





# PEOPLE-CENTRED CARE: TOWARDS VALUE-BASED INNOVATIONS

6-8

December 2019 (Friday – Sunday)

Hong Kong Academy of Medicine Jockey Club Building, 99 Wong Chuk Hang Road, Aberdeen, Hong Kong





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# **WELCOME MESSAGE**

On behalf of the Organising Committee, we are most delighted to welcome you to the Hong Kong Academy of Medicine Annual Conference & Hong Kong Primary Care Conference 2019 jointly organised by Hong Kong Academy of Medicine (HKAM) and The Hong Kong College of Family Physicians (HKCFP). The Conference is to be held from 6 to 8 December 2019 (Friday – Sunday) at the Hong Kong Academy of Medicine (HKAM) Jockey Club Building, Aberdeen, Hong Kong.

The theme of this Conference is "People-centred Care: Towards Value-Based Innovations". This amplifies the diversity of topics from basic Genetics and Genomics to various innovative medical advances and back to the clinical approach of LGBT.

We would also take the opportunity to thank the Scientific Subcommittee chaired by Professor Gilberto K.K. LEUNG, Dr. CHOW Yu Fat and Professor William C.W. WONG for coordinating a packed and exciting scientific programme which includes high-standard plenaries, workshops, seminars and symposia delivered by outstanding leaders, clinicians, healthcare providers and experts working in various aspects in the medical field. The conference will provide a platform for our colleagues to share their knowledge and experience with our friends and to explore new ideas and collaborations.

We look forward to seeing you and hope that you enjoy the Conference!





Co-Chairman (HKAM)
Organising Committee,



Casting Da.

Dr. Angus M.W. CHAN

Co-Chairman (HKCFP)

Hong Kong Academy of Medicine Conference & Hong Kong Primary Care Conference 2019





# **WELCOME MESSAGE**

It is my great pleasure and honour to welcome you to the Hong Kong Academy of Medicine Conference and Hong Kong Primary Care Conference 2019, which will be held at the Hong Kong Academy of Medicine headquarters.

The conference not only provides an excellent platform for medical practitioners and academicians to share experience and insights of tackling common health problems in today's world, but also brings together experts from various backgrounds to generate synergies in finding more effective solutions or better outcomes to improve the lives of patients.

The conference theme is "People-centred Care: Towards Value-Based Innovations". In diverse settings of medical practices, people-centred care is of increasing importance. Behind every disease or health condition is a fellow human being with links to a complex social network and a unique medical history. Healthcare professionals need to maintain good communication with the patient and the family, provide tailored healthcare service, as well as pay attention to a wide range of patient-related issues, such as quality of life, psychosocial health and the impact of the disease on the family. The implementation of holistic and people-centred approaches require collective effort of specialists across disciplines and involvement of primary care providers, working in concert to attain the shared goal of providing the most suitable treatment and optimum care for the patient.

To align with the conference theme, the Organising Committee has put together a well-structured programme to facilitate the sharing of ideas in using value-based innovative approaches to provide the best people-centred care. I hope you will find the talks enlightening and the workshops useful.

I look forward to greeting you all at the event.



**Prof. LAU Chak Sing, JP**President
Hong Kong Academy of Medicine





# **WELCOME MESSAGE**

Welcome to the Hong Kong Academy of Medicine Conference and the Hong Kong Primary Care Conference 2019! The Hong Kong Primary Care Conference (HKPCC) has been an important annual scientific event for family physicians, nurses and allied health professionals over the years. We are most honoured to have the opportunity to co-organise this year's Conference in conjunction with the Hong Kong Academy of Medicine. Together, our joint Conference has become an even more attractive platform for exchange, bringing together healthcare experts and practitioners from different specialties across the healthcare sectors to share their experiences and insights on how we can collectively and continuously enhance our services for patients in the community.

The conjoint Conference theme is "People-centred Care: Towards Value-Based Innovations". The Conference aims at addressing the future directions of healthcare improvement and development in the provision of patient-oriented clinical care. The scientific programme of the Conference encompasses a wide range of clinical practice situations. The clinical symposia cover topics from acute to chronic conditions, and from artificial intelligence in healthcare to voluntary health insurance. There is definitely more than something for everyone.

Last but not least, I would like to express my heartfelt gratitude to the Organising Committee, the Scientific Subcommittee and the Secretariat in making this Conference possible, hopefully successful, and definitely memorable!

I wish you all a very enjoyable and rewarding Conference ahead!



**Dr. David V.K. CHAO**President

The Hong Kong College of Family Physicians





# **ORGANIZING COMMITTEE**

# **Organising Committee:**

Dr. LAU Chor Chiu (HKAM) (Co-Chairman)

Prof. Gilberto K.K. LEUNG (HKAM)

Dr. CHOW Yu Fat (HKAM)

Dr. Henry L.Y. CHAN (HKAM)

Dr. Angus M.W. CHAN (HKCFP) (Co-Chairman)

Dr. David V K CHAO (HKCFP)

Dr. Billy C.F. CHIU (HKCFP)

Dr. LAU Ho Lim (HKCFP)

Dr. William C.W. WONG (HKCFP)

### **Scientific Subcommittee:**

Prof. Gilberto K.K. LEUNG (Co-Chairman)

Dr. CHOW Yu Fat (Co-Chairman)

Dr. William C.W. WONG (Co-Chairman)

### **Members of HKAM Segment:**

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Prof. Samuel Y.S. WONG (Community Medicine)

Prof. LEUNG Wai Keung (Dental Surgeons)

Dr. CHAN Yiu Cheung (Emergency Medicine)

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Prof. TAM Wing Hung (Obstetricians & Gynaecologists)

Dr. Kendrick C. SHIH (Ophthalmologists)

Dr. Paul KOLJONEN (Orthopaedic Surgeons)

Dr. John CHAN (Otorhinolaryngologists)

Dr. FONG Nai Chung (Paediatricians)

Prof. Anthony W.H. CHAN (Pathologists)

Prof. Anthony T.C. CHAN (Physicians)

Dr. May LAM (Psychiatrists)

Dr. Sunny K.S. TSE (Radiologists)

Dr. Patrick H.Y. CHUNG (Surgeons)

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Dr. Judy G.Y. CHENG

Dr. CHIANG Lap Kin

Ms. Samantha Y.C. CHONG

Dr. Wendy W.Y. KWAN

Dr. KWAN Yu

Dr. TSE Sut Yee





# **CONFERENCE INFORMATION**

Date : 6 – 8 December 2019 (Friday – Sunday)

**Venue** : Hong Kong Academy of Medicine Jockey Club Building,

99 Wong Chuk Hang Road, Aberdeen, Hong Kong

Official Language : English

Academic Accreditation: Applications are in progress and details will be announced later.

**Co-Organizers** : Hong Kong Academy of Medicine

The Hong Kong College of Family Physicians

**Conference Secretariat**: Exhibition & Advertisement:

Ms. Teresa Liu

Scientific & Publication:

Ms. Crystal Yung and Ms. Suki Lung

Registration: Ms. Windy Lau

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General:

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(Other enquiries)

**Supported by** : HKCFP Foundation Fund





# **CONFERENCE INFORMATION**

Organized by : Hong Kong Academy of Medicine

Hong Kong College of Family Physicians : 6 – 8 December 2019 (Friday - Sunday)

**Venue** : 6 – 8 December 2019 (Friday - Sunday)

: Hong Kong Academy of Medicine Jockey Clu

: Hong Kong Academy of Medicine Jockey Club Building,

99 Wong Chuk Hang Road, Aberdeen, Hong Kong

Official Language : English

### CME/ CPD / CNE Accreditation

### Accreditation for HKAM Conference & HKPCC 2019

College/Programme	6/12/2019 Whole Day	7/12/2019 Whole Day	8/12/2019 Whole Day	CME/CPD Category
Anaesthesiologists	1	8.5	4.5	6/12: Non Ana Passive 7-8/12: Ana Passive
Community Medicine	1	6	4	PP
Dental Surgeons	1	8.5	4.5	Cat. B
Emergency Medicine	0.5	6	4.5	PP
Family Physicians	1	5	5	Cat 5.2
Obstetricians & Gynaecologists	Pending	Pending	Pending	Cat. C
Ophthalmologists	0.4	4.5	2.5	Passive
Orthopedic Surgeons	1	Pending	Pending	Cat C
Otorhinolaryngologists	0.5	Pending	Pending	Cat 2.2
Paediatricians	1	6	3	Cat A
Pathologists	1	8.5	4.5	PP
Physicians	0.5	Pending	Pending	-
Psychiatrists	0.5	Pending	Pending	PP/0P List B
Radiologists	0.5	8.5	4.5	Cat. B
Surgeons	1	6	4.5	Passive
Prosthetist-Orthotists		4	4	Cat A1
CEU (For HA Pharmacists)		6	4	-
MCHK CME Programme		5	3	Passive
CNE (For Nurse)	1	5	4.5	-

### **Conference Secretariat**

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**Supported by** : HKCFP Foundation Fund





# **ACKNOWLEDGEMENT**

The organizing committee wishes to express our most sincere thanks to all parties who have helped to make our Congress a successful one.

### Officiating Guests

Dr. CHIU Tak Yi, JP

Under Secretary for Food and Health, Food and Health Bureau, HKSAR

Dr. Donald K.T. LI, SBS, OStJ, JP

President, World Organization of Family Doctors (WONCA)

Prof. LAU Chak Sing, JP

President, Hong Kong Academy of Medicine

Dr. David V.K. CHAO

President, The Hong Kong College of Family Physicians

Dr. Angus M.W. CHAN

Co-chairman of HKAM Conference & HKPCC 2019 Organising Committee

Dr. LAU Chor Chiu, GMSM, MH, JP

Co-chairman of HKAM Conference & HKPCC 2019 Organising Committee

### David Todd Oration Speaker

Prof. John C.Y. LEONG, GBS, JP

Academician, Chinese Academy of Sciences; Former Chairman, Hospital Authority

### Halnan Lecture Speaker

Mr. Ricky M.K. CHU, I.D.S

Chairperson, Equal Opportunities Commission

### Plenary Speaker

Dr. Donald K.T. LI, SBS, CStJ, JP

President, World Organization of Family Doctors (WONCA)

### Seminar Speakers

Prof. LAM Tai Hing, BBS, JP

Sir Robert Kotewall Professor in Public Health; Chair Professor of Community Medicine, School of Public Health, The University of Hong Kong

### Prof. YEOH Eng Kiong, GBS, OBE, JP

Director, JC School of Public Health and Primary Care; Head, Division of Health System, Policy and Management, Faculty of Medicine, The Chinese University of Hong Kong





# **ACKNOWLEDGEMENT**

### Dr. Roger M.K. NG

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### Dr. CHAN Yiu Cheung

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Specialist in Clinical Oncology

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#### Dr. William C.W. WONG

Clinical Associate Professor & Chief of Research at Department of Family Medicine & Primary Care, The University of Hong Kong;

> Chief of Service, Departmental of Family Medicine, HKU-Shenzhen Hospital; Honorary Consultant, HK West Cluster, Hospital Authority, Hong Kong; Advisor, World Health Organization

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Director, State Health Department, Malaysia;
Senior Consultant Public Health Physician and Communicable Disease Epidemiologist

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Clinical Associate Professor, Department of Medicine, The University of Hong Kong

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Clinical Associate Professor, Department of Surgery, The University of Hong Kong

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Consultant Clinical Geneticist, Department of Health, HKSAR

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Director of CUHK Centre for Bioethics, The Chinese University of Hong Kong

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Head of Information Technology and Health Informatics / Chief Medical Informatics Officer, Hospital Authority

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Danny D.B. Ho Professor and Head, Department of Family Medicine and Primary Care, The University of Hong Kong

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Clinical Assistant Professor, Department of Anaesthesiology, The University of Hong Kong

### Dr. Benjamin X.H. FANG

Associate Consultant, Department of Radiology, Queen Mary Hospital, Hong Kong

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Specialist in Ophthalmology, Hong Kong Sanatorium & Hospital

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Director, Hong Kong Island Joint Replacement Centre;
Specialist, Department of Orthopaedics and Traumatology, Queen Mary Hospital, Hong Kong

### Dr. Raymond K.Y. TSANG

Associate Professor, Department of Surgery, The University of Hong Kong

### **Prof. Jimmy S.M. LAI**

Clinical Professor and Acting Head of the Department of Ophthalmology, The University of Hong Kong

#### Dr. Brian H.Y. CHUNG

Clinical Associate Professor, Paediatrics & Adolescent Medicine, LKS Faculty of Medicine, The University of Hong Kong

### Workshop Speakers

### Dr. Andrew M.W. WAI

Specialist in Radiology

### Dr. Miko C.M. LO

Specialist in Oral & Maxillofacial Surgery

### Mr. Chris C.H. CHAN

Director of APS Physiotherapy and Sports Clinic

### Ms. Ida F. LAM

Physiotherapist

### Prof. Martin C.S. WONG

Editor-in-Chief, Hong Kong Medical Journal; Editor, Hong Kong Academy of Medicine

#### **Prof. Doris YOUNG**

Professor, Yong Loo Lin School of Medicine, National University of Singapore; Head of Department of Family Medicine, National University Health System

#### Mr. Alan PURVIS

Managing Editor, Hong Kong Medical Journal and Hong Kong Academy of Medicine Press

### Prof. George K.C. WONG

Honorary Deputy Director and Chairman of Education Subcommittee, The Hong Kong Jockey Club Innovative Learning Centre for Medicine

### Dr. Tong T.N. CHAN

Consultant, Accident and Emergency Department, Kwong Wah Hospital; Honorary Deputy Director and Chairman of Research & Development Subcommittee, The Hong Kong Jockey Club Innovative Learning Centre for Medicine

#### Mr. Graham BARKUS

Managing Partner, The Human Factor Ltd

### Dr. CHAN Tao

Clinical Assistant Professor, Department of Diagnostic Radiology, The University of Hong Kong

### Symposia Speakers

### Dr. Charles F. CHAN

Specialist in Geriatric Medicine;
Honorary Clinical Assistant Professor,
Department of Medicine and Department of Family Medicine and Primary Care,
The University of Hong Kong

### Dr. Peter C.Y. TONG

Clinical Associate Professor (Honorary), Jockey Club School of Public Health and Primary Care,
The Chinese University of Hong Kong;

Past President of the Hong Kong Society of Endocrinology, Metabolism and Reproduction

### Prof. Ivan F.N. HUNG

Ru Chien and Helen Lieh Endowed Professor in Health Sciences Pedagogy;
Clinical Professor and Assistant Dean (Admissions);
Chief of the Division of Infectious Diseases, Department of Medicine, LKS Faculty of Medicine,
The University of Hong Kong;
Honorary Consultant, Queen Mary Hospital, Hong Kong

#### Dr. Alexander CHIU

Medical Director, Health and Employee Benefits, AXA Hong Kong

#### Dr. Jamie C.M. LAM

Consultant Physician in Respiratory Medicine, Hong Kong Sanatorium & Hospital

#### Prof. Ronald C.W. MA

Professor, Department of Medicine and Therapeutic, School of Medicine,
The Chinese University of Hong Kong;
Honorary Consultant Physician, Head of Division of Endocrinology and Diabetes,
Prince of Wales Hospital, Hong Kong

#### Dr. Jason K.Y. FONG

Consultant Neurologist, Hong Kong Adventist Hospital

### Judges of Full, Trainee Research Paper Competition

### Prof. LAM Tai Pong

Professor and Chief of Postgraduate Education, Department of Family Medicine & Primary Care, The University of Hong Kong

#### Prof. Albert LEE

Director, Centre for Health Education and Health Promotion; Professor, JC School of Public Health and Primary Care, The Chinese University of Hong Kong

### **Prof. Doris YOUNG**

Head, Department of Family Medicine, National University Health System

### Judges of Free Paper Competition - Oral Presentation

### Dr. Wendy W.S. TSUI

Specialist in Family Medicine; Council Member & Chairlady of Specialty Board, The Hong Kong College of Family Physicians

### Dr. Cecilia Y.M. FAN

Specialist in Family Medicine; Vice President, The Hong Kong College of Family Physicians

### Judges of Free Paper Competition - Poster Presentation

### Ms. Samantha Y.C. CHONG

Associate Professor (Nursing Practice), School of Nursing; Nursing Director, HKU Health System, Li Ka Shing Faculty of Medicine, The University of Hong Kong; President, Hong Kong College of Nursing & Health Care Management

### Dr. Maria K.W. LEUNG

Specialist in Family Medicine; Council Member, The Hong Kong College of Family Physicians

### Judges of Clinical Case Presentation Competition

Dr. David V.K. CHAO

President, The Hong Kong College of Family Physicians

Ms. Kathy Y.H. CHEUNG

President, Hong Kong Association of Family Medicine and Primary Health Care Nurses

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# **SCIENTIFIC PROGRAMME AT-A-GLANCE**

DATE TIME	6 December 2019 (Friday)			
15:00 - 16:30	HKAM Best Original Research by Trainees			
16:30 - 17:30	Registration - HKAM Annual General Meeting and Conferment			
17:30 - 18:00	HKAM Annual General Meeting			
18:00 - 20:00	HKAM Annual Fellowship Conferment Ceremony and David Todd Oration Twice Rendezvous with Hospital Authority			
20:00 - 21:00	HKAM Dinner Reception (by invitation only)			

DATE	7 December 2019 (Saturday)					
08:30 - 09:00	Registration - G/F Exhibition Hall					
09:00 - 10:00	Seminar 1	Pao Yue Kong (G/F)	Championing Advocacy – How Can We Extend Our Reach?	Speakers: Prof. LAM Tai Hing, Prof. YEOH Eng Kiong, Dr. Roger M.K. NG Chairperson: Dr. Thomas H.F. TSANG		
	Seminar 4	James Kung (2/F)	Colorectal Cancer Screening	Speakers: Prof. Joseph J.Y. SUNG, Prof. Martin C.S. WONG Chairperson: Dr. Lorna V. NG		
09:00 - 11:00	Seminar 3	Lim Por Yen (G/F)	Clinical Application of Genetics and Genomics	Speakers: Prof. LEUNG Tak Yeung, Prof. Rossa W.K. CHIU, Prof. SHAM Pak Chung, Dr. Henry C.K. SZE		
	Seminar 2	Pao Yue Kong (G/F)	Innovation in Acute Care	Chairperson: Prof. Anthony W.H. CHAN  Speakers: Dr. CHAN Yiu Cheung, Dr. Andrea O.Y. LUK, Dr. Simon H.Y. TSANG		
10:00 - 11:00		(0/1)		Chairperson: Dr. Axel Y.C. SIU		
	Seminar 5	James Kung (2/F)	Use of Social Media in Health Promotion	Speaker: Dr. William C.W. WONG		
				Chairperson: Dr. Catherine X.R. CHEN		
11:00 - 11:30	Coffee Bre	Coffee Break and Poster Presentation - Part 1 * - Exhibition Hall & Foyer (G/F & 1/F)				
	Seminar 6	Pao Yue Kong (G/F)	From Hepatitis Management to Achieve its Elimination	Speakers: Dato' Indera Dr Sha'ari Ngadiman, Dr. SETO Wai Kay, Dr. Kenneth S.H. CHOK		
				Chairperson: Dr. Michael K.K. LI		
11:30 - 12:30	Seminar 7	Lim Por Yen (G/F)	Genetics and Genomics in Clinical Practice	Speakers: Dr. Ivan F.M. LO, Dr. Derrick K.S. AU		
				Chairperson: Dr. Stephen T.S. LAM		
	Workshop 3	ILCM (7/F)	Decision Making at the Sharp End	Speakers: Prof. George K.C. WONG, Dr. Tong T.N. CHAN, Mr. Graham BARKUS		
12:30 - 14:00	Lunch Run Run Sh	Run Run Shaw Hall	2. Leading the Shift of T2DM Paradigm: Role of SGI T2i	Speaker: Dr. Charles F. CHAN		
	Symposium 1	(1/F)		Speaker: Dr. Peter C.Y. TONG Chairperson: Dr. Ngan Po Lun		
14:00 - 14:30	Welcome Reception					
14:30 - 15:00	Opening Ceremony - Pao Yue Kong (G/F)					
15:00 - 15:30	Halnan Lecture	Pao Yue Kong (G/F)	Knocking Down Barriers to Inclusive Healthcare	Speaker: Mr. Ricky M.K. CHU Chairperson: Prof. Gilberto K.K. LEUNG		





15:30 - 16:00	Plenary	Pao Yue Kong (G/F)	Enhancing Primary Care in Hong Kong through the Provision of Integrated People - Centred Primary Care in District Health Centres	Speaker: Dr. Donald K.T. LI Chairperson: Dr. LAU Ho Lim	
16:00 - 16:30	Coffee Break and Poster Presentation - Part 2 - Exhibition Hall & Foyer (G/F & 1/F)				
16:30 - 18:00	Seminar 8	Pao Yue Kong (G/F)	Application of Artificial Intelligence in Healthcare	Speakers: Dr. CHEUNG Ngai Tseung, Prof. Ian C.K. WONG, Prof. Cindy L.K. LAM, Dr. Stanley S.C. WONG, Dr. Benjamin X.H. FANG	
				Chairperson: Dr. Neeraj MAHBOOBANI	
	Seminar 9 Workshop 1	Lim Por Yen (G/F)	Update on Eye Procedure	Speaker: Dr. Tommy C.Y. CHAN	
				Chairperson: Dr. Wendy W.Y. KWAN	
		Function Room 1 (2/F)	Jaw Pain - Temporomandibular Joint Dysfunction	Speakers: Dr. Andrew M.W. WAI, Dr. Miko C.M. LO, Mr. Chris C.H. CHAN, Ms. Ida F. LAM	
				Chairperson: Dr. TSE Sut Yee	
	Free Paper -	Function Room 2	Various Speakers		
	Oral Presentation (Primary Care)*	(2/F)	Chairperson: Dr. CHIANG Lap Kin		
18:00 - 19:30	19:30 Dinner Run Ru Symposium		Influenza Infection, Cardiac Complication, Treatment and Prevention	Speaker: Prof. Ivan F.N. HUNG	
		Run Run Shaw Hall (1/F)	2. Voluntary Health Insurance Scheme (VHIS): The New Health Insurance Landscape	Speaker: Dr. Alexander CHIU	
			3. Better Asthma Management Strategies	Speaker: Dr. Jamie C.M. LAM Chairperson: Dr. Matthew M.H. LUK	

DATE TIME	8 December 2019 (Sunday)			
08:30 - 09:00	Registration - G/F Exhibition Hall			
09:00 - 10:30	Seminar 10	Function Room 1	Patient Centric Approach to LGBT Patients in Clinical Practice	Speakers: Dr. Francois Y. FONG, Mr. Henry E. TSE
		(2/F)		Chairperson: Dr. Judy G.Y. CHENG
09:00 - 11:00	Workshop 2	James Kung (2/F)	Academic Research Writing	Speakers: Prof. Martin C.S. WONG, Prof. Doris YOUNG, Mr. Alan PURVIS
	Clinical Case Presentation Competition (Primary Care)#	Lim Por Yen (G/F)	<b>Various Speakers</b> Chairperson: Dr. KWAN Yu	
10:30 - 12:00	Seminar 11	Pao Yue Kong (G/F)	The Role of Robotic and Telemedicine in Clinical Practice	Speakers: Dr. Eric C.H. LAI, Dr. Henry C.H. FU, Dr. Raymond K.Y. TSANG, Prof. Jimmy S.M. LAI Chairperson: Dr. Patrick H.Y. CHUNG
	Seminar 12	Function Room 2 (2/F)	Genetic Counselling in Primary Care	Speaker: Dr. Brian H.Y. CHUNG Chairperson: Dr. William C.W. WONG
12:00 - 13:30	L	D D C 11 11	New landscape of Diabetes     Management	Speaker: Prof. Ronald C.W. MA
	Lunch Symposium 2	Run Run Shaw Hall (1/F)	2. Target Therapy (CGRP monoclonal antibodies) for Intractable Migraine	Speaker: Dr. Jason K.Y. FONG Chairperson: Ms. Samantha Y.C. CHONG

# Active CME/CPD points will be accreditated to presenters

Disclaimer

Whilst every attempt will be made to ensure all aspects of the conference mentioned will take place as scheduled, the Organizing Committee reserves the right to make changes to the programme without notice as and when deemed necessary prior to the Conference. (Supported by HKCFP Foundation Fund)





### **David Todd Oration**

Friday, 6 December 2019 • 18:00 – 20:00

# **Twice Rendezvous with Hospital Authority**



Professor John CY LEONG, GBS, JP Academician, Chinese Academy of Sciences

Former Chairman, Hospital Authority

Professor Leong is presently Chairman of the Hospital Authority of Hong Kong.

Professor Leong graduated from the Medical Faculty of The University of Hong Kong in 1965 and became a Fellow of the Royal College of Surgeons of Edinburgh in 1969, a Fellow of the Royal College of Surgeons of England in 1970, a Fellow of the Royal Australasian College of Surgeon in 1985, and a Fellow of Hong Kong Academy of Medicine in 1993. He was also an Honorary Fellow of the Royal College of Orthopaedic Surgeons of Thailand (2001), the Hong Kong College of Orthopaedic Surgeons (2007), and the Hong Kong College of Physicians (2018).

From 1966 to 2003, Professor Leong worked in the University of Hong Kong, for 38 years. He served as Chair Professor and Head of the Department of Orthopaedic Surgery from 1981 to 2003. Concomitantly, he headed the Department of Orthopaedics and Traumatology at Queen Mary Hospital. He was Dean of the Faculty of Medicine from 1985 to 1990, and Director of the School of Postgraduate Medical Education and Training, Faculty of Medicine, from 1993 to 1999. He was conferred Emeritus Professor of the University on his retirement in 2003.

He was appointed President of The Open University of Hong Kong in December 2003 and served to the end of March 2014, at which time he was conferred Emeritus President.

Professor Leong is an internationally renowned clinician-scientist specialising in spinal and paediatric orthopaedics. He has published more than 200 full papers in the top orthopaedic journals, and 37 invited chapters in books or articles in journals. He was President of Societe Internationale de Chirurgie Orthopaedique et de Traumatologie (SICOT) (International Society of Orthopaedic Surgery and Traumatology) from 2002 to 2005, being the first Chinese to head the SICOT.

In 2001, he was elected an Academician of the Chinese Academy of Sciences, the first clinician in Hong Kong to receive the honour. He was awarded a Doctorate of Science, honoris causa by The University of Hong Kong in 2011 and by The Open University of Hong Kong in 2014. In 2015, he was conferred an Honorary Doctorate by The Hong Kong Academy of Performing Arts.

Professor Leong has been invited as a guest speaker or visiting professor more than 200 times worldwide, including as the C. Howard Hatcher Visiting Professor at Stanford University, the Keynote Speaker at Imperial College London, Greg Houghton Memorial Lecturer of the British Scoliosis Society, the Dewar Spinal Visiting Professor at the University of Toronto, the F.P. Patterson Visiting Professor at the University of British Columbia, and the Francois P. Fouché Lecturer of the Colleges of Medicine of South Africa.

Professor Leong is an honorary member of the Orthopaedic Societies of Argentina, Cuba, Portugal and Western USA; British Scoliosis Society, Philippine Spine Society, and the Association of Research Groups in Orthopaedic Surgery. He is an invited member of the American Orthopaedic Association, the Spine Society of Australia, the International Orthopaedic Association (world membership of 30), and the Japanese Orthopaedic Association.





