

ADVANCING THE FRONTIER OF PRIMARY CARE PHARMACY TOGETHER

PRIMARY CARE PHARMACY CONSORTIUM 2019

A Milestone for a New Landscape of Hong Kong Primary Care Pharmacy Service

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Jointly organised by the Department of Pharmacology and Pharmacy, the University of Hong Kong (HKU), and Pharmacists Connect, the Primary Care Pharmacy Consortium 2019 (the Consortium) was successfully held on 23 June 2019 at the Centennial Campus, HKU.

The event signifies the engagement and concerted efforts by the Consortium to foster the networking and collaborations between social welfare sector, healthcare sector, and academia on:

- Planning, implementation, and evaluation of primary care pharmacy services;
- Research to guide evidence-based pharmacy practice in primary care setting;
- Education to nurture the next generation of leaders in primary healthcare system.

The Consortium has invited guest speakers and participants from non-governmental organisations (NGOs) and different healthcare settings.

During the sharing sessions, several local community-based providers shared their visions, experiences, opportunities, and challenges in delivering pharmacy services in different areas:

- **Primary Care Pharmacy - Current Landscape**
 - Community outreach
 - Medication dispensing and management
 - Medication systems and technologies
- **District Health Centre - The Way Forward**

Throughout the programme, speakers and the floor contributed insightful comments and ideas through online chatroom and discussion sessions.

This report presents the key insights that have been generated in the Consortium regarding the development of Hong Kong primary care pharmacy services. The report also provides abstracts of the sharing by each guest speaker.

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KEY INSIGHTS

Research to Improve Patient Care and Outcomes

- Further research on local primary care pharmacy services is needed
- To generate knowledge that guides the improvement of patient care and outcomes
- To evaluate and demonstrate the impact of primary care pharmacy services to guide evidence-based care delivery
- To measure outcomes that reflect reduction in healthcare cost and improvement of patient outcomes as the result of service. For instance, the savings by preventing drug-related problems and unplanned admissions

Data Infrastructure for Pharmacy Service

- Community-based providers need a platform to document and evaluate pharmacy services under a standardised data framework
- Computerised platform will facilitate data collection and utilisation for impact evaluation and research
- Integration with existing systems, e.g. Electronic Health Record Sharing System, is preferred over the development of a separate stand-alone system

Service Sustainability

- Pharmacy services need evidence of healthcare cost reduction to increase the buy-in by service funding and policymakers

Collaborations to Improve Service Delivery

- Public health system can outsource drug refill service to community and NGO pharmacies
- Primary care providers and public health system can collaborate to enhance the continuity of care, and to better utilise services and resources, e.g. management of discharged patients in the community, referral framework
- Healthcare providers can explore measures to facilitate access to patients' medication profiles in the community setting, e.g. patient's copy of medication list, app that can read the barcodes on drug labels of Hospital Authority

Pharmacy Service at District Health Centres

- Pharmacists at District Health Centres (DHCs) can focus on screening, public health and medication education, and pharmaceutical services such as medication review and reconciliation
- In the multidisciplinary setting at DHCs, pharmacists need to go beyond medication management to deliver holistic patient care with other healthcare professionals, e.g. chronic pain management
- DHCs can serve as a bridge between public health services and community-based services to improve patient care across settings
- Collaboration between DHCs and community pharmacies can be explored for screening, management of minor ailments, frameworks for bi-directional patient referral, interventions, and case management
- Evaluation of service outcomes is crucial to establishing a sustainable model for DHCs across the territory

Consortium - The Way Forward

- The Primary Care Pharmacy Consortium serves to gather experience, to share resources and to foster collaborations among local healthcare and social service stakeholders in planning, implementing and evaluating primary care pharmacy services
- The Consortium can address the local needs for primary care pharmacy services by constructing and promulgating service models to promote sustainable and scalable implementation
- Collaborations between service providers and academia on research and data infrastructure will generate knowledge that transforms healthcare practice and policy
- The Consortium enables the engagement with the public, other professions, and policymakers to drive further development of primary care pharmacy services

SHARING SESSION ON CURRENT PRIMARY CARE PHARMACY SERVICES – ABSTRACT

The Consortium has invited local community-based providers to share their experiences and perspectives on a spectrum of primary care pharmacy services. For the full programme and presentation slides, please visit www.ppcp.hku.hk.

