



Hong Kong College of Health Service Executives

Newsletter Issue 4 2017/18

Past Events

Advisors 顧問

Prof Geoffrey LIEU 廖錫堯
Prof Peter YUEN 阮博文

Honorary Fellows 榮譽院士

Prof YEOH Eng Kiong 楊永強
Prof William HO 何兆煒
Dr KO Wing Man 高永文
Dr LEI Chin lon 李展潤

Council Members

President 院長

Dr LIU Shao Haei 劉少懷

Vice President 副院長

Ms CHIANG Sau Chu 蔣秀珠

Honorary Secretary 義務秘書

Mr Anders YUEN 源志敏

Honorary Treasurer 義務司庫

Mr Leo LUI 呂家豪

Academic Convener 學術召集人

Dr Fowie NG 伍時豐

Publication Convener 編務召集人

Dr Arthur SHAM 岑思勁

Council Members 會董

Ms Pearl CHAN 陳麗貞

Dr Steve CHAN 陳志強

Dr Flora KO 高淑蘭

Ms Cindy LAM 林愛貞

Mr Stephen LEUNG 梁國強

Dr MA Hok Cheung 馬學章

Ms Ivy TANG 鄧鳳琪

Ms Macky TUNG 董曼琪

Co-opt Members 增選委員

Ms Joyce AU 區慧蓮

Ms CHAN Yuk Sim 陳玉嬋

Mr Leo CHEUNG 張葉聲

Ms Liza CHEUNG 張銀弟

Dr Raymond CHEUNG 張偉文

Mr Benjamin LEE 李祥美

Mr Herman LEE 李向榮

Ms Manbo MAN 文保蓮

Dr POON Wai Kwong 潘偉剛

Ms Tammy SO 蘇敏兒

Ms Inez WU 伍穎詩

Mr Jimmy WU 胡仰基

Dr Eddie YUEN 袁卓斌

Chief Editor 總編輯

Dr Arthur SHAM 岑思勁

CPCE Health Conference 2018

Quality Health Care for All :
Through People, Technology, Patient Empowerment and Sustainable Financing System
全民享用優質醫療服務：
從人才、科技、病人自主及可持續融資

CPCE Health Conference 2018

Date : 12 January, 2018
Venue : PolyU Hung Hom Bay Campus



Jan

Health Service Management Seminar

Date : 12 January, 2018
Venue : Staff Club, Hong Kong Polytechnic University Hung Hom, Kowloon Hong Kong



Hong Kong Pharmaceutical Care Foundation Fund Raising Dinner

Date : 23, February, 2018
Venue : Sheraton Hong Kong Hotel & Towers 20 Nathan Road Tsim Sha Tsui, Kowloon



Feb

Joint Commission International Seminar

Date : 7, May, 2018
Venue : Staff Club, Hong Kong Polytechnic University Hung Hom, Kowloon Hong Kong



May

College's website:

<http://www.hkchse.org>

Disclaimer This is a publication of the Hong Kong College of Health Service Executives. The articles published are the expressed views of the authors and are not necessarily those of HKCHSE.

Our Future is in Our Hands



Looking at your hands, palmistry practitioners try to figure out a way to change our fate by foretelling the lines on our palms. People wish that good fortune could arrive if they have possessed the lucky lines on their palms or having different shapes of hands and fingers. Unfortunately, thing does not happen in that way. A lot of these readings are not based on evidence.

The human hand is made up of twenty-seven individual bones and connected by joints and ligaments. Whilst hand is a small part of our body, one fourth of all our bones are found in our hands in order to construct the complex functions. Our hands can grip strongly and move objects or holding on to a handle. With the ability of our thumb to be positioned opposite the fingers, we can pick up very small objects with precision in speed and directions. These hand movements requires the adjunct muscles, nerves and blood vessels. Over 75% of a man's daily activities are carried out by our hands. According to anthropologist, the human evolution could have been related to how far and how best we use our hands to make tools, to express signs, to write and to communicate.