Professor Leong has been appointed Honorary Professor at Sun Yat-Sen University of Medical Sciences, Norman Bethune Medical University, West China University of Medical Sciences, First Military Medical University, Peking Union Medical College Hospital, 301 People's Liberation Army Chief Hospital, Tianjin University, Sichuan University, and Hainan University and Honorary Director of the Spinal Research Centre of Xinjiang Medical University.

Professor Leong has served on the Editorial Boards of Spine, Injury, JAMA, Current Orthopaedics (Great Britain), Current Opinion in Orthopaedics (USA), Current Orthopaedic Practice (USA), European Spine Journal, Orthopaedics (USA), Journal of Orthopaedic Science (Japan), and seven orthopaedic and medical journals in Mainland China.

Professor Leong has been honoured with the Order of the British Empire, Silver Bauhinia Star, appointment as a Justice of the Peace, the University Fellowship of The Hong Kong Polytechnic University, the Walter P. Blount Service Award from the Scoliosis Research Society (USA), the Leader of the Year Award in the category of Education/ Research by the Sing Tao News Corporation Ltd, and the Director of The Year Awards (under the category of Statutory/Non-profit-distributing Organisations Non-Executive Directors) by the Hong Kong Institute of Directors.

Professor Leong's other past government community services include being Chairmen of the Joint Committee of Student Finance, the Hong Kong Council for Academic Accreditation, Public Libraries Advisory Committee, Citizens Advisory Committee on Community Relations of the ICAC, and Consultation Panel of the West Kowloon District Authority.

Professor Leong has also been invited to be AJS McFadzean Orator, Sun Yat Sen Orator, E K Yeoh Orator, Ho Hung Chiu Orator, Arthur Li Orator, and Sir Harry Fang Orator.

He has also been a guest speaker of The Hong Kong Institution of Engineers and The Hong Kong Institute of Certified Public Accountants in 2017.

Hong Kong's public hospital services were under immense pressure in the 1970's and 80's, and healthcare standards varied among the then government and subvented hospitals. After careful study and public consultation, the Hospital Authority Ordinance was passed in 1990, upon which the "Hospital Authority" (HA) was formally inaugurated in December 1990. A year later, the HA gradually took over the management and control of all government and subvented hospitals.

My first encounter with HA dates back to 1990. As Dean of the Medical Faculty of the University of Hong Kong back then, I had the privilege to be appointed to the first HA Board. Nearly two decades later, I had a reunion with the HA family to serve as its Chairman from 2013, working closely with a mega pool of over 79 000 dedicated and professional healthcare practitioners for six years.

Having been personally involved with the HA at two important occasions of its birth and the end of its third decade, I would like to take the opportunity presented by this Oration to share my journeys with the HA. During that time, HA witnessed daunting challenges, such as in the fast growing and ageing population; skyrocketing service demands; reduction in supply of doctors and nurses; budget constraints during the tough macro-economic environment; and gaps in hospital facilities. Building on its mission "Helping People Stay Healthy", the HA family made concerted efforts for continuous enhancements in service efficiency and outcomes, innovation and expansion of clinical services, and audits and assessment. The Government's unwavering support has given us a silver lining by better equipping HA to sail ahead, enabled by two 10-year Hospital Development Plans, proactive human resources strategies, and other innovation and technology developments, all contributing to better public medical services for Hong Kong overall.





### Halnan Lecture

Saturday, 7 December 2019 • 15:00 – 15:30 • Pao Yue Kong (G/F)

# **Knocking Down Barriers to Inclusive Healthcare**



Mr. Ricky MK CHU, I.D.S. B.S.SC. (HON), LLB (HON) Chairperson, Equal Opportunities Commission

Mr. Ricky CHU Man-kin took the helm as Chairperson of the Equal Opportunities Commission (EOC) on 11 April 2019, leading and steering the operation of the Commission to enforce the anti-discrimination ordinances and promote the value of equal opportunities in Hong Kong.

Mr. Chu brings with him extensive experience in public service and proven management capabilities, having worked in leadership positions of different public organizations. He joined the Independent Commission Against Corruption (ICAC) in 1978 as an investigator, and rose through the ranks to become the Assistant Director of Operations and Acting Director of Corruption Prevention. In 2010, he left the ICAC to join the Independent Police Complaints Council (IPCC) as its Secretary-General, leading the Secretariat to assist Council members in monitoring and reviewing the handling and investigation of complaints against the Police.

Mr. Chu re-joined the ICAC in 2016 as the Director of Investigation and retired from the Commission in 2019. Throughout his career, he made distinguished contribution to the anti-corruption cause, and dedicated himself to upholding justice in society. He is also committed to the principles of fairness and impartiality in administering the law.

Mr. Chu graduated from The Chinese University of Hong Kong with a Bachelor Degree in Social Science. He also holds a UK law degree.

As the sole statutory body in Hong Kong tasked with eliminating discrimination, the Equal Opportunities Commission (EOC) is committed to enforcing the four anti-discrimination ordinances currently in place – namely, the Sex Discrimination Ordinance, the Disability Discrimination Ordinance, the Family Status Discrimination Ordinance and the Race Discrimination Ordinance – and identifying gaps in the existing law that continue to put stigmatised communities in a vulnerable and disadvantaged position.

One of the domains where prejudice and discrimination manifest themselves is the provision of goods, facilities and services, including healthcare. Drawing on recent studies released by the EOC, this lecture will highlight barriers to accessing healthcare services and facilities for ethnic minorities, persons affected by mental health issues, persons with physical disabilities, as well as victims of sexual harassment and assault. Examples and contributing factors of these obstacles will be examined, along with ways to enhance the inclusiveness of our local healthcare system. Ultimately, we need a combination of legal protection, administrative practices and public education in providing quality healthcare as a fundamental right, rather than a privilege for a limited few.





# **Plenary**

Saturday, 7 December 2019 • 15:30 – 16:00 • Pao Yue Kong (G/F)

# Enhancing Primary Care in Hong Kong through the Provision of Integrated People-Centred Primary Care in District Health Centres



Dr. Donald KT LI, SBS, CStJ, JP

MBBS, FHKCFP, FHKAM (FM), FFPH, FHKDS (Hon), FAFPM (Hon), FACP (Hon), FRCPT (Hon)

President, World Organization of Family Doctors (WONCA)

Dr. Donald Li is a specialist in Family Medicine in private practice in Hong Kong. He is the President of the World Organization of Family Doctors (WONCA). He is the Censor of the Hong Kong College of Family Physicians. He is the Past President of the Hong Kong Academy of Medicine and Chairman of the Governing Board of Hong Kong Jockey Club Disaster Preparedness and Response Institute. Dr Li is appointed as the member of the 13th National Committee of Chinese People's Political Consultative Conference (CPPCC).

Dr. Li is also an active member of many Hong Kong governmental and public health bodies. He is a member of the Steering Committee on Primary Healthcare Development of Food & Health Bureau, member of the Chief Executive's Council of Advisers on Innovation and Strategic Development, Director of the Hong Kong St. John Ambulance Association, Chairman of the Hong Kong Sheng Kung Hui Welfare Council, Director of Bauhinia Foundation Research Centre and Honorary Steward of Hong Kong Jockey Club.

People-centred care is needed for everyone, everywhere to access the quality health services they need, when and where they need them. The care needs to be safe, effective and timely that responds to people's comprehensive needs and are of the highest possible standards.

This will be a presentation on how the comprehensive needs of people and communities in Hong Kong can be fulfilled respecting their preferences through provision of Integrated people-centred health services at the newly established District Health Centres in Hong Kong. Focus will be on a network of Family Doctors trained to provide holistic, comprehensive and continuous care, leading and assisted by a multi-disciplinary primary healthcare team. Emphasis will also be on educating and empowering people to have a more active role in their own health and modifying their health-seeking behaviour.

The enhanced primary healthcare will offload patients who are relying on services provided at the hospitals and can avoid unnecessary hospitalisation and overtreatment whilst maintaining quality and rendering the healthcare system of Hong Kong more sustainable. The author will share the concept and the challenges in setting up the District Health Centres.





### Seminar 1

Saturday, 7 December 2019 • 09:00 - 10:00 • Pao Yue Kong (G/F)

# Championing Advocacy – How Can We Extend Our Reach?



Professor Lam Tai Hing, BBS, JP

Sir Robert Kotewall Professor in Public Health

Chair Professor of Community Medicine, School of Public Health, The University of Hong Kong

Professor TH Lam, MBBS 1975, MD 1978, was Head of Department of Community Medicine (2000-12), Director of School of Public Health (2009-13) of The University of Hong Kong, and President of Hong Kong College of Community Medicine (1997-2001). He has been an active researcher and advocate on tobacco control and public health for 30+ years and published 800+ international peer reviewed journal papers.

He was principal investigator of FAMILY: A Jockey Club Initiative for a Harmonious Society (HK\$250 million donation, 2007-2017) to promote FAMILY Health, Happiness and Harmony by collaborating with 700+ government units and NGOs, training 1000+ people, and organising family activities for 400,000+ participants. (www.family.org.hk).

#### Advocacy to Extend our Reach against Non-communicable Diseases (NCD): from the Most Complex to the Simplest Interventions for **Behavioral Changes**

The UN 2011 political declaration highlighted 4 major NCD risk factors: tobacco use, unhealthy diet, physical inactivity and harmful use of alcohol. The most complex and successful advocacy, the WHO Framework Convention on Tobacco Control (FCTC), covers more than 90% of the world population. Our advocacy in Hong Kong is for a total ban of e-cigarettes and new tobacco products in 2019, and a total tobacco ban in 2030. Following FCTC, advocacy for a Framework Convention on Alcohol Control shows a little progress. In a Lancet commentary (April 2019), we advocate to drop the term "harmful use" from alcohol as there is no safe use of alcohol, and to unite for an FCAC. The obesity epidemic, expanding globally, is at an early stage. We advocate for a Framework Convention on Obesity Control.

We advocate for the simplest interventions for small behavioral changes as a 'foot-in-the-door" strategy. In our community intervention programmes, we promote the simplest exercise, Zero Time Exercise (ZTEx). ZTEx is the integration of simple strength- and stamina-enhancing physical activity into daily life, and can be done anytime, anywhere and by anyone. We focus on reducing sugar intake especially from sugar sweetened beverages. For smoking cessation, we test brief AWARD (Ask, Warn, Advice, Refer, Do-it-again) interventions in different settings, and completed a trial on physician's very brief advice (about 30 seconds, 13671 smokers). Our trials have consistently shown good evidence of effectiveness (small to moderate effect size). Advocacy for simplest interventions should have great potentials to extend our reach.



### Professor YEOH Eng Kiong, GBS, OBE, JP

MBBS (HK), FHKAM, FHKCCM, FHKCP, FFPHM (UK), FRCP (Edin), FRCP (Lond), FRCPS (Glasg), FRACMA, FRACP

Director, JC School of Public Health and Primary Care Head, Division of Health System, Policy and Management Faculty of Medicine, The Chinese University of Hong Kong

Professor EK Yeoh is Professor of Public Health, Director at the JC School of Public Health and Primary Care of The Chinese University of Hong Kong and also Head of Division of Health System, Policy and Management at the JC School of Public Health and Primary Care. His research is in health systems, services and policy with an interest in applying systems thinking in studying how the complex components of health systems interact and interrelate to improve health. He is a member of the Research Council of Our Hong Kong Foundation.

Professor Yeoh was Secretary for Health, Welfare and Food of the HKSAR Government 1999 - 2004. He was the head and first Chief Executive of the Hong Kong Hospital Authority 1990 - 1999. He was awarded JP, OBE and GBS.

#### Population Health: Nested in the Community of Persons at the District

Health in human societies at both individual and population levels is defined by cultural, social and economic factors. In enhancing our understanding of these determinants of health, models of population health have recognised the need to study the dynamic inter-relationships of these determinants and the interplay between pre-natal, early and late life influences over a life course of their effect on health. Populations are nested in the community of persons which interconnect with provincial, national and global populations. The paper will discuss innovative approaches to population health defined by the community of persons and the insights for the policy initiative for a district health system for 2019 to 2022.



### Dr. Roger MK NG

FHKAM (Psychiatry), FHKCPsych, FRCPsych (UK)

Chief of Service and Consultant, Department of Psychiatry, Kowloon Hospital, Hong Kong

Dr. Roger MK Ng is the Chief of Service of Department of Psychiatry, Kowloon Hospital, Hong Kong. At a territory-wide level, bit. Nogel with vig is the Chair of Service of Department of Psychiatry, who who has been the Chair of the Central Coordinating Committee (Psychiatry) under Hospital Authority of Hong Kong, which is the central body in advising the Head Office of Hospital Authority in the strategic development, implementation and evaluation of mental health services in Hong Kong. Besides, he is also the President of the Hong Kong College of Psychiatrists. At a global level, he is the Secretary for Education, World Psychiatric Association which is a global association representing 140 countries with 250,000 psychiatrists. He is currently promoting training and education to all stakeholders of mental health - service users, caregivers, medical students, mental health professionals, primary care doctors, psychiatric trainees and psychiatrists.

#### Recovery-based Practice in Mental Health Services in Hong Kong

Although mental health service has put much emphasis on evidence-based care, increasing number of service users (a preferred name to 'patients') has been requesting for services that are service user-orientated (or recovery-oriented). Recovery-based practice is about involving patients (also known as service users) and caregivers in the design, implementation, delivery and evaluation of health services that the service users are and will be receiving. Recovery-based practice has been adopted in many Western countries since 1980s and is steadily evolving. Although the evidence about its effectiveness in enhancing mental health is slowly accumulating, this is widely and rapidly adopted in many Western countries due to its face validity, acceptability by service users and consistency with Western values of autonomy, freedom of choice, and partnership. Hong Kong has been adopting recovery-based practice principles in various areas of mental health services since 2010. This presentation will discuss how such practice is implemented and adapted culturally in Hong Kong and the current challenges faced.





# Seminar 2

Saturday, 7 December 2019 • 10:00 – 11:00 • Pao Yue Kong (G/F)

# **Innovation in Acute Care**



Dr. CHAN Yiu Cheung

MBBS, FRCS(Edin), FHKCEM, FHKAM (Emergency Medicine)

Consultant, Accident and Emergency Medicine Department, United Christian Hospital, Hong Kong Chair, Scientific Affair Committee, Hong Kong College of Emergency Medicine

Dr. YC Chan graduated from the medical school of the University of Hong Kong in 1994, and became a specialist in emergency medicine since 2002. He underwent overseas training in clinical toxicology in 2003. He is currently a consultant in the Accident & Emergency Department of United Christian Hospital. He is the chair of the Scientific Affair Committee, Vice-chair of the Education Committee of the Hong Kong College of Emergency Medicine. He actively participates in training activities for emergency medicine and clinical toxicology. He has over 50 publications in books and peer review journals.

### **Innovative Emergency Care beyond Emergency Room**

Activated charcoal (AC) is a treatment for acute poisoning and its efficacy depends on its time of administration. Since 2010, paramedics have been administering pre-hospital AC to patients after consulting emergency physicians (EPs) from the Hong Kong Poison Information Centre. More than 200 patients per year were given prehospital AC and data suggested the time between poison exposure and AC use were reduced.

ST elevation myocardial infarction (STEMI) is a cardiac emergency diagnosed by ECG. Prehospital ECG is performed in ambulance and transmitted to Accident & Emergency Department (AED) for EP interpretation. A pilot program indicated it is useful in reduction of door to balloon time for STEMI patients.

EP also provide prehospital emergency care for patients via the participation as flying doctors in the Government Flying Service, medical support in local and international sports events in Hong Kong, as well as being the on scene medical team during disasters.

The first emergency medicine ward (EMW) opened in 2007. Currently, nearly all AEDs have EMWs with a total number of approximately 500 beds. Extended care are provided to patients in EMW, primarily by EP. The service cover patients with acute medical, surgical, orthopaedic, toxicological, psychiatric or critical care problems.



**Dr. Andrea OY LUK** 

MBChB, FHKCP, FHKAM, M.D.

Associate Professor, Department of Medicine and Therapeutics, Faculty of Medicine, The Chinese University of Hong Kong

Dr. Andrea Luk is a specialist in endocrinology and is currently the Associate Professor at the Department of Medicine and Therapeutics of the Chinese University of Hong Kong. She is also the Non-Oncology Medical Director of the Phase 1 Clinical Trial Centre at the Chinese University of Hong Kong, Honorary Associate Consultant at the Prince of Wales Hospital, and Deputy Medical Director of the Asia Diabetes Foundation. Dr Luk graduated from the University of Auckland, New Zealand, and received post-graduate training in Sydney, Australia and Hong Kong. She obtained her fellowship in endocrinology, diabetes and metabolism in 2007 at the Hong Kong College of Physicians. Her main research focus is in diabetes epidemiology with special interests in diabetic kidney disease and young-onset diabetes. She has published over 90 articles in peer-reviewed journals.

#### **Update on Management of Endocrine Emergencies**

With the exception of acute hyperglycaemic complications and hypoglycaemic coma related to diabetes mellitus, other endocrine emergencies including adrenal crisis, phaeochromocytoma crisis, thyroid storm and myxoedema coma are relatively rare occurrences. Nonetheless, in view of the non-specific nature of clinic presentation and high mortality rates when treatment is withheld or delayed, frontline clinicians should have a high index of suspicion and be able to make the diagnosis for timely institution of appropriate therapy. In this presentation, I shall summarise the key clinical features, basic investigation and immediate management of these uncommon but important endocrine emergencies, using real life examples of recent cases encountered in our hospital.





# Seminar 2

Saturday, 7 December 2019 • 10:00 – 11:00 • Pao Yue Kong (G/F)

# Innovation in Acute Care



Dr. Simon HY TSANG

MB ChB (Bristol), FCSHK, FHKAM

Consultant Surgeon, Queen Mary Hospital, Hong Kong

Honorary Clinical Associate Professor, Department of Surgery, The University of Hong Kong

Dr. Simon Tsang underwent his undergraduate medical education in the University of Bristol, United Kingdom. He subsequently completed his surgical residency and post-fellowship training in the Department of Surgery, the University of Hong Kong. He is currently Consultant Surgeon in Queen Mary Hospital, Hong Kong. He has a keen interest in hepatobiliary and pancreatic surgery, surgical endoscopy, surgery for trauma, surgical education and hospital management. He is an instructor and course director in the Advanced Trauma Life Support (ATLS) program, having taught in local ATLS courses as well as overseas.

### **Advances in Surgical Critical Care**

"Surgical critical care", as defined by the American Board of Surgery, is a branch of surgery and a primary component of general surgery related to the care of patients with acute, life – threatening, or potentially life – threatening surgical conditions. The discipline involves expertise in the operative management of such patients, as well as essential knowledge and skills in pre – hospital care, resuscitation, support of various organ systems, wound management, rehabilitation and restoration of function

The care of patients suffering from necrotizing pancreatitis poses one of the greatest challenges to the general surgeon. The 21<sup>st</sup> century surgical armamentarium to tackle this highly complex and multifaceted problem involves advanced skills in minimally – invasive surgery, fluoroscopic – guided procedures, endoscopy, ultrasonography, and wound closure techniques; in addition to a thorough knowledge of infection, resuscitation, organ support and nutrition.

Surgical critical care starts in the field. Some highly complex diagnostic and therapeutic equipment may be miniaturized for better portability, and adapted for rugged use. However, simple measures are sometimes the most effective lifesavers. We have finally realized that the employment of some of these by the general public, such as the use of tourniquets and wound packing for bleeding, may have a profound impact on improving survival in victims of trauma. The critical care surgeon - trainer is in an excellent position to propagate such skills to society.





### Seminar 3

Saturday, 7 December 2019 • 09:00 – 11:00 • Lim Por Yen (G/F)

# **Clinical Application of Genetics and Genomics**



Professor LEUNG Tak Yeung

MBChB(CUHK), MD(CUHK), FHKCOG, FHKAM(O&G), FRCOG

Assistant Dean (Mainland Affairs)
Chairman, Department of Obstetrics and Gynaecology, Faculty of Medicine,
The Chinese University of Hong Kong

Prof. Tak-yeung Leung is the Chairman of the Department of Obstetrics and Gynaecology of The Chinese University of Hong Kong, as well as the Assistant Dean (Mainland Affairs) of the Medical Faculty of CUHK.

Prof. Leung is also the Director of Maternal Fetal Medicine of the same unit, and leading the research and development in fetal genetic screening, diagnosis and therapy, such as carrier screening, chromosomal microarray, low-pass sequencing, and fetoscopic surgery. Professor Leung has published more than 290 papers in international peer reviewed journals, with an H-index of 38.

### Prenatal Genetic Diagnosis: from Karyotyping to Whole Exome Sequencing



### **Professor Rossa CHIU**

MBBS, PhD, FHKCPath, FHKAM, FRCPA

Choh-Ming Li Professor of Chemical Pathology, Associate Dean (Development), Faculty of Medicine, The Chinese University of Hong Kong and Honorary Chief of Service of the Department of Chemical Pathology, Prince of Wales Hospital, Hong Kong

Prof. Rossa Chiu's research interests lie in the analysis of circulating nucleic acids found in human plasma. She has made significant contributions to the development of non-invasive prenatal diagnosis which led to the worldwide introduction of non-invasive plasma DNA tests for Down syndrome screening. She continues to develop applications of non-invasive diagnostics for prenatal and cancer assessments through cell-free nucleic acid analyses. Prof Chiu has published over 170 peer-reviewed research articles and has over 250 granted patents. She is a contributor of the key reference textbook in Clinical Chemistry, the Tietz textbook. Prof Chiu has received a number of international research awards and serves as Secretary to the Board of Directors of the International Society for Prenatal Diagnosis.

#### **Genetics and Genomics in Current Clinical Practice**

Diseases caused by genetic or genomic abnormalities were once managed by the rare individuals with highly specialised medical expertise. With the rapid expansion in knowledge in human genomics and the availability of powerful investigational tools, the use of genetic and genomic tests are now infiltrating many branches of medicine. For example, the risks of Steven-Johnson syndrome and toxic epidermal necrolysis could be mitigated by avoiding carbamazepine prescription in Asian individuals with HLA-B\*1502 allele. Warfarin doses could be titrated according to the person's CYP2C9 and VKORC1 genotypes. Tyrosine kinase inhibitors are the first line drugs for patients with non-small cell lung cancer harbouring sensitising epidermal growth factor receptor mutations. Carrier screening, preimplantation genetic diagnosis and prenatal diagnosis of suspected single gene diseases are a part of pregnancy management. Maternal blood DNA analysis allows for sensitive and specific, yet non-invasive, screening of fetal chromosomal aneuploidies. Evidently, the incorporation of genetic and genomic information in medical care, aka. genomic medicine, is becoming a daily routine in many areas of medical practice now. How may we, as healthcare professionals, better equip ourselves to embrace this new paradigm? (Supported by the Research Grants Council of the Hong Kong SAR Government under the Theme-based research scheme (T12-401/16-W) and (T12-403/15-N)).





### Seminar 3

Saturday, 7 December 2019 • 09:00 – 11:00 • Lim Por Yen (G/F)

# **Clinical Application of Genetics and Genomics**



### **Professor SHAM Pak Chung**

BA (Cambridge), BM BCh (Oxford), MSc (London), PhD (Cambridge), MRPsych

Suen Chi-Sun Professor in Clinical Science and Chair Professor of Psychiatric Genomics, Li Ka Shing Faculty of Medicine, The University of Hong Kong

Prof. Pak-chung Sham studied Medicine at Cambridge and Oxford Universities, and subsequently trained in Psychiatry at the Bethlem Royal and Maudsley Hospitals in the UK. In 2000, He was appointed Professor of Psychiatric and Statistical Genetics at the MRC Social, Genetic and Development Psychiatry Research Centre at King's College London. He was the Head of Department of Psychiatry, The University of Hong Kong from 2007 to 2011, and served as the Director of the Centre for Genomic Sciences from 2011 to 2019. Professor Sham has developed new statistical methods for the analysis of genetic data, and applied such methods to study the etiology of psychiatric disorders and other complex diseases.

#### **Genetic Prediction of Common Diseases**

All common diseases are caused by a combination of multiple genetic and environmental influences. The greater the contribution of genetic influences (as measured by the heritability), the greater is the clinical relevance of family history, which provides an indirect measure of genetic predisposition. Recent advances in genomic technologies and the meta-analysis of results from multiple studies have now enabled the identification of numerous genetic variants which confer increased risk of disease, and the possibility of directly measuring genetic predisposition. However, because of the small effect size of any single genetic variant, prediction requires multiple genetic variants to be aggregated into a single "polygenic score" in order to achieve sufficient prediction accuracy to have clinical impact. For many diseases, the predictive power of polygenic scores are now comparable to, or have exceeded, that of a positive family history. This may have implications for the prevention or early detection and intervention of common diseases.



Dr. Henry CK SZE

MBBS (HK), FRCR, FHKCR, FHKAM (Radiology), PDip Epidemiology and Biostatistics Specialist in Clinical Oncology

Dr. Henry Sze obtained his medical degree from the University of Hong Kong and started his career in the Department of Clinical Oncology, Pamela Youde Nethersole Eastern Hospital. He obtained fellowship from the Royal College of Radiologists and was awarded the Rohan Williams Medal. From 2013 to 2015, he was Clinical Assistant Professor in the Department of Clinical Oncology, Faculty of Medicine, The University of Hong Kong. In 2016, he joined Pamela Youde Nethersole Eastern Hospital as Associate Consultant. He started private practice since 2019. He has multiple publications in peer-reviewed journals and is the author of several book chapters.

### **Cancer Genomics and Personalised Oncology Care**

Cancer is caused by the accumulation of genetic and epigenetic alterations in DNA of normal somatic cells. Early cancer research focused on genetic and epigenetic mechanisms of carcinogenesis have led to the discovery of crucial genetic events for many of particular malignancies. The greatest discoveries in the field have been driven by advancements in technology. In the 1990s, the human genome project and the use of polymerase chain reaction (PCR)-based target sequencing led to some of the most important genomic discoveries and corresponding pathways to date. They have not only helped to elucidate the mechanism of carcinogenesis but also opened up a brand new avenue in new cancer therapies by creation of drugs targeting all the specific genes and proteins that allow the cancer cells to grow and survive. Targeted therapy has revolutionized cancer treatment and has largely replaced chemotherapy in many oncological diseases. As we are now entering the era of personalized medicine in oncology, more precise decision tools based on genomic profiling are developed to allow oncologist to help patients based on a genetic understanding of their disease.





# Seminar 4

Saturday, 7 December 2019 • 09:00 – 10:00 • James Kung (2/F)

# **Colorectal Cancer Screening**



### **Professor Joseph JY SUNG**

MBBS (HK), PhD (Canada), FHKCP, FHKAM (Medicine), FRCP (Edinburgh), MD (CUHK), FRCP (London), FACG, FRACP, FRCP (Thailand), FRCP (Glasgow), FAGA

Mok Hing Yiu Professor of Medicine, Department of Medicine and Therapeutics

Director, Institute of Digestive Disease, Faculty of Medicine, The Chinese University of Hong Kong

Professor Sung received his medical degree (MBBS) from The University of Hong Kong, and conferred PhD in biomedical sciences by the University of Calgary and MD by The Chinese University of Hong Kong (CUHK). He holds fellowships from the Royal Colleges of Physicians of Edinburgh, Glasgow, London, and Australia, the American College of Gastroenterology, the American Gastroenterological Association, the Hong Kong College of Physicians, the Hong Kong Academy of Medicine and Academy of Sciences of Hong Kong (ASHK). He is currently Mok Hing Yiu Professor of Medicine and Director of Institute of Digestive Disease of CUHK.