Community Outreach

藥到病除 長者藥物管理計劃

Aberdeen Kai-fong Association Social Service, and The University of Hong Kong

As a collaboration between Aberdeen Kai-fong Association Social Service and HKU Department of Pharmacology and Pharmacy, the outreach project has arranged home visits for elderly patients in the Southern District over the past 4 years.

The service targets at elderly with limited caregiver support and difficulties in managing their medications. Regular home visits were conducted by teams of HKU pharmacy students who were supervised and supported by registered pharmacists and social workers.

The home visit teams assess the health status and review the medication management of the elderly every 1-2 months. Education and interventions are provided on an as-needed basis. After receiving the service, participants reported better understanding of drug administration, potential consequence of co-administering traditional Chinese medicine with western ones. Some reported fewer adverse effects after pharmacists' interventions.



藥到病除 長者藥物管理計劃：Health assessment and medication review during home visit.

HKU had conducted a study to evaluate the effectiveness of the outreach service in 2017-19. In the study, drug-

related problems can be detected in 93.5% of the elderly. Over 60% of the drug-related problems can be attributed to patient-related factors that are amenable to education and interventions.

Home visits offer opportunities for on-site comprehensive review of health and medication management by the elderly, e.g. storage condition, in their own living environment. Home visits built trust between the elderly and the visiting team, and participants were more willing to share information about their health and medication practices.

CU CHAMPION

The Chinese University of Hong Kong

Community Health And Medication-safety Promotion Inter-school Outreach Network (CU CHAMPION) is a multidisciplinary service team established by the Chinese University of Hong Kong in 2013. Students, teachers, and alumni of different health disciplines and social work deliver outreach service to promote healthy lifestyle and medication safety in the community. The team provides health check, disease screening, and on-site professional consultation at community centres.



CU CHAMPION Community Outreach Services - Health and medication consultation.

CU CHAMPION outreach service has successfully engaged many participants and identified common health problems in the elderly population. However, there have been difficulties in reaching the hidden or less health-conscious elderly. Follow-up on the long-term impact on elderly's behavioural change has been challenging too.

A primary care project has been initiated to develop the social capital and to build a healthy community in Sham Shui Po District. CU CHAMPION collaborated with local NGOs in conducting outreach service, volunteers training, and case follow-up. The initiative has also engaged community pharmacists and Chinese medicine practitioners in providing follow-up management to selected elderly participants. This connected the providers of social service and healthcare, and facilitated the integration of community pharmacies into the community care network.

Discussion

Concerning the methods to evaluate the clinical outcomes or benefits of the services, both projects have documented the rates of interventions and acceptance by prescribers. Outcomes such as mortality or admission rates were difficult to obtain in the setting within the limited time frame. The projects would look into expanding the sample size and exploring more impactful outcome measures.

Medication Dispensing and Management

Kwai Tsing Community Health Management Hub

Health In Action

Aiming to enhance health among working poor and their family members, Health In Action (HIA) has established the Kwai Tsing Community Health Management Hub (the Hub) to deliver person-centred care through family-based and multidisciplinary approach.

The multidisciplinary team at the Hub comprises nurses, nutritionist, pharmacist, physiotherapist, public health specialist, doctor volunteer, and social worker. The team's synergy enables HIA to deliver holistic and flexible one-stop health services to the community members. The goal is to promote health equity by enhancing access to health care.

At the Hub's community pharmacy, the pharmacist works closely with the multidisciplinary team in delivering primary care services, such as management of minor ailments, smoking cessation, advice on medications and lifestyle changes.

By integrating a community pharmacy into the multidisciplinary model, HIA anticipates that pharmacists will contribute to different health interventions, such as vaccination, health literacy enhancement, case triage, so as to further strengthen their role in the primary care setting.



