM services was arranged for ICWM hospital sites. Taken into consideration the current CMCTR tripartite arrangement, the CM service was contracted out as an expanded service for patients at the designated public hospitals.

2.5 The enrolled patient is charged daily by the CMCTR on the CM service during the in-patient stay, while HA continues to charge for HA hospital services. It is entirely voluntary for a patient to join the Pilot Programme as CM service remains not to be part of the highly subsidized public healthcare service.

2.6 Academic support was invited through participating in the Clinical Working Groups on protocol development and service monitoring at the Centre Management Meetings and Operational & Risk Management Meetings of CMCTRs.

## **DISCUSSION**

2.7 This is the very first attempt for HA to initiate the delivery of ICWM care for in-patients. Given that there has been no CM service operating directly under HA, it is essential to have a clear design set out to guide the development of an interface model. Early and thorough communications among all the collaborating institutions can minimize the likelihood of misunderstandings and ensure the programme to be implemented on the right track.

2.8 CM services are contracted out to an external service provider (i.e. a tripartite CMCTR). Under the tripartite model, WM and CM services belong to two streams of medicine and different institutions. Despite CMPs retain their professional autonomy to deliver treatment under clinical protocols, WMPs have the ultimate decision rights in the duty of care. Therefore, the design of this Pilot Programme might not be applicable to the future CMH.

2.9 According to the results of surveys, all stakeholders expressed that they were well informed of the programme design, which was presented in the preparatory meetings and stipulated in the “Operational Manual” distributed to all parties. They were clear that CM is a treatment option under the Pilot Programme for pre-defined disease areas.

2.10 Patients also considered that they were given clear explanation of the programme details and a daily fee would be paid directly to the CMCTR for the CM service. This piece of information has been clearly laid out in the “Notice to Patients” with explanation provided by hospital staff to the patients before enrollment.

## **SUGGESTION**

2.11 As the objective of the Pilot Programme is to gain experiences on CM services at in-patient setting for the development of CMH, it is reasonable and attainable for the programme to be built on the existing tripartite collaboration.

2.12 On the other hand, the implementation of ICWM service is an integrated care from two streams of medicine as well as with service providers from different institutions. In

order to provide the best available treatment to patients, it requires both CMPs and WMPs to work together across with mutual understanding of each other's disciplines and practices. It is suggested to further strengthen the communication between CMPs and WM professionals in order to promote the integration and coordination of service.

### **SUGGESTION TO CM HOSPITAL**

2.13 ICWM programme is piloting in HA setting with HA patients and WMPs have the ultimate autonomy on patient care. The existing model of Pilot Programme could not be fully applied to CMH in which the Government announced that CMPs would have pre-dominant role. In this connection, the roles and responsibilities of CMPs, WMPs and other disciplines should be further discussed.

2.14 It is suggested that a new service model shall be worked out for CMH in which CMPs shall have pre-dominant role on clinical decision making. The new model could be further tried out in an appropriate platform.

## CHAPTER 3 GOVERNANCE STRUCTURE

### OVERVIEW

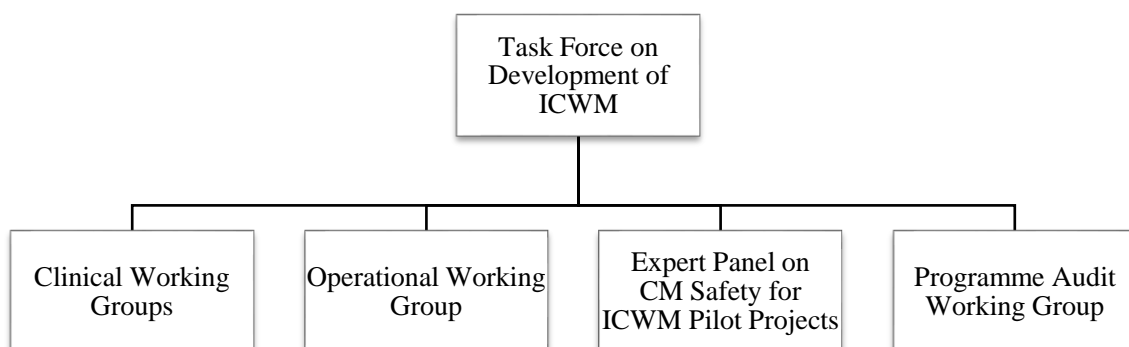
#### Task Force

3.1 A Task Force on the Development of Integrated Chinese-Western Medicine (Task Force) has been set up to oversee the development and implementation of the Pilot Programme. The Task Force acts as a steering committee and is chaired by the Director (Cluster Services) and including representatives from the departments of HAHO and that from the seven Cluster ICWM Committees. The Terms of Reference (TOR) are set as follows:

- i. To recommend a framework for the development of Integrated Chinese-Western Medicine (ICWM)
- ii. To recommend guidelines on the ICWM practice
- iii. To report and oversee the ICWM development
- iv. To report and oversee specific ICWM projects' development, implementation, monitoring and evaluation

3.2 The Task Force establishes a structure that determines if the Pilot Programme meets the objectives and keeps compliance to the requirements of HA. The key aspects include ICWM service delivery, quality and safety, audit, medical record, training and financial arrangement. A governance structure with responsibilities and reporting line has been set out to ensure the smooth implementation of the programme:

#### Governance Structure of ICWM Pilot Programme





3.3 Meetings of Task Force were held prior to the implementation of Phase I in September 2014 to discuss on the overall frameworks of the Pilot Programme. Subsequently, consultation and endorsement have also been sought at various HA governance meetings including the Directors' Meeting, Medical Services Development Committee and Administrative and Operational Meeting.

3.4 For disseminating information and seeking advice from senior management, the Task Force reports to the Directors' Meeting of HAHO and with deliberations at the meetings of the Government's Chinese Medicine Practice Sub-Committee and Chinese Medicine Development Committee.