### **Professor Martin CS WONG**

BMedSc (Hons), MSc (Hons), MBChB, MD (CUHK), MPH, MBA, FRACGP, FHKCFP, FHKAM (Family Medicine), FFPH, FRCP (Glasgow), FRSPH

Professor of Family Medicine and Primary Healthcare, School of Public health and Primary Care, Faculty of Medicine, The Chinese University of Hong Kong

Professor Martin CS Wong is a specialist in Family Medicine with a research interest in cancer screening and prevention. He is the former Director of the CUHK JC Bowel Cancer Education Centre, and participated in pioneering of the first colorectal cancer screening programme in Hong Kong with a multidisciplinary team leb y Prof. Joseph Sung since 2008. Prof. Wong has published over 300 journal articles, and received over ten international/local research awards in the discipline. He is currently the Co-Chair of the NCD stream, Association of the Pacific Rim Universities and the Editor-in-Chief of the Hong Kong Medical Journal.

Worldwide, colorectal cancer (CRC) is a leading cause of cancer mortality and induces a substantial public health burden. In 2018, it affected more than 1.8 million people and killed over 861,000 people in the globe. A large body of evidence shows that its incidence and mortality has been increasing in a large number of nations, including Asia Pacific countries. Owing to its slow progression, early diagnosis and removal of adenomatous polyps have been proven effective to reduce its incidence and mortality. Healthcare professionals play a pivotal role in screening programmes, as their recommendations could significantly enhance screening uptake in clinical practice. This seminar will provide an update on the epidemiology, etiology, risk factors and its screening in primary care. It will highlight the following topics: (1). Global epidemiology of CRC, its regional and time-trend incidence and mortality; (2). Recognised risk factors for CRC; (3). The effectiveness and cost-effectiveness of each individual CRC screening test, including faecal immunochemical tests, flexible sigmoidoscopy, computed tomography (CT) colonography, and colonoscopy; (4). Major recommendations from guidelines on CRC screening including the Asia Pacific Consensus Recommendations for Colorectal Screening; the American Cancer Society; and the U.S. Preventive Services Task Force; with a particular focus on: (a). The starting age of screening; (b). The use of the Asia Pacific Colorectal Screening (APCS) score for risk stratification of screening participants; and (c). Surveillance interval for colonoscopy screening. The seminar will recommend future perspectives of CRC screening and strategies that may further enhance screening uptake in the community.





# Seminar 5

Saturday, 7 December 2019 • 10:00 – 11:00 • James Kung (2/F)

# **Use of Social Media in Health Promotion**



### Dr. William CW WONG

MB ChB (Edin), MD (Edin), MPH (CUHK), DFFP (UK), DCH (Lon), FRCGP (UK), FRACGP (Aus), Specialist Registration (Family Medicine)

Clinical Associate Professor & Chief of Research at Department of Family Medicine & Primary Care, HKU; Chief of Service, Departmental of Family Medicine, HKU-Shenzhen Hospital; Honorary Consultant, HK West Cluster, Hospital Authority, Hong Kong; Advisor, World Health Organization

Dr. Wong received his medical education and Doctorate in Medicine from the University of Edinburgh and has worked extensively in the hospitals and communities in the United Kingdom, Australia, China and Hong Kong over the last twenty years. He set up Health Promoting Hospital (HPH) Office at HKU-Shenzhen Hospital that was awarded Excellence Leadership in Population Health & Health Promotion at the last Australian Council on Healthcare Standards Assessment. Dr Wong has been, on four occasions, appointed Temporary Advisor for WHO whose consultation work resulted in a number of guidelines. He is Board Member of WONCA Research Working Party and was the Founder & Convener of WONCA Special Interest Group (SIG) in Health Equity to promote professional awareness and better quality of health for the disadvantaged. He is among the most prolific scholars in the field, accruing over 150 papers in peer-reviewed journals and Principal Investigator of many competitive research grants with the awarded funding over HK\$30million.

Social media plays a significant role in our daily life. Hong Kong has one of the highest rates of digital device ownership and use in Asia; therefore, in the digital age, reaching out to the target population of interventions through a mobile App is becoming an important pathway. Using two examples, one on an online web-based intervention on dating app use and another one on self-health assessment app, we examine a systematic and scientific approach to develop and evaluate a peer-led, web-based intervention to promote its safe usage in young adults in Hong Kong, and how a self-health assessment tool empower the general public in controlling their own health. These work also illustrates the importance of engaging different stakeholders and work with a different multi-disciplinary team.





# Seminar 6

Saturday, 7 December 2019 • 11:30 - 12:30 • Pao Yue Kong (G/F)

# From Hepatitis Management to Achieve its Elimination



### Dato' Indera Dr Sha'ari Ngadiman

MD, MPH, EIPM, FPHMM, FAMM

President, College of Public Health Medicine, Academy of Medicine, Malaysia; Director, State Health Department, Malaysia; Senior Consultant Public Health Physician and Communicable Disease Epidemiologist

As a Senior Public Health Physician with more than three decades experience in public health program at various level in Malaysia, he has been engaged in a wide range of public health issues including HIV/AIDS, other sexually transmitted infections, vector borne diseases, food and water borne diseases, vaccine preventable diseases, public health management and others. He is currently Director of the State Health Department of Pahang, Malaysia; President of Malaysian Alumni. Malaysian Alumni of Epidemic Intelligence Program; President of College of Public Health of Academy of Medicine; Head of Discipline for Communicable Disease Epidemiologist; Deputy Chair of Country Coordinating Committee (CCM) on Global Fund for Malaysia; Supervisor for Epidemic Intelligence Program of Malaysia and Board of Study for Epidemic Intelligence Program of Malaysia.

Initiative on Triple Elimination of Mother to Child Transmission (EMTCT) of HIV, Syphilis and Hepatitis B - The Malaysia Experience Anita Binti Suleiman\*, Shaari Bin Ngadiman\*

- Public Health Medical Consultant and Head, Sector HIV/STI/Hep B, Ministry of Health Malaysia Public Health Medical Consultant and Director, Pahang State Health Department, Malaysia

Malaysia received the much-coveted validation status from WHO for achieving the EMTCT of HIV and syphilis in October 2018; making it the first country in the Western Pacific Region to receive the honour. With achievement of dual elimination, Malaysia has set target to achieve triple elimination (Hepatitis B) in the years to come. Intervention to prevent vertical transmission dated 20 years and 30 years back for HIV and congenital syphilis. It entails provision of antenatal screening of syphilis and HIV at first booking. Infected pregnant women and infants are given free treatment, continued for life in case of HIV infection. HIV-exposed infants are given free antiretroviral prophylaxis and free infant formula for two years. While congenital syphilis has always remained less than 50 per 100,000 live births, HIV vertical transmission rate reached global elimination target of less than 2% for the first time in 2016 and maintained till now. One of Malaysia's strong points in achieving eMTCT is full integration of HIV and syphilis care into the existing Maternal and Child Health (MCH) services which is of high-quality, low-cost and universally accessible for all including the vulnerable populations. In 2019, three sub-nationals in Peninsular Malaysia embarked on Hepatitis B antenatal screening pilot program besides Sabah of Borneo that pioneered the Hepatitis B screening among antenatal mothers since 2003.



### Dr. SETO Wai Kay

MBBS MD FRCP FHKCP FHKAM

Clinical Associate Professor, Department of Medicine, The University of Hong Kong

Dr. Wai-Kay Seto is currently a Clinical Associate Professor in the Department of Medicine, the University of Hong Kong, Hong Kong. He is also the Assistant Hospital Chief Executive (Research); Director, Clinical Trials Center; and Consultant in Medicine of the University of Hong Kong-Shenzhen Hospital, Shenzhen, China. He has published more than 150 international journal articles and book chapters, including first-authored articles in the Lancet, Journal of Clinical Oncology, Gut, Journal of Hepatology and Hepatology, majority related to research on chronic liver diseases. He has been awarded the Distinguished Young Fellow (2013) from the Hong Kong Academy of Medicine; the Guangdong Province Outstanding Young Medical Talent Award (2017), the Outstanding Young Research Award (2016-2017) from The University of Hong Kong, and the Asia-Pacific Digestive Week Emerging Leader from the APDW Federation (2018).

### 2030: Will Viral Hepatitis be Eradicated?

Much progress has been made in the treatment and management of chronic hepatitis B virus (HBV) and hepatitis C virus (HCV) infection. For HBV, long-term nucleoside analogue therapy can achieve potent viral suppression and can effectively reduce the risk of cirrhotic complications and liver cancer. New drugs are currently being developed in clinical trials, aiming at achieving a functional cure. For HCV, direct-acting antivirial agents for a finite duration can eradicate the disease in the vast majority of patients. Hence, the World Health Organization has set a 2030 target of eliminating HBV and HCV as a public health threat, which will require achieving a diagnostic uptake of 90% and treatment uptake among eligible patients of 80%. Such objectives are required to achieve a reduction in liver-related mortality by 65%.

Nonetheless, majority of countries and regions worldwide are not on target in achieving the WHO 2030 objectives. Using HBV as an example, the Center for Disease Control estimated a global diagnostic and treatment uptake of only 10% and 5% respectively. A recent mathematical modeling estimated that the diagnostic and treatment uptake in Hong Kong for HBV was only 22% and 27% respectively. For Mainland China, the rates were 11% and 19% respectively. There is thus much discussion on the need for linkage to care, i.e. identifying patients and arranging a follow-up strategy. Linkage to care strategies depends on local epidemiology. There are currently innovative methods that have been published, but if applied, need to be tailored to the local setting. For HCV, the identification of high-risk groups and the simplification of follow-up logistics will be important. For HBV in endemic regions e.g. Hong Kong, it will come down to screening and the involvement of non-specialists, primary care physicians, nurses and non-government organizations in promoting and improving uptake. If we act early, the WHO 2030 objectives may still be achievable.



### Dr. Kenneth SH CHOK

MBBS (HKU), MS (HK), FRCSEd, FCSHK, FHKAM (Surg)

Clinical Associate Professor, Department of Surgery, The University of Hong Kong

Dr. Kenneth Chok graduated from the University of Hong Kong in 1999. He soon became the Consultant Surgeon and Faculty Member and subspecialized himself to be the liver transplant surgeon. He is also the Clinical Associate Professor and Principal Investigator for the State Key Laboratory of Liver Research at the University of Hong Kong. He is the Council member for the Society of HK HBP Surgery, Honorary Secretary for Hong Kong Society of Transplantation and Council member/ Chairman of Liver Donation Committee for Hong Kong Liver Foundation. He is also the finance committee member for the International Liver Transplant Society (ILTS).

#### Management of Hepatitis B Virus Infection in Liver Transplantation

For patients undergoing liver transplantation for hepatitis B-related complications, effective antiviral prophylaxis has improved both the short and long term outcome and survival by preventing graft loss and death due to hepatitis B recurrence. The use of hepatitis B immune globulin (HBIG) as a prophylactic agent during the eighties was a major milestone for liver transplant patients with hepatitis B virus (HBV) infection. The approval of lamivudine (LAM) for the treatment of chronic hepatitis B (CHB) in 1998 was another major milestone. The major limitation of LAM is the high rate of drug resistant mutation occurring with long-term use.

chronic hepatitis B (CHB) in 1998 was another major milestone. The major limitation of LAWI is the nigh rate of drug resistant mutation occurring with long-term use. After liver transplantation, the use of LAM monotherapy has been associated with a variable resistance rate of up to 60% at 3 years after transplantation. Entecavir (ETV), a cyclic guanosine nucleoside analog, was approved in 2005. The major advantages of ETV over LAM include the superior antiviral potency and the high barrier to the development of viral resistance. After 7 years of ETV therapy, the resistance rate was only 1.2%, compared to 70% for LAM. Therefore, the considerable beneficial effects of reducing viral resistance of LAM when combined with HBIG may not be substantiated when ETV is used for liver transplantation. A study of 80 CHB patients treated with ETV monotherapy after liver transplantation with a median follow up of 26 months demonstrated a high hepatitis B surface antigen (HBsAg) seroclearance rate with excellent virological suppression without evidence of virological rebound.





### Seminar 7

Saturday. 7 December 2019 • 11:30 – 12:30 • Lim Por Yen (G/F)

# **Genetics and Genomics in Clinical Practice**



Dr. Ivan FM LO

MBChB, FHKCPaed, FHKAM(Paed)

Consultant Clinical Geneticist, Department of Health, HKSAR

Dr. Ivan FM Lo is Head of the Clinical Genetic Service of the Department of Health, a tertiary referral centre of clinical genetic service in Hong Kong for over 30 years. Dr. Lo was trained in genetics and genomics in the Clinical Genetic Service since 1991, and received training in biochemical and molecular genetics at the University of British Columbia, Canada, in 1996. He also received Paediatric training in Hong Kong and became a Fellow of the Hong Kong College of Paediatricians in 1998. He is also Honorary Clinical Associate Professor of the Department of Paediatrics & Adolescent Medicine of both medical schools in Hong Kong, and Chairman of the Genetics & Genomics (Paediatrics) subspecialty board under the Hong Kong College of Paediatricians. Dr. Lo's special interests include dysmorphology, neurogenetics, molecular genetics and application of next generation sequencing technology. He has more than 100 publications in international peer reviewed medical/genetic/genomic journals.

### A Genomic Approach to Paediatric Rare Disorders

The field of medical genetics has transitioned steadily from genetics to genomics over the last 10 years. It was also called a paradigm shift. From the laboratory perspective, a genetic approach is usually a targeted one that studies genes one by one, or even worse, exon by exon; while a genomic approach is one that studies multiple genes in one go, even without the need of a clear target. This is of particular relevance to a diagnostic laboratory for rare genetic disorders, because these disorders, though individually rare, are estimated to reach 5000-8000 in number. Furthermore, a lot of disorders are clinically non-specific, that means the clinical signs and symptoms cannot give a clue about the underlying genetic defect; and a lot of disorders are genetically heterogeneous, that means there are multiple genetic loci implicated in the same phenotype. The paradigm shift was most evident in the repertoire of genetic tests available in a genetic laboratory. In contrast to the "gene after gene" approach of conventional molecular genetics technology, NGS enables simultaneous analysis of hundreds or thousands of genes. Gene panel-based analyses can easily deal with the genetically heterogeneous disorders. The number of genes interrogated by these gene panels range from 2 to over 100. The diagnostic capacity is almost without limit. For ultra-rare genetic diseases, whole exome sequencing can be done and achieved a diagnostic rate of about 30%. In conclusion, the adoption of genomic technology in the genetic laboratory has highly increased the diagnostic capacity and efficiency.



**Dr. Derrick KS AU**MD(Brown), LMCHK, FHKAM(Med), FRCP(Edin), FRCP(Glasg)
Director of CUHK Centre for Bioethics. The Chinese University of Hong Kong

Dr. Derrick AU received medical education at Brown University and specialist training in Hong Kong. He served in clinical service for two decades before taking up management positions in the Hospital Authority (HA), including Director of Quality & Safety, overseeing technology assessment among other duties. He joined CUHK in 2017. Presently he also serves as Chairman of the HA Clinical Ethics Committee through honorary appointment. Besides, Dr. Au is a writer on healthcare and humanities. A book newly published (《生命倫理的四季大廈》) looks at the intertwined journey of bioethics and biomedical technologies.

#### **Genomic Medicine and Common Good: Promises and Tensions**

Advances in genomics research and genomic medicine promise a new era of personalized medicine on the one hand, and on the other hand push for a change on traditional ethical framework in medicine and human research. While personalized medicine promises to provide the best case to individual patients, questions arise as to whether this promise can be truly delivered, and whether such paradigm is promoting a "Me Medicine" which, at its extreme, might be counterproductive for the common good. Paradoxically, the idea of "the common good" has also been used by advocates of genomic medicine to challenge the traditional framework of informed consent and data privacy. At heart of the tension between genomic medicine and the common good is the issue of equity. Will the idea of personalized medicine eventually prove too much to be sustainable and equitable in health care of the population? This presentation considers the promises of genomic medicine and the related ethical concerns.





### Seminar 8

# **Application of Artificial Intelligence in Healthcare**



### Dr. CHEUNG Ngai Tseung

MBBS, BSc(Med), MSc(Comp Sci)

Head of Information Technology and Health Informatics / Chief Medical Informatics Officer, Hospital Authority

Dr. NT Cheung is the Head of Information Technology & Health Informatics and Chief Medical Informatics Officer of the Hong Dr. N Crieding is the read of information fectimology a relatin informatics and chief wederal minormatics office of the Profig Kong Hospital Authority (HKHA) and also the Consultant for eHealth for the Hong Kong Government. He has taken HA from a virtual "green fields" site to today's situation where clinical information systems have become ubiquitous and indispensable in the care delivery process. His current work focuses on developing the fourth generation of the Clinical Management System (CMS) embracing innovative IT and data driven approaches to enable new and enhanced healthcare service delivery models, on integrating with the wider health care ecosystem via the territory-wide Electronic Health Record Sharing System and in processing patients directly through HA Go, area stone Health solution for HA electronic Health Record engaging patients directly through HA Go, a one stop eHealth solution for HA patients and their carers

#### An Al Strategy for the Hospital Authority

Over the last 3 decades the Hospital Authority (HA) of Hong Kong has gained enormous experience in the use of electronic medical record (EMR) systems to support clinical service and hospital management via the development and operations of the Clinical Management System (CMS) and related systems. In recent years there has been a strong emphasis on the use of innovative technology to allow new models of service delivery and management. These technologies include Big Data and Al, Mobile, Cloud and Internet of Things. The HA has set up an IT Innovation Laboratory and Communities of Practice to explore all of these areas. The HA Data Collaboration Lab (HADCL) has been launched, and university researchers have started several machine learning projects on HA data in the HADCL

Al in particular has great potential to be a step change agent in healthcare delivery. The ability to predict clinical events, to identify patients at risk, to make better clinical decisions or to automate manual and repetitive workloads promises to transform healthcare delivery. The current Al revolution is largely data driven, and the pervasive use of the CMS over three decades across a 43 hospital network has also led to the accrual of a large pool of detailed, structured and standardized clinical data for nearly 10 million lives. If "Data is the New Oil", then HA is sitting on a rich oil field!

However, such a powerful technology could also lead to many unintended consequences. This presentation will highlight how HA will develop her own Al technology and integrate it with the workflow and systems that are already in place. The guiding principles that will guide HA's Al journey will be explained, and early experiences will be described.



### **Professor Ian CK WONG**

PhD, FRCPCH (Hon), FRPharmS

Head and Lo Shiu Kwan Kan Po Ling Endowed Professorship in Pharmacy, Department of Pharmacology and Pharmacy, The University of Hong Kong

As an academic pharmacist with expertise in pharmacoepidemiology and big data research, Professor Wong has over 250 publications with publication in JAMA, JAMA Internal Medicine, JAMA Psychiatry, Lancet Psychiatry, Lancet Infectious Disease BMJ and PLOS Medicine. According to Clarivate Analytics' Essential Science Indicators, Professor Wong has been a top 1%

Professor Wong has been awarded over £5 million in research grants as the principal applicant and approximately £170 million as a co-applicant. He is also the Founder of a University College London spin-off company which developed three licensed prescription only medicines in Europe.

### Application of Healthcare Big Data in the Evaluation of Clinical Outcomes in Patients after H Pylori Eradication

The importance of observational studies in the evaluation of drug safety and effectiveness has been recognized in recent decades. Data generated from observational studies supplement pre-marketing experimental trials, especially in situations where the outcome of drug exposure is rare, delayed or observed in specific subgroups. In such cases, large databases offer a platform with relatively large sample sizes, long follow-up periods and few ethical issues, and are more cost-effective and efficient compared to interventional studies. Healthcare big databases are an important tool to generate "Real-World Evidence" for medicine research.

The Hong Kong Hospital Authority (HA) has a unified electronic health record system which contains clinical information from all publicly funded primary, secondary, tertiary care and accident and emergency admissions. The Hospital Authority electronic health records platform has the appropriate infrastructure and potential to be developed into a world-class research database, much like the "Clinical Practice Research Datalink" in the UK. Furthermore, it contains important data, including patient demographics, laboratory results, and medical records, that are captured as part of routine clinical management, currently the database contains data from 11 million patients.

In this talk, I will demonstrate the application of Hong Kong Hospital Authority clinical database in evaluating clinical outcomes in patients after H pylori eradication treatment. Specifically, I will present the results of two published studies from our research team in the BMJ [1] and JAMA Internal Medicine [2].

[1] https://www.bmj.com/content/352/bmj.h6926.long (open access)

[2] https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2517922 (open access)





### Seminar 8

# **Application of Artificial Intelligence in Healthcare**



**Professor Cindy LK LAM** 

MBBS(HK), MD(HK), FHKAM(Family Medicine), FRCGP

Danny D. B. Ho Professor in Family Medicine & Head, Department of Family Medicine & Primary Care, The University of Hong Kong

Professor Cindy Lo-Kuen LAM, MH, JP, is a specialist in Family Medicine. She is currently Danny D. B. Ho Professor in Family Medicine and Head of the Department of Family Medicine and Primary Care of the University of Hong Kong. She serves as co-Chair of the Grant Review Board of the Health and Medical Research Fund, Government of Hong Kong SAR; Chief Censor of the Hong Kong College of Family Physicians. Her main research interests are primary care quality and outcome evaluation using big clinical data, health-related quality of life and mental health. She has over 350 publications.

#### Big Routinely Collected Clinical Data- A Treasure Hunt for Best DM Care

Computerization of medical record and digitalization of investigation results and drug prescriptions have enabled structured collection and linkage of big longitudinal data on the process and outcomes of care of very large numbers of people with different characteristics. Big routinely collected clinical data reflect real-world practice that can provide empirical evidence on quality, cost and outcomes of care. Such data are most valuable in research on chronic diseases such as diabetes mellitus. This presentation will describe the use of routinely collected data of 316,869 patients with diabetes mellitus (DM) managed in 73 Hospital Authority primary care clinics from 2009 to 2015 to answer important research questions on risk of complication and mortality, predictors primary care clinics from 2009 to 2015 to answer important research questions on risk of complication and mortality, predictors of complications and deaths, service burden and costs, quality of care of DM, and the cost-effectiveness of a structured risk assessment and management (RAMP) intervention for DM. The big data analyses showed that for an average DM patient aged 63 under usual care the risks of any DM complication, CVD and death were 31%, 23% and 21%, respectively, and RAMP was associated with a relative risk reduction by 38%, 49% and 56%, respectively. We found a J-shaped relationship between HbA1c/blood pressure and risks of CVD/mortality, with HbA1c 7-7.5% and SBP 130-134mmHg and DBP 65-69mmHg associated with the lowest risks. The average annual public service cost for each DM patient without complication was HKD11,015 in 2013, which was increased by 1.2 0.3 6 by each complication. increased by 1.2 to 2.6 by each complication, and RAMP saved significant cost from reduction of complications.



### Dr. Stanley SC WONG

MBBS (HK), FHKCA, FHKAM (Anaes), FANZCA

Clinical Assistant Professor, Department of Anaesthesiology, The University of Hong Kong

Dr. Wong Sau Ching Stanley, MBBS (HK), FHKCA, FHKAM (Anaesthesiology), FANZCA, graduated from The University of Hong King data onling statiley, MBBS (Int), FIRMIN (Mitaestresting), FANCA, FIRMIN (Mitaestresting) and the Australian and New Zealand College of Anaesthetists. He was awarded Merit for the HKCA Final Fellowship examination. He obtained his HKCA Fellowship in Pain Medicine in 2017. His research interests include acute postoperative pain management, the effect of anaesthetic drugs and techniques on pain, and molecular signaling mechanisms in animal pain models. He is currently the Deputy Director of the Laboratory and Clinical Research Institute for Pain, The University of Hong Kong.

#### Big Data for Pain Medicine

Acute postoperative pain remains an important clinical problem, with less than half of patients receiving adequate pain relief. A large patient database of pain related outcomes would help improve the quality of acute postoperative pain control. PAIN OUT is a large patient database of pair related outcomes would reprint prove the quality of acute positoperative pair control. PAIN OUT is a range international registry project on postoperative pair control involving numerous countries worldwide. By standardizing collection of clinical and patient outcome data, it allows benchmarking between different participating centres. In this talk, we will discuss PAIN OUT and also the development of the PAIN OUT initiative in Hong Kong and Shenzhen.



Dr. Benjamin FANG

MBBS, FRCR, FHKCR, FHKAM (Radiology)

Associate Consultant, Department of Radiology, Queen Mary Hospital, Hong Kong

Dr. Benjamin Fang serves in a multitude of mostly IT related roles in Queen Mary Hospital, Hong Kong College of Radiologists and Hospital Authority Head Office. Apart from serving at the administrative level, he also leads and participates at the technical level in various projects he is involved in. He is currently working closely with Hospital Authority Head Office to develop artificial intelligence tools for radiology and has already achieved some success in bringing about positive clinical impact to radiology service with the help of such tools

#### Deep Learning in a Nutshell

The term AI - Artificial Intelligence puts up a grandiose front but does little in conveying what exactly happens behind the scene. The hype surrounding AI in the recent years had been mostly the result of the successes of one type of algorithm, the artificial neural network. While it requires a non-trivial amount of time and effort to acquire the technical skills and understanding to develop such algorithms, the core concepts of how such algorithms work are not difficult to understand. Having a basic understanding of such algorithms can shed insights into the possibilities they bring as well as the limitations they face.





# Seminar 9

Saturday, 7 December 2019 • 16:30 – 18:00 • Lim Por Yen (G/F)

# **Update on Eye Procedure**



Dr. Tommy CY CHAN

BSc, MBBS, MMedSc, MD, MRCOphth, FRCS(Ed), FRCS (Glasg), FCOphthHK, FHKAM(Ophthalmology), PGDipClinDerm (Lond)

Specialist in Ophthalmology, Hong Kong Sanatorium & Hospital

Dr. Tommy CY Chan is a Specialist in Ophthalmology at the Hong Kong Sanatorium & Hospital. He is also a Clinical Assistant Professor (Honorary) at the Department of Ophthalmology and Visual Sciences of the Chinese University of Hong Kong and the Department of Ophthalmology of the University of Hong Kong. His special interests include corneal refractive procedures, cataract surgery, keratoconus, corneal crosslinking, and corneal transplantation. Dr. Chan has published over 100 articles in peer-reviewed journals and book chapters. He was awarded the APAO Achievement Award in recognition of his contribution to scientific programs of the APAO annual congresses over these years. He was elected as the Distinguished Young Fellow of the College of Ophthalmologists of Hong Kong in 2016. His team won the Asia-Pacific Association of Cataract and Refractive Surgeons Film Festival Award in 2017. Chan is currently the Council member of the Hong Kong Ophthalmological Society, Director of the CUHK Jockey Club Ophthalmic Microsurgical Training Programme for Laser Refractive Surgery and Cataract & Lens Surgery, Treasurer of the Asia-Pacific Ocular Imaging Society, Director and Honorary Secretary of the Hong Kong Federation of Societies for the Prevention of Blindness.

Vision is one of the most important senses to our life. Our vision could be affected by eye diseases including corneal scarring, cataract, glaucoma and age-related macular degeneration. Advances in eye procedure over recent years have improved the efficacy and safety in saving the vision of our patients. Apart from sight threatening pathologies, myopia is an important issue in our society. Use of atropine eye drops in children and application of refractive surgeries have become popular options in the management of myopia.

