



2<sup>nd</sup> July, 2020

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***\*About HKPCF***

*Founded in 2007 by a group of pharmacists, the Hong Kong Pharmaceutical Care Foundation is a registered non-profit charitable organization with the main objectives to provide professional pharmaceutical service to improve medication safety for the elderlies particularly in old-age homes. Our major service includes integrating the visiting pharmacist service with the support of electronic medication management system plus an automatic medication packaging service and an electronic drug administration record system to serve the old-age homes.*

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The Hong Kong Pharmaceutical Care Foundation\* (HKPCF) wishes to submit our following opinion on the future service planning for the Elderly and the ageing population in Hong Kong.

**Our opinion and suggestions:**

- 1. There should be inclusion of pharmacists and dispensers in the manpower mix to support the medication management and pharmaceutical care service provision at Residential Care Homes for Elderly (RCHE) and Residential Care Homes for Persons with Disabilities (RCHDs)**

- 1.1 The Visiting Pharmacist Service**

Starting from 2010, the Social Welfare Department has begun to award service contracts to HKPCF to make regular and routine Visiting Pharmacists (VP) service to different RCHEs to deal with the medication management issues at these homes. The VPs conduct various activities including medication safety assessments, medication reconciliations and medication reviews for residents, and providing training and education to the RCHE staff.

- 1.2 The service was highly valued by the Homes as pharmacists can help to resolve medication management and related matters which have always been a chronic problem and would be increasingly so in the Old Aged Homes in Hong Kong with the ageing population where there**

is a high institutionalization of 8.3% of population aged 60 and above, and with the expectation that more and more elderly will be living in these homes in the coming decades.

1.3 Studies<sup>1</sup> have shown that three major chronic diseases were prevalent among the elderly, namely hypertension, diabetes mellitus and dyslipidaemia. The study also found that around 75% of the elderly were on medication, and among them 21.8% were taking five or more medicines, which raised their vulnerability to the dangers of polypharmacy and drug-related problems. Polypharmacy (the concurrent use of 5 or more medications, resulting in too many or unnecessary medicines at dosages or frequencies higher than therapeutically essential) can result in non-adherence and can cause adverse drug reactions, drug-drug interaction, increased risk of hospitalization, medication errors and increased cost.

1.4 The VPs were able to assume the professional responsibility to review the medication profiles for all residents in the RCHes, perform medication reconciliation, update and check residents' medication records, supervise all medication related matters, identify possible causes leading to drug incidents to ensure that the residents' medication profile is complete and appropriate so as to eliminate drug duplication or any unintended or inappropriate dosages leading to drug interactions and incidents. In the process, VPs will make the necessary contacts and communicate with the relevant parties to make clarifications to optimize the drug treatment for the residents and reduce unnecessary hospital readmissions.

### **1.5 Dispenser's Role in Resident Care Setting**

Currently, some large-scale OAHs employ dispensers who are better trained on medications knowledge to handle all medication preparation and management issues inside the care homes. It is recommended to include Dispensers as part of the manpower mix in the OAHs as they are better trained on medication issues and drug related knowledge and they can help to manage the medication management process on a routine day to day basis.

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1. 27 September 2007 Press Release, CUHK Discovers Poor Drug Compliance among the Elderly

## **2. The Government should fund the integrated Pharmaceutical Care Service model with IT and automation at the RCHes**

### **2.1 The IT system - the Safe Medication Management System (SMMS)**

Since 2015, apart from the VP service, the Hong Kong Pharmaceutical Care Foundation has started the implementation of an IT system – the Safe Medication Management System (SMMS) as a major enhancement measure to further safeguard medication safety and drug management accuracy for the elderlies at the RCHes. The VP service coupled with the use of an IT system is an integrated service model to ensure the appropriate medication use and medication safety at transitions of healthcare service. The Visiting Pharmacist will first use the SMMS to prepare the full list of medications with clear drug images, names, dosage and frequency for printing out the drug administration record charts.