#### Clinical Working Groups

3.5 Under the Task Force, three Clinical Working Groups on Stroke Care, Cancer Palliative Care and Musculoskeletal Pain Management have been set up. The Clinical Working Groups are responsible for the development of evidence-based clinical protocols for each disease group identified, and also coordinate the implementation of respective Pilot Programme at hospital sites. The chairman of the Clinical Working Group is nominated by the Hospital Chief Executive of the respective ICWM hospital site and including clinical representatives from HA hospitals, the collaborating NGOs and universities. The TOR are set as follows:

- i. To develop evidence-based clinical protocols for the Integrated Chinese-Western Medicine (ICWM) project on clinical programme
- ii. To identify and mitigate clinical risks associated with the ICWM practice
- iii. To co-ordinate and monitor the clinical programme implementation across HA and address the training needs of frontline staff
- iv. To define performance and clinical outcome indicators for project evaluation

3.6 Meetings of Clinical Working Groups were held for each of the disease areas to develop and discuss the programme with an evidence-based protocol of the respective disease prior to the launch of Phase I. Furthermore, preparatory meetings were held at ICWM hospital sites to discuss the workflow and logistics issue in operational level. Subsequently, meetings of Clinical Working Groups would be held on need basis for updates and discussion on the clinical protocol if required by the site clinical team.

### Operational Working Groups

3.7 The discussion of operational issues was led by the Operational Working Group and the respective sub-group meetings. Detailed discussion was summarized into an Operational Manual with input sought from the HAHO departments including finance, nursing services and the Chief Pharmacist's Office.

3.8 At hospital level, logistic discussion would be coordinated by the respective Site Monitoring Meetings held at each of the ICWM sites. The meetings are chaired by the ICWM Site-in Charge with the multidisciplinary team including WMPs, CMPs, nurses, IM coordinator, EA and other administrative staff.

### Other Working Groups related to Risk Management

3.9 To review and advise on CM safety pertinent to the Pilot Programme, an Expert Panel on CM safety for ICWM Pilot Projects has been formed. A Programme Audit Working Group has also been set up to establish framework and methodology for the audit of compliance against established guidelines and protocols, as well as to identify areas for improvement in the Pilot Programme.

## **DISCUSSION**

3.10 Clear governance structure and reporting line should be pertinent for management of clinical risks and incident situations. Stakeholders at all levels should be aware of whom to report to and seek for advice. Appropriate review of issues encountered within the programme should be conducted followed by discussion at the Working Groups and Task Force. After consolidation and consensus of views, a proper flow of information in timely and dynamic manners should be established to promulgate the management decision at operational level.

3.11 According to the focus group discussion, the majority of WMPs, nurses and CMPs considered that they were clear about the governance structure of the Pilot Programme. They were also well aware of the responsibilities and the reporting line when implementing the programme.

## **SUGGESTION**

3.12 A well-defined governance structure has been set out for Pilot Programme in which Task Force acting as the steering committee to oversee the ICWM development and various working groups to ensure quality of service delivery. It is suggested that the current governance structure of the Pilot Programme shall be maintained and review shall be conducted on regular basis to ensure effective coordination on service delivery and development.

## **SUGGESTION TO CM HOSPITAL**

3.13 The existing Pilot Programme is owned by HA with clear governance structure and reporting line. The governance structure of CMH may take reference from the model of HA with input of CM features. The governance should include CMPs, WMPs and other different disciplines to assure that quality integrated care is delivered. A planning and commissioning committee should be set up to oversee the service development and capital works of the CMH. In the operation of the CMH, there should be a single governing body that clearly set out lines of responsibility and accountability within the authority for service delivery.

## CHAPTER 4 CLINICAL FRAMEWORK

### OVERVIEW

4.1 To facilitate the collaboration of CMPs and WMPs in the provision of clinical services to patients, HA has developed the clinical and operational frameworks to guide the development of ICWM model. The proposed framework also aims to explore the feasibility and gain experience for future CMH development via small-scale pilot programmes in HA hospitals. The clinical framework of the Pilot Programme comprises of three elements: service scope and disease selection, model of ICWM intervention, and risk management.

#### Service Scope and Disease Selection

4.2 The criteria for selecting disease areas include: (i) the disease areas where the treatment of CM, or the synergistic effect generated by the treatment of ICWM, are effective with the support of scientific proof; (ii) the disease areas with anticipated patient load; and (iii) the disease areas with well-defined conditions in which the inclusion and exclusion criteria could be clearly defined.

4.3 After reviewing the best available evidences on the benefits of CM treatment and the anticipated patient load, three disease-based Pilot Programme have been developed for patients with stroke, cancer and acute low back pain in the first two phases of the Pilot Programme.

4.4 In the objective of gaining experience for in-patient CM service and the development of CMH, an in-patient component was the essential feature of the Pilot Programme. The patient journey is set out with explicit entry and exit points defined for each programme. Eligible patients are invited either in acute, post-acute or convalescence setting of in-patient stage. Designated wards of each hospital were identified with the support of trained frontline staff to implement the programme. The service scope of the ICWM hospital sites is as follows:

<b>Disease</b>	<b>Hospital</b>	<b>Service Scope</b>
Cancer palliative care	Tuen Mun Hospital (TMH)	Post-acute
	Princess Margaret Hospital (PMH)	Post-acute
Acute Low back pain care	Pamela Youde Nethersole Eastern Hospital (PYNEH)	Acute/ Out-patient day hospital
	Kwong Wah Hospital (KWH)	Acute
Stroke care	Tung Wah Hospital (TWH)	Post-acute
	Prince of Wales Hospital (PWH)/ Shatin Hospital (SH)	Acute/ Post-acute

4.5 To support the continuity of care, the service scope also covers an out-patient component under the ICWM model. After discharge from hospital, WM out-patients are followed up in day hospital and/or specialist out-patient department while that for CM care would be carried out at the designated tripartite CMCTR, for a maximum period of six months. Under the following circumstances, the attending WMP shall decide whether to suspend the CM treatment or exit the patient from the programme.

1. No additional benefits observed
2. Maximum benefits observed
3. Intolerance to CM treatment
4. Change in medical condition

Model of ICWM Intervention

4.6 The respective roles and responsibilities of related healthcare professionals have been clearly set out in the “Operational Manual” and promulgated in the pre-launch briefing sessions. Under the Pilot Programme, HA WMPs screen and invite eligible in-patients to participate in the respective programmes in accordance with the clinical protocols developed. They are the person-in-charge of the patient receiving ICWM care and has the overall responsibility and accountability for the patient under his/her care. In this regard, WMPs have the full autonomy on patients’ treatment plan and can suspend or exit patients from the programme based on their clinical condition.