This presentation will highlight various eye procedures developed in the last decade such as lamellar corneal transplantation, corneal cross-linking, minimal invasive glaucoma surgeries and intravitreal injection of anti-vascular endothelial growth factors. Different intraocular lens designs aimed at reducing postoperative spectacle dependence will also be discussed. Lastly, the presentation will provide information on using low-dose atropine eyedrops in children and innovative techniques in refractive surgery such as small incision lenticule extraction (SMILE) and implantable collamer lens (ICL).





### Seminar 10

Sunday. 8 December 2019 • 09:00 – 10:30 • Function Room 1 (2/F)

# Patient Centric Approach to LGBT Patients in Clinical Practice



**Dr. Francois Y FONG** 

MBBS(Hons), BMedSc(Hons), GDipHI, MFM(Clinical), MHSc(Sexual Health), FRACGP, FACKM, AASERT CEO. Founder & Medical Director of Neo-Health Group

Dr. Francois Fong is founder and medical director of Neo-Health Group and Hong Kong Sexual Health Centre, the first integrative private sexual health clinic in Hong Kong. He is senior advisor for Aids Concern and Chairman of NGO Action For Reach Out, Honorary Clinical Assistant Professor of University of Hong Kong and The Chinese University of Hong Kong in Family Medicine. Dr Fong had received training in Australia from Monash University and University of Sydney and Master in Family Medicine, Master in Health Science (Sexual Health) and FRACGP.

Dr. Fong has been working with the LGBT community for over 10 years in Hong Kong with various community education and services programs and supporting many different NGOs, AIDS Concern, AIDS Foundation, Gay Harmony, Big Love Alliance, Action for Reach Out, Society of Rehabilitation and Crime Prevention, Society for AIDS Care, Hong Kong Rainbow locally, as well as overseas LGBT organizations in Taiwan, Thailand and China.

Based on population survey in US, 4.5% of the population identify themselves as lesbian, gay, bisexual and transgender (LGBT) and amonst Asians, 4.9% self-declared to be LGBT. There has been a steady increase in the proportion of adults identifying themselves as LGBT with a significantly higher proportion up to 8.2% amongst the younger age group.

There are special health needs among LGBT patients, however, physicians commonly do not enquire about patients' sexual orientation or sexual identity. Many physicians feel uncomfortable or even awkward to ask such questions. Communication skills, non-judgmental mind-set and patient-centered approach are essential in providing high quality and equality care to LGBT patients.

Sexual and mental health are two key areas where special attentions are required for LGBT community. But first we need to identify LGBT patients, yet not making them feel being treated in a different way. This seminar aims to go through some of the common problems faced by LGBT patients using health services. How to take history regarding sexual orientation and sexual identity without causing patient's embarrassment or discomfort? Often speaking the same language helps to break down barriers. What are some of the common jargon LGBT community uses? How to make the practice LGBT friendly? What else can be done for the LGBT community as a physician?



Mr. Henry E TSE

Chairman, Transgender Resource Centre

As a transman born and raised in Hong Kong, Henry filed a judicial review in 2017 to challenge the Hong Kong Government on its current coercive policy on full sex reassignment surgery. He uses himself as a vehicle to push the Government to enact gender recognition legislation for the better lives of the transgender community. Henry has been proactive in engaging various stakeholders on this subject by sharing his story with universities, companies and religious groups. He also spoke at Legislation Council conferences, and at annual LGBT+ events such as the Pride Parade and Pink Dot to urge for action. His vocal activism and bravery have raised public and media awareness on the rights of transgender persons and have made positive impact on trans inclusion.

In 2018, Henry won the Transgender Inclusion Champion Award presented by Community Business. Currently, Henry is the Chairman of Transgender Resource Center.

Many doctors may not have had experience with treating transgender patients and may encounter difficulties in approaching them. We have invited Mr. Henry Tse, Chairman of Transgender Resource Centre to discuss how doctors can create a friendly and safe environment for transgender persons.

The first thing we do on approaching patients is greeting them. With transgender persons we should refer to them by the name and pronoun associated with their gender identity and use gender inclusive language with non-binary pronouns or anatomical terms. Respect is foremost in treating transgender persons as for other patients and we should get to know the person and concentrate on the care they need.

Knowledge wise, apart from general medical problems, transgender persons may have specific medical problems related to hormone treatment, bottom surgery with possible complications and body dysphoria. Individuals have very different transition journeys and Mr. Henry Tse will share his personal journey and knowledge about the transgender community.





# Seminar 11

Sunday, 8 December 2019 • 10:30 - 12:00 • Pao Yue Kong (G/F)

# The Role of Robotic and Telemedicine in Clinical Practice



Dr. Eric CH LAI

M.B., Ch.B. (CUHK), MRCS(Ed), FCSHK, FHKAM(Surgery), FRACS

Consultant, Department of Surgery, Pamela Youde Nethersole Eastern Hospital, Hong Kong

Dr. Eric Lai is currently Consultant, and Division Chief of Hepato-biliary & pancreatic (HBP) surgery service in Pamela Youde Nethersole Eastern Hospital in Hong Kong, Dr. Lai's clinical research has focused on liver, bile duct, and gallbladder cancers, and minimally invasive therapy for HBP diseases. He has published more than 150 peer-reviewed publications and more than 20 book chapters. Outside of the hospital, he also currently serves as Scientific Committee member of the Asian-Pacific Hepato-Pancreato-Biliary Association (APHPBA), Finance Committee member of the International Hepato-Pancreato-Biliary Association (IHPBA) and editorial board members of several peer-reviewed journals. He has delivered over 100 lectures around

### Robotic Hepato-Biliary & Pancreatic Surgery: Is It Worthwhile?

The introduction of minimally invasive surgery (MIS) has revolutionized surgical practice in the past 3 decades. MIS benefits patients in terms of better pain control, shorter hospital stay, earlier recovery, and better cosmesis. Traditionally, hepato-biliary-pancreatic (HBP) surgery is considered as one of the most challenging surgeries among the abdominal procedures. Its MIS development is also lagging behind compared with MIS of other gastrointestinal organs. These advanced techniques also require highly experienced laparoscopic skills. The introduction of robotic surgical systems has given a new face of MIS. It was developed to overcome the disadvantages of conventional laparoscopic surgery. Well-known advantages of the robotic system such as improved vision via 3-dimensional view, magnification, tremor suppression, and the dexterity of the instruments. These features allow the surgeons to perform delicate tissue dissection and precise intra-corporeal suturing and anastomosis. The main drawback of robotic system is the associated cost. Currently, major hepatectomy, Whipple operation, distal pancreatectomy, biliary tree resection and reconstruction can be performed safely by robotic approach by experts. It should be emphasized that considering robotic HBP surgery requires 4 conditions: 1) appropriate selection of patients; 2) follow the principle of traditional open surgery; 3) specific expertise and training, in both open and laparoscopic HBP surgery; 4) familiarization with the robotic machine and paying precaution of its potential dangers, such as visceral injury by robotic arm and total loss of tactile feedback. Its future clinical value and cost-effectiveness will depend on the advantages that it can provide over conventional laparoscopy or open surgery.



Dr. Henry CH FU

MBBS(HK), MMedSc(HK), FRCS(Edin), FHKCOS, FHKAM(Orthopaedic Surgery)

Honorary Assistant Professor, The University of Hong Kong Director, Hong Kong Island Joint Replacement Centre

Specialist, Department of Orthopaedics and Traumatology, Queen Mary Hospital, Hong Kong

Dr. Henry Fu's special interest lies in robotic assisted arthroplasty and was the first user of both Mako and Navio robots in Hong Kong. He has received training at the Hospital for Special Surgery, New York, and Rothman Institute, Philadelphia, on

Dr. Fu is now director of the Hong Kong Island Joint Replacement Centre where 350 arthroplasty operations are performed annually under ERAS(enhanced recovery after surgery) driven protocols.

Dr. Fu received the Hospital Authority Young Achiever Award in 2019 and was the team leader for the Hong Kong West Cluster Outstanding Team Award in 2018.

### Robotic Joint Replacement Surgery: Accuracy, Precision and Longevity

Joint replacement surgery is becoming an increasing accepted operation in treating patients with arthritis. Accuracy of implant positioning and limb alignment are important prognostic variables affecting implant survival. Robotic technology enables precise bone cuts and guarantees implant placement accuracy.

Two robotic systems have gained widespread popularity in joint replacement. Both are semiactive systems where the robot provides realtime stereotactic guidance to the operating surgeon. The image guided robot utilizes preoperative CT\_scan(Mako) while the imageless robot relies on intraoperative registration(Navio) to create a patient-specific 3D virtual model. The surgeon plans the optimal sizing and alignment on registered 3D images. Bone resection is performed by the surgeon using the robotic arm which only works within the haptic windows. Once the predefined boundaries are violated, the robot will stop, minimizing the risk of periarticular soft tissue injury. Soft tissue tension is quantifiable with robotic software and aids ligament balancing. Implant placement can also be guided for total hip replacement.

Major advantages of robotic joint replacement are improved accuracy and alignment of implants, less soft tissue and ligament injury, reduced posteroperative pain and faster rehabilitation. Drawbacks include cost, operation time and pin tract related complications.

The image guided robotic system has FDA approval for primary total hip replacement, partial knee replacement and total knee replacement, while the imageless system can only perform partial or total knee replacement.

Hong Kong has adoped both two new robotic systems and early results are promising. Long term data is required to assess survivorship and cost effectiveness.





### Seminar 11

Sunday, 8 December 2019 • 10:30 - 12:00 • Pao Yue Kong (G/F)

# The Role of Robotic and Telemedicine in Clinical Practice



### Dr. Raymond KY TSANG

MS, MBChB, FRCSEd, FRCSEd(ORL), FHKCORL, FHKAM(Otorhinolaryngology) Associate Professor, The Department of Surgery, The University of Hong Kong

Dr. Raymond KY TSANG, MS, MBChB, FRCSEd, FRCSEd(ORL), FHKCORL, FHKAM(Otorhinolaryngology), graduated from the Chinese University of Hong Kong in 1994 and received his training in otolaryngology in Prince of Wales Hospital, Chinese University of Hong Kong. He obtained his specialist qualification in otolaryngology and fellowship of the Royal College of Surgeons of Edinburgh in 2001 and then sub-specialized in the field of head and neck surgery.

Dr. Tsang is currently the Associate Professor in the Department of Surgery, University of Hong Kong and Honorary Consultant ENT Surgeon of Queen Mary Hospital and Tung Wah Hospital. He is also the Division Chief of Ear Nose and Throat Surgery of the Department of Surgery, the University of Hong Kong-Shenzhen Hospital in Shenzhen, China.

His clinical research interests include application of robotic surgery in head and neck surgery, minimally invasive surgery in the head and neck region, endoscopic surgery for anterior skull base lesions and swallowing disorders in patients after head and neck cancer treatment. He is actively researching on the application of the next generation flexible robotic surgical system to be used in the head and neck area

He has published more than 80 peer review papers and book chapters. He is currently the Executive Board Member of Asian Research Symposium in Rhinology and the International Guild of Robotic and Endoscopic Head and Neck Surgery. He is also the Vice President of the Hong Kong Society of Otorhinolarynology – Head and Neck Surgery, Chairman of the Head and Neck Subspecialty Board of the Hong Kong Society of Otorhinolarynologists and Member of the Education Committee of the Hong Kong College of Otorhinolaryngologists and Member of the Education Committee of the Hong Kong Society of Robotic Surgery.

#### Robotic Surgery in Otorhinolaryngology and Head and Neck Surgery

Due to the anatomy and nature of the diseases, ENT surgeons has been one of the earliest advocates of natural orifice surgery. Endoscopic sinus surgeries, endoscopic resection of laryngeal cancers and endoscopic ear surgeries are all examples of natural orifice surgeries. The major limitations of endoscopic surgery include loss of degrees of movement and poor instrumentation. These limitations are also experienced in laparoscopic surgeries. The surgical robot was partly invented to circumvent these limitations.

Since 2005, the surgical robot, mainly the da Vinci robotic system (Intuitive Surgical Inc., Palo Alto, CA, USA) has been employed in endoscopic transoral resection of turnours in the upper aerodigestive tract. Through a series of preclinical trials, animal experiments and phase one clinical trials, the da Vinci Surgical Robot has been approved by the US FDA to perform resection of T1-2 cancers of the oropharynx, larynx and hypopharynx in 2009. The abbreviation TORS for TransOral Robotic Surgery was coined to describe the procedures. In the same period, the exponential increase in HPV related oropharyngeal cancers, which usually presented with small primary tumours, dramatically increased the application of TORS in treating head and neck cancer. In Hong Kong, we developed the use of the robot for resecting small recurrent tumour of the nasopharynx, improving the dexterity of surgeon in performing minimally invasive nasopharyngectomy.

Simultaneously, the robot was also used to resect benign lesions in the upper aerodigestive tract. One of the major application is resection of hypertrophic lingual lymphoid tissues in patients with obstructive sleep apnea. The US FDA subsequently in 2014 approved the da Vinci robot for use in benign conditions of the upper aerodigestive tract.

The surgical robot is also used in performing remote access resection of neck lesions, including thyroid nodules, neck masses and submandibular glands. With the special aesthetic needs of the population, South Korean ENT surgeons have been the pioneers in developing robotic neck surgeries. While these surgeries are not minimally invasive, the incisions can be placed in inconspicuous area like hairline or axilla, satisfying the aesthetic needs of the patients.

With the full development of robotic surgery in ENT, the limitations of adapting a robot mainly designed for abdominal surgeries become apparent. Specially designed robots focusing on deployment in natural orifices hit the market in the latter half of the 2010's. The Flex Robot (Medrobotics, MA, USA) was the first specially designed robot for TORS and was approved by US FDA in 2015. The single port da Vinci SP (Intuitive Inc.) had the first clinical trial for TORS in Hong Kong, ran by a team of ENT surgeons from both medical schools in Hong Kong. After completion of further clinical trials in US, the da Vinci SP robot was approved by US FDA for TORS in March 2019.

Applications of robotic surgery in the nose and ear area faces more challenges as the operative field and structures are smaller, miniaturization of the robots are required. Researches are on-going and we are expecting to see more applications of robot assisted surgeries in different areas in the near future.



### **Professor Jimmy SM LAI**

MBBS, FRCSEd, FRCS(Glasgow), FRCOphth(UK), FHKAM(Ophthalmology), M.Med (Ophthalmology), MD Clinical Professor and Acting Head of the Department of Ophthalmology, The University of Hong Kong

Prof. Jimmy Lai is the Clinical Professor and Acting Head of the Department of Ophthalmology, the University of Hong Kong; Chief of Service and Honorary Consultant Ophthalmologist of the Department of Ophthalmology, Queen Mary Hospital & Grantham Hospital; Chair of Specialty of the Department of Ophthalmology, Gleneagles Hospital and the Immediate Past-President of the College of Ophthalmologists of Hong Kong, He is also the Medical Director of Asian Foundation for the Prevention of Blindness. He has received the Hospital Authority Long Service Award; the Asian Pacific Academy of Ophthalmology Distinguished Service Award, DeOcampel Award and the Achievement Award.

#### Telemedicine in Ophthalmology

Telemedicine is the use of electronic information and communications technologies to provide and support health care to patients whose access to medical institutions is remote. Tele-ophthalmology supplements traditional health care delivery systems. With the introduction of advanced technology and tools in ocular imaging systems, it is possible to remote diagnose and monitor eye diseases like cataract, glaucoma, age-related macular degeneration and diabetic retinopathy. The lecture will discuss basic issues in applying tele-ophthalmology to public health. The use of teleophthalmology presents great opportunity to manage the steadily increasing demand for ophthalmic care. The application of tele-ophthalmology in the public health care system in Hong Kong may reduce the specialist clinic attendance.





### Seminar 12

Sunday, 8 December 2019 • 10:30 – 12:00 • Function Room 2 (2/F)

## **Genetic Counselling in Primary Care**



**Dr. Brian HY CHUNG** 

MD, FHKAM, FRCPCH, FCCMG

Clinical Associate Professor, Paediatrics & Adolescent Medicine, LKS Faculty of Medicine, The University of Hong Kong

Dr. Brian HY Chung is a Clinical Geneticist at Queen Mary Hospital and Duchess of Kent Children's Hospital in Hong Kong and HKU-SZ Hospital in Shenzhen, China. He is an Associate Professor of Paediatrics & Adolescent Medicine and Centre for Genomic Sciences, LKS Faculty of Medicine, the University of Hong Kong. His research is focused on the clinical application of whole genome technologies and the study of rare genetic diseases. He is currently the Secretary of the Asia Pacific Society of Human Genetics.

Genomic medicine is an emerging medical discipline that involves using genomic information about an individual as part of their clinical care and the health outcomes and policy implications of that clinical use. Its impact in clinical care depends significantly on the successful translation and integration of cutting-edge whole genome technologies from bench to bedside. To maximize this potential, approaches to genetic counseling will need to adapt to fit the changing needs. This will require overcoming multiple challenges including an inadequate workforce; development and implementation of tailor-made models of service delivery to different communities; and integration of new technologies to improve, extend, and expand services. The result will be the empowerment of patients and families to utilize genetic information appropriately, making autonomous decisions about their care, and modifying their approach to disease risk to actively contribute to their health.

In this talk, we shall discuss the following:-

- Genetic/Genomic issues encountered in primary care
- 2. The development of Genomic Medicine around the world
- 3. Genetic counselling in the era of Genomics Medicine
- 4. Are we ready for genomic medicine in Hong Kong?





## Workshop 1

Saturday, 7 December 2019 • 16:30 – 18:00 • Function Room 1 (2/F)

## **Jaw Pain - Temporomandibular Joint Dysfunction**



Dr. Andrew MW WAI

MBBS (HK), MMedSc (HK), MMed (DR) NUS, FRCR, FHKCR, FHKAM (Radiology)

Specialist in Radiology

Dr. Andrew Wai is a medical graduate of the University of Hong Kong. He completed his residency and radiology fellowship training at the Queen Elizabeth Hospital. During which time he underwent research fellowship in musculoskeletal radiology at the Thomas Jefferson University (USA).

Since then, he also completed clinical fellowships in MRI in the University College of London (UK), as well as in PET-CT, PET-MRI and functional imaging at the University Hospital of Zurich (Switzerland) respectively.

He was previously a consultant radiologist at the Union Hospital and the Adventist Hospital Group. He is currently working at the Dr. Roentgen & Partners Medical Imaging in Central.

Dr. Wai specializes in musculoskeletal, sports and biomechanics imaging. He regularly delivers lectures and workshops to family physicians, sports physicians, radiologists and orthopaedic surgeons.



Dr. Miko CM LO
BDS (HKU), FRACDS, MOMS (Edin), FCDSHK (Oral and Maxillofacial Surgery), FHKAM (Dental surgery)

Dr. Lo graduated from the University of Hong Kong with a Bachelor of Dental Surgery. She is the fellow of College of Dental Surgeon of Hong Kong and a specialist in Oral and Maxillofacial Surgery. She also obtained Fellowship of the Royal Australian College of Dental Surgeons and Membership in Oral and Maxillofacial Surgery of Royal College of Surgeons (Edinburgh). Currently, she is the Senior Dental Officer in Prince of Wales Hospital and provides care to patients with TMJ problems.



Mr. Chris CH CHAN
PDPT MSPT OCS MCPA
Director of APS Physiotherapy and Sports Clinic

Specialist in Oral & Maxillofacial Surgery

Chris graduated from Hong Kong Polytechnic University (HKPolyU) in 1989. He qualified as an "Orthopedic Clinical Specialist" by APTA and obtained his master's degree in 2001 in USA. He was employed by the HKPolyU as assistant manager in the Rehabilitation clinic in 2003 and worked as the Deputy Director in the Sports Unit of Rehabilitation Clinic in HKPolyU in 2009. In 2010, Chris was employed by the Guangdong Sports institute to help the Chinese elite competitors in preparation for the 2012 London Olympic Games and 2013 China Games.

Chris has operated his Central clinic since 2011 and established the MotionMetrix and Sports institute in 2019.



Ms. Ida F LAM

MSc Exercise Science (CUHK)

Physiotherapist

Ms. Ida LAM is a registered physiotherapist with a Master degree on Exercise Science in CUHK. She has a keen interest in exercise industry and attained qualifications in clinical Pilates, personal training and aqua fitness. She served various specialties in public hospital for over 10 years and is now working in private.

Have you ever seen any patient presenting with jaw pain? Do you know how to properly examine the temporomandibular joint (TMJ)? What types of disorder could happen in this joint and what should be the management?

Jaw pain is a common presenting symptom in the primary care setting, both in the medical and dental offices. However, the commonest cause – Temporomandibular Joint Dysfunction (TMD) may not be familiar to some frontline health care workers. Although not life-threatening, TMD can be detrimental to the quality of life particularly when it becomes chronic and difficult to treat.

Apart from pharmacological treatment, do you know how to teach your TMD patients to do jaw exercise? Do you know how to perform close reduction on a dislocated TMJ? Are there any intervention or surgery for difficult cases? How to investigate on a suspected TMD? There are many different imaging modalities for the TMJ. But sometimes just a simple ultrasound can already give you very helpful information instantly at your clinic. Do you know how to do it?

By attending this workshop, you will have answers to all these queries. You will have a better understanding on how to manage TMD. Moreover, there will be live demonstration on using ultrasound to assess the TMJ and you may even try it! Interesting cases of TMD will also be shared by our expert panel of speakers. So, don't miss this excellent chance. Come and join us. Reserve your seat early! See you by then.





## Workshop 2

Sunday, 8 December 2019 • 09:00 – 11:00 • James Kung (2/F)

## **Academic Research Writing**



**Professor Martin CS WONG** 

MBChB (CUHK), MD (CUHK), FRACGP

Editor-in-Chief, Hong Kong Medical Journal; Editor, Hong Kong Academy of Medicine

Professor Martin CS Wong is a specialist in Family Medicine with a research interest in cancer screening and prevention. He is Co-Chairman of the Grant Review Board of the Health and Medical Research Fund (HMRF), the Food and Health Bureau; a Reviewer of the Medical Research Council (MRC), the United Kingdom; Expert Reviewer of the National Medical Research Council (NMRC) and Health Services Research Grant, Ministry of Health, Singapore. Prof. Wong has published over 300 journal articles, and received over ten research awards in the discipline. He is currently the Co-Chair of the NCD stream, Association of the Pacific Rim Universities, actively promoting global collaborative research.



**Professor Doris YOUNG** 

MBBS (Melb), MD (Melb), FRACGP

Head, Department of Family Medicine, National University Health System

Professor Doris Young has over 35 years' experience educating and training medical students, registrars, general practitioners and other health professionals in adolescent medicine, general practice and primary care research. She has published widely on General Practice integration models with the wider healthcare system. Her research focussed on trialling innovative models of care in the primary care setting to improve health outcomes for people with chronic diseases in culturally and linguistically diverse and disadvantaged communities. She is currently a Professor and Head of the new Department of Family Medicine at the National University Health System, Singapore.



Mr. Alan PURVIS

BEng (Hons)

Managing Editor, Hong Kong Medical Journal and Hong Kong Academy of Medicine Press

Mr Alan Purvis is the Managing Editor of the Hong Kong Medical Journal and HKAM Press, which also publishes the Asian Journal of Gerontology and Geriatrics, East Asian Archives of Psychiatry, Hong Kong Journal of Gynaecology, Obstetrics and Midwifery, Hong Kong Journal of Ophthalmology, and Hong Kong Journal of Radiology. Mr Purvis has >10 years' experience working in Asia with non-native English speakers, and has helped the authors of >1000 research papers achieve their publication goals. Mr Purvis is a Professional Member of the Society for Editors and Proofreaders and a member of several other societies dedicated to promoting best practices in scholarly publishing (EASE, CSE, ISMTE, and ISMPP).

English has become the de facto 'language of science', with more than 80% of scholarly works published in English. Authors are also often under pressure not only to publish their research but also to maximise their 'impact'. Papers published in English tend to attract higher citation rates, so naturally authors are motivated to use English. However, communicating complex scientific, technical, or medical research in a clear and concise way is hard, even for native English speakers. Thus, it is a particular challenge for the 95% of the world population who are non-native English speakers. In addition to the difficulties in writing the manuscript, non-native authors face further obstacles during the submission and review processes used by many journals.

This workshop will present some of the key challenges faced by non-native English authors when writing and submitting articles to medical journals. Topics will include preparing research papers for submission to medical journals, maximising the chance of acceptance in your chosen journal, and using English to communicate your research clearly and concisely. The workshop will provide practical advice and examples that will help you achieve your publication goals.





## Workshop 3

Saturday, 7 December 2019 • 11:30 - 12:30 • ILCM (7/F)

## **Decision Making at the Sharp End**



#### **Professor George KC WONG**

MB ChB (CUHK), FHKAM (Surgery), FCSHK, FRCSEd (SN), FACS, MD (CUHK), LLM (Arb&DR) (HKU), FCIArb. CHSF

Honorary Deputy Director and Chairman of Education Subcommittee, The Hong Kong Jockey Club Innovative Learning Centre for Medicine

Professor Wong is Professor (Clinical) and Consultant (Honorary) in Division of Neurosurgery, Department of Surgery, Prince of Wales Hospital, and the Chinese University of Hong Kong. After completing IMS simulation instructor course, he furthers his training in team and interdisciplinary simulation as a Boston CMS Scholar. Professor Wong is also a Certified Healthcare Simulation Educator of the Society of Simulation in Healthcare. George now serves the Hong Kong Jockey Club Innovative Learning Centre for Medicine of Hong Kong Academy of Medicine as Honorary Deputy Director, Chairman of Education Subcommittee, Operation Committee Member, Research and Development Subcommittee Member, and Faculty of Comprehensive Simulation Educator Course. Professor Wong also serves the College of Surgeons of Hong Kong through his dedications in Basic Surgical Skill Course, Sedation Safety Course intercollegiate working group, Simulation working group, Acute Abdomen module working group, and Communication module working group. Professor Wong is also a programme committee member of the Hospital Authority Clinical Core Competency Course.



#### **Dr. Tony TN CHAN**

MBBS (HKU), FHKAM (EM), FHKCEM, MHM (UNSW)

Consultant, Accident and Emergency Department, Kwong Wah Hospital Honorary Deputy Director and Chairman of Research & Development Subcommittee The Hong Kong Jockey Club Innovative Learning Centre for Medicine

Dr. Chan is Consultant of the Accident and Emergency Department of the Kwong Wah Hospital. He is a Fellow of the Hong Kong College of Emergency Medicine. Dr. Chan was a Visiting Scholar at the Center for Medical Simulation in Boston. His involvement in developing simulation courses for doctors and nurses, teaching emergency USG courses, AHA courses and simulation instructor courses reflect his special interest in training and teaching. He is the Honorary Deputy Director of the Kwong Wah Hospital Multidisciplinary Simulation Training Centre and the Chairman of the Research and Development Subcommittee of the Hong Kong Jockey Club Innovative Learning Centre for Medicine of Hong Kong Academy of Medicine.



#### Mr. Graham BARKUS

BA (Hons), Dip Clin&Org Psych (INSEAD), MCCC (INSEAD), Dip SI (Oxon), LLM (Arb&DR) (HKU), MCIArb Managing Partner, The Human Factor Ltd

Mr. Barkus is Managing Partner of The Human Factor Ltd, a Hong Kong-based coaching and consulting practice that guides people and organisations through personal, organisational and systemic change. The Human Factor approach brings together coaching, facilitation and dispute resolution techniques to address the interplay between work and human well-being, in the service of achieving and sustaining a step-change in performance.