The release of hands from being part of locomotion when *Homo sapiens* could stand upright significantly induced the evolutionary pathway to become the kind of modern men we are. Fine motor and the indispensable sensory capabilities of our hands matched with our brain is the remarkable organ for all the **creativity and innovation** in the history of human civilization. It is said that our society is in the third industrial revolution which have alter the way we live, work and relate to one another. The healthcare executives' work is much changed due to the extensive use of computers (paperless), analysis of dashboard information and surveillance data, automation in diagnostics, application of ICT in various service delivery models where data are interchanged at super-speed, & etc. Now we are entering Technology Revolution 4.0. with the powerful digital transformation through artificial intelligence, robots, internet of things, 3D printing, nanotechnology, big data, energy storage and etc. The smart devices in the hands of our executives will be linked to the soon coming future in which healthcare ecology is not only improving the **cost and efficiency** but also achieving the **favorable clinical outcomes and satisfaction** among our clients (patients and families).

Whilst we are keen looking forward for a utopia, let's not forget that man's future is in man's hands at the present moment. In the succeeding generations after generations, our hands are here to find a better way of doing things, to teach our followers well and let them lead the way. Emile Durkheim (French, 1858-1917, recognized as a principal architect of modern

social science) once said, "**Each new generation is reared by its predecessor, the latter must therefore improve in order to improve its successor. The movement is circular.**"

As they are, the hands of executives are flexible, coordinated and powerful, they create the enabling environment for our survival. So, how are healthcare executives going to face the future with ageing, emerging diseases, staffing issues, rising costs? Future is not without uncertainties and difficulties. We explore, we organize, we share, we change, we innovate, we improve, we prosper. As executives, we understand that every decisions we make could have a long term impact on the future of our society. Thus, successful executives (leaders) peruse continuing knowledge discovery, responding and adapting to impacts of changes, creating a meaningful fulfillment of their existence and be able to transmit a positive value during adversity. At the College, when we come to **continued professional development** and **competency attainment** of healthcare executives, we are always serious. We like to impart the attributes of courage, wisdom, resilience, persistence as well as the skills of reflection & learning, problem solving, team-work & problem solving, influencing other & leadership to our Fellows. Our belief of passion for humanity, commitment to quality and endurance for long term success are in our hands of fellow executives. Joining our hands together, we shall be making a difference to the world!

Dr LIU Shao Haei
President ◆



Supporting Manual Drug Picking Process with MedPicker App – A Solution from Safe Medication Management Matrix (SMMM)

The relentlessly growing demands brought by an ageing population in Hong Kong have set the sustainability of conventional healthcare delivery models in question, in which medication management process is of no exception. In particular, 62% of the local elderly (age 60 and above) population have co-morbidities, and over 88.2 % need to have medications for chronic disease management. Therefore, common medication-related issues amongst elderlies, such as concurrent use of multiple of medications and poor drug compliances, are anticipated to soar alongside the ageing demographic challenge. Meanwhile, Hong Kong has one of the highest institution rate globally with 8.4% of its local elderly population living in the Residential Care Homes for the Elderly (RCHes). On average, more than 60% of these elderlies needs to take 5 different types of medications, with some even taking up to more than 20 types. In handling such vast volume of medications for their residents, the RCHes in Hong Kong are prevailingly confronted by growing pressure in dealing with the complicated yet important medication management processes at their

facilities. Most current local practices of medication management are highly inefficient, as most processes are hand-operated that lead to labour-intensive and critically fallible ways of working (*Figure 1*).