### **2.2 Mobile device for drug administration capturing and recording**

Alternatively, with the SMMS, the medication management workflow can be further supported by the use of mobile device for electronic drug administration capturing and recording, the efficiency and accuracies of drug administration rounds will be further improved in the drug administration process by the health care workers in the RCHes. The initiative aims to enhance the safety, quality and efficiencies for medication distribution and administration practices along the continuum of care in Hong Kong.

### **2.3 Automation technology for drug dispensing and packaging for the Homes**

For large-scale OAHs, HKPCF is currently proposing a pilot project of setting up a Pharmacy under the Public-Private-Partnership Scheme concept. Original packs of medications can be supplied from the Hospital Authority (HA) to the care home pharmacy instead of dispensing patient by patient by HA. Medications can then be packed into individual patient pack inside the pharmacy using automation dispensing and packaging machines. This is to increase the efficiency of daily drug preparation process in residential care setting, to reduce time for care home staff on medication handling, hence can spare more time for direct nursing care, and nevertheless, to reduce medication wastage which is a huge issue inside care home.

### **2.4 Promotion and facilitation of use of eHR system**

With the use of the integrated Pharmaceutical Care Service model, there can be better sharing of information between the Homes and the eHR platform. The information exchange can include the residents' clinical and medication information in order to bridge the gaps of information between the Homes and the Hospital System to provide better understanding on the continuum of care and reduce error during transitions of care.

## **2.5 The funding to support the RCHE to use the integrated Pharmaceutical Care**

The above integrated Pharmaceutical Care Service is important as the model is a long term effective measure which can help the staff at the Homes to enhance the quality of service and reduce labour costs. The Homes that have used this model of service opined that funding should be provided by the Government as this is in line with the Government policy that is to deploy technology, ICT, and “tele-health” for both elderly users and service providers to enhance the quality of life of elderly and better health management; to increase work efficiency and to address the problem of manpower shortage.

## **3. Support to Pharmaceutical Care Service in Community Care**

### **3.1 Pharmaceutical Care Service to Community Elderlies**

Currently, different small scale pharmaceutical services are being provided to community elderlies by different NGOs and universities. These services include public medication talks, individual medication consultation service to help elderlies better understand their medications, home visits to provide medication consultation services, etc. Many different medication related issues have been uncovered during these services, e.g. wrong medications taking behaviours that adversely affect drug treatment results, wrong storage conditions for medications that adversely affect drug qualities and over stocking of left over and even expired medications, etc. The different types of Pharmaceutical Care Services are mainly provided through day care center referral by nurses and social workers. HKPCF believes there is a big service gap, especially for home-alone elderly. In this connection, HKPCF suggests the extension of the pharmaceutical care service to community elderly with funding resources to encourage organizations to provide such services and build support network to identify the elderlies who are in need of these pharmaceutical care service.

### **3.2 Carer Support and Training**

For elderlies living in community, responsibility of medication handling is often shouldered by their carers including family members and domestic helpers. Both may not be well-trained or well-educated on medication knowledge. Thus, medication issues, e.g. medication dosing schedules, preparation and storage, correct medication administration method, medication side effects, may all lead to high burden to the carers. For domestic helpers, there may also be language issues that hinder them from understanding the correct medication instructions or administration methods. Pharmacist can help by delivering training and support regarding elderly medication e.g. talks, medication consultation service, question and answer sessions and even arrange special trainings to domestic helpers regarding medication handling with appropriate translations.

### **3.3 Purpose built Assistance Service on medication management matters**

Currently different organizations and universities are organizing different purpose built assistance service to help patients handle their medication independently e.g. developing aids such as personalized medication charts and individual daily or weekly drug boxes. To capitalize on the digital and smart phone technology abundantly available, some mobile apps and smart drug boxes are developed to assist patients to manage their daily medication schedules, as well as sending alerts and reminders at schedule intervals to improve medication adherence for the patients. HKPCF is of the view that resources and funding should be provided to extend these assistance services to all patients in need of these services.