Health In Action Community Pharmacy - Opening Ceremony



Health In Action - Exercise session led by physiotherapist



Health In Action - Train-the-trainer workshop on healthy diet

Health@Community 健康·友里

Bliss District Elderly Community Centre, Hong Kong Christian Service

The Health@Community project was initiated in Kwun Tong District to empower community-dwelling elderly to prevent and self-manage chronic medical conditions.

The project comprises three levels of interventions:

- Enhance knowledge and awareness among elderly and volunteers
- Engage and empower volunteers in the neighbourhood
- Identify and manage high-risk elderly

As a service partner, Pharmacists Connect provided consultation service on disease and medication management to the high-risk elderly at the community clinic. Through teleconsultation, the pharmacist counselled the elderly on proper use of medication, identified and managed drug-related problems. The use of teleconsultation helped the elderly to overcome mobility and geographical barriers to gain access to the health facilities in the district. The service also reduced the elderly's dependence on the public health services.



Health@Community - Pharmacist counselled elderly on medications via video call

Primary Care Services at Philanthropic Community Pharmacy

St. James' Settlement

In 2009, St. James' Settlement set up the first non-profit community pharmacy in Hong Kong, Philanthropic Community Pharmacy. The pharmacy is now serving in Wan Chai, Sham Shui Po, Kwun Tong, and Sha Tin.

With the implementation of Hospital Authority Drug Formulary, patients have to pay out-of-pocket for medications listed as self-financed items (SFIs). In partnership with charity donor, the Philanthropic Community Pharmacy provides SFI medications to target patient groups at an affordable cost. This reduces financial barriers to access to essential medications for the grassroots.

Besides ensuring equitable access to essential medications, the Philanthropic Community Pharmacy also provides professional consultation service on medication and health-related issues. The service aims to empower patients to properly use medications and to self-manage their conditions. The pharmacists monitor patients for adherence and drug-related problems, and they intervene accordingly as necessary. Access to patient's medical history on the Electronic Health Record Sharing System facilitates the delivery of pharmaceutical care and communication with other healthcare professionals.

At St. James' Settlement, pharmacists also take part in other services, for example, public health talks, outreach, and other non-drug subsidy programmes.

Discussion

Financial feasibility of the medication dispensing, and management services was discussed. The existing service models are implemented based on funding. Financial sustainability beyond the funding period is less certain. On the other hand, cost of service may be recovered by the medication charges.

Promotion of the roles of pharmacists in the primary care setting, for instance public health talks, can boost the utilisation and hence sustainability of the community medication management services.

Medication System and Technologies

Medication Dispensing and Management Services

Hong Kong Pharmaceutical Care Foundation

Medication management in residential care homes for elderly (RCHE) can be complicated. Elderly patients often have complex medication profiles and receive care from multiple healthcare providers. Dispensing and medication management in most RCHE lacks input from pharmacist and represents a significant work burden on the staff.

The Hong Kong Pharmaceutical Care Foundation offers a spectrum of pharmacy services to improve medication safety in the RCHEs. Visiting pharmacists assist RCHE to comply with guidelines on medication management, including record keeping, storage, dispensing, and distribution. Visiting pharmacists also review and reconcile the medication profiles of the elderly residents to ensure accuracy and appropriateness of the regimen. The pharmacists also deliver education and training sessions to elderly patients and care providers.

The Foundation has also developed an electronic medication management system and automation to support the digitalisation of record keeping, dispensing, distribution, and administration of medications in RCHEs.

The Foundation envisages that the medication management system and technologies can be further applied to benefit individual patients in the community. RCHEs and day care centres should involve pharmacists and dispensers in the care team to support medication management and pharmaceutical care services.

The Implementation of Pharmacy Automation in the Rehabilitation Setting

TWGHs Jockey Club Rehabilitation Complex

The Jockey Club Rehabilitation Complex (JCRC) of Tung Wah Group of Hospitals is serving over 1000 users with different demographic characteristics, such as mentally challenged cases and visually impaired older adults.

Medication management process at JCRC was originally handled by nursing staff. Owing to the large caseload, the process was labour-intensive and time-consuming.