▲ *Figure 1 – Conventional hand-operated dispensing and medication packaging in RCHes*

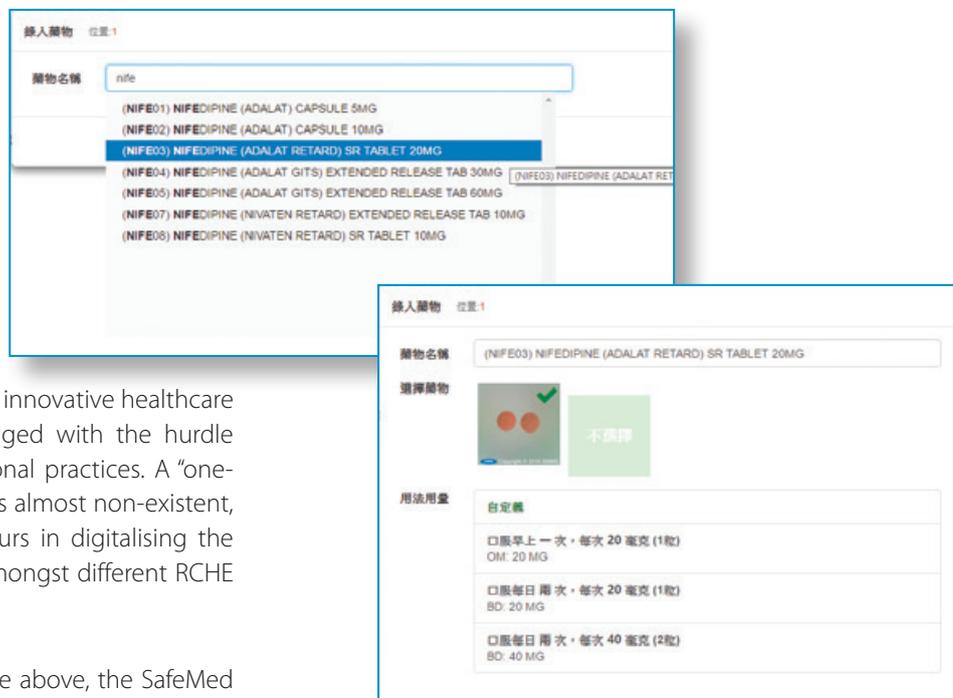
As most RCHEs are already hampered by limited manpower, this presents chronic operational challenges for their medication management in order to ensure the right medications are prepared and administered in a timely manner to the right individuals. These pain points are not deemed to be relieved in the near future and would, in fact, be further amplified with the growing number of residents brought by ageing population. In particular, in some of these RCHEs who are serving elders with special needs, more manpower for bedside care would be required. The need for a sustainable and affordable solution which offers accuracy, timeliness and efficient features to optimise medication management within these RCHEs is solidly inevitable at current times.

Over the recent decades, development of an integrated healthcare infrastructure has been placed under the spotlight in response to the situation. This emphasizes interoperability and patient empowerment embraced by modern digital health deployments and ambulatory services as key levers of a long-term solution. Adoption of innovative healthcare solutions are yet often challenged with the hurdle of variable clinical and operational practices. A “one-size-fits-all” healthcare solution is almost non-existent, which also applies to endeavours in digitalising the variable dispensary practices amongst different RCHE in Hong Kong.

In thorough consideration of the above, the SafeMed Medication Management Matrix (SMMM) was devised by the Hong Kong Pharmaceutical Care Foundation (HKPCF) to provide the one-of-a-kind and highly flexible digital solution for fulfilling this gap of the healthcare sector in Hong Kong. The spectrum of the SMMM applications and system integrations can be selectively deployed to ingratiate the variable practices amongst dispensaries of RCHE. Therefore, it offers the edge to maximise the potential of digitalising dispensary service within individual dispensary settings based on their respective existing level of technological advancement. At the operational level of dispensaries, this also brings flexibility to the management of change upon the implementation of a digitalised service model. This is well demonstrated by the diffusion and differently paced yet smooth adoption of the SMMM infrastructure amongst the over fifteen RCHEs across