### **4. Interdisciplinary Service and Support including pharmacists in community call centres**

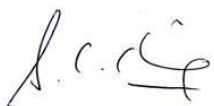
We understand that the care and support to the elderly population require interdisciplinary cooperation e.g. nurses, pharmacists, dietitians, physiotherapists, occupational therapists, speech therapists and social workers, etc. There are many different means of cooperation one of which is the setting up of community health call centers/ health care telephone help line manned by qualified healthcare professionals. HKPCF suggests that pharmacists should be included amongst the different disciplines in these call centers to provide medication related advice and support to the elderlies in a cost-effective manner.

### **Conclusion**

The Hong Kong Pharmaceutical Care Foundation is fully engaged in order to address the increasing prevalent needs of the elderly population in different areas of medication management in Hong Kong. It is expected that this need will prevail and become more pertinent as long as medication treatment remains an option to manage the chronic diseases of the population. For these reasons, HKPCF felt that the inclusion of all of the above suggestions are important and will make significant contribution to improve the overall health outcome.

The proposed duties, roles and suggested manpower ratio for pharmacist and dispenser is also attached as Appendix I for your consideration.

Yours Sincerely,



Ms S C Chiang

Director, Hong Kong Pharmaceutical Care Foundation

## 到訪藥劑師的角色

藥劑師在協助院友使用藥物的過程中，扮演著重要的角色，包括作出藥物協調、藥物諮詢、藥物核查、改善藥物管理及記錄系統、培訓員工及提供電話支援。

## 到訪藥劑師的職責

### 藥物管理

1. 根據衛生署出版的「安老院舍藥物管理指南 2018」管理藥物儲存、備藥、派藥、藥物紀錄等工作
2. 為安老院舍建立藥物管理的機制及指引標準操作程序
3. 進行定期檢視並設計改善計劃，以改善院舍藥物管理流程
4. 藥物教育服務
5. 教育員工和院友正確使用藥物和相關健康知識
6. 為安老院舍員工提供藥物管理諮詢及支援服務

### 臨床藥學服務

1. 最新藥物記錄整合

到訪藥劑師會在院友每次出院或覆診後檢查藥物有否改變，以整理一個最新、最齊全及最準確的藥物記錄，避免因為院友到不同的醫院或診所覆診，而導致藥物記錄混亂，重複服用相同的藥物

2. 藥歷覆查

到訪藥劑師會檢查檢查醫生處方，監察院友的症狀、藥物的副作用或不良反應，確保院友接受最適當的藥物療程。

3. 與其他專業醫護人員保持聯繫並在必要時轉介

### 協助安老院舍使用電子藥物記錄系統

1. 電子藥物記錄系統內置全面的藥物資訊，包括常見藥物劑量，藥物照片和注意事項，以提高院舍的備藥安全和減少用藥錯誤
2. 電子藥物記錄系統能整合 MAR (俗稱派藥紙)，增加派藥的效率及準確性

## 員工培訓及考核

- 制定有關藥物培訓的年度計劃，每年不少於一次培訓
- 制定員工考核機制，每年為員工考核一次並進行有關記錄。

## **到訪藥劑師的最低人手要求**

- 規定藥劑師於院舍的服務時數最少為每年每住客 2 小時，逐步以 3 年時間提升至每年每住客 4 小時，以便舒緩護士在藥物管理上所花的時間並提供訓練及配藥員和保健員和護士。

## **配藥員的角色**

可以在院舍內執行有關配藥給每位住客的工作，解答有關藥物的一般常識。

## 配藥員的職責

1. 根據藥物紀錄備藥
2. 管理及儲存藥物
3. 更新藥物紀錄
4. 統籌棄置藥物流程
5. 有異常狀況時通知藥劑師或護士

## **配藥員的最低人手要求**

以 30 人院舍作計算(不足 30 人作 30 人論)，需要 1 位配藥員。其他較多住客的院舍亦可按比例適當地增加配藥員人數。

For more information about Hong Kong Pharmaceutical Care Foundation, please visit our website [www://pcfhk.org](http://www.pcfhk.org). For any queries and communication, please contact the under the Director, Ms S C Chiang at [scchiang@pcfhk.org](mailto:scchiang@pcfhk.org).