Mr. Barkus's 30 years of experience has spanned employment and consultancy roles to clients across Asia and the UK/Europe, in diverse industries including banking and finance, insurance, aviation, logistics, healthcare, real estate development and FMCG.

Mr. Barkus holds postgraduate degrees with distinctions in Clinical Organisational Psychology (INSEAD); Strategy & Innovation (University of Oxford), and an LLM in Arbitration and Dispute Resolution from the University of Hong Kong. He is a Founding Fellow at the Institute of Coaching at Harvard University and an Associate Fellow at Saïd Business School at the University of Oxford.

Considerable attention has been directed recently towards error prevention in healthcare. One of the vulnerabilities to error is in decision making by clinicians. Classical decision-making theory assumes static, well-defined problems facing decision makers who are fully rational and are fully informed regarding all options and possible outcomes. In crisis situations, clinicians are required to make time-pressured decisions under high uncertainty and with shifting goals. This Workshop introduces participants to pitfalls in decision making and factors affecting the thinking process under such conditions.





## Lunch Symposium 1 Saturday, 7 December 2019 • 12:30 – 14:00 • Run Run Shaw Hall (1/F)

## **Management of Osteoporosis in Primary Care**



Dr. Charles F CHAN

MBBS (H.K.), MRCP (U.K), FHKCP, FHKAM (Medicine), Dip Ger Med RCPS (Glasg)

Specialist in Geriatric Medicine; Honorary Clinical Assistant Professor, Department of Medicine and Department of Family Medicine and Primary Care, The University of Hong Kong

Dr. Chan Fei, Charles is a specialist in Geriatric medicine and Honorary Clinical Assistant Professor in the Department of Medicine and Department of Family Medicine and Primary Care, The University of Hong Kong. He received his medical degree (M.B.,B.S.) from The University of Hong Kong, and received training in Geriatric medicine and Advance Internal Medicine in the Department of Medicine, Queen Mary Hospital. He became a Fellow in Geriatric Medicine in 2011.

He has special clinical interest in Alzheimer's disease, Parkinsonism and Ortho-geriatric care. In 2017, he had overseas training in geriatric medicine and attached to different hospitals in UK include the Leeds University Teaching Hospital, the Cambridge University Teaching Hospital and the Poole Hospital.

Before he left Hospital Authority, he was the Associate consultant and the clinical lead in Ortho-geriatric and in-patient End-of-life Service in Fung Yiu King Hospital (FYKH) and MacLehose Medical Rehabilitation Centre (MMRC).

Osteoporosis poses a huge burden to our society and impact quality of life in patients with fracture. Fragility fractures also are a major cause of morbidity and mortality in older adults. The primary goal of osteoporosis treatment is prevention of fractures, and several pharmacological options have been shown to reduce this risk. As osteoporosis is a chronic condition, the optimal duration of treatment is an important decision that depends on the repeated evaluation of individual fracture risk.

However, low diagnosis rate in osteoporosis render many high risk patients do not receive adequate management. Challenges include implementation of local screening protocols, which may include fracture risk scoring system that combine clinical risk factors +/- DXA to diagnose osteoporosis patients and are also feasible to be done in primary care settings as to provide osteoporosis treatment to highrisk patients before fractures. Recent understanding of bone remodelling and different anti-osteoporosis pharmacological options will also be discussed.





Lunch Symposium 1 Saturday, 7 December 2019 • 12:30 – 14:00 • Run Run Shaw Hall (1/F)

## Leading the Shift of T2DM Paradigm: Role of SGLT2i Beyond Glucose Control



#### Dr. Peter CY TONG

PhD, MBBS, BPharm, FRCP (London, Edinburgh), MRCP, FHKCP, FHKAM

Specialist in Endocrinology, Diabetes & Metabolism

Dr. Peter Tong is a Specialist in Endocrinology, Diabetes & Metabolism.

Dr. Tong is a Clinical Associate Professor (Honorary) in the Jockey Club School of Public Health and Primary Care, The Chinese University of Hong Kong, and is a Past President of the Hong Kong Society of Endocrinology, Metabolism and Reproduction. He was a Professor in the Department of Medicine & Therapeutics, The Chinese University of Hong Kong. Dr. Tong was a co-founder of Qualigenics Medical Limited, a technology transfer and health promotion programme company established by the Chinese University of Hong Kong and an industrial partner collaboration. His previous position was the Medical Director of Raffles Medical (Hong Kong) Limited.

Dr. Tong obtained a First Class Honours degree in Pharmacy from The University of Bradford, UK. He received his MBBS (Bachelor of Medicine) and PhD degrees from The University of Newcastle upon Tyne, UK. He has been a UK Medical Research Council Clinical Research Training Fellow, and also received a Peel Travelling Fellowship for his postdoctoral fellowship at the Hospital for Sick Children in Toronto, Canada.

Dr. Tong's research areas include disease management models of diabetes, diabetic kidney disease, obesity, the cellular mechanism of insulin resistance, and the use of traditional Chinese medicine in the treatment of diabetes. His work has been published in many international peer-reviewed scientific journals.

For decades the approach to treat diabetes has been focusing on glycemic control and reduce microvascular complication, however cardiovascular disease (CVD) remains the major leading cause of morbidity and mortality in this population.

Sodium glucose co-transport 2 inhibitor (SGLT2i) blocks the glucose transport at proximal tubule in the kidney and facilitate glycemic level by increase urinary glucose excretion, it also improves several metabolic parameters, including blood pressure, body weight and serum uric acid level. This class of therapeutic agent may also potentially modulate cardiac and renal function via its effects on atherosclerosis, inflammation, oxidative stress, diuresis, renal hemodynamic effect, myocardial function, vascular resistance and 'fuel' metabolism.

The EMPA-REG OUTCOME study, the first published large dedicated CV outcome SGLT2i trial, with the aim to verify CV safety, has revealed significant relative risk reductions of 38% in CV death; 32% in all-cause mortality and 35% in hospitalization for heart failure (HHF) in T2DM patients with established CVD.

In addition, subgroup analysis has found the overall results to be consistent even in Asian population.

As diabetic nephropathy (DMN) is the leading cause of kidney damage and end-stage renal disease (ESRD), also one of the complication that is most devastating to patients' quality of life and survival, therefore it is also worth noting empagliflozin can substantially reduce incident or worsening of nephropathy by 39%; progression to macroalbuminuria by 38%; doubling of serum creatinine ≤ eGFR 45 by 44%; time to first initiate of continuous renal replacement therapy by 55%

Further analysis also demonstrated a lower rate of heart failure readmission, in patients treated with empagliflozin. In the real world setting, EMPRISE study showed that the initiation of empagliflozin was associated with an approximate 40% decrease in risk of HHF, compared with dipeptidyl peptidase-4 (DPP4) inhibitors. Although the exact mechanism of CV benefits of SGLT2i remain uncertain, it appears not to be solely contributed by its glucose-lowering effect.

The recent EASD/ADA consensus statement suggests that in T2DM patients with atherosclerotic CVD, HF or chronic kidney disease, a different approach with a preferential use of glucagon-like peptide-1 receptor agonist or SGLT2i are recommended. The robust and consistent evidence on CV risk reduction demonstrated by the class of SGLT2i supports its wide clinical utilization in T2DM patients. However, clinicians should weigh these benefits against the potential side effects or risks associated with SGLT2i, such as an increase in urogenital infection and a possibility of developing euglycemic diabetic ketoacidosis, prior to the commencement of this class of oral anti-diabetic agent in our patients.





Dinner Symposium Saturday, 7 December 2019 • 18:00 – 19:30 • Run Run Shaw Hall (1/F)

## Influenza Infection, Cardiac Complication, **Treatment and Prevention**



#### **Professor Ivan FN HUNG**

MBChB (Brist), MD (HK), MRCP (UK), FRCP (Lond), FRCP (Edin), FHKCP FHKAM (Medicine), PDipID (HK)

Ru Chien and Helen Lieh Endowed Professor in Health Sciences Pedagogy, Clinical Professor; Assistant Dean (Admissions), Chief of the Division of Infectious Diseases, Department of Medicine, LKS Faculty of Medicine, The University of Hong Kong; Honorary Consultant in Queen Mary Hospital,

Professor Ivan Fan Ngai HUNG is currently Ru Chien and Helen Lieh Endowed Professor in Health Sciences Pedagogy, Clinical Professor and Assistant Dean (Admissions), Chief of the Division of Infectious Diseases, Department of Medicine, LKS Faculty of Medicine, The University of Hong Kong, and Honorary Consultant in Queen Mary Hospital, Hong Kong. Professor Hung is a dual specialist in Infectious Disease and Gastroenterology & Hepatology. He obtained his medical degree from the University of Bristol Medical School, England in 1996. After working in the University of Cambridge Medical School and Charing Cross Hospital, the Imperial College Medical School, London, he returned to Hong Kong in 1999 and joined the Department of Medicine, Queen Mary Hospital. He obtained his M.D. degree from HKU in 2011 and was awarded the Sir Patrick Manson Gold Medal award for best M.D. thesis. He was awarded the Richard Yu Lectureship and medal in 2016 by the Hong Kong College of Physicians. He is currently the Fellow of Royal Colleges of Physicians of London and Edinburgh.

Professor Hung has published more than 180 international peer reviewed original articles, including research articles in the Lancet, the Lancet Infectious Diseases and the Clinical Infectious Diseases. He and his team have pioneered the use of topical imiquimod before intradermal influenza vaccination, which results in protection against heterologous nonvaccine and antigenically drifted viruses. His team was also the first to prove convalescent plasma and H-IVIG reduced mortality in patients with severe influenza infection in prospective clinical trials. He is ranked as HKU Scholars in the world top 1% in 2013 and 2018.

Influenza poses a heavy burden to both global and local health services. The WHO estimated half a million death worldwide annually is secondary to influenza infection and its complication. Elderly subjects, young children and patients with chronic illness are at high risk in acquiring severe influenza infection. Recent studies have demonstrated that patients with influenza infection are at risk of developing cardiac complications. Such complications could be prevented by annual seasonal influenza vaccination. Unfortunately, in Hong Kong, influenza vaccination rate has been low among high risk patients and subjects. Therefore, strategies to improve the and expand the antigenic breadth, immunogenicity, clinical efficacy and vaccination rate will be of utmost importance.

In the treatment of influenza infection, the new endonuclease inhibitor baloxavir marboxil has proven to be a potent antiviral agent. Other adjunctive therapy including convalescent plasma, hyperimmune IVIG, clarithromycin and NSAIDs have been studied and proven to improve the clinical outcome in severe influenza infection when given with oseltamivir.

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## Dinner Symposium Saturday, 7 December 2019 • 18:00 – 19:30 • Run Run Shaw Hall (1/F)

## **Voluntary Health Insurance Scheme (VHIS):** The New Health Insurance Landscape



Dr. Alexander CHIU MBChB(CUHK), MRCP(UK), FHKCP, FHKAM(Med), FRCP (Edin) MEDICAL DIRECTOR, Health and Employee Benefits, AXA Hong Kong

Alexander Chiu is Medical Director of AXA Hong Kong, taking the lead for Payer to Partner strategy, overseeing clinical governance of health services, implementing best practices and cost-effective healthcare as well as designing and delivering population health management programmes.

Prior to joining AXA Hong Kong, Alex was Chief Operating Officer in Gleneagles Hong Kong Hospital, who led the clinical operations and business development.

Alex's career in healthcare spans across public and private sectors. He has practised as a physician for 17 years before embarking on a career in health administration. Previous roles include being Service Director for Quality and Safety at Queen Mary Hospital, Chief Manager for the Department of Quality and Standards at Hospital Authority Head Office, Chief Manager for the Department of Integrated Care Program at Hospital Authority Head Office, and Executive Medical Director of Quality Healthcare Medical Services Limited.

Alex holds a medical degree from The Chinese University of Hong Kong and was a critical care physician by training. He is a member of the Royal College of Physicians of the United Kingdom and a fellow of the Hong Kong College of Physicians, the Hong Kong Academy of Medicine and the Royal College of Physicians of Edinburgh.

After more than 7 years of deliberation, the voluntary health insurance scheme (VHIS) was finally inaugurated in April 2019. At present there are 27 insurance companies that participated in the program, with more than 50 different insurance plans registered at the VHIS office. To survive in a very competitive market, many of the benefits and services offered by individual companies have exceeded the basic requirement laid out by the Food and Health Bureau, providing a wide variety of choice for customers of different budget and need. Furthermore, the massive campaigns launched by insurance companies has successfully increased the awareness of Hong Kong people for the need of health protection. From the industry perspective, the standardization of terms in VHIS has enhanced the transparency of insurance products, increasing the confidence of the public. Finally, the new VHIS policy terms are more explicit with less obscurity, creating positive impact in underwriting and claim practices which benefit both the insurers and the insured.





## Dinner Symposium |

Saturday, 7 December 2019 • 18:00 – 19:30 • Run Run Shaw Hall (1/F)

## **Better Asthma Management Strategies**



#### **Dr. Jamie CM LAM**

BSc (Med), MBBS (UNSW), MD (HKU), MRCP (UK), FRCP (Edinburgh, Glasgow), FCCP, FHKCP, FHKAM (Medicine)

Consultant Physician in Respiratory Medicine

Dr. Lam is a Specialist in Respiratory and Sleep Medicine. She underwent fellowship training in respiratory and sleep medicine at Queen Mary Hospital, The University of Hong Kong. She obtained a Hong Kong Lung Foundation Fellowship Grant to pursue further training at the Woolcock Medical Research Institute and Royal Prince Alfred Hospital in Sydney, and was awarded her Doctor of Medicine degree with Sir Patrick Manson Gold Medal in 2009.

Dr. Lam is the Past President of the Hong Kong Society of Sleep Medicine and a council member of American Chest Delegation (Hong Kong & Macau Chapter). She has worked as a respiratory and sleep physician in Queen Mary Hospital before, and is currently working as the Honorary Consultant in Respiratory Medicine Centre, Hong Kong Sanatorium & Hospital. She has also been appointed as Honorary Clinical Assistant Professor at the University of Hong Kong and Honorary Associate Professor at the Chinese University of Hong Kong, actively involved in clinical services, undergraduate and postgraduate teaching as well as research projects in the field of respiratory and sleep medicine.

Asthma is an airway disease with typical presenting symptoms – coughing, wheezing, chest tightness or shortness of breath. It is defined as a reversible obstructive disease due to airway hyper-reactivity. Our understanding of asthma has evolved over time from a single medical disease to a complex of multiple phenotypes. This heterogeneity has led to challenges in different management approaches.

From the early established treatments of asthma with inhaled bronchodilators, anti-inflammatory or biologic therapies, the treatment outcomes were variable. More and more patient characteristics were identified in order to tailor-made better asthma management. Apart from clinical phenotyping, molecular disease pathways have been identified in different patient groups who have better responses to certain asthmatic therapies. The presence of eosinophils in both the sputum and blood has been implicated in the assessment of airway eosinophilic inflammation and treatment outcomes.

Eosinophilic inflammation is present in a significant proportion of patients with severe asthma and is associated with acute exacerbations. In the past few years, many clinical studies have used blood eosinophil measurements as a surrogate biomarker to indicate treatment response. Anti-IgE therapy inhibits the release of inflammatory mediators from mast cells and diminished recruitment of eosinophils and other inflammatory cells into the airways. And, anti-IL 5 biologic therapy has been developed to target for severe, uncontrolled eosinophilic asthma recently.

It has become increasingly recognized that asthma is a heterogeneous disease with multiple phenotypes representing different pathologies, presentations and treatment outcomes. It is important to characterize these phenotypes for targeted and individualized therapies for asthmatic patients.





## Lunch Symposium 2

Sunday, 8 December 2019 • 12:00 – 13:30 • Run Run Shaw Hall (1/F)

## New landscape of Diabetes Management



#### **Professor Ronald CW MA**

BA (Cantab), MB BChir (Cantab), MA (Cantab), MRCP (UK), FHKCP, FHKAM (Medicine), FRCP (Edin), FRCP (Lond)

Professor, Department of Medicine and Therapeutic, School of Medicine,
The Chinese University of Hong Kong;
Hongrany Consultant Physician, Head of Division of Endocripology and Diabet

Honorary Consultant Physician, Head of Division of Endocrinology and Diabetes, Prince of Wales Hospital, Hong Kong

Ronald Ma is Professor at the Department of Medicine and Therapeutics, Chinese University, Hong Kong and Honorary Consultant Physician, Head of Division of Endocrinology and Diabetes, Prince of Wales Hospital, Hong Kong.

Prof. Ma completed his medical training at the University of Cambridge, UK and trained in Internal Medicine in London. He subsequently returned to Hong Kong, where he completed his endocrinology fellowship training. Through support from a Croucher Foundation Fellowship, he furthered his research interest in the area of diabetic complications at the Joslin Diabetes Center, Harvard Medical School, Boston, USA, under the mentorship of Professor George King.

Prof. Ma's research focuses on the epidemiology and genetics of diabetes and its complications, gestational diabetes, polycystic ovary syndrome, and endocrine disorders. He is currently leading a mutli-disciplinary project team to leverage on the large Hong Kong Diabetes Register and accompanying biobank to identify novel molecular markers for diabetic complications, and is the principal investigator of the Hong Kong Diabetes Biobank. His laboratory is also undertaking multi-omics studies in GDM. He has published over 280 research articles in international peer-reviewed journals including Nature, Nature Genetics, Lancet, JAMA, Lancet Diabetes and Endocrinology Diabetes and Kidney International, and authored 11 book chapters. Prof. Ma is a recipient of several awards, including the Young Investigator Award from the International Diabetes Epidemiology Group (IDEG), Ten Outstanding Young Persons Award, Hong Kong (2009), the Albert Renold Fellowship from the European Association for the Study of Diabetes (2010), the Research Excellence Award (2011) and the Outstanding Fellowship of Faculty of Medicine from the Chinese University of Hong Kong (2014), and the Sir David Todd Lectureship from the Hong Kong College of Physicians (2015).

Prof. Ma is a Past President of the International Diabetes Epidemiology Group (IDEG), a Past President of Diabetes Hongkong and the Hong Kong Society of Endocrinology, Metabolism and Reproduction (HKSEMR), a member of the Executive Board, the Asian Association for the Study of Diabetes (AASD) and Council Member of the International Society for Developmental Origins of Health and Disease (DOHaD). He has served on the World Health Organization Working Group on Science and Evidence to End Childhood Obesity (ECHO), and is a member of the International Federation of Gynaecology and Obstetrics (FIGO) Pregnancy and NCD Committee. He is a Regional Editor of Diabetic Medicine, and editorial board member of PLoS Medicine, Obesity Reviews, Nutrition, Metabolism and Cardiovascular Diseases, and Journal of Diabetes Investigation.





## Lunch Symposium 2 Sunday, 8 December 2019 • 12:00 – 13:30 • Run Run Shaw Hall (1/F)

## Target Therapy (CGRP monoclonal antibodies) for Intractable Migraine



Dr. Jason KY FONG MBBS, MRCP, FHKCP, FHKAM (Medicine), FRCP (Edin), FRCP(Lond) Specialist in Neurology; Consultant Neurologist, HK Adventist Hospital

Dr. Fong graduated from the University of Hong Kong in 1986 with further post-graduate training in Neurology and Epilepsy at the Institute of Neurology, Queen Square, University of London. Dr. Fong was appointed chief of Division of Neurology at the Department of Medicine, University of Hong Kong from 1995 to 1996 and is currently in private practice. He was appointed Honorary Consultant in Neurology at Ruttonjee and Tang Siu Kin Hospital in 2001 to improve the standard of service in epilepsy and supervise post-graduate training in Neurology. Dr. Fong pioneered the formation of the Hong Kong Epilepsy Society which was inaugurated in 2003. He was elected President, Hong Kong Epilepsy Society, from 2005 to 2009.

Migraine is a common medical condition and one of the leading cause of disability worldwide. Many patients have a severe unilateral throbbing headache, which sometimes can be bilateral or generalised (20%). Common associated features include nausea with vomiting, light sensitivity (photophobia), sound sensitivity (phonophobia), and visual aura which can persist after the pain goes away. Migraine is usually treated by painkiller (e.g. NSAID, paracetamol, triptans) but analgesic overuse can be problematic given the frequent recurring nature of migraine. Migraines generally don't get worse over time but serious complications may rarely occur e.g. status migrainosus, stroke, seizures, anxiety and depression.

Drug treatment of migraine includes acute and preventive treatment of attacks. Commonly used preventive treatments for episodic migraine include β blockers (mainly propranolol and metoprolol), antiepileptic drugs (mainly topiramate and valproate), and antidepressants (eg, amitriptyline, dothiepin). About 45% patients on prophylaxis have more than 50% reduction in migraine frequency, but compliance to long term treatment is variable due to troublesome side effects. In addition, these medications were developed for other indications rather than for a target specific for migraine pathophysiology. Many patients are therefore suboptimally treated and experience high disability and impaired quality of life.

On the other hand, Calcitonin gene-related peptide (CGRP) is involved in the pathophysiological mechanism underlying migraine through nociceptive mechanisms in the trigeminovascular system. CGRP is a neuropeptide which is a target for migraine preventive therapies. The role of CGRP in migraine was shown in phase 2 and phase 3 clinical trials of small-molecule CGRP-receptor antagonists in acute migraine and is further supported by phase 2 and phase 3 trials of monoclonal antibodies targeting the CGRP pathway, which suggests that the pathway could be a target for preventive migraine treatment.





## **CLINICAL CASE PRESENTATION COMPETITION –**

## **Schedule**

### 8 December 2019 (Sunday) • Lim Por Yen Lecture Theatre

TIME	TOPIC	PRESENTING AUTHOR		
09:10 - 09:25	A patient with Injury on duty(IOD)  Dr. KWAN Sin Man			
09:25 - 09:40	A Feverish Infant in my Room	Dr. YANG Jing		
09:40 – 09:55	Lipid management in the primary care: Common pitfalls and how to avoid them?	Dr. CHEN Xiao Rui, Catherine		
09:55 – 10:10	Kneecap recap	Dr. LEUNG Lok Hang		
10:10 – 10:25	A Nepalese patient at a Primary care clinic	Dr. WAN Ming Shing		





## FREE PAPER COMPETITION -

## **Schedule of Oral Presentation**

### 7 December 219 (Saturday) • Function Room 2, 2/F

TIME	TOPIC	PRESENTATION GROUP		
16:30 - 16:42	Age-specific associations of Usual Variability of Systolic Blood Pressure with Cardiovascular Disease and Mortality in Patients with Diabetes – A Hong Kong Primary Care Diabetes Cohort Study	Dr. WAN Yuk Fai, Eric		
16:42 - 16:54	Can Family Physician in Hong Kong provide quality colonoscopy after structural endoscopy training?	Dr. CHAN Kin Wai		
16:54 - 17:06	Mental Health and Health-related Quality of Life of Low- Income Families in Hong Kong	Ms. YEUNG Maegan Hon Yan		
17:06 - 17:18	Cardiovascular risk factor control and diabetic complication study of schizophrenic diabetic patients: what primary care doctors need to know?	Dr. KWONG Sheung Li		
17:18 - 17:30	Is hand-held spirometric device (COPD 6) a reliable tool to detect chronic obstructive pulmonary disease (COPD) in general outpatient clinics in Hong Kong?	Dr. LEUNG Ching Ching		
17:30 - 17:42	Effect of deprescription clinic on the functional capacity of Chinese elderly patients with polypharmacy: a study from the primary care setting	Dr. WONG Sze Kei		
17:42 - 17:54	An exploration of the long-term impact of a Health Empowerment Programme on self-care enablement and health outcomes of Hong Kong Chinese adults of low socioeconomic status	Dr. Laura BEDFORD		

#### **ORAL 001**

Age-specific associations of Usual Variability of Systolic Blood Pressure with Cardiovascular Disease and Mortality in Patients with Diabetes – A Hong Kong Primary Care Diabetes Cohort Study

Eric Yuk Fai Wan, PhD<sup>1</sup> <sup>2\*</sup>, Esther Yee Tak Yu, MBBS<sup>1</sup>, Weng Yee Chin, MD<sup>1</sup>, Shiqi Chen, BSocSc<sup>1</sup>, Cindy Lo Kuen Lam, MD<sup>1</sup>

<sup>1</sup>Department of Family Medicine and Primary Care, the University of Hong Kong

#### **Objective:**

The detrimental effects of increased variability in systolic blood pressure (SBP) on the risk of cardiovascular disease (CVD) and mortality remains unclear in patients with type 2 diabetes mellitus (DM). This study aimed to evaluate the age-specific association of usual variability of SBP with CVD and mortality in DM patients.

#### **Research Design and Methods:**

A retrospective cohort study was conducted on 155,982 Chinese primary care diabetic patients aged 45-84 years with no prior diagnosis of CVD at baseline (2008-2010). Usual SBP variability was estimated based on the standard deviations of SBP using a mixed effects model adjusted for regression dilution bias. Age-specific associations (45-54, 55-64, 65-74, 75-84 years) between the usual SBP variability and risk of CVD and mortality were assessed by Cox proportional hazards regression adjusted for patient characteristics. Subgroup analyses were conducted stratified by subject baseline characteristics.

#### **Results:**

After a median follow-up of 9.7 years (16.4 million person-years), there was an overall of 49,816 events, including 34,039 CVD events and 29,211 mortalities. Elevated usual SBP variability and independently usual SBP, were positively and log-linearly associated with a higher risk of CVD and mortality among DM patients, with no evidence of a threshold. Each 5mmHg increase in usual SBP variability was associated with 27% (HR: 1.27 [95% CI 1.23-1.32]), 30% (HR: 1.30[95% CI 1.25-1.35]), and 26% (HR: 1.26[95% CI 1.23-1.30]) increased risk for CVD, all-cause mortality, and their composite, respectively. The significant associations remained consistent among all subgroups, while HRs were raised with males, younger age, smokers and greater number of types of anti-hypertensive medications prescribed.

#### **Conclusions:**

The findings from this population-wide cohort study suggests that SBP variability was strongly related to CVD and mortality with no evidence of a threshold. In addition to aiming for optimal BP control, clinicians should also pay attention to the SBP variability.

#### **Keywords:**

Diabetes; Blood pressure; Variability; Cardiovascular Disease; Mortality

<sup>&</sup>lt;sup>2</sup>Department of Pharmacology and Pharmacy, the University of Hong Kong

#### **ORAL 002**

## Can Family Physician in Hong Kong provide quality colonoscopy after structural endoscopy training?

Chan KW<sup>1</sup>, Tsang CF<sup>1</sup>, Yiu MP<sup>1</sup>, Lai PY<sup>1</sup>, Cheung WW<sup>1</sup>, Chan CW<sup>1</sup>, Yiu YK<sup>1</sup>, Luk W<sup>1</sup>, Cheung WI<sup>2</sup>, Wong WC<sup>2</sup>, Chiu YW<sup>3</sup>, Lau CN<sup>3</sup>, Wong KW<sup>4</sup>

#### Introduction:

Colorectal cancer is the leading cancer in Hong Kong and with screening program launched; demand for endoscopy has been increasing. Family physicians in the Kowloon West Cluster of the Hospital Authority have started providing lower GI endoscopy service since 2008. With years of development, the system has been solidly established; incorporating structured training, credentialing and quality assurance.