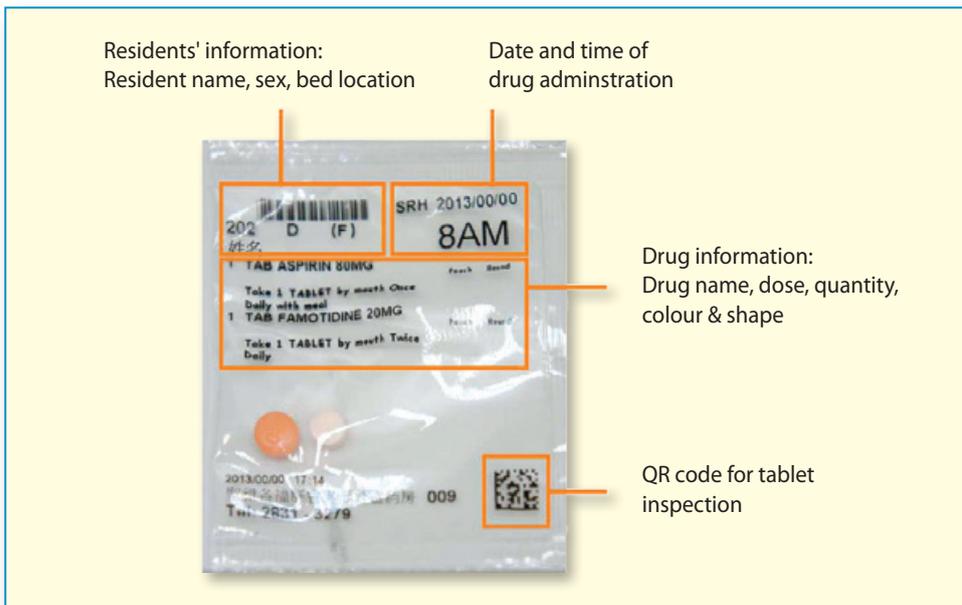
Hong Kong and Macao. Early this year, the SMMM has gained its recognition for gerontechnology by winning the Hong Kong ICT Awards 2018: Smart People (Smart Ageing) Silver Award.

In 2016, informatics pharmacists of the HKPCF had first developed the SafeMed Medication Management System (SMMS) to lay foundation for the new paradigm of digitalised pharmacy practices in play for RCHEs across Hong Kong. The SMMS is a real-time system that dually maintains medication profiles of RCHE residents supported by a comprehensive drug database. It forms the basis for a subsequent suite of novel Android mobile applications as well as integration with other systems, such as automatic tablet dispensing and



▲ Figure 2 – Example of inputting a common prescribed drug to resident’s database

packaging system (ATDPS). The SMMS drug database was set up based on the drug formulary of the Hospital Authority (HA) as its primary body. But additionally, the drug database covers all registered drugs in Hong Kong, in accordance to the Department of Health of Hong Kong (DoH). Information regarding usage of drug preparations inputted into the database are aligned to common dosages and instructions of use prescribed by HA hospitals and clinics, which serves majority (90%) of the Hong Kong’s patient population. Most information is projected from the database as pre-set options for the ease of the user in building profiles upon new data entries (Figure 2).



▲ Figure 3 – Sample of a multi-dose medication sachet

The database is maintained and updated by informatics pharmacists of HKPCF on regular basis, ensuring quality of design and content of SMMM are always of professional standards.

In advocacy of personalised medication preparation for elderlies, the rather novel approach of multi-dose medication (MDM) management supported by ATDPS enables safe dispensing for patients into a series of single sachets, where each sachet (Figure 3) precisely has the right dosage, date and time the drugs need to be consumed by the respective residents.

The adoption of ATDPS is, however, far from the mainstay of many nowadays pharmacy operations, as aforementioned manual dispensing practices still dominates amongst RHCEs. In light of this, HKPCF continued to promote efficient drug picking practices in RHCEs and created the recent novel mobile application of the SMMM series, known as MedPicker. By data synchronisation with SMMS, the MedPicker translates information from the patient treatment regimens to rules for medication packaging that are displayed under the configuration of a blister pack on a mobile device. This forms interactive visuals and touchscreen mechanics to navigate hand-operated medication picking and assembly with accuracy pinpointed to the level of individual patient profiles and/or scheduled treatment administration timeslots (Figures 4 and 5).