4.7 The CM treatment intervention is initiated after the conventional WM diagnosis. Designated CMP(s) from the collaborating CMCTR deliver CM care for in-patient according

to the protocols which includes initial assessment and CM consultation with the corresponding treatments, namely Chinese medicines, acupuncture, cupping and tui-na therapy. CMPs would also participate in programme related works like patient and staff education, outcome evaluation and documentation. Emergency consultation would be rendered by CMPs at any time and as required.

4.8 For the nurses in the Pilot Programme, they are not only delivering routine nursing care under HA in-patient setting, but also practicing pre- and post-CM treatment nursing care as well as administration of oral CM granules. The roles and responsibilities of ICWM related nursing care are further elaborated in the “Guideline on the roles and responsibilities of HA nurse in Pilot Project on ICWM”. They also supervise the patient enrollment procedures and take part in other programme works including clinical outcome evaluation and programme audit.

#### Model of ICWM Intervention

4.9 Integration of two streams of professional disciplinary was achieved by inviting CMPs to join grand round, case conference or joint consultation which built up a communication channel for WM/CM interaction. Apart from the delivery of routine WM care, to ensure patient safety and smooth operation of ICWM service, HA adopted a disease-based protocol-driven approach. The clinical protocols were formulated based on the best available evidences and jointly developed by respective Clinical Working Group comprising of CM and WM experts from CMCTRs, hospitals and local universities. The four disease-based clinical protocols not only defined the inclusion and exclusion criteria for the target patient groups, but also provided clinical guidelines on WM and CM diagnosis, available CM treatment options as well as related precautions, contraindications and clinical outcome measures.

4.10 The following assessment tools have been recommended to measure different aspects of clinical outcome covering symptoms relief, quality of life and change in level of disability in each programme. Each hospital site and Clinical Working Group would report the progress and clinical outcome to the Task Force on regular basis.

<b>Programme</b>	<b>Clinical Outcomes</b>	<b>Major Assessment Tools</b>
<b>Cancer Palliative Care</b>	Quality of life	The European Organization for Research and Treatment of Cancer Quality of Life Questionnaire Core 15 PAL
	Anorexia/ Cachexia	Functional Assessment of Anorexia/ Cachexia Therapy
	Symptom relief	Pain score, Insomnia, Limb circumference, Frequency of bowel movements
<b>Acute Low Back Pain Care</b>	Pain relief	Pain Log
	Disability	Oswestry Disability Index, Roland-Morris Disability Questionnaire
<b>Stroke care</b>	Neurological Impairment	National Institutes of Health Stroke Scale
	Disability	Modified Barthel Index, Modified Functional Ambulatory Category
	Swallowing & Nutrition	Royal Brisbane Hospital Outcome Measure for Swallowing
	Cognitive/ Psychological Assessment	Mini-Mental State Examination

Risk Management

4.11 While it is the first time to introduce CM treatment into the HA in-patient setting, there has been concerns raised over the patient safety to provide ICWM service. HA implement a series of risk mitigation measures to manage potential clinical risk associated with ICWM care. The clinical protocols defined the inclusion and exclusion criteria for each disease and also list out the precautions and contraindications for CM treatment.

4.12 To address the concerns arisen from the co-administration of oral Chinese medication and western medications, an “Expert Panel on CM safety for ICWM Pilot Projects” has been established to review the potential toxicities of CM and herb-drug interactions (“HDI”) through evidence-based approach. The “Risk Assessments and Recommendation on Use of Chinese Medicines (CMs) in the ICWM Pilot Project” (“Recommendation”) based on the CMs stated in the clinical protocols has been formulated by the Expert Panel to provide reference on the intrinsic toxicity of CMs pertaining to the cardiovascular, hepatic, and renal system as well

as the adverse HDI with level of risk grading.

4.13 Consensus was built by collating the likelihoods of adverse effect and HDI associated with the use of CMs at doses within the recommended ranges by official references. Total 323 CMs and formulae have been assessed and classified into four different risk ratings: (1) High Risk; (2) Moderate Risk; (3) Low Risk; and (4) No Reported Risk. Specific warning of the possible toxicities or potential HDI together with recommendations of use from the Expert Panel were formulated and tabulated. The recommendations facilitate both WMPs and CMPs to cross-check upon considering the concurrent use of drug and CMs, and closely monitor patients who have received drugs with potential risk of HDI.

4.14 A Programme Audit Working Group has also been set up to establish framework and methodology for the compliance audit against established guidelines and protocols, as well as to identify areas for improvements in the programme. From 2014 to 2018, three rounds of audit exercises on CM medical record documentation, and two rounds on administration of CMs, CM intervention delivery and administration procedures have been conducted in all the programme sites.

## **DISCUSSION**

### Service Scope and Disease Selection

4.15 The current ICWM service scopes and disease selection are to test out the clinical framework for the development of ICWM service in HA as well as for the future CMH. HA adopted an evidence-based approach to select the diseases based on the best available evidence and anticipated patient load as the target patient groups for the Pilot Programme.

4.16 The Pilot Programme was well accepted by surveyed patients and they indicated their satisfaction with the in-patient CM care as well as the CM follow-up arrangement at CMCTRs. Besides, the majority of patients claimed that the ICWM treatment enhanced their confidence on the efficacy of treatment received and enhanced their quality of life.

4.17 According to the feedback collected from both patients and stakeholders, responded patients and multiple voices from other stakeholders agreed that the Pilot Programme should be continuously provided and expanded to other disease areas as well as to other HA hospitals.



4.18 Pilot Programme is the add-on element provided under the existing HA services where WM plays a dominant and leading role. As indicated by the Government, the future CMH should adopt an operating mode whereby ICWM services with CM having the predominant role. The service scope of the CMH would be determined by the positioning set out by the Government. WMPs and CMPs stakeholders expected CMH to be positioned as sub-acute to rehabilitation hospital, providing both in-patient and out-patient services.

4.19 For the disease coverage in the CMH, stakeholders generally agreed that the selected diseases covered in the Pilot Programme, namely stroke care, musculoskeletal pain management, cancer palliative care should be applied as the services can be leveraged by the experience from the programme.