#### Methods:

- 1. Candidates recruited are registered specialists in family medicine (FM).
- 2. Candidates participated the workshop in endoscopy and safe sedation, organized by the university or HA.
- 3. Candidates received hands-on skill training organized by the university or under attachment program in an HA hospital, and passed the appraisal by supervisor(s).
- 4. Candidates then started performing flexible sigmoidoscopy under supervision for 150 patients, followed by colonoscopy for another 150 patients, before credentialed as competent to perform colonoscopy independently.
- 5. Quality assurance to monitor ongoing performances.

#### **Results:**

Under the structured training program, we have successfully established a team of 5 endoscopists. All have been credentialed for performing flexible sigmoidoscopy and 3 for colonoscopy in a regional public hospital under HA. From 2016 to 2018, the team had performed 1946 colonoscopies and >900 flexible sigmoidoscopies. In terms of quality of colonoscopy, the team had achieved international benchmark, with 95% caecal intubation rate (international benchmark >90%) and no perforation or mortality reported. Cancer was detected in 3% and adenomatous polyp in 29% of cases. There were 2 cases of post-polypectomy bleeding (0.1%). Both had baseline thrombocytopenia with platelet count <100 (eventually with bleeding controlled and no further consequences).

#### **Conclusions:**

With structured training provided by the university and HA, family physicians can develop skills in lower GI endoscopy and eventually be competent to provide safe and effective endoscopy service.

#### **Keywords:**

Colonoscopy, Family Physician, Quality

<sup>&</sup>lt;sup>1</sup>Department of Family Medicine and Primary Health Care, KWC

<sup>&</sup>lt;sup>2</sup>Department of Medicine, Our Lady of Maryknoll Hospital

<sup>&</sup>lt;sup>3</sup>Department of Surgery, Our Lady of Maryknoll Hospital

<sup>&</sup>lt;sup>4</sup>Department of Surgery, Caritas Medical Centre.

#### **ORAL 003**

## Mental Health and Health-related Quality of Life of Low-Income Families in Hong Kong

Caitlin H.N. Yeung, Laura Bedford, Esther Y. T. Yu, Maegan H.Y. Yeung, Kiki S. N. Liu, Florence T. Y. Ng, Eric H. M. Tang, Edmund K. M. Au, Ben Y F Fong, Emily T. Y. Tse, Carlos K. H. Wong, Cindy L. K. Lam

#### Introduction:

The growing prevalence of mental health problems in Hong Kong warrants a better understanding of its underlying factors. Poverty is a known significant social determinant of mental health and health-related quality of life (HRQoL), with wide-ranging effects across the life course. This systematic review aimed to appraise the literature on the mental health and HRQoL of low-income families in Hong Kong.

#### Methodology:

Original pieces of research conducted in Hong Kong that examined low-income populations and assessed mental health or HRQoL were identified according to PRISMA guidelines. PubMed, PsycINFO and SCOPUS were searched using controlled keywords, including (1)'low-income', 'poverty' or 'socioeconomic', (2)'Hong Kong' and (3)'mental health', 'depression', anxiety', 'psychosocial', 'domestic violence' or 'health-related quality of life'.

#### **Results:**

543 studies were identified, 88 were screened, and 14 were included (4 cohort studies and 10 cross-sectional studies). Children in poverty experience more anxiety and depression, lower psychological wellbeing and reduced happiness. Poverty negatively affects self-rated health and HRQoL in adults, with having income <50% of HK household median as the threshold for impairment. In particular, low-income mothers have lower HRQoL, which is shown to have spillover effects in their children, who then have more behavioural problems and experience worse physical and psychosocial health. Furthermore, low socioeconomic-status and living-alone is significantly associated with geriatric depression, which is expected to increase with the rapidly ageing population and growing elderly population living in poverty.

#### Conclusions:

Low-income populations across all age-groups in Hong Kong experience worse mental health, and HRQoL. Primary care doctors should be better equipped to manage mental and psychosocial health issues of low-income groups, including depression and loneliness in elderly, anxiety/depression in children, HRQoL and intimate partner abuse, which has spillover effects in children and may contribute to intergenerational poverty. This can improve accessibility of mental health services in the community and reduce stigma of seeking help.

#### **Keywords:**

Mental Health, Health-related Quality of Life, Low-income Families

### **ORAL 004**

## Cardiovascular risk factor control and diabetic complication study of schizophrenic diabetic patients: what primary care doctors need to know?

Kwong SL, Law TC, Chen XR, LI YC

#### Introduction:

To study the cardiovascular risk factor control and diabetic complication rates of schizophrenic patients with type 2 diabetes (T2DM) at local primary care clinics in Hong Kong.

#### Methods:

Design: Cross-sectional descriptive study.

Subjects: Type 2 Diabetes Mellitus (T2DM) patients with concomitant schizophrenia, who had been regularly followed up in 2 Ggeneral Oout P-patient Cclinics (GOPCs) in Hospital Authority of Hong Kong from 1/1/2016 to 31/12/2017. Main outcome measures: Cardiovascular risk factors (Haemoglobin HbA1c (HbA1c), blood pressure, low density lipoprotein (LDL)), diabetic complication rates, and healthcare utilization rates. Student's t test was used to analyse continuous variables and Chi squared test and Fisher's exact test was used for categorical data. All statistical tests were two-sided, and a P value of <0.05 was considered significant.

#### **Results:**

Results: In total, 183 schizophrenic patients were identified among all T2DM patients during the study period, with a prevalence rate of 1.38%. Prior to matching, schizophrenic diabetic patients were noted to be younger (8.2 + 0.8 years, p<0.001) than general T2DM patients (<0.001).

After comparison to Compared with age- and sex-matched T2DM patients, the schizophrenic diabetic patients group were found to have significantly higher Body Mass Index (BMI) but lower average HbA1c, while their blood pressure and LDL levels were comparable. When diabetic complication status was reviewed, it was found that Schizophrenic T2DM patients had lower diabetic retinopathy rate than that of the general diabetic group (22.7% versus 41.5%, p =0.009), whereas the other macro- and microvascular complication rates were comparable between these two groups. Further studies on their health care utilization status revealed that Schizophrenic T2DM patients had higher frequencies of medical attendance (both GOPC and SOPC) than the general diabetic group (all p <0.001).

#### **Conclusions:**

1.38% T2DM patients were found to have concomitant schizophrenia, they were younger compared with those without schizophrenia. Their glycaemic control was better and their diabetic retinopathy complication rate was lower. They were found to have a much higher general and specialist outpatient clinic attendance in the health care system.

#### **Keywords:**

Cardiovascular risk factor, schizophrenic diabetic patients, primary care

#### **ORAL 005**

## Is hand-held spirometric device (COPD-6) a reliable tool to detect chronic obstructive pulmonary disease (COPD) in general outpatient clinics in Hong Kong?

**Leung Ching Ching** 

#### Introduction:

Chronic Obstructive Pulmonary Disease (COPD) is often underdiagnosed in general populations as well as in primary care, probably because of the underutilization of spirometry due to the complexity of the tool and the lack of time and trained personnel.

The handheld COPD-6™ that measures forced expiratory volume ratio at 1 and 6 seconds (FEV1/FEV6) has been used in some countries as an alternative to standard spirometry in diagnosing COPD. Recently the device was introduced in Kowloon Central Cluster. This study aimed to validate the diagnostic accuracy of COPD-6 so that it can act as a fast and simple screening tool for COPD in the busy general outpatient clinic settings.

#### Methods:

This is a Prospective validation study.

120 Chinese individuals aged 40 or above who were ever-smokers and had attended general outpateint clinics in Kowloon Central Cluster during 1/1/2018 to 30/6/2018 were recruited. All recruited cases performed COPD-6™and standardized spirometry test. FEV1/FEV6 measured by COPD-6™were compared with the post-bronchodilator spirometric FEV1/FVC to see correlations. Standard validation measures, including sensitivity, specificity, positive predictive value (PPV) and negative predictive value (NPV) were calculated to find out the best FEV1/FEV6 cut-off.

#### **Results:**

106 out of 120 subjects' data were valid for analysis. FEV1/FEV6 correlated well with post-bronchodilator FEV1/FVC under Pearson correlation analysis (R coefficient =0.725, p<0.001). The COPD-6™ FEV1/FEV6 showed good diagnostic accuracy with area under the Receive Operating Characteristic curve 0.916 (95% CI 0.86, 0.97).

FEV1/FEV6 ratio being 0.69 was identified to be the best cut-off value with excellent sensitivity 87% and specificity 90%.

#### Conclusions:

COPD-6™ demonstrated a high accuracy in detecting COPD in the primary care setting. FEV1/FEV6 being <0.69 is recommended to be the best cut off value for the case detection. This promising result is helpful in implementing the hand-held COPD-6™ as a screening tool among high risk individuals to actively detect possible COPD in primary care clinic setting.

#### **Keywords:**

Screening, COPD, spirometry

#### **ORAL 006**

## Effect of deprescription clinic on the functional capacity of Chinese elderly patients with polypharmacy: a study from the primary care setting

#### SK Wong<sup>1</sup>, SH Ko<sup>2</sup>, Catherine XR Chen<sup>3</sup>, KH Chan<sup>4</sup>

<sup>1</sup>Resident, Department of Family Medicine and General Out-patient Clinic, Kowloon Central Cluster, Hong Kong

#### Introduction:

Polypharmacy is a common phenomenon among older people and is expected to become a major health concern in the coming years. Polypharmacy has been shown to adversely affect the elderly in multiple aspects. Given the risks of polypharmacy and inappropriate medication use in older persons, Deprescription Clinic (DPC) was set up at Yau Ma Tei Jockey Club Clinic (YMTJC) to address this issue.

#### **Objective:**

To explore the clinical effectiveness of Deprescription Clinic (DPC) among Chinese elderly patients with polypharmacy in the primary care and to evaluate its impact on the functional capacity and quality of life.

#### Methods:

**Design:** Prospective cohort study

**Subjects:** 245 Chinese elderly patients with polypharmacy who had been regularly followed up at DPC of YMTJC from 1 February 2017 to 30 June 2018. Polypharmacy is defined as taking more than 10 medications in total among which at least 5 were chronic medications.

Main Outcome Measures: Measurements of the patients were assessed at baseline and 12 months interval, on the followings:

- 1. Primary outcomes: the total number of prescribed chronic drug items per day, total number of chronic drug pills prescribed per day and frequency of chronic drug intake per day.
- 2. Secondary outcomes: chronic disease control status, quality of life (QOL), independence in activities of daily living (ADL), risk of fall, cognitive function and Accident and Emergency Department (AED) attendance.

#### **Results:**

After medication review and management at DPC for 12 months, all 3 primary outcomes showed statistically significant reduction (all p-value <0.001). The chronic disease control was stable after management in DPC. There were statistically significant improvement in a few domains of QOL (role limitations due to physical health, role limitations due to emotional problems, energy / fatigue, emotional well-being and general health). The risk of fall was reduced among this group of patients whereas the ADL, cognitive function and AED attendance were not affected.

#### **Conclusions:**

DPC is effective in reducing the number of inappropriate chronic medication use among Chinese elderly patients with polypharmacy, without affecting the chronic disease control. It can also improve the quality of life and reduce the risk of fall in this group of patients

#### Keywords:

Deprescription, Polypharmacy, Elderly

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<sup>&</sup>lt;sup>4</sup>Consultant, Department of Family Medicine and General Out-patient Clinic, Kowloon Central Cluster, Hong Kong

### **ORAL 007**

An exploration of the long-term impact of a Health Empowerment Programme on self-care enablement and health outcomes of Hong Kong Chinese adults of low socioeconomic status

Esther Y.T. YU, Laura E. BEDFORD, Caitlin H.N. YEUNG, Kiki S.N. LIU, Florence T.Y. NG, Emily T.Y. TSE, Ben Y.F. FONG, Carlos K.H. WONG, Cindy L.K. LAM

#### Introduction:

Individuals of low socioeconomic status (SES) experience poorer health. This study aimed to determine whether a community-based health empowerment programme (HEP) could improve self-care and health outcomes among adults of low SES.

#### Methods:

This longitudinal study included participants enrolled in the HEP where they received free annual health assessments and health enablement programmes (intervention group) and those with a similar socioeconomic background (control group). Inclusion criteria were: 1) at least one working family member; 2) at least one child studying in grade 1-3; and 3) a monthly household of <75% Hong Kong's median monthly household income. The primary outcome was self-care enablement, measured using the Patient Enablement Instrument (PEI). Secondary outcomes included Health-Related Quality-of-Life (HRQoL) measured by Short-Form 12 Health Survey Version 2(SF-12v2)) and allostatic load assessed by waist-to-hip-ratio (WHR), total-cholesterol to high-density-lipoprotein-cholesterol (TC:HDLC) ratio, triglycerides and blood pressure.

#### **Results:**

229 intervention adults (mean age: 45.5, 67.0% female) and 167 control adults (mean age: 51.3, 76.6% female) were included (mean follow-up: 4 years). Both intervention and control groups reported increases in mean PEI-total scores between baseline and follow-up, with significantly greater increases in the intervention group than control group (p<0.001). The change in mean SF-12v2 mental component scores were also significantly greater for the intervention group (p<0.001). No statistically significant differences were found between groups for changes in mean SF-12v2 physical component scores. For allostatic load, the intervention group showed significant increases in the proportion achieving optimal TC:HDL-C ratio and blood pressure, whereas significant decreases were found in the control group (all p<0.001). Both groups showed significant increases in WHR and triglycerides, however, such increases were higher among control group participants.

#### **Conclusions:**

Our findings support the implementation of community-based health empowerment programmes to build self-care capacity among individuals of low SES and ultimately improve self-care enablement, mental wellbeing and allostatic load.

#### **Keywords:**

Health empowerment, Self-care enablement, HRQOL





## FREE PAPER COMPETITION -

## **Poster Presentation**

### Saturday, 7 December 2019 • 11:00 – 11:30 & 16:00 – 16:30 • 1/F, Foyer

Poster	Presentation Topic	<b>Authors</b> (The underlined author is the presenting author)		
001	Analysis of patient appreciation in Cheung Sha Wan Jockey Club General Outpatient Clinic in 2018	Dr. Rosanna W.N. WONG, YIU M.P., CHAN C.W.		
002	Effect of a structured Pre-diabetes program on risk factors control and physical fitness of Pre-DM patients in a General Outpatient Clinic	Dr. LUK Chun Wa, CHAN Y.L., LI W.I., YEUNG T.H., WAN K.Y., YIU Y.K., LUK W.		
003	Appropriate Use of Oral Antifungal is the Key to Cure Severe Tinea Corporis	Dr. LUK Chun Wa		
004	'Doctor, by the way, I've more bowel opening these daysDoes it matter?'	Dr. Emily T.Y. TSE		
005	Improve the Standard of Care in Nurse Assessment of the Risk Assessment and Management Program for Diabetes (RAMP-DM) in General Outpatient Clinics	Ms. Emily C.L. MA, CHU T.K., CHAN M.L., WONG B.C., LIANG J.		
006	Age-specific associations between Systolic Blood Pressure and Cardiovascular Disease in Patients with Type 2 Diabetes Mellitus: A population-based cohort study	Dr. Eric Y. F. WAN, YU E. Y.T., CHIN W.Y., CHEN S.Q., LAM C. L.K.		
008	Promoting Smoking Cessation for Chronic Disease Management in Primary Care Clinics	Ms. YIP Lai Han, MA C.L., WU S.C., CHAU P.S., HON W.S., LEE C.K., LI P.W., TSE O.K., WONG B.C., CHU T.K., WONG M.K., LIANG J.		
009	Community-based nutrition education: an alternative way to improve health outcomes?	Ms. Doris P.S. LAU, LO K. T.W.		
010	Stressors of low-income parents in Hong Kong – a cross-sectional study	Dr. Esther Y.T. YU, LIU K. S.N., TANG E. H.M., WONG R. S.M., WONG C. K.H., LAM C. L.K.		
011	Impact of Parent and Child Factors on Behaviour of Children from Low-income Chinese Families	Dr. Esther Y.T. YU, CHEN S. S., LIU K. S.N., TANG E. H.M., WONG R. S.M., WONG C. K.H., LAM C. L.K.		
012	Allostatic Load and its determinants in the Hong Kong General Population	Dr. Esther Y.T. YU, YEUNG C. H.N., TANG E. M.H., WAN E. Y.F., LAM C. L.K.		
013	Together, We Care. General Out-patient Clinic Public-Private Partnership Program (GOPC-PPP) in the Hong Kong East Cluster (HKEC) of Hospital Authority (HA)	Ms. Lydia L.C. TIU, TSE T. W.M., WONG W., LEUNG W. W.M., LEUNG W.W.C., CHEUNG P.H., CHOW A. W.P., CHEUNG K. Y.H., WONG M. M.S., WONG M.M.Y.		
014	Together, We Share. Experience sharing forum on the public private collaboration in the Hong Kong East Cluster (HKEC) of Hospital Authority (HA)	Ms. Lydia L.C. TIU, TSE T. W.M., WONG M.S., LEUNG W. W.M., LEUNG W. W.C., CHEUNG P.H., CHOW A. W.P., CHEUNG K. Y.H., WONG M. M.S., WONG M. M.Y.		
016	Socioeconomic Gradients in Healthcare Access and Health-Seeking Behaviour in Hong Kong	Ms. Caitlin H.N. YEUNG, NG F. T.Y., YU E. Y.T., BEDFORD L., YEUNG M. H.Y., LIU K. S.N., TANG E. H.M., AU E. K.M., FONG B. Y.F., TSE E. T.Y, WONG C. K.H., LAM C. L.K.		





## FREE PAPER COMPETITION -

## **Poster Presentation**

## Saturday, 7 December 2019 • 11:00 – 11:30 & 16:00 – 16:30 • 1/F, Foyer

Poster	Presentation Topic	<b>Authors</b> (The underlined author is the presenting author)		
017	Ill-health and Poverty: Physical Health Outcomes of Low-income Populations in Hong Kong	Ms. Caitlin H.N. YEUNG, LIU K. S.N., YU E. Y.T., BEDFORD L., YEUNG M. H.Y., NG F. T.Y., TANG E. H.M., AU E. K.M., FONG B. Y.F., TSE E. T.Y., WONG C. K.H., LAM C. L.K.		
018	Review on outcome and appropriateness of patient call back system in Cheung Sha Wan Jockey Club general out-patient clinic (CSWJCGOPC)	<u>Dr. Beatrice P.Y. NG,</u> KWAN S.M., YIU M.P., CHAN C.W., YIU Y.K., LUK W.		
019	Antimicrobial Susceptibility Pattern of Bacteriuria and Associated factors of bacteriuria among Pregnant Women in Primary Health Care of Macau, China	Dr. Stella M.F. CHOU, LI P.W.		
020	Seasonal Influenza Vaccination is associated with Less Hospital Admission due to Severe Hypoglycaemia among Community Dwelling Elderly Patients with Diabetes	Dr. CHU Tsun Kit, LIANG J.		
021	Prevalence of diabetic nephropathy among Chinese patients with type 2 diabetes mellitus and different categories of their estimated glomerular filtration rate based on the Chronic Kidney Disease Epidemiology Collaboration (CKD-EPI) equation in primary care in Hong Kong: a cross-sectional study	Dr. MOK Ka Yee, CHAN P.F., LAI L. K.P., CHOW K.L., CHAO D. V.K.		
022	Elderly care: a practice team approach	Dr. CHUNG Tsz Nang, LI S.M.		
023	A Smart Safe - Enhances Specimen Security In A Perfect Way	Ms. MAK Pui Ying, LAI M.L., KWOK F.L., LAM P.H., CHIU C. W.H., LEUNG W.K., HUI E. M.T.		
024	Direct Access Endoscopy Booking by Family Physicians: Clinical Factors Associated with a Positive Endoscopy Finding in Primary Care Setting	Dr. LEUNG Lok Hang		
025	Challenges, Barriers and Innovative Ways in promoting Family Medicine	Dr. LEUNG Lok Hang, WONG A. C.L., CHAN C. L.		
026	Strategies to improve blood pressure and hypertension control of patient in General Out Patient Clinic, HKEC	Ms. HUNG Suk Yee, LAM S. S.K., CHAN T. Y.L., CHOU P.K., LEUNG W. W.C., LEUNG C. P.S., LI F. H.L., CHEUNG P.H., CHOW A. W.P., CHEUNG K. Y.H., WONG M. M.S., WONG M. M.Y.		
027	One short video: An Small Intervention to achieve Great Leap in Patients' Knowledge on SMBP	Ms. Janice S.W. TSANG, FUNG W.M., WAN C.M., CHAN M. W.Y., LAU Y.Y., CHAN M.S., LIN W.C., TSE K.Y., WONG W.Y. LAU W.H., LAM P.H., CHIU C. W.H., HUI E. M.T., HUI E., LI P. P.K.		
028	Can Holter monitoring (ambulatory electrocardiography) detect more atrial fibrillation among patients presented with palpitation in the primary care setting	Dr. CHIANG Lap Kin		
029	Case Study: Healing a Diabetic Amputation wound with the use of Photodynamic Therapy	Dr. LEUNG Kin		
030	The Revolution of Primary Health Care Wound Services in Previous Decade	Ms. Annette K.K. LAM, CHAN H.Y., CHAN C.S., CHOWT.W., CHOI W.K., AU P.S., WAN Y.T., LAU M.S., CHOW A. W.P., CHEUNG P.H., CHEUNG K. Y.H., WONG M. M.Y.		

### POSTER PRESENTATION

#### POSTER 001

## Analysis of patient appreciation in Cheung Sha Wan Jockey Club General Outpatient Clinic (CSWJCGOPD) in 2018

#### Wong Wing Ning Rosanna; Yiu Ming Pong; Chan Chi Wai

Wong Wing Ning Rosanna; Resident Trainee, Department of Family Medicine and Primary Care (Kowloon West Cluster)
Yiu Ming Pong, Associate Consultant, Department of Family Medicine and Primary Care (Kowloon West Cluster)
Chan Chi Wai, Consultant, Department of Family Medicine and Primary Care (Kowloon West Cluster)

#### Introduction:

Patient experience is one of the benchmark to improvement in health care quality at organization level in primary care setting. In this abstract, we are going to look into the monthly return on appreciation in 2018 of Cheung Sha Wan Jockey Club General Outpatient Clinic (CSWJCGOPC).

#### Methodology:

Both qualitative and quantitative study approach were employed. We particularly looked into the monthly return on appreciation statistics from Patient-Relationship-Office (PRO) in CSWJCGOPC in 2018. We analyze the personnel, nature and mode of appreciation. We undertook comparative data with analysis of benchmark results internally.

#### Results:

In year 2018, Cheung Sha Wan Jockey Club General Outpatient Clinic (CSWJCGOPC) received significantly higher rate of appreciation than other clinics with similar patient load. Clinic A received 22 appreciation (36% that of CSWGOPC) whereas Clinic B received 41 appreciation (62% that of CSWJCGOPC). For the nature of appreciation, mostly the patients were mainly thankful to the attitude as well as the service delivered. Patients were grateful to the caring and professional attitude of staff. Service was supplied with patience and zeal. Nursing staff received 3.67 fold of thankfulness than that of doctor. Appreciation would be one of the key to boost staff morale in primary care setting.

#### Conclusions:

Overall, Cheung Sha Wan Jockey Club General Outpatient Clinic (CSWJCGOPD) appreciation statistics are more remarkable than other non-training clinic with similar patient load. Appreciation would be one of the key to boost staff morale in primary care setting.

### FREE PAPER COMPETITION -

### POSTER PRESENTATION

#### POSTER 002

# Effect of a structured Pre-diabetes program on risk factors control and physical fitness of Pre-DM patients in a General Outpatient Clinic

#### Luk CW, Chan YL, Li WI, Yeung TH, Wan KY, Yiu YK, Luk W

Lady Trench General Outpatient Clinic (LT GOPC), Department of Family Medicine and Primary Health Care, Kowloon West Cluster, Hospital Authority

#### Introduction:

Pre-diabetes (Pre-DM) is a common condition in Hong Kong with a local prevalence of 8.9%. An annual conversion rate from Pre-DM to diabetes mellitus of 5-10% was observed. American Diabetes Association (ADA) recommended lifestyle modification as the first line treatment of Pre-DM to prevent diabetes conversion. A multi-disciplinary structured Pre-DM program was set up in LT GOPC to empower lifestyle modification according to recommendation.

#### Methodology:

LT GOPC patients diagnosed with Pre-DM according to the ADA guideline were referred to the structured Pre-DM program. A 20-weeks multidisciplinary program, involving 1 nursing, 3 dietetic and 4 physiotherapy sessions with both group and individual sessions, was offered to patients. Baseline assessment was performed for all patients and post-program assessment was performed for patients completed the program. Body composition, physical fitness test and biochemical parameters were assessed.

#### **Results:**

198 patients (median age 67.5) joined the program from 9/2016 to 3/2019. A total of 18 classes were held. 39.4% (78 patients), including 51 female and 27 male patients, completed the program. All parameters measured showed improvement after the program. There were improvements in HbA1c, FBS, TC and LDL. In particular, LDL achieved a mean reduction of 5.9%. BMI and body weight showed a respective 2.1% and 2.0% improvement. There was a significant improvement in physical fitness showing 12.0%, 17.0% and 19.1% increases for upper limb strength, lower limb strength and aerobic fitness respectively.

#### **Conclusions:**

A structured Pre-DM program in GOPC improved patient metabolic parameters and enhanced their physical fitness. Further studies can be performed to investigate the impact of Pre-DM program on conversion of Pre-DM to diabetes. Abbreviations: HbA1c = Haemoglobin A1c, FBS = Fasting blood sugar; TC = Total cholesterol, LDL = Low density lipoprotein; BMI = Body mass index; UL = Upper limb; LL = Lower limb

Table 1: Results of Assessments for Pre-DM Program								
	Unit	Pre (Mean)	Post (Mean)	Difference (Mean)	P value			
HbA1c	%	5.99	5.91	-0.09	<0.001			
FBS	mmol/L	6.08	5.88	-0.20	<0.001			
TC	mmol/L	5.30	5.08	-0.22	0.004			
LDL	mmol/L	3.28	3.08	-0.19	0.004			
Weight	kg	64.1	62.8	-1.3	<0.001			
ВМІ	kg/m²	26.0	25.4	-0.5	<0.001			
Waist/Hip Ratio	-	0.908	0.906	-0.002	0.716			
Body Fat %	%	30.5	30.1	-0.4	0.238			
Arm Curl (UL Strength)	Repetitions	19.8	22.1	+2.4	<0.001			
Chair Stand (LL Strength)	Repetitions	15.0	17.5	+2.5	<0.001			
2-minute Step (Aerobic Fitness)	Steps	86.8	103.3	+16.5	<0.001			

## FREE PAPER COMPETITION -

### POSTER PRESENTATION

#### POSTER 003

## **Appropriate Use of Oral Antifungal is the Key to Cure Severe Tinea Corporis**

#### **Luk CW**

Lady Trench General Outpatient Clinic (LT GOPC), Department of Family Medicine and Primary Health Care, Kowloon West Cluster, Hospital Authority

#### Introduction:

A 76 years old gentleman visited LT GOPC for follow-up of his poorly-controlled diabetes. On a follow-up visit seen by me in 9/2018, he requested to refill clotrimazole cream for the rash at his back. Upon further history taking and reviewing of medical records, he was given clotrimazole cream and Whitfield cream multiple times by different doctors, from both public and private, since 6/2012. The rash was initially small, but it gradually involved the whole back. It was itchy and affected his sleep. There was no other topical cream or oral medication used for the back rash except those given by doctors. On physical examination, a large well-defined erythematous plaque with leading edge was seen over the whole back. A clinical diagnosis of tinea corporis was made.