▲ Figure 4 – MedPicker app displays with real-time alerts on modifications of patient regimens upon medication dispensing and packaging



▲ Figure 5 – MedPicker app in operation

At the same time, these rules could be transcribed to the MedPacker device, which holds medication blister packs/cups and discretely projects lighting on different medication-containing compartments accordingly upon synchronisation with the app to directly provide its user clear visual guidance for medication packaging. By operating both the MedPicker and MedPacker alongside each other (Figure 6), this is a frugal yet smart innovative combo that can guide dispensers, or even less well trained users, on where each medication should be placed during preparation of a medication blister.



▲ Figure 6 – Integrated use of MedPicker and MedPacker

The MedPacker was originally designed for medication management in old age homes. Upon fine tuning, HKPCF sets to extend its use for personal medication management. It was observed that many products of the existing drug adherence aids market mainly address on medication administration time, and are unable to robustly guide patient on administration of required doses and types of medications. HKPCF aims to fulfil this unmet need by installing the technology of the MedPacker into developing an electronic pillbox for empowering patients or their caregivers to pack medications correctly. Upon administration time of medications, the compartment of the pillbox that contains the respective medications should light up in reminding one to take such. Innovation shall once again be proven to optimise one's treatment and awareness with medications. By all means, there are

huge potentials to expand functionalities of HKPCF's existing interoperable personalised medication management platform and capitalise on the wide penetration of the mobile devices to lower the entry barrier to the use of health technologies.

In reference to the healthcare setting of Hong Kong, the increasing emergence of healthcare public-private partnership (PPP) projects since 2008 entail many future opportunities for digitalisation of pharmacy services. By carrying a drug database that spans beyond the public sector's drug information inventory, the SMMM already holds salient edge to be leveraged by PPP projects and enrich the developments of the Electronic Health Record Sharing System (eHRSS) that was hailed as part of the campaign. An example of such deliverables would be the potential set-up of a platform for big data analysis on elderly health outcomes and medication utilisation in RCHEs to reflect benefits and impacts upon using the proposed medication management model.

According to the latest Chief Executive's Policy Address, the healthcare community is now and will continue to steer its focus onto augmenting gerontechnology and home care services. Especially by Hong Kong's recent commitment to the Sustainability Development Solutions Network (SDSN) of United Nation, the importance of sustainable practices in promoting population-wide well-being is clearly addressed in the current climate. This deems the future line extension of SMMM's functionality and its synergy with the developing Visiting Pharmacist Services (VPS) of HKPCF an indubitable solution package for the well endorsed demand from healthcare. For instance, the conversion of VPS to telepharmacy service is one of the prospects under the current agenda of HKPCF to raise accessibility to pharmacists for elderlies in the community.

Authors contact : scchiang.ppi@outlook.com
anthonyfan@pcfhk.org

Sau-chu CHIANG, Director
Anthony FAN, Pharmacist



Hong Kong Pharmaceutical Care Foundation Limited

CPCE HEALTH CONFERENCE 2018

Quality Health Care for All :