#### Model of ICWM Intervention

4.20 Evidence-based CM was reflected in the development of clinical protocols in the Pilot Programme. Both WMPs and CMPs agreed that the inclusion and exclusion criteria as well as the clinical condition for selected diseases were clearly defined in protocols. Furthermore, CMPs considered the clinical protocol could support their diagnosis and it was effective for building mutual understanding with WM professionals on clinical condition and patient safety. This helps WMPs better accept and understand the CM principles as well as the applicability of CM component for treatment, and thereby facilitates side-effect monitoring and WM/CM communication.

4.21 To fulfill clinical needs and test out the model of ICWM intervention, the protocols have been regularly reviewed by both WMPs and CMPs. Protocol revisions including modification of clinical criteria, addition of other CM treatment modalities (namely tui-na and cupping therapy) and addition of shoulder and neck pain protocol under musculoskeletal pain management were discussed in the Site Monitoring Meetings and respective Clinical Working Group meetings.

4.22 However, CMPs revealed that the existing protocol-driven approach limited the choices of CM treatment modalities and CM medical equipment which in turn restricted their clinical practice during in-patient setting. For example, fire cupping and bloodletting therapy which helps in pain management have been excluded in the protocol. They expected to have more flexibilities on the scope of CM practice in the CMH.

4.23 Focus group participants pointed out that protocol-driven is one of the ideal model for ICWM practice in CMH. The experience gained in developing disease-based clinical protocols of Pilot Programme could serve as reference for CMH. However, as protocol development needs time, it may need to cautiously select the appropriate disease areas suitable for protocol-driven ICWM practices.

4.24 The ICWM programme is piloting in HA setting for HA patients, WMPs have the full autonomy in making final decision on the patient care while CMPs are in a supplementary role throughout the in-patient journey. The roles and responsibilities of CMPs and WMPs will be redefined under the setting of CMH. CMPs in focus group expected that they could take the dominant role and in-charge of overall patient care in future CMH. On the other hand, WMPs expected that they would have a role for the initial screening of patient to decide whether they are medically stable for receiving CM treatment and also responsible for managing serious acute conditions.

4.25 According to the “Code of Practice for Registered CMPs”, a registered CMP can only use the relevant diagnostic techniques including modern diagnostic techniques, after he/she has passed the relevant professional assessment, and when he/she is equipped with the appropriate medical apparatuses and is acting in accordance with the requirements of the relevant medical legislation. It was also indicated in the “Code of Practice for Registered Radiographers and Registered Medical Laboratory Technologists” that radiographers and technologists can only accept testing requests from registered medical practitioners (i.e. WMP) and dentists. CMPs are not regarded as registered medical practitioners under current regulatory framework. WMPs would expect to take up the role of ordering WM diagnostic services (e.g., X-ray, MRI) and signing death certificates because of the limitation of CMP practice.

4.26 For nurses in the Pilot Programme, they are responsible for providing task-based CM related care on top of the routine nursing care. The nurses in the focus group discussion opined that the role and responsibilities of nurses in CMH should be based on the clinical structure and types of service provided. They expected that these nurses should have additional roles in delivering professional CM nursing care, for example assisting in certain CM treatments such as acupuncture, Chinese herbal bath or auricular plaster therapy under CMPs' supervision. However, they also expressed concern on the lack of credentialing system for CM

nursing in HK and urged the development of competency framework in CM nursing care.

### Risk Management

4.27 Patient safety is always the prime consideration and HA bears the ultimate liability on the ICWM services delivered to HA patients. To ensure safe practice and reduce clinical risk, the disease-based protocols were cautiously designed with prudent criteria for patient screening. Consequently, only medically stable patients of target disease groups and those who are capable of giving consent to CM treatment could be enrolled in the Pilot Programme. Furthermore, acute and emergency cases are handled by HA clinical team in the programme. The resuscitation policy of the future CMH is a concern for some stakeholders participated in the focus group discussion, they pointed out that resuscitation policy including a cardiopulmonary resuscitation (CPR) team and CPR facilities should be set up in the CMH.

4.28 The "Risk Assessments and Recommendation on Use of CMs in the ICWM Pilot Project" ("Recommendation") has been developed to provide reference on CM toxicities and potential HDI as both WMPs and CMPs were not familiar with medication regimes of the other discipline. CMPs considered that the risk assessment on CM toxicities and HDI were mainly based on the reported cases of CM adverse reaction with limited evidence available. As there are only three disease groups covered in the Pilot Programme, the information on CM toxicities and HDI in the current database may not be sufficient to support the future CMH.

4.29 HA has established a comprehensive clinical governance structure and risk management framework to assure the quality and safety of the convention WM services and the management of adverse events and incidents related to ICWM service followed HA current practices. Stakeholders generally agreed that the existing risk management framework of HA could serve as reference for future CMH but modification would be required to accommodate the features of CM.

### **SUGGESTION**

#### Service Scope and Disease Selection

4.30 HA adopted evidence-based approach to select diseases based on best available evidence and anticipated patient load for Pilot Programme. As ICWM is a small scale pilot under HA setting, there is limitation on the service scope and disease selection criteria. For the

future development of ICWM service to other disease areas, it is suggested that this approach should be maintained. Furthermore, research study on the clinical effectiveness of ICWM care should be explored in the long term.

#### Model of ICWM Intervention

4.31 Disease-based protocols were formulated by CMPs and WMPs for the Pilot Programme and it is suggested to review protocols on regular basis to meet the clinical need.

4.32 During the in-patient journey of Pilot Programme, CM consultation and treatments were provided in parallel with routine WM care and ICWM intervention was achieved by joining grand round and case conference. However, ICWM intervention was not set up in the out-patient setting. Based on stakeholders' comments, it is suggested that communication channels between CMPs and WM professionals shall be developed in the out-patient setting to support the continuity of patient care.

#### Risk Management

4.33 HA implemented a series of risk mitigation measures to manage potential clinical risk associated with ICWM care. To address the concerns of CM safety and HDI, the "Recommendation on CM toxicities and herb-drug interaction (HDI)" was formulated in paper format as to provide reference for both WM and CM disciplines. It is suggested to explore the development of built-in electronic alerts on CM toxicities and HDI in the medical information system to facilitate timely checking and clinical decision making.

### **SUGGESTION TO CM HOSPITAL**

#### Service Scope and Disease Selection

4.34 There is limitation on the service scope and disease selection of the Pilot Programme under the HA setting. For future development of ICWM service in other disease areas at CMH, it is advised that CMH should have a wider scope of diseases that CM has manifest advantages, and evidence-based approach should be fostered in CMH. It is also suggested to start with the three disease groups in the Pilot Programme in which services can be leveraged by the experience gained.