To streamline the medication management process, JCRC introduced centralised and computerised medication management system and automation to support medication dispensing and checking. The system is overseen by an in-house pharmacist, who:

- Devises and implements medication supply workflow
- Ensures compliance to medication management guidelines
- Participates in developing closed-loop medication administration system
- Provides pharmaceutical care to residents, e.g. medication reconciliation, education
- Trains nursing staff on medication knowledge
- Engages residents and caregivers in health promotion

The use of computerised system and automation has raised the standard of practice. It also minimises manual workload and human errors during medication handling. Quality of care is enhanced when the nursing staff can focus on direct patient care, and that residents can receive pharmaceutical care from pharmacists.

This project extends pharmaceutical care to special patient populations in the rehabilitation setting. It also serves as a model of in-house pharmacy services in mega-sized long-term care facilities.

依藥盒 MEDeliver

MEDeliver

Inspired by the need of older adults with cognitive impairment and inadequate social support, MEDeliver is a smart pillbox system designed to enhance medication adherence among older patients through reminders and remote monitoring.

It is hoped that the service can be expanded to benefit more elderly patients in the community.

SHARING SESSION ON KWAI TSING DISTRICT HEALTH CENTRE

The Consortium has invited Mr. Peter Poon, Executive Director of Kwai Tsing District Health Centre (DHC), to introduce the brand-new operation model in primary care setting. For the presentation slides, please visit www.ppcp.hku.hk.

Initiated and supported by the government, DHC is a new model of medical-social collaboration in Hong Kong primary care setting. The first DHC at Kwai Tsing is operated by Kwai Tsing Safe Community and Healthy City Association. Kwai Tsing DHC serves as the pilot for subsequent DHCs that will be gradually set up in all 18 districts.

Besides the core centre, five satellite centres will be set up to expand the service to whole district.

Kwai Tsing DHC will provide various healthcare services including health promotion and education, health assessments and chronic disease management. The major mode of service initiation is when users present themselves at the centre for their health concerns. Kwai Tsing DHC is also connected to a network of private general practitioners who may refer patients to the DHC.

Empowerment and Engagement

Kwai Tsing DHC focuses on empowering people to actively participate in managing their own well-being and health conditions.

Users at the Centre or outreach service will undergo disease screening and baseline risk assessment. Subsequently, care coordinators will act as health coaches and guide users to set goals and to take actions to improve their lifestyle and health. They will also assist the users to navigate the services in the district health network and follow up on the individual's self-management plan.

At the DHC, the multidisciplinary team will deliver workshops and rehabilitation programmes to support self-management of health conditions, for example, diabetes mellitus, stroke, post-fracture, low back pain, and cardiac rehabilitation.

By increasing the awareness and capacity of self-care in the community, DHC envisages to drive a reduction in demand for formal health and social services.

DISCUSSION SESSION ON PHARMACY SERVICE AT DISTRICT HEALTH CENTRES

Following the sharing session on Kwai Tsing DHC, the Consortium focused the discussion on the pharmacy service at DHC.

Kwai Tsing DHC has no plans to set up a pharmacy in the early stage. They are looking into available resources and service opportunities for pharmacists to collaborate with other healthcare professionals and to reach out in the community.

Kwai Tsing DHC is looking forward to collaborations with community pharmacies. Possible services for collaboration have been suggested: disease screening, management of minor ailments, care coordination, and case management.

Besides collaboration with other community pharmacies, Kwai Tsing DHC hopes to map the community resources, e.g. pharmacy service, and present to patients with

chronic diseases. The DHC team will observe the needs in the community and expand services accordingly.

The discussions brought some suggestions on the potential role of DHC pharmacist:

- Disease screening and risk assessment
- Public education on health promotion such as smoking cessation, and medications use
- Pharmaceutical care services, such as medication review and reconciliation

In view of the multidisciplinary setting at DHC, pharmacist needs to go beyond the traditional role of medication management and to deliver holistic patient care together with other healthcare professionals in areas such as chronic pain management.

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