Through People, Technology, Patient Empowerment and Sustainable Financing System

全民享用優質醫療服務：
從人才、科技、病人自主及可持續融資



Jan 12

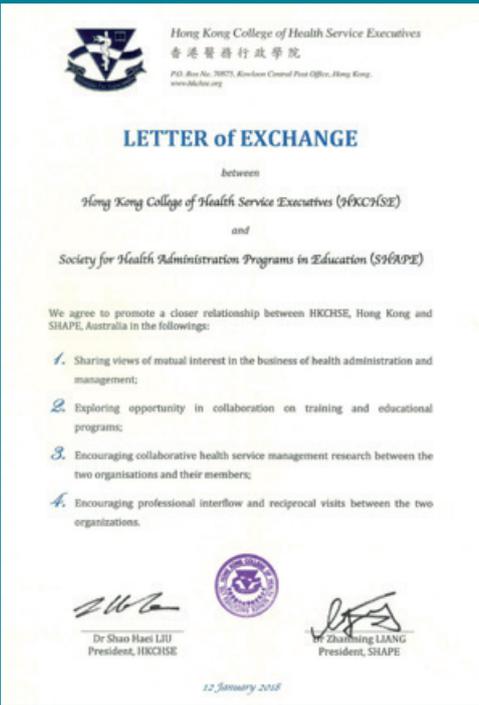
CPCE Health Conference 2018

The CPCE Health Conference 2018 was held successfully at the Hung Hom Bay Campus, Hong Kong Polytechnic University on 12 January 2018. This year conference was jointly organised by the College of Professional and Continuing Education (CPCE) and the Hong Kong College of Health Service Executives (HKCHSE). Our College has also chaired the session of 'Technology and Innovation for Better Health Service' in which three of the council members have presented their papers. Their presentations have included the topics of:

- Sharing on Simulation Training in Healthcare by Dr Wai-kwong Poon
- Service Design for Healthcare: Innovations for Better Health Services by Dr Fowie Ng, Graeme SMITH and Keith CHAU
- Supporting Manual Drug Picking Process with Medpicker* App by Sau-chu Chiang and Anthony Fan

Dr Fowie NG





Jan 12 Health Service Management Seminar

A seminar of Clinicians Turned Managers' – A Career Change or Simply Taking Up Extra Responsibilities? was delivered by Dr. Zhanming Liang, President of The Society for Health Administration Programs in Education (SHAPE) at the Staff Club of the Hong Kong Polytechnic University on 12 Jan 2018 evening.

Apart from the great sharing by Dr. Liang, our President Dr. S. H. Liu and Dr. Liang have both signed a 'Letter of Exchange' between the Hong Kong College of Health Service Executives (HKCHSE) and the Society for Health Administration Programs in Education (SHAPE) to signify our collaborations in different areas in the future.

Dr Fowie NG 

Feb 23

Hong Kong Pharmaceutical Care Foundation Fund Raising Dinner



May 7

Joint Commission International Seminar

The seminar was jointly organised by the Hong Kong Nursing and Health Care Management on May 7, 2018.

Dr Thomas W. Kozlowski, Principal Consultant, was the speaker. He addressed about the International Patient Safety Goals (IPSG), areas of concerns and some of the most problematic areas of patient safety.

International Patient Safety Goals (IPSG) are:

- Goal 1: Identify patients correctly
- Goal 2: Improve effective communication
- Goal 3: Improve the safety of high-alert medications
- Goal 4: Ensure safe surgery
- Goal 5: Reduce the risk of health care-associated infections
- Goal 6: Reduce the risk of patient harm resulting from falls