All creams were stopped for 2 weeks before skin scraping for mycology. Subsequent skin scraping showed fungal elements under microscopy with fungal culture yielding Trichophyton rubrum. The baseline liver function test (LFT) was normal. Oral Terbinafine (Lamisil) 250mg daily was given for 4 weeks. LFT was repeated 2 weeks later and was normal. On follow-up, the long-standing tinea corporis resolved completely.

#### **Discussion:**

Tinea corporis was a superficial dermatophyte infection on the glabrous skin. The commonest dermatophyte was Trichophyton rubrum. Despite the common usage of topical anti-fungal agents, oral anti-fungal agents, e.g. Terbinafine, are indicated in patients with extensive involvement or disease unresponsive to topical agents. Latest guideline suggested confirmation of fungal infection with skin scraping before commencement of oral agents. A course of 2-4 weeks should be sufficient for tinea corporis. Liver function should be monitored after the usage of oral agents. Continuity of care for dermatological diseases is essential as illustrated in this case. Further investigation and appropriate treatment is of paramount importance to cure chronic fungal infections.

Figure 1. The effect of appropriate oral anti-fungal for chronic extensive tinea corporis



Treated with 4 weeks of Lamisil after positive skin scraping



### POSTER PRESENTATION

#### POSTER 004

## 'Doctor, by the way, I've more bowel opening these days... Does it matter?'

#### TSE Tsui Yee Emily

University of Hong Kong

#### Introduction:

Amongst the elderly, constipation is the leading bowel habit problem faced by family physicians. However, when an elderly patient mentions the contrary, 'I've more bowel movement recently', would that set your alarm bells ringing?

#### Methodology:

Case report

A 79-year old woman attended regular general outpatient clinic (GOPC) follow up in March 2019. Her chronic diseases were stable. Towards the end of the consultation, she casually mentioned to the doctor, 'I have more bowel opening in the past few months. Does it matter?' She reported having several bowel movements in the morning with tenesmus. Yet, no per-rectal bleeding nor other red flags. Per-rectal examination, however, revealed an irregular circumferential nodularity with contact bleeding.

She was referred immediately to the colorectal specialist. Her haemoglobin was normal but Carcinoembryonic Ag (CEA) elevated. Colonoscopy showed a circumferential tumour at 1cm from anal verge extending 1.5cm into the rectum. Biopsy confirmed adenocarcinoma. CT showed no distant metastasis. MRI showed levator ani muscle and lower vagina wall involvement. Curative neoadjuvant CTRT followed by surgery was recommended.

#### **Results:**

The patient and her family accepted the suggestions and proceeded accordingly.

#### **Conclusions:**

Colorectal cancer is the commonest cancer in Hong Kong. It accounted for 17.3% of all new cancer cases in 2016. The incidence rate for both sexes was on an upward trend between 1983 and 2016.

However, many elderly patients are unaware of the significance of bowel habit changes and may not put it high on their consultation agenda especially when they have many co-morbidities. Family physicians play a crucial role in being vigilant against the disease even when seemingly trivial bowel concerns are raised by patients.

### POSTER PRESENTATION

#### POSTER 005

# Improve the Standard of Care in Nurse Assessment of the Risk Assessment and Management Program for Diabetes (RAMP-DM) in General Outpatient Clinics

Emily C.L. Ma<sup>1</sup>, T.K. Chu<sup>2</sup>, M.L. Chan<sup>2</sup>, B.C. Wong<sup>3</sup>, J. Liang<sup>4</sup>

- <sup>1</sup>Advanced Practice Nurse, Department of Family Medicine and Primary Health Care, NTWC
- <sup>2</sup>Associate Consultant, Department of Family Medicine and Primary Health Care, NTWC
- <sup>3</sup>Departmental Operations Manager, Department of Family Medicine and Primary Health Care, NTWC

#### Introduction:

Periodic nurse assessment and intervention are part of the essential components of the Risk Assessment and Management Program for Diabetes (RAMP-DM), which has been shown to reduce diabetic-related complications and mortality. Regular audit of standard of care would be important for service evaluation and better patient care.

#### **Objective:**

To evaluate and improve standard of care in nursing care provided in the Risk Assessment and Management Program for Diabetes (RAMP-DM) for diabetic patients followed up in 8 General Outpatient Clinics in the New Territories West Cluster.

#### Methodology:

Documentation of 9 essential components of comprehensive diabetes complication assessment (DCA) during nursing care in RAMP-DM (performed once every 2 years) were reviewed regularly, which included assessment of HbA1c, blood pressure, cholesterol, serum creatinine, urine albumin, diabetic foot surveillance, diabetic retinopathy screening (by retinal photography), body mass index and smoking status. A departmental taskforce on chronic disease management involving medical and nursing staff has been established to enhance service delivery for diabetic patients since 2014. Regular staff meetings and training sessions to nurses providing RAMP-DM service since 2015 followed by audits aiming to review and enhance the standards of care during the nursing assessment. A reminder system to nurses by using cue cards was implemented to improve documentation of nurse assessment in 2018.

#### **Results:**

The proportion of diabetic patients followed up in New Territories West cluster with comprehensive diabetes complication assessment performed within 3 years has increased from 77% in 2014/15 to 90% in 2017/18. In conclusion, multi-faceted interventions can improve the standards of diabetes nursing care in complication assessment.

#### **Conclusions:**

In conclusion, multi-faceted interventions can improve the standards of diabetes nursing care in complication assessment.

<sup>&</sup>lt;sup>4</sup>Chief of Service, Department of Family Medicine and Primary Health Care, NTWC

### POSTER PRESENTATION

#### POSTER 006

# Age-specific associations between Systolic Blood Pressure and Cardiovascular Disease in Patients with Type 2 Diabetes Mellitus: A population-based cohort study

Eric Yuk Fai Wan, PhD<sup>1</sup> <sup>2\*</sup>, Esther Yee Tak Yu, MBBS<sup>1</sup>, Weng Yee Chin, MD<sup>1</sup>, Shiqi Chen, BSocSc<sup>1</sup>, Cindy Lo Kuen Lam, MD<sup>1</sup>

<sup>1</sup>Department of Family Medicine and Primary Care, the University of Hong Kong

#### **Background:**

The relationship between systolic blood pressure (SBP) and cardiovascular diseases (CVD) among diabetic patients remains unclear. This aim of this study was to explore age-specific associations between SBP and CVD.

#### Methodology:

A population-based retrospective cohort study was conducted on 180,492 Chinese adult primary care patients with type 2 diabetes mellitus sampled in 2008-2010. Age-specific associations (<50,50–59,60–69,and 0–79 years) between the average SBP (mean SBP in the past two years) and risk of CVD were assessed by Cox proportional hazards regression with adjustments for age-specific regression dilution ratios and patient characteristics. Subgroup analyses stratified subjects' characteristics were also performed.

#### **Results:**

During 9.3 years median follow-up, 32,545 subjects developed a CVD with an incidence rate of 23.4 per 1,000 person-years for CVD. A positive and log-linear association between SBP and CVD was observed across all four age groups with no evidence of a threshold down to 120mmHg, but the magnitude of the effect of SBP on CVD attenuated with increased age. The CVD risk per each 10mmHg higher SBP in the <50 years group was approximately three times higher than that in 70-79 years group(HR:1.33[95%CI:1.26-1.41] vs. HR:1.09[95%CI:1.07-1.11]). Smokers had nearly twice the risk compared to non-smokers for CVD(HR:1.21[95%CI:1.17-1.26] vs. HR:1.10[95%CI:1.08-1.12]). The associations were similar for other patient characteristics.

#### **Conclusions:**

The impact of SBP appears to be positive and log-linear associated with risk of CVD among Chinese diabetic population, with no evidence of a threshold down to 120mmHg. Age and smoking status appears to influence the strength of the associations. Hence, younger patients and smokers may receive the most benefit from lowering their SBP target. Individualised, age-stratified SBP targets in may be more appropriate for patients with diabetes.

#### **Keywords:**

Diabetes; Hypertension; Blood pressure; Cardiovascular Disease; Mortality

<sup>&</sup>lt;sup>2</sup>Department of Pharmacology and Pharmacy, the University of Hong Kong

### POSTER PRESENTATION

#### POSTER 008

## **Promoting Smoking Cessation for Chronic Disease Management in Primary Care Clinics**

L.H. Yip<sup>1</sup>, C.L. Ma<sup>1</sup>, S.C. Wu<sup>1</sup>, P.S. Chau<sup>2</sup>, W.S. Hon<sup>2</sup>, C.K. Lee<sup>2</sup>, P.W. Li<sup>2</sup>, O.K. Tse<sup>2</sup>, B.C. Wong<sup>3</sup>, T.K. Chu<sup>4</sup>, M.K. Wong<sup>4</sup>, J. Liang<sup>5</sup>

#### Introduction:

Tobacco smoking increases morbidity and mortality among patients with chronic diseases such as diabetes (DM) and hypertension (HT) and complicates their treatments. The Smoking Cessation and Counseling Service in General Outpatient clinics (GOPCs) has been well established. However, educational materials tailored for DM and HT patients in promoting smoking cessation was not well developed.

#### **Objective:**

- Design educational leaflets targeted for DM and HT patients in order to improve knowledge and awareness of smoking cessation.
- Implement its use by nurses during nursing care for chronic disease management.
- Evaluate outcome of implementation by assessing patients' knowledge and attitudes towards smoking cessation and staff satisfaction survey

#### Methodology:

Two sets of educational leaflets were designed, tailor-made for DM and HT patients. They were used in 6 GOPCs by nurses in their daily patient education in July 2017. By convenient sampling in DM or HT risk assessment and management program, 30 DM and 30 HT patients were invited to complete questionnaires evaluating their knowledge and attitude on smoking cessation before and after nurse education facilitated by use of the leaflets. 40 nurses also completed a staff satisfaction survey for usage of the leaflet.

#### **Results:**

The mean score of knowledge on smoking cessation among patients increased from 3.27 to 4.6 out of 5, and the percentage of patients who were ready to quit smoking or would consider quit smoking in coming 6 months increased from 37% to 56% (p<0.01) after received nurse education. Around 80% and 90% of nurses interviewed were satisfied with the leaflets and found them useful respectively.

#### **Conclusions:**

Use of the tailor-made educational leaflets to DM and HT patients may enhance their knowledge and positive attitude towards smoking cessation. It is perceived by primary care nurses as useful tools to facilitate promoting smoking cessation as a part of chronic disease management.

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<sup>&</sup>lt;sup>5</sup>Chief of Service, Department of Family Medicine and Primary Health Care, NTWC

### POSTER PRESENTATION

#### POSTER 009

## Community-based nutrition education: an alternative way to improve health outcomes?

Doris Pik Shan Lau, Accredited Practising Dietitian, Dietitians Association Australia Kurtus Ting Wai Lo, Accredited Practising Dietitian, Dietitians Association Australia

Service Manager, Allied Health Service Division, Community Nutrition Service Community Dietitian, Allied Health Service Division, Community Nutrition Service

#### Introduction:

Establishing rapport and interpersonal relationship are vital for medical interventions and clinical outcomes. Beyond individual consultation by offering professionals' advice to restrict patients' food options, community dietitians take further role to put themselves into clients' shoes. Through interactive nutrition workshops, dietitians built up rapport with clients, intervened daily lifestyle change and improved their knowledge, attitude and intention to modify behaviour habits (KAB), which eventually prevent chronic diseases development and improve quality of life.

#### Methodology:

The content of three workshops (four sessions each) were tailor made based on literature review using National Institutes of Health database to search for Research-tested Intervention Programs (RTIPs), focused on diet/nutrition implementation targeting young to middle-aged adults. Pre/post-test and satisfaction surveys were conducted for each workshop to investigate participants' change of KAB (n=26). All data were collected and analysed by Microsoft Excel using one-tailed t-test.

#### **Results:**

The themes of three workshops are "Healthy travelling", "Healthy eating out" and "Healthy cooking at home". According to the review of six RTIPs, 10 out of 12 recommended interventions were applied (Appendix1). The results of pre/post-test demonstrated improvement on participants' knowledge (Overall average score: 57%vs79%, p=0.029), while their positive attitude on nutrition facts maintained. Participants showed increased willingness to modify behaviour habits such as reducing deep fried foods consumption during travelling, slowing down mealtime with eating pace to >30 minutes, reducing eating out frequency to one meal daily, and self-preparing three meals or above daily. Participants were satisfied with all workshops (4.3/5 scores) and suggested "More supermarket tours/ eating out experience" and "More sessions on learning cooking skills and techniques".

#### **Conclusions:**

These interactive nutrition workshops demonstrated group education provided positive impacts on participants' KAB. This innovative way to improve patients' health outcomes, not only focusing on individual based counselling but also by group based patient-oriented interventions to enhance food enjoyment and quality of life.

### POSTER PRESENTATION

#### POSTER 010

## Stressors of low-income parents in Hong Kong – a cross-sectional study

Esther Y.T. Yu, Kiki S.N. Liu, Eric H.M. Tang, Rosa S.M. Wong, Carlos K.H. Wong, Cindy L.K. Lam The University of Hong Kong

#### Introduction:

Economic hardship predisposes to parental stress, family problems and consequent ill health of both parents and children. Identification of modifiable stressors is crucial to promote health of low-income parents. This cross-sectional study aims to explore the association between personal, child and family factors and stress among low-income parents in Hong Kong.

#### Methodology:

217 low-income parent-child pairs were recruited from two less affluent districts in Hong Kong between March 2016 and October 2017. Face-to-face interviews were conducted. Stress-subscale of Depression-Anxiety-Stress-Scale-21(DASS-21) was used to measure parental stress. Depression level was assessed by Patient-Health-Questionnaire-9(PHQ-9). Child behavioral problems were evaluated by Strength-and-Difficulties-Questionnaire(SDQ). Socioeconomic confounders and potential family factors contributing to parental stress were collected: household income, education, employment and marital status, presence of intimate partner abuse assessed by Abuse-Assessment-Screen-5(AAS-5), family harmony by Family-Harmony-Scale-5(FHS-5), parenting style by Authoritative-Parenting-Style-subscale of Parenting-Style-and-Dimension-Questionnaire(PSDQ), social cohesion by Neighbourhood-Collective-Efficacy-Scale(NCES), and parent-child conflict tactics by Child-Physical-Assault-and-Neglect-subscale of the Conflict-Tactics-Scale-for-Parent-and-Child-Scale(CTSPC).

#### **Results:**

38 parents experienced stress (i.e.DASS $\geq$ 8), who were significantly more likely to be single parent (39.5%vs.19.0%,p=0.004), victim of intimate partner abuse (26.3%vs.8.4%,p=0.002) and depressed (27.0%vs.4.8%,p<0.001), suffer from mental illness (26.3%vs.5.6%,p<0.001) and have child with behavioural problems (mean SDQ-score(SD):15.47(6.54)vs.9.32(5.30),p<0.001). Family harmony (mean FHS-5-score(SD):17.22(4.91) vs.19.81(2.91),p<0.001) and neighbourhood support (mean NCES-score(SD):29.83(7.46)vs.33.46(7.56),p=0.010) were significantly lower among stressed parents. They were also more likely to physically punish (mean Physical-Assault-subscale (SD):3.74(5.34)vs.1.92(2.79),p=0.005) or neglect (mean Neglect-subscale (SD):7.51(8.84) vs.3.39(4.80),p<0.001) their children. After adjusting for covariates, personal history of mental illness (Odds Ratio(OR)=1.091,p=0.010), child behavioral problem (Odds Ratio(OR)=1.16,p=0.005), authoritarian parenting style (Odds Ratio(OR)=0.94,p=0.049) and child neglect (Odds Ratio(OR)=1.24,p=0.010) were significantly associated with parental stress.

#### **Conclusions:**

Personal mental illness, child behavior and parenting style (i.e. authoritarian style and neglect) were significantly associated with parental stress. Bi-directional and causal relationship between parental stress and these factors should be further explored in order to develop an optimal intervention to reduce stress of the low-income parents.

### POSTER PRESENTATION

#### POSTER 011

## Impact of Parent and Child Factors on Behaviour of Children from Low-income Chinese Families

Esther Y. T. Yu, Sikky S. Chen, Kiki S. N. Liu, Eric H. M. Tang, Rosa S. M. Wong, Carlos K. H. Wong, Cindy L. K. Lam

The University of Hong Kong

#### Introduction:

Children from low-income families are at increased risk of behavioural problems. However, factors contributing to such problems were not well-understood. This study aims to explore the association between parent, child and family factors and behavioural problems of children from low-income families in Hong Kong.

#### Methodology:

A cross-sectional study was conducted on 217 parent-child pairs recruited from two less affluent districts in Hong Kong between March 2016-October 2017. The primary parents were invited to complete a face-to-face questionnaire, which collected: 1) Their child's behavioural problems using Strength-and-Difficulties-Questionnaire(SDQ), special education needs and physical health; 2) Their own physical and mental health, stress level using Depression-Anxiety-Stress-Scale(DASS)-21-Stress-subscale, family harmony using Family-Harmony-Scale-5(FHS-5), parenting style using Parenting-Styles-and-Dimensions-Questionnaire(PSDQ), use of physical punishment using Conflict-Tactics-Scale-for-Parent-and-Child(CTSPC)-physical assault subscale and neglect potential using CTSPC-neglect subscale; 3) Socio-demographic factors including household income, marital, education and employment status of parents. Multivariable linear regression with backward selection method was adopted to identify the parental and child factors associated child behavioural problems.

#### **Results:**

114(53%) of the 217 recruited families lived in poverty. 49(23%) were single-parent and 126(58.1%) primary parent were unemployed. Mean age of the children was 10.7 years (standard deviation(SD)=2.0); 114(53%) children were boy. 25(11.5%) and 16(7.4%) children had known Attention-Deficit-Hyperactivity-Disorder(ADHD) and dyslexia, respectively. The mean total-difficulty-score(TDS) measured by SDQ was 10.4(SD=6.0). After adjusting for covariates, younger age of the child(p<0.001), diagnosis of ADHD(p=0.012), higher parental stress (p<0.001), working primary parent(p=0.039) and family disharmony(p=0.042) were significantly associated with increasing behavioural problems of the studied children.

#### **Conclusions:**

Parental stress and family disharmony were significant modifiable factors associated with behavioural problems of children from low-income Chinese families, regardless of household income, single-parent, parenting style and physical health of both parent and child. Further longitudinal study to confirm whether the relationship is bi-directional will allow design of an optimal intervention strategy for reducing children's problematic behaviour.

### POSTER PRESENTATION

#### **POSTER 012**

## Allostatic Load and its determinants in the Hong Kong General Population

Dr. Esther Y.T. Yu, Ms. Caitlin H.N. Yeung, Mr. Eric H.M. Tang, Dr. Eric Y.F. Wan, Prof. Cindy L.K. Lam

#### Introduction:

Chronic life stress can lead to physiological dysregulation and adverse health outcomes. Allostatic Load Index (ALI) is a composite index of biological markers that conceptualizes the overall physiological impact of chronic life stress, which can predict disease in later life and allow for early prevention when conditions are still reversible. However, few studies have explored determinants of ALI in Asian populations. This study aims to explore the determinants of Allostatic Load in the Hong Kong general population

#### Methodology:

A cross-sectional study of 1,551 subjects aged 18-64 without known disease diagnosis was conducted on data from the Population Health Survey 2014/15 of the HKSAR government. Biomarkers of ALI and respective increased-risk cut-offs were: waist-to-hip ratio≥0.9(male)/0.8(female), total-cholesterol to high-density-lipoprotein-cholesterol ratio≥4.5(male)/4.0(female), triglyceride≥1.7mmol/L, haemoglobin A1c≥5.7%, systolic blood pressure≥130mmHg and diastolic blood pressure≥80mmHg. ALI was calculated by the sum of biomarkers that fall above increased-risk cut-offs, ranging from 0-6. Potential determinants of ALI included sociodemographic (age, sex, marital status, income, education, working status) and lifestyle factors (smoking, drinking, exercise, diet, sleep). Generalized linear models with Poisson family and identity link were fitted to assess both unadjusted and adjusted effect of factors associated with ALI. Backward elimination was performed to select the most significant factors.

#### **Results:**

47.2% of subjects were male and mean age was 37.5 [standard deviation (SD)=13.8]. The mean ALI was 1.6 (SD=1.6). After adjusting all baseline covariates and performing backward model selection, male (Coefficient=0.231, p<0.001), older age (Coefficient=0.058, p<0.001), current smoker (Coefficient=0.262, p=0.012) and inadequate sleep (<6hours/night) (Coefficient=0.409, p<0.001) were significantly associated with increasing ALI.

#### **Conclusions:**

Older age, male, smoking and inadequate sleep are associated with increased allostatic load, which smoking and sleep are the most modifiable factors. While smoking cessation is a popular health promotion strategy, the importance of adequate sleep, an easily overlooked but important modifiable factor, should be advocated.

### POSTER PRESENTATION

#### POSTER 013

# Together, We Care. General Out-patient Clinic Public-Private Partnership Program (GOPC-PPP) in the Hong Kong East Cluster (HKEC) of Hospital Authority (HA)

Lydia Tiu L C, Teresa Tse W M, Wong M S, Wanmie, Leung W M, Wangie Leung W C, Cheung P H, Annow Chow WP, Kathy Cheung Y H, Marcus Wong M S, Michelle Wong M Y

Department of Family Medicine and Primary Healthcare, Hong Kong East Cluster (HKEC), Hospital Authority (HA)

#### Introduction:

With the increasing aging population and the epidemiological shift to chronic diseases such as Hypertension and Diabetes Mellitus, over 590 million people attend the General Outpatient Clinics (GOPCs) of Hospital Authority for primary care service. The follow-up interval is lengthening. The appointment schedule is not flexible.

The GOPC PPP has been launched in the Hong Kong East Cluster since October 2016. Stable hypertension patients who had regular follow-up more than 1 year in the GOPC will be invited to join the program. Patients will have 10 subsidized consultations with the private doctors per year.

#### Methodology:

#### Objectives of the Program:

1. To provide more choices of primary healthcare service for patients. 2. To promote the family doctor concept. One patient, one doctor. 3. To manage the public health care demand. To enhance public private partnership. 4. To increase primary care service accessibility.

#### Method:

The program was rolled out in 6 GOPCs in the HKEC by phase. The help desk in each GOPC facilitates patient recruitment. It also provides ongoing support to both patients and private doctors. Help Desk staff proactively approached eligible patients on their day of GOPC follow-up to promote the program. In addition, regular patient forums were organized to introduce the program details to patients and facilitate enrollment.

#### Results:

As at 30 April, 2019, a total of 3650 patients of our cluster were participating in the program. Over 99% of participants expressed satisfaction with the program. They commented that primary care service in the private sector is easily accessible. The private clinic can accommodate a shorter follow-up interval more readily and thus allows a closer monitoring of their chronic medical conditions. The continuity of care can be more easily realized in a private setting.

#### Conclusions:

This is a very innovative experience for us to collaborate with private doctors to strive to achieve the objective of continuity of care and public private partnership hand in hand.

### POSTER PRESENTATION

#### POSTER 014

Together, We Share. Experience sharing forum on the public private collaboration in Hong Kong East Cluster (HKEC) of Hospital Authority (HA)

Lydia Tiu L C, Teresa Tse W M, Wong M S, Wanmie, Leung W M, Wangie Leung W C, Cheung P H, Annow Chow WP, Kathy Cheung Y H, Marcus Wong M S, Michelle Wong M Y

Department of Family Medicine and Primary Healthcare, Hong Kong East Cluster (HKEC), Hospital Authority (HA)

#### Introduction:

The Healthcare system in Hong Kong is a dual-track system, comprising public service in HA and Department of Health, and healthcare service in private institutions. According to the Food and Health Bureau, there were a total of 5400 and 5000 doctors serving in public and private health sector respectively in 2015. This dual system plays an important role in the delivery of healthcare services in the community. With the introduction of various public private partnership programmes and increased collaboration, it is worthwhile establishing a platform for both public and private health care professionals to meet and share their experiences and view.

#### Methodology:

#### Objectives:

1. To develop a platform for communication to enhance collaboration 2. To update knowledge on chronic disease management in a primary care setting 3.To share experience from different perspectives in caring for patients in a community setting 4. To promote the GOPC-PPP Program

On 29<sup>th</sup> Nov 2018, an experience-sharing forum was held. A total of 38 private doctors and 32 HA doctors and health care professionals gathered to share experience and receive updates on chronic disease management.

#### Results:

Overall feedback from both private and public doctors was satisfactory. They commented that the forum was informative and useful. The knowledge of chronic disease management and the latest development of smoking cessation and counselling service were refreshed. They agreed that these forums could be conducted regularly. Knowledge of patient care in the community and innovative ideas were exchanged during the forum. Three private doctors were enrolled to participate to the GOPC-PPP Program after the sharing forum.

#### **Conclusions:**

This is a pioneering and innovative experience to enhance collaboration among private and public doctors practicing in a community-based setting, and strive to provide quality primary care to our patients.

### POSTER PRESENTATION

#### POSTER 016

## Socioeconomic Gradients in Healthcare Access and Health-Seeking Behavior in Hong Kong

Caitlin H.N. Yeung, Florence T. Y. Ng, Esther Y. T. Yu, Laura Bedford, Maegan H.Y. Yeung, Kiki S. N. Liu, Eric H. M. Tang, Edmund K. M. Au, Ben Y. F. Fong, Emily T. Y. Tse, Carlos K. H. Wong, Cindy L. K. Lam

#### Introduction:

Limited healthcare accessibility and lower health-seeking behaviour have been shown to contribute to poor health in low-income families. Given that Hong Kong has heavily-subsidized public healthcare-services, it is unclear as to whether differences in healthcare access and health-seeking behaviour exist across different socioeconomic groups. The purpose of this systematic review is to synthesize the literature on the socioeconomic gradients of access to healthcare-services and health-seeking behaviour in Hong Kong.

#### Methodology:

Original pieces of research conducted in Hong Kong that examined low-income populations and assessed health-service accessibility and health-seeking behaviour were eligible for inclusion. Three electronic databases (PubMed, Scopus and PsycINFO) were searched using keywords: (1)'low-income', 'poverty', or 'socioeconomic', (2)'Hong Kong' and (3) 'health-service access', 'health-service utilization' or 'health-seeking behaviour'. PRISMA guidelines were followed.

#### **Results:**

121 articles were identified, 35 studies were screened, and 6 were included. Overall, in Hong Kong, there is horizontal inequity with pro-rich bias in private primary care outweighing the pro-poor bias of public care. The quality of primary care experienced was higher for those with higher income and private insurance and were able to pay out-of-pocket. Cervical and breast cancer detection are also much later in low-income or ethnic minority women. Almost half had never received a cervical smear before, which delayed their opportunity for earlier treatment and better prognosis. Last, lower household income and education level were associated with less frequent health information seeking, which makes individuals less aware of methods to improve their health.

#### **Conclusions:**

There is socioeconomic inequity in health-seeking behaviour and access to healthcare services, which is most likely related to the private-dominated primary-care system. Affordable, holistic and community-based primary care should be made more accessible to low-income families. This will be an essential step to improving healthcare service accessibility and health-seeking behaviour in low-income families, in order to reduce health inequities in Hong Kong.