4.35 In addition, it is important to understand patients' expectation towards the

services in CMH, so that CM in-patient care and ICWM care could be set out to meet their needs.

#### Model of ICWM Intervention

4.36 It is suggested that both protocol-driven approach and pure CM practice should be adopted to support evidence-based CM and foster development of CMH. Protocols with integrated care pathways for selected disease areas that require close monitoring should be developed to facilitate the collaboration between WMPs and CMPs, and minimize the clinical risk. Moreover, protocol should clearly define the stage of progression in which CM or ICWM intervention could be provided.

4.37 To enhance the comprehensiveness of the clinical protocols, both streams of professional disciplines should be engaged at the protocol design stage so as to build up mutual understanding and consensus. Most importantly, the protocol should be regularly reviewed by the clinical team and respective Clinical Working Group to ensure patient safety and smooth implementation.

4.38 It is expected that CMPs should be the attending medical practitioners with overall accountability and full autonomy for individual patient care in CMH. The scope of practices of WMP and CMP should be taken into consideration for setting out their roles and responsibilities in CMH. There should be a clinical management committee established in the CMH for defining roles and responsibilities of each healthcare professionals throughout the patient journey, especially in the delineation of duties during emergency to ensure clinical handover.

4.39 Additional roles and responsibilities of nursing staff are also expected in the CMH. To build the competency of nurses in delivering CM nursing care and to prepare the workforce for the future CMH, a structured training framework for postgraduate curriculum should be developed.

#### Risk Management

4.40 A quality and safety committee shall be established to oversee the quality and

safety of ICWM care and services delivered within the hospital. The committee should set up the clinical risk management system based on the service scope of CMH, formulate guidelines on CM treatment modalities and CM medical equipment in the context of safety practice. The model of clinical risk management could be learned from HA with accommodation of both CM & WM features.

4.41 For the emergency handling, resuscitation policy should be set out in the CMH and staff training should be provided. Furthermore, the referral system with nearby acute hospitals should be developed for timely management of emergency situation.

4.42 For the drug safety management in the CMH, quality of Chinese medicines and potential herb-drug interactions (HDI) are two main areas to be taken into account. It is suggested that HA's quality assurance and management system on CM granule and herbal CM could serve as reference for the CMH. Moreover, a more comprehensive HDI database should be developed to support the service of CMH. Local universities, CM and WM experts should be engaged for developing the database by evidence-based approach with regular review. To facilitate the checking of the CM toxicities and HDI, electronic alerts in the medical record system should be explored. The level of evidence as well as the source of risk alerts should be indicated for healthcare professionals' reference.

## CHAPTER 5 OPERATIONAL FRAMEWORK

### OVERVIEW

5.1 The implementation of ICWM practice involves high degree of complexity which includes (i) the integration of two streams of medicine; (ii) provision of care involving different healthcare disciplines; and (iii) collaboration between different organizations and institutions. A good interfacing is necessary to facilitate the collaboration and operation of the Pilot Programme. The operational framework mainly composes of collaboration and project management including staff mix and manpower, financial model, fees and charges and sharing of medical records.

#### Operational Guidelines

5.2 The Pilot Programme involves the collaboration of three institutions (HA, NGOs and universities). Administration workflows have been set out for the role of HAHO, HA hospitals and CMCTRs in the “Operational Manual”. Under administration of HAHO, accounting workflow and financial audit procedures have been covered. Under hospital and CMCTR administration procedures, workflow covers patient screening, enrolment, appointment scheduling, patient consultation, discharge and follow-up, as well as financial management have been outlined. CM related nursing care pathway and guidelines on prescribing, dispensing and administration of CMs for in-patients have also been laid out.

5.3 The Chinese Medicine Department (CMD) is the project office in HAHO to coordinate Pilot Programme implementation, manage and monitor service contracts and budgets, coordinate programme review meetings, governance meetings and report compilation, liaise with CMCTR on the investigation of incidents and support hospital and patient on project related issues.

5.4 The hospital ICWM site is to screen, invite and enroll patient, provide routine WM care and in-patient CM related nursing care, procure and manage project related furniture and equipment, check and verify service report submitted by CMCTR and submit verified report to HAHO. Furthermore, the roles and responsibilities of nursing care involving the administration of oral CMs as well as the pre and post CM treatment nursing care are further elaborated in the “Guideline on the roles and responsibilities of HA nurse in Pilot Project on ICWM”.

5.5 The CMCTR is to deliver CM services and other project related services according to contract provisions, provide appointment scheduling to hospitals and patients, record relevant patient data, attend clinical and management meetings, and conduct audit as required.

5.6 The university is to provide academic expertise in the development of clinical protocols and other clinical related aspect.

#### Staff Mix and Manpower

5.7 HA comes into a contractual relationship with the tripartite CMCTR on the delivery of CM services under the Pilot Programme. CMPs involved in the programme are appointed by CMCTRs with pre-set requirement. They are required to have at least four years of clinical experience and have received basic infection control, basic life support and data privacy training.

5.8 NGOs are reimbursed for each in-patient enrolled into the programme per day (in-patient bed day) and the out-patient follow up at CMCTRs (out-patient attendance). The number of patients enrolled into the programme differed at each hospital site. It is estimated that the time used by CMP per in-patient is 0.75 hours and with two additional hours for ward round and other programme work per day.

5.9 Both WMPs and nurses involved in the Pilot Programme are staff of HA hospitals. The additional manpower provided by means of lump sum funding to each of the seven hospitals under the Pilot Programme is set as follows:

- 1.4 Registered Nurse (RN) to provide ICWM related day to day nursing
- 0.7 Advanced Practice Nurse (APN) to supervise and monitor ICWM nursing care
- 1 Executive Assistant I (EAI) to support programme related administrative duties

5.10 Furthermore, a one-off budget to hospital sites was provided to relieve clinical staff to attend programme related training.



5.11 At HAHO, one post of Advanced Practice Nurse (APN) has been created for the central coordination of nursing practice in the Pilot Programme and to explore the professional development of CM nursing.