Dr Arthur SHAM ◆

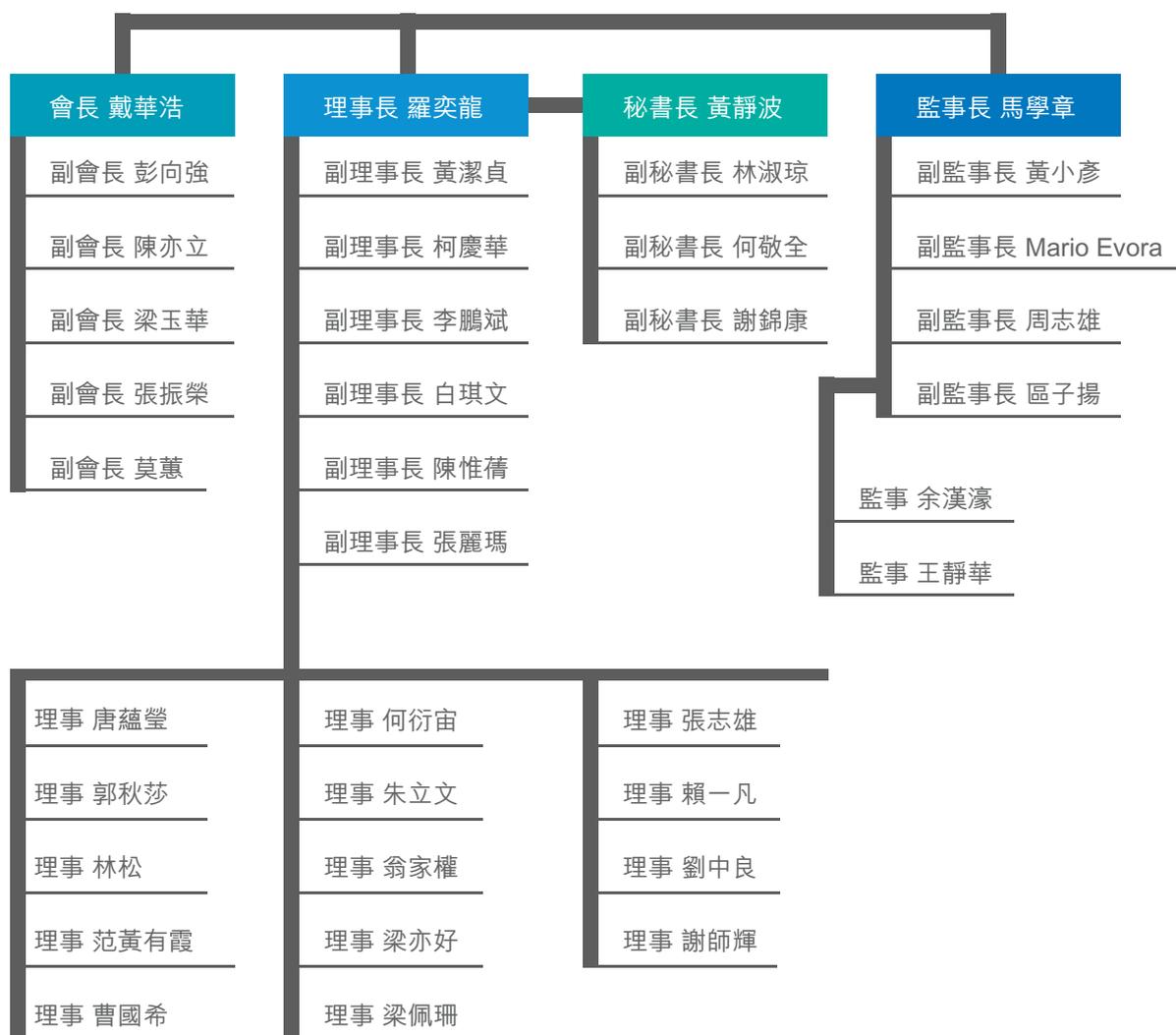



2018 醫療政策論壇暨
第一屆領導架構就職禮
 2018 HEALTHCARE POLICY FORUMS



澳門醫務行政學會領導架構成員

排名不分先後





Hong Kong College of Health Service Executives HKCHSE Annual Conference cum Annual Dinner 2018

Date : 1 September 2018 (Sat)
Time : 14:00 – 22:00
Venue : Cordis Hotel Hong Kong,
Mong Kok, Kowloon

創意醫療 關顧無價

Creativity For Better Care

Registration fee (including dinner)

Member HK\$600 (Early Bird: HK\$500)
Non-member HK\$1,200 (Early Bird: HK\$1,000)

Registration Fee for Abstract Submission (Including Dinner):

Member HK\$400
Non-member HK\$800

Deadline for Registration: 1 July 2018 (Early Bird)
1 August 2018 (Regular)

Language

Cantonese (Supplement with English)

Please send the registration form and a cheque payable to "Hong Kong College of Health Service Executives Ltd" to FMSHK, 4/F Duke of Windsor Social Service Building, 15 Hennessy Road, Wanchai
Enquiry: (Tel) 2527 8898 (Fax) 2865 0345 (Email) rachel.yau@fmshk.org
Conference Secretariat: The Federation of Medical Societies of Hong Kong
Please visit www.hkchse.org for update