## POSTER PRESENTATION

## POSTER 017

## Ill-health and Poverty: Physical Health Outcomes of Lowincome Populations in Hong Kong

Caitlin H.N. Yeung, Kiki S. N. Liu, Esther Y. T. Yu, Laura Bedford, Maegan H.Y. Yeung, Florence T. Y. Ng, Eric H. M. Tang, Edmund K. M. Au, Ben Y. F. Fong, Emily T. Y. Tse, Carlos K. H. Wong, Cindy L. K. Lam

#### Introduction:

The inextricable relationship between poverty and ill-health is well-documented worldwide and can be intergenerational. Although Hong Kong has a high GDP per capita, income inequality is severe, which may lead to health disparities across socioeconomic groups. A better understanding of poverty and physical health can better inform health policy on reducing health inequities. This systematic review aimed to critically appraise the existing literature on physical health outcomes of low-income families in Hong Kong.

#### Methods:

Articles that were original pieces of research, conducted in Hong Kong, examined low-income populations, and assessed physical health-related outcomes were included. Electronic databases PubMed, PsycINFO and Scopus were searched according to PRISMA guidelines, using keywords related to 'low-income'(e.g. 'poverty', socioeconomic'), 'Hong Kong', 'physical health' (e.g. 'health-status', 'cancer', 'cardiovascular', 'diabetes') and risk factors (e.g. 'tobacco', 'diet').

### **Results:**

560 articles were identified, 64 screened and 11 eligible for inclusion. 3 were cohort studies and 8 were cross-sectional. Low-income individuals have higher risk of multimorbidity, with a higher prevalence of obesity, hypertension and diabetes. Lower SES is associated with higher risk of childhood obesity and hypertension, which can severely affect both short term and long term health. The lack of accessibility to healthy food options is also detrimental to health of low-income families, increasing their risk of non-communicable diseases. Oral health for low-income families worsens without universal access to publicly-funded dental services. Low-income families are more prone to infectious diseases such as tuberculosis and experience increased mortality risks associated with air pollution.

#### Conclusions:

There are gradients of physical health across different income groups in Hong Kong. Physicians should be aware of the complex health-related conditions low-income populations experience in order to provide better support. A good primary healthcare system has been shown to improve health outcomes and reduce health inequities, and should be made more accessible to low-income populations in Hong Kong.

## POSTER PRESENTATION

## **POSTER 018**

Review on outcome and appropriateness of patient call back system in Cheung Sha Wan Jockey Club general out-patient clinic (CSWJCGOPC)

BPY NG, SM KWAN, MP YIU, CW CHAN, YK YIU, W LUK

KWC Family Medicine and Primary Health Care Department

### Introduction:

Abnormal laboratory results are commonly encountered by doctors in general out-patient clinic during daily laboratory report screening. A system is in place to call back patients who require urgent or early follow up, so that appropriate management can be provided accordingly and in a timely fashion. Effective patient call back system can improve the quality of patient care, reduce patient's anxiety and optimize the use of the tight appointment quotas.

## Methodology:

Retrospective review of CMS record for patients who were called back from November to December 2018 was done. The appropriateness of the call back was assessed. The attendance of these patients and management outcome were retrieved.

#### **Results:**

Total number of 90 call back cases were assessed in the study. The common types of investigation call back included blood test (28/90) e.g. low Hb level, urine test(24/90) e.g. urinary tract infection, x ray (21/90)e.g. abnormal lung shadow and retinal photos (6/90). 94% of the call back cases were appropriate, only 5 call back cases which were inappropriate e.g. detached osteophyte at talus.

Compared to the call back study done in 2016, there were 225 call back cases in total and 29 of those cases (12.9%) were inappropriate call back. The reduction of call back in the second review may be due to the sharing of data and alignment of management among the team.

#### **Conclusions:**

The study showed that most of the call back cases were indicated. Also, the appropriateness of utilizing call back quota was satisfactory. The regular educational seminars, cases review and discussion with seniors helped medical staffs to uphold clinic standard and greatly improved the appropriateness of call back cases.

## POSTER PRESENTATION

## POSTER 019

# Antimicrobial Susceptibility Pattern of Bacteriuria and Associated factors of bacteriuria among Pregnant Women in Primary Health Care of Macau, China

1<sup>st</sup> author: Stella Mei Fong Chou, 2<sup>nd</sup> author: Ping Wan Li, MD

AreiaPreta Health center in Macau of China

#### Introduction:

Both asymptomatic bacteriuria (ASB) and symptomatic bacteriuria(SB)during pregnancy increase the risk of developing pyelonephritis, which is associated with adverse fetal or maternal outcomes. The purpose of our study was to determine the prevalence, etiological agents with susceptibility for bacteriuria and associated factors of bacteriuria among antenatal care pregnant women in primary health care of Macau, China.

## Methodology:

This is a cross-sectional survey involving 5038 antenatal care pregnant women from 1st Jan, to 31st Dec, 2018. The mid-stream clean urine specimens were routine arranged in 1st consultation and other data were collected from medical records in computer. Samples were examined microscopy, culture and antimicrobial sensitivity. Data were analyzed by EXCEL and SPSS software.

## **Results:**

The prevalence of 1st bacteriuria in our study was 2.56% (n=129), 88.97% was ASB. The mean ages were 30.95±4.80 years; ASB mainly found in young age group (21- 30 years) and multipara. The most common isolated microorganism was Escherichia coli 62.75%, Susceptibility of Nitrofurantoin (96.09%), followed by Klebsiella pneumonia and Streptococcus agalactiae, also 8.82%, 100% Susceptibility of 2nd general cephalosporin in former and 88.9% of Amplcillin in latter, respectively. Urinary irritating symptom and history of urinary tract infection were definitively associated with bacteriuria(P<=0.05).

#### Conclusions:

ASB is common in young age group and multipara. Nitrofuranton, 2nd general Cephalosporin and Amplcillin are safe and effective antibiotics again UTI in pregnancy. Bacteriuria in pregnancy was easier to be found in suffering urinary irritating symptom and history of urinary tract infection cases.

## POSTER PRESENTATION

## POSTER 020

Seasonal Influenza Vaccination is associated with Less Hospital Admission due to Severe Hypoglycaemia among Community Dwelling Elderly Patients with Diabetes followed up in Primary Care

TK Chu, J Liang

NTW cluster

#### Introduction:

Admission or Accident & emergency attendance due to severe hypoglycaemia causes significance morbidity to DM patients and increase the burden of secondary care.

## Methodology:

A retrospective review of electronic medical records of elderly patients with diabetes and aged 65 or above followed up in 8 primary care clinics in the New Territories West Area of Hong Kong was performed to investigate any association between seasonal influenza vaccination (2017/18) status, number of attendances in the Accident and Emergency Department, and number of unplanned hospital admission during the influenza season period. The data capture period was from 1 Jan 2017 to 31 Mar 2018. Besides the above outcome parameters, demographic and clinical data, such as gender and age, body mass index (BMI), blood pressure, use of insulin and oral hypoglycemia agents, biochemical parameters such as HbA1c and LDL, were collected.

#### **Results:**

There were 19,276 elderly patients with diabetes and mean age over 70 followed up in the 8 primary care clinics during the period, 9,783 (50.8%) of them had received 2017/18 influenza vaccination. The characteristics between vaccinated and unvaccinated group were compared (Table 1). Both in univariate analysis and multivariate analysis after adjusting age, HbA1c, and use of insulin or hypoglycaemic agents, seasonal influenza vaccination was associated with a lower risk for attending the Accident and Emergency Department (Adjusted Odd Ratio (AOR) of 0.562 (95 CI: 0.362, 0.872, p=0.016)) and unplanned hospital admission (AOR of 0.439 (95%CI: 0.244, 0.791, p=0.034)) related to severe hypoglycemia.

#### Conclusions:

Seasonal influenza vaccination was associated with less hypoglycemia-related unplanned hospital admission and Accident and Emergency Department attendance among community dwelling elderly patients with diabetes followed up in primary care.

## POSTER PRESENTATION

## **POSTER 021**

Prevalence of diabetic nephropathy among Chinese patients with type 2 diabetes mellitus and different categories of their estimated glomerular filtration rate based on the Chronic Kidney Disease Epidemiology Collaboration (CKD-EPI) equation in primary care in Hong Kong: a cross-sectional study

Dr. Ka Yee Mok, Dr. Pang Fai Chan, Dr. Loretta K.P. Lai, Dr. Kai Lim Chow, Dr. David V.K. Chao KE cluster

#### Introduction:

Diabetes mellitus is a major public health problem and is the leading cause of chronic kidney disease worldwide. The results of our study would provide us important information about the epidemiology of diabetic nephropathy in primary care in Hong Kong. This would be useful for devising the long-term management policy for our diabetic patients in primary care in order to reduce the incidence of end-stage renal failure caused by diabetic nephropathy.

## Methodology:

A cross-sectional study was conducted in 35,109 Chinese patients with type 2 diabetes followed up in all General Outpatient Clinics in a Hospital Authority cluster and had undergone comprehensive diabetic complication assessment from April 2013 to March 2016. The GFR was estimated by the CKD-EPI equation. Logistic regression was used to analyze the associated factors of diabetic nephropathy.

#### **Results:**

The prevalence of diabetic nephropathy (with either or both albuminuria and impaired eGFR), impaired eGFR (with or without albuminuria) and albuminuria (with or without impaired eGFR) was 31.6%, 16.9% and 22.0% respectively. The prevalence of eGFR categories 1, 2, 3, 4 and 5 was 36.0%, 47.1%, 15.7%, 1.1% and 0.1% respectively. The comorbidity with hypertension or presence of other diabetic microvascular or macrovascular complications including diabetic retinopathy, peripheral neuropathy, peripheral vascular disease, history of stroke and history of ischemic heart disease had strong association with diabetic nephropathy. Obesity, smoking, suboptimal control of blood pressure, hemoglobin A1c and non-high density lipoprotein cholesterol were also significantly associated with diabetic nephropathy.

#### **Conclusions:**

Diabetic nephropathy was common among Chinese patients with type 2 diabetes in primary care in Hong Kong. Early identification and control of the modifiable risk factors are of upmost importance in preventing the complication.

## POSTER PRESENTATION

## POSTER 022

## Elderly care: a practice team approach

Dr. Chung Tze Nang, FRCGP, FRACGP, FHKCFP, FHKAM(Family Medicine)
Miss Li Sau Man, RN

UCN

#### Introduction:

The Wo Lok Estate clinic of United Christian Nethersole Community Health Service in Kwun Tong serves predominantly an elderly population. In this case commentary, a 89 year old widowed estate resident is described.

## Methodology:

Madam C lives with her young Cantonese speaking Indonesian maid. She attends GOPC for hypertension, hyperlipidaemia and gout, and United Christian Hospital (UCH) for stress incontinence. She has four children who live away.

She is our patient since 2012. In 2019 she visited 12 times from January to May for epigastric discomfort, retrosternal burning and chest pain. She was also admitted to UCH where ECG and CT abdomen were normal.

In January 2019 MMSE scored 25/30 and in May GDS-15 showed 9/15, but Madam C denied depression.

#### Results:

The practice nurse performed a home visit in June finding a tidy home decorated with awards in Cantonese opera singing but scattered with medications in confusion. Madam C complained that she was not getting enough attention from her children but denied that she was attention seeking. Time was spent instructing the maid on supervising Madam C's medications.

Our nurse subsequently found that Madam C's complaining nature also caused stress in the family.

Thereafter, time was spent in counselling, her visits becoming less frequent with no more vague symptoms.

## **Conclusions:**

The elderly stands to benefit from special attention. Behavioural change can be a sign of underlying psycho-social problems which in Madam C's case is lack of social support.

The practice team is in the best position to explore and help. The home visit has been useful. It is fortuitous that her maid is a competent carer. The confusion with medications further illustrates this common problem among the elderly.

Hopefully, the family can cope better but the practice team will continue to visit and offer support.

## POSTER PRESENTATION

## **POSTER 023**

## A Smart Safe - Enhances Specimen Security In A Perfect Way

Ms Mak Pui Ying, Ms Lai Mei Ling, Ms Kwok Fei Ling, Ms Lam Pui Ha, Ms Chiu Wai Hing Caroline, Dr Leung Wing Kit, Dr Hui Ming Tung Eric

### Introduction:

Specimen collection is a routine and heavy workload among clinics. There is about 100-150 collected specimen each day in GOPC clinics. In usual practice. Patients drop down their specimens in a collection box without security lock which located nearby the treatment room. This collection facility is undesirable and has potential risk in missing patient specimens though clinic staffs are nearby. Moreover, the specimen bottles in the boxes are prone to exposing patients' personal particulars from the labels on the specimen bottles. To ensure the security of collected specimens and to protect patient data privacy, a specimen drop box in a one-way path design was preventing missing specimen.

## **Objectives:**

- 1. To ensure all collected specimens are kept in a secure area.
- 2. To facilitate self-assisted specimen collection by drop off box.
- 3. To allow flexible time for specimen collection.
- 4. To ensure protection of patient personal data.

## Methodology:

- 1. Design a specimen drop box in a one-way path with swirling tunnel to prevent picking up specimen by others.
- 2. The specimen drop off box is fixed on the floor, non-movable with lockable door to protect the collected specimens in site before sent out to laboratory.
- 3. Easy read instruction in using the drop box was placed on top of the drop box for patients.
- 4. All specimens only can be drawn out by designated staff.

#### **Results & Outcome:**

- 1. The new specimen drop boxes are being used in 9 GOPC clinics located in NTEC from 1st December 2018.
- 2. The new specimen box is eye catching and user-friendly for patients to drop in their specimens.
- 3. Since all specimens cannot be taken out by patient after drop off, the security of the collected specimens is ensured.
- 4. The flexibility of collection time is enhanced.
- 5. There was no missing specimen reported after using the new specimen drop box by the end of June 2019.

## POSTER PRESENTATION

## POSTER 024

## Direct Access Endoscopy Booking by Family Physicians: Clinical Factors Associated with a Positive Endoscopy Finding in Primary Care Setting

### Dr. LH Leung

Department of Family Medicine and Primary Health Care, Kowloon West Cluster, Hospital Authority

## **Background:**

Peptic ulcer disease is a common and important upper gastrointestinal tract condition encountered in Family Medicine. Various clinical factors had been described to be associated with the condition. Most existing studies were conducted in hospital-based setting or in high risk patients. There is scarcity in updated literature to review such factors in Hong Kong community-based patients. The objective of the study was to examine factors associated with ulcer disease versus non-ulcer endoscopic findings in primary care settings.

## Methodology:

A retrospective cross-sectional study with study period from 1st October, 2015 to 31st December, 2017 was conducted. General out-patients without high risk features who were booked oesophagogastroduodenoscopy (OGD) under the direct access endoscopy programme were included in the study as subjects. Demographic and clinical information were obtained. Associations between subjects' characteristics and endoscopic outcome were evaluated by multiple binary logistic regression which included factors with P < 0.1 in simple regression analyses. A P-value of < 0.05 was considered statistically significant.

#### **Results and Conclusion:**

340 patients were booked OGD in the study period. Among 297patients who completed endoscopy, 32 (10.8%) were positive for peptic ulcer disease. Factors associated with positive peptic ulcer disease included ever smoking status (adjusted OR9.28; 95%CI 2.85-30.25; P<0.001), positive Helicobacter Pylori status (adjusted OR 5.95; 95%CI 2.45-14.42; P <0.001), and presence of epigastric pain on history (adjusted OR 4.40; 95%CI 1.61-12.01; P 0.004). Further studies with modified designs might be conducted for evaluation of our findings and associated conditions.

## **POSTER PRESENTATION**

## POSTER 025

## Challenges, barriers and innovative ways in promoting Family Medicine

Dr. Will Leung, Dr. Aldo Wong, Dr. Chloe Chan

Young Doctors' Committee, HKCFP

### Introduction:

There were a number of challenges and barriers in promoting Family Medicine, including policy and system factors, media impact, education system, patient factors and physician factors.

## Methodology:

A round table discussion in a format of "world café" was conducted at the WONCA World Conference 2018 hosted by the Young Doctors' Committee, HKCFP. Interactive discussions were conducted among delegates around the world to understand more about the challenges, barriers and innovative ways in promoting Family Medicine.

#### **Results:**

Ways to promote Family Medicine included arousing public awareness, enhancing training in Family Medicine, and re-visiting role of Family Medicine. Successful cases in promoting Family Medicine including national campaign, medical education and referral systems were shared at the interactive discussion.

## POSTER PRESENTATION

## POSTER 026

# Strategies to improve blood pressure and hypertension control of patients in General Out Patient Clinics, Hong Kong East Cluster

HUNG SY, Sally LAM SK, Teresa CHNA YL, CHOU PK, Wangie LEUNG WC, Crystal LEUNG PS, Felix LI HL, CHEUNG PH, Annow CHOW WP, Kathy CHEUNG YH, Marcus WONG MS, Michelle WONG MY

Department of Family Medicine and Primary Healthcare, Hong Kong East Cluster, Hospital Authority (HA)

#### Introduction:

In General Out Patient Clinic (GOPC), Hong Kong East Cluster (HKEC), there are around 56000 hypertension patients.

Correct blood pressure (BP) measurement technique, lifestyle modification, drug compliance are all contributing factors to enhance good BP control, prevent and delay complications.

In GOPC HKEC, HT patients measure BP by self-help BP machine before consultation, it was found that 43.1 % of patients used inappropriate method to measure BP, e.g. measure at lower arm. There are also 30-40% of patients have drug compliance problems.

Since July 2018, some strategies are conducted to find out contributing factors affecting patients' BP, correct patients' BP measuring technique, empower patients' HT knowledge and promote home BP.

## Methodology:

Briefing session were conducted to staff of improvement measures. HT patients would advise to take enough rest before BP measure, volunteer workers are assigned to self-help BP counter to ensure correct BP measure, HT care posters are posted-up in clinics, promotion of correct BP measure and normal BP target by broadcasting. Supporting staff would remind patients to take out their home BP record before consultation. During HT assessment, nurse would educate lifestyle modification, check home BP technique and drug compliance; doctors would titrate medication for fair BP control patients and marked clearly in drug sheet with red ball pen to alert pharmacy staff for explaining clearly to patients.

HT care education game booth is held quarterly by student nurses.

#### **Results:**

Patients had BP under 140/90 mmHg was improved from 77.7% (2017/18) to 80.6% (2018/19)

All supporting staff agreed that briefing session increased their understanding of HT patients' journey

All patients who had attended game booth agreed that lifestyle modification, correct BP measure technique are essential.

Monthly average of printing home BP record sheet in Patient Resource Corner were increased from 745 (2017/18) to 784 (2018/19).

## **Conclusion:**

Patient education and empowerment are the cornerstone of hypertension management.

## POSTER PRESENTATION

## **POSTER 027**

## One short video: An Small Intervention to achieve Great Leap in Patients' Knowledge on SMBP

Janice S.W. Tsang, W.M. Fung, C.M. Wan, Medina W.Y. Chan, Y.Y. Lau, M.S. Chan, W.C. Lin, K.Y. Tse, W.Y. Wong, W.H. Lau, P.H. Lam, Caroline W.H. Chiu, Eric M.T. Hui, Elsie Hui, Philip P.K. Li Department of Family Medicine, New Territories East Cluster, Hong Kong

#### Introduction:

Self-measured Blood Pressure (SMBP) monitoring was important for patients with Diabetes Mellitus (DM) and Hypertension (HT). Having regular monitoring of blood pressure (BP), these patients have a grasp of their updated BP situation to facilitate appropriate interventions for preventing complications like stroke or heart disease. A short video for teaching SMBP at home and in clinic was broadcasted in 3 general out-patient clinics (GOPC) in NTEC between August and October 2018 to promote patient's self-awareness and empower their SMBP knowledge. Apart from knowledge empowerment, few self-help automatic BP kiosks in clinics were set up to improve the waiting time for BP measurement as well as alleviate patient's "nervous" feeling.

## Methodology:

The program adopted a one-group pretest-posttest design, with the SMBP video and the Self-help automatic BP kiosks as the intervention. Adult Chinese patients with DM or HT attending Risk Assessment Management Program (RAMP) were recruited. SMBP knowledge, waiting time for BP measurements in clinic as well as patients' satisfaction were measured before and after the intervention.

#### **Results:**

406 subjects with DM and 637 HT patients completed the program. The pre-post data comparison revealed encouraging improvement in knowledge of target BP for DM and HT respectively (from 24.5% to 42.8%). Significant increase of patients' understanding on the correct using home BP machine (from 30.2% to 56.6%) while over 40% patients realized the reason of regular SMBP at home. For BP measurement in clinic, the waiting time was reduced by 67% from 30 mins to 10 mins. In addition, 96.7% patient expressed "satisfactory" feedback on SMBP video.

#### Conclusion:

This program demonstrated an effective education intervention of empowering patients in SMBP knowledge in primary healthcare setting. As patients taking a more active role in the disease process, it is anticipated to improve treatment adherence and health outcomes for patients with DM or HT.

## POSTER PRESENTATION

## POSTER 028

# Can Holter monitoring (ambulatory electrocardiography) detect more atrial fibrillation among patients presented with palpitation in the primary care setting

### **Chiang LK**

KC Cluster

#### Introduction:

Atrial fibrillation (AF) is one of the common chronic cardiac arrhythmia, and will lead to serious complications. A 24-hour ambulatory electrocardiography (or Holter monitoring) monitor is usually used, aiming for a higher yield of detection of possible cardiac arrhythmia, and its clinical efficacy in this aspect has been well established.

## Methodology:

This is a retrospective case series, including all patients presented with palpitation seen in primary care and had Holter monitoring performed in a regional primary care clinic of Hong Kong during the year 2010 to 2017. The study aims to examine the prevalence of atrial fibrillation detected by Holter monitoring; and to examine the patient characteristics associated with Holter monitoring identified AF.

## **Results:**

Holter monitoring were arranged for 135 (31%) male and 301(69%) female patients with palpitation, their mean (SD) age were 59.4 (15.1) and 56.6 (13.9) years old respectively. 253 (58%) patients had associated chronic comorbidity, including 38.0% had hypertension. 170 (39.0%) Holter monitoring detected significant cardiac arrhythmia. 16 cases (3.7%) were confirmed to have AF or paroxysmal AF. Both Chi-Square test and multivariate logistic regression revealed that patients who were smoker, older in age, or with concomitant ischaemic heart disease were more likely to have significant cardiac arrhythmia (P < 0.05).

#### Conclusion:

39% of Holter monitoring for patients presented with palpitation in the primary care setting have significant cardiac arrhythmia, while 3.7% has atrial fibrillation which need referral to specialist for further management.





## HONG KONG ACADEMY OF MEDICINE CONFERENCE & HONG KONG PRIMARY CARE CONFERENCE 2019

## FREE PAPER COMPETITION -

## POSTER PRESENTATION

## POSTER 029

## Case Study: Healing a Diabetic Amputation wound with the use of Photodynamic Therapy

Dr. Kin Leung, ND

## **Purpose:**

Patient of 60yoa presented with diabetes Type 2, blood sugars uncontrolled for 35 years. Sugars average 11-20 mmol/l (normal <6.1). The patient underwent the 1st metatarsal phalange (Right) amputation because of an infection that had penetrated deep into the tissue. 2 months after the amputation the patient requests to start treatment as the surgeon wants to cut off the rest of the toes/foot due to an infection and the wound not healing or closing. The patient also present with 2 other wounds on the Left leg that have never healed for 2 years.

Fig 1: Right foot initial presentation (notice the discoloration of the  $2^{nd}$  metatarsal phalange and how the stitches did not hold the wound close). Start of first treatment.



Left leg wounds that never healed for 2 years

## Methodology:

Treatment is Photodynamic Therapy (PDT) IV and topically. The IV therapy included vitamin C, curcumin and riboflavin. The topical laser was done on the foot for 17mins (5 mins green, Red, Blue, 2min UV) the IV therapy was done over 2.5 hours, for every session.



#### **Results:**

Fig 2: After one session, (gauze on the wound), notice the improvement on the other leg.

Fig 3: After two sessions, his surgeon cleaned up the wound and noticed the improvement (notice the color of the 2<sup>nd</sup> metatarsal). Notice the depth of the wound.

Fig 4: Notice the improvement in the fat pad and the depth of the wound decreased after 3 sessions



Fig 5: Notice the regrowth of the tissue and the healing, and more decrease in the depth of the wound. After 4 sessions

Fig 10

(For the sake of keeping the abstract short this is about 1 ½ months into treatment) There was a reduction in blood sugar to 4.5-5.8 mmol/l which was observed as well.



#### Conclusion:

This is still an ongoing case and will be concluded by the time the conference starts. As you can see the treatment has been very effective so far and I hope to show the full results at the symposium and delve into the case and treatment details.

## POSTER PRESENTATION

## POSTER 030

## The Revolution of Primary Health Care Wound Services in Previous Decade

LAM KKA, CHAN HY, CHAN CS, CHOW TW, CHOI WK, AU PS, WAN YT, LAU MS, CHOW WPA, CHEUNG PH, CHEUNG YHK, WONG MYM

Department of Family Medicine and Primary Health Care, Hong Kong East Cluster, Hospital Authority

#### Introduction:

The aging people and on time discharge minimized prolong hospitalization, Primary Health Care in order to face with the increasing demand and complexity of wound care. Before 2009, there is lack of standardization on wound assessment, planning, training and referral system, resulting in unnecessary dressing frequency and heavy workload.

## Methodology:

A structural referral system was launched in 2009, from frontline to wound specialist which frontline nurses are responsible for screening and assessment. Wound link nurse in each clinic would devise a wound management plan and monitor the progress on healing. Wound specialist would initiate advanced investigations and interventions when healing is delayed.

Knowledge & skill transfer via Department Intranet, Wound Assessment Quick Guide and new wound products sharing class can facilitate frontline staff to tackle the wound problems.

Through patient empowerment program (Leg Club and Walk with Diabetes - Foot Care), and a series of poster and educational pamphlet can arouse the awareness on patient immediate care on wound.

Also local Evidence Based Studies on wound pain control and wound shower could build up the confidence on both patients and nursing staff.

#### Results:

The statistical dressing attendance in General Out-patient Clinic was dramatically drop around 25.2%, from 85536 in 2008 to 63999 in 2018. However, the numbers of patient were increased around 17.6% from 15802 to 18582 respectively. The healing rate on leg ulcer, burn & scald and traumatic wound have 30-50% speed up.

#### Conclusion:

Statistically showed that even increasing service capacity and without any extra nursing manpower and clinic space, the performance on wound service can be effectively delivered. The seamless referral system is getting efficient in wound management. Wound Clinic can provide continuity & safety care by close monitoring and enhanced service quality of wound care in community by early detection, proactive nursing intervention and patients empowerment.



+25% more patients on Relvar has improved asthma control versus BD ICS/LABAs

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## RELVAR ELLIPTA

References: 1. Woodcock A, Vestbo J, Bakeriy ND, New J, Gibson JM, McCorkindale S, et al. Effectiveness of fluticasone furoate plus vilanterol on asthma control in clinical practice: an open label, parallel-group, randomised controlled trial. Lancet 2017 390 2247 - 2255. 2. Svedsafer H., Jones R, Bosanquet N. Jacques L, Lay-Flurrie J, Leather DA, et al. Taltient reported outcomes with initiation of fluticesone furcate/vilanterol years of continuing usual care in the extinuity Safety