#### Financial Model and Fee & Charges

5.12 As CM is not part of HA's highly subsidized public healthcare services and given the pilot nature of the ICWM programme, the patient service fee for CM component under the programme is set by the Government with HA's input. Designated funding has been allocated by the FHB for HA to support the development of the programme. Funding arrangement for the programme includes the administrative cost and the delivery of CM services.

5.13 HA in-patients enrolled in the programme is charged by the NGO, in addition to the prevailing HA fees and charges, at a fixed lump sum of HK\$200 for CM care on daily basis, irrespective of the number of CM consultations and treatments provided within the same day. CM out-patient followed up at CMCTRs is charged by the NGO at a fixed lump sum of HK\$120 per attendance, irrespective of treatments type provided within the same attendance.

5.14 NGOs collect the daily fee directly from patient and may choose to issue bill on patient by "deposit" model or the "Octopus" model. Detailed operational workflow has been established to ensure adequate system of internal control is in place and cash handling at the in-patient wards is minimized.

5.15 The daily programme fee for each participating in-patient to be received by NGOs was set by FHB at \$280 and later revised to \$310 in 2017/18. HA would reimburse NGO on the residual balance of the programme fee per each attendance i.e. \$110 for in-patient and \$190 for out-patient after the adjustment. Apart from the programme fee, NGO would in addition receive a daily allowance of \$660 (set to be \$570 in 2014/15) for all programme related activities by CMP, a daily allowance of \$320 for the support by clinical assistant and an annual allowance of \$127,152 for executive support. Upon NGOs' reimbursement by HA, an accounting workflow on payment release to NGOs has been developed with review and audit inspection on the financial performance against service delivery.

5.16 Charges on recipients of Comprehensive Social Security Allowance (CSSA) for both in-patient and out-patient services under the Pilot Programme are waived.

#### Sharing of Medical Record

5.17 Under the Pilot Programme, HA adopts the electronic Clinical Management System (CMS) for WM medical record while CMCTRs use the Chinese Medicine Information System (CMIS) for CM medical record. CMIS was originally designed for out-patient CMCTRs and certain enhancements have been conducted in the system to support in-patient module features.

5.18 CMS and CMIS are separate systems. CMPs do not have the right to access CMS while WMPs do not have the right to access CMIS. The sharing of medical record between WM and CM is achieved via Integrated Patient Documentation (IPD) in hard copy and the set of standard HA forms created for the programme. “Guideline on Writing Chinese Medicine Consultation Record for In-patient” has been formulated to provide guidance for CMPs in the documentation of medical record in HA in-patient setting.

#### Incident Management

5.19 The reporting and management of incidents related to ICWM patients is stipulated in the “Operational Manual”. Incidents related to ICWM patients occurred at HA hospitals should be reported via the HA Advanced Incident Reporting System (AIRS). A checkbox of “Special Programme – ICWM” would be available for reporters to report incidents related to Pilot Programme. Incidents reported in AIRS should be followed up according to HA existing cascade structure, with input from related parties to assist the investigation. HA CMD would act as the contact point to coordinate information transfer between the involved hospital site and designated CMCTR. The case would be forwarded to CMCTRs for follow up.

5.20 For incidents related to ICWM patients that occurred at CMCTRs during out-patient follow up, the existing mechanism for incident management at CMCTRs should be followed according to the ‘Guideline on Incident Management at CMCTRs’. Briefings have been arranged for frontline staff in the CMCTRs regarding the incident reporting and management of ICWM case.

## **DISCUSSION**

### Operational Guidelines

5.21 The workflow of the Pilot Programme has been clearly set out and made clear to all the parties involved. During focus group discussion, all stakeholders expressed that they were well informed of the programme's logistic workflow as well as their roles and responsibilities. Patients in general agreed that they were clear with the overall workflow of the programme. They also agreed that sufficient, clear and understandable explanation has been given throughout the patient journey, from enrollment to discharge and follow up.

### Collaboration

5.22 For the future CMH, according to stakeholders, potential patient sources would be referrals from private sectors, HA, CMCTRs and out-patient clinics of CMH. Stakeholders also advised that partnership should be built up with universities as CMH would take a leading role in training and research.

### Staff Mix and Manpower

5.23 As the manpower involved in the Pilot Programme is mostly under the existing HA workforce, increased workload was a concern for HA frontline staff with introduction of the programme. According to the focus group findings, all stakeholders involved in the programme considered that their workload has been increased since the implementation of the programme. However, they pointed out that the additional manpower allocated to nurses was sufficient while that for WMPs was not sufficient.

5.24 According to the patient survey, patients still expected WM professionals to play an active role in the caring process. Surveyed patients expected WM nurses to support the daily operation in the CMH. They also expected that WMPs would be monitoring patients who receive ICWM therapy, providing recommendations and collaborating with CMPs in addressing multiple issues when necessary.

5.25 The availability of CM nurses is a challenge for the future CMH. Almost all the surveyed patients stated that registered nurse with qualifications of CM nursing care should be included. As indicated by multiple stakeholders, it is difficult to build up the first batch of nurses for the CMH due to the fact that there is no appropriate platform in HK for CM nursing clinical training and practice and currently no professional trainers for CM nursing care in HK.

5.26 At the current stage, it is hard to estimate the allocation of manpower in the future CMH as it depends on its department setting. Focus group participants suggested that the current model of rehabilitation in WM hospitals could be taken as reference to estimate the required manpower of clinical staff in the CMH. They further suggested that CM and WM pharmacists and allied health professionals should be included in the staff mix.

#### Financial Model and Fee & Charges

5.27 Service fee is a major factor that patients would take into account before they joined the Pilot Programme. Regarding the daily fee imposed for the CM service, surveyed patients who joined the programme accepted the current charges. Nevertheless, some of the eligible patients refused to join the programme due to the pricing of the CM service. As suggested by some consulted stakeholders, patients' expectation should be considered when setting up the service fee in CMH.

5.28 According to the NGOs' comment, the financial management has been clearly set out under the Pilot Programme and elaborated in the guideline. Patient respondents generally agreed that clear explanation has been given on payment options, logistics and charges.

#### Sharing of Medical Record

5.29 CMPs pointed out that separate information systems for WM and CM have imposed barriers on communication of patient care. Both CMPs and WMPs considered that it is important to have access to all ICWM related medical record.

5.30 The existing CMIS used by CMCTRs is not completely compatible with the operation of ICWM services as CMIS was developed as an out-patient module.

#### Incident Management

5.31 The stakeholders agreed that the current incident management workflow has been clearly elaborated in the "Operational Manual" and the current mechanism facilitates prompt management of ICWM related incidents. However, the incidents reported in AIRS could not be conveyed to CMCTR via the electronic system. CMD is required to act as the

contact point to coordinate information transfer between CMCTR and hospital site. Prompt notification and timely management of incidents by CMCTR is not facilitated.

## **SUGGESTION**

### Operational Guidelines

5.32 To ensure smooth operation of the tripartite collaboration under Pilot Programme, the roles and responsibilities of related parties, financial and incident management as well as other administrative workflows have been clearly set out in the “Operational Manual” and distributed to all related stakeholders. Programme audit has been conducted regularly to ensure compliance against workflow and guidelines. It is suggested that the “Operational Manual” shall be reviewed on regular basis to ensure efficient and effective implementation of the programme.

### Sharing of Medical Record

5.33 Currently, CMPs have no access right to the CMS while WM professionals have no access right to CMIS for patient under Pilot Programme. The ICWM-related medical information is shared via hard copy patient progress notes and HA forms. It is suggested that both CMPs and WM professionals should have access to all CM and WM medical information on patients under care.

### Incident Management

5.34 HA’s incident management system has been well-established for early identification and management of adverse events incidents. Incidents related to ICWM patients in in-patient setting are currently reported in AIRS. However, incident reports could not be conveyed to CMCTR via the electronic system. It is suggested to strengthen the communication of incident between CMCTRs and hospital sites.

## **SUGGESTION TO CM HOSPITAL**

### Collaboration

5.35 Pilot Programme involves the tripartite collaboration of HA, NGOs and Universities for service delivery. The scope of collaboration for CMH would be further expanded – including HA, CMCTRs and private sectors for case referral and emergency referral as well as liaison with local universities and overseas institutions for research and

training. It is suggested that proper communication channels should be established between various stakeholders to ensure efficient collaboration.

5.36 It is suggested to set up close collaborations with local universities, overseas CM universities and hospitals on ICWM research and training for the further development of CMH. CMH could serve as a clinical trial centre for ICWM/CM evidence-based research and be the platform for training of both streams of medicine practitioners on ICWM practice.

#### Staff Mix and Manpower

5.37 HA comes into a contractual relationship with CMCTRs under the Pilot Programme and CMPs are appointed by CMCTRs. WMPs and nurses involved are built on existing HA workforce with additional manpower provided by means of lump sum funding to each hospital site. It is suggested that CMH to establish its manpower structure and the pay scale of each healthcare professional should be benchmarked with other healthcare disciplines of HA and private market.

5.38 For the building up of WM professionals in the CMH, it is suggested to set up a scheme for sourcing visiting WMP specialist based on operational needs. WM healthcare professionals may work as secondment or on part-time basis for the CMH.

5.39 Overseas trainers should be invited or overseas training should be arranged to build up the first batch of local CM nurses. Renowned overseas CMPs or CM field leaders can be invited to facilitate the development of professional competency.

#### Financial Model and Fee & Charges

5.40 CM is currently not part of HA's highly subsidized public healthcare services and patients enrolled in Pilot Programme is charged by NGO in addition to the prevailing HA fees and charges. It is suggested that public expectation should be considered while setting out fees and charges on the service provided in CMH.

5.41 According to the "Invitation for Expression of Interest of CM hospital", the Government considered to invite a non-profit making organization to run the CMH on a self-financing basis. It is suggested to consult patient groups on the expectation of the fees & charges. The Government should set up a sustainable financial model to support the operation

of the hospital and long term development. Furthermore, subvention should be considered to provide affordable services for the public.

#### Sharing of Medical Record

5.42 Currently, HA and CMCTRs use two different clinical systems for management of medical record in the programme. It is suggested that a unified ICWM medical record system which accommodates both CM and WM elements, and to develop both in and out-patient modules in CMH.

5.43 The medical record system in the CMH should be connected to the Electronic Health Record (eHR) sharing platform to facilitate collaboration with HA hospitals and private sectors as the continuity of patient care.

## CHAPTER 6 TRAINING

### OVERVIEW

6.1 To address the knowledge gap between WM and CM healthcare professionals in the Pilot Programme, programme specific briefing sessions which included protocol-based on-site briefing and demonstration workshop was provided to frontline staff before the programme launch. The on-site briefing covered (i) basic CM concept of individual disease, protocol concept and treatment plans; (ii) operational workflows and procedures; (iii) CM related nursing care; and (iv) CM safety and administration.

6.2 WMPs and nurses involved in the programme could familiarize with the clinical protocol, logistics, guidelines and operational procedures listed in the “Operational Manual”. Furthermore, CMPs were invited to share on clinical case with WM professionals by luncheon talks at the hospital sites before the programme implementation. They were also invited to join the in-patient grand-round or ward round which built up a communication channel for WM/CM interaction.

6.3 In order to engage a wider spectrum of HA staff, different levels of CM training have been provided. The “Chinese Medicine Certificate Programme for Medical and Healthcare Professionals” has been conducted on an annual basis. Moreover, to further enhance collaboration and communication between WM and CM professionals, three batches of "Intermediate Chinese Medicine Training Programme for Nursing Care" and an “Intermediate Chinese Medicine Training Programme in Pharmacy” has been conducted. It serves as an advanced course to strengthen the CM knowledge and the practical capability in particular in handling clinical scenarios related to CM treatments.

### DISCUSSION

6.4 In the Pilot Programme, professional knowledge gap on the ICWM practice is addressed by providing pre-launch briefings to the related frontline staff. The majority of WMPS and nurses agreed that the briefing sessions have strengthened their basic CM knowledge, as well as helping them to familiarize with programme logistics and workflow. However, there is still need of additional training for the healthcare professionals in the future CMH.



6.5 Currently, the undergraduate curriculum for WM covers very little element of CM and WMPs have limited exposure to CM. For the WMPs in the future CMH, it is expected they should have at least basic CM knowledge and be aware of herb-drug interaction. In the focus group discussion, WMPs raised that further training or briefing on the safety and risks of CM treatment, theories and principles of CM diagnosis should be provided to enhance their understanding of CM practice.

6.6 In HK, there are three local universities providing undergraduate programmes of CM. The curriculum encompasses core CM courses as well as courses in biomedical and clinical WM, for example anatomy, biochemistry, physiology, pathology, immunology and diagnosis. These WM courses take up around 20 to 40% of the total undergraduate curriculum. Moreover, students are also required to complete clinical practicum and internship in a CM teaching hospital in mainland China or local CM clinics.

6.7 However, CMPs participating in the programme expressed the need to enhance their WM knowledge especially in WM diagnostic tools, interpretation of diagnostic results and emergency handling. They also strongly requested for more training regarding diagnosis and clinical management. Furthermore, they raised that the undergraduate internship arrangement in HK is limited to out-patient setting which imposes limitations on CM students' exposure to in-patient setting at HA hospitals.

6.8 The CMH is expected to serve as a clinical training platform and research centre. Both CM and WM stakeholders agreed that CM clinical research should be advocated at CMH to encourage evidence-based CM which could minimize knowledge gap and enhance credibility as well as confidence towards CM.

6.9 Nurses from focus group pointed out that there are limited context of CM component included in the current undergraduate and diploma nursing programmes. They advised that additional training, for example, CM nursing practical training should be in place to address their on-the-job issue.

6.10 Furthermore, they also expressed that nurses should receive advanced trainings on CM knowledge and get qualification on CM nursing to support the additional roles and

responsibilities in the future CMH. The model of nursing training and CM nursing qualification system could be learned from HA and overseas examples.

### **SUGGESTION**

6.11 Protocol briefings and workshops are conducted to facilitate mutual understanding of both streams of medicine. It is suggested that more in-depth CM training programmes should be developed for WM healthcare workers.

### **SUGGESTION TO CM HOSPITAL**

6.12 A structured training framework for both CM and WM professionals is suggested to be developed. This is important not only for the narrowing of professional knowledge gap between CM and WM, but also preparing for the development of CMH.

6.13 It is suggested that CMH to be served as the training hub for clinical practicum of undergraduate CMP in order to gain experience in local in-patient setting and nurture them working in the multidisciplinary team for the delivery of ICWM care. For the CMPs working in the CMH, on-the-job training including clinical risk management, basic life support or advanced life support training should be provided to strengthen their understanding of clinical risks in other regime of healthcare professional and the handling of emergency situation. Disease-specific ICWM trainings are suggested to be provided as postgraduate programmes or continuing professional education to enhance the competency of CMPs and professional development in ICWM care.

6.14 To enhance the understanding of CM practice, CM training or relevant continuing/ professional education shall be provided to WM professionals working in the CMH. In addition, post-graduate training on disease-specific ICWM care should be developed by local universities as professional development and facilitated CM/WM collaboration. CMH should also be served as a platform for short-term clinical attachment of WM disciplines on ICWM care to promote WM and CM communication.

## CHAPTER 7 CONCLUSION

7.1 HA has dedicated strong effort to explore the development and provision of CM treatment for HA patients. HA has set up the frameworks and put forward the ICWM service for maximizing the patient care, gaining experience in the development of CM in-patient services/ hospital, and facilitating postgraduate CM development and training.

7.2 The formulation of clinical and operational frameworks by HA facilitates the smooth and effective implementation of the Pilot Programme. Solid experience has been gained in the collaboration between the WM and CM disciplines.

7.3 In general, the Pilot Programme is in smooth implementation with well acceptance from both patient and other stakeholders. In view of a small scale pilot and adopting a protocol-driven approach, the existing project management structure and risk mitigation measures are effective to explore a feasible interface model between CM and WM in HA hospital, while also manage potential concerns on patient safety related with ICWM practices. However, limitations such as prudent patient selection criteria, restricted use of CMs based on clinical protocols, as well as conventional WM treatment remained to be dominant which may hinder CM from exploring its advantages in a pragmatic model of ICWM care.

7.4 For the application of experiences gained in the Pilot Programme to the CMH, there should be thorough review and consultation process with the relevant stakeholders. While the collaboration model from Pilot Programme could serve a reference, further clarification will be needed on the roles and responsibilities of the streams of medical professionals involved when CMP will be able to take a leading role in the dynamic process of ICWM care, i.e. to select the appropriate form of medical treatments, CM or WM, while the other would play a supporting role in patient care.

7.5 The CMH may in future become the major provider of CM in-patient services in HK, the design and development of Pilot Programme in the public healthcare sector should also be reviewed in the nearest future. As the only platform to test the interface model between CM and WM, extension and/or expansion may be necessary to map out potential areas for ICWM practices to be put forth to the scope of the CMH.

## ANNEX 1 STUDY METHODOLOGY

1. Three data collection tools including patient survey, stakeholder in-depth interview and stakeholder focus group discussion were adopted.
2. Patient survey was used to gauge satisfaction throughout patients' journey, and help justify stakeholders' points of view. Stakeholders were invited to an in-depth interviews which gauge their opinion toward the operational and clinical frameworks of ICWM programme. For the stakeholder focus Group discussion, it was to dive in depth for specific areas for further elaboration.
3. The parties that have been consulted in the evaluation study included (1) patients, (2) representatives of local universities (3) WMPs and (4) nurses of HA, (5) Cluster ICWM coordinators of HA (6) CMPs, (7) IM coordinators and (8) management executives of NGOs and HA Head Office representatives from (9) Nursing Service Department, (10) Chief Pharmacist's Office and (11) IT Division.
4. The sample sizes of each data collection tools are summarized as follows:

### *Patient Survey*

	No. of survey conducted
Patient survey	112

### *Stakeholder In-depth Interview*

Organization	Stakeholders	No. of participants
HA	WMP of ICWM site	3
	Nurse of ICWM site	3
	Ward frontline staff	3
	HO IT Divison	2
	HO Nursing Service Department	1
	HO Chief Pharmacist's Office	2
NGO of CMCTR	CMP	3
	Admin Manager of CMCTR	2
	IM Coordinator	3
Universities		3
	Total	25

*Stakeholder Focus Group Discussion*

Organization	Sub-group	No. of sub-group	No. of participants
HA	WMP	3	13
	Nurse	2	12
	ICWM Coordinator	2	6
CMCTR/NGO	Management	2	11
	CMP	2	9
Universities		1	6
Total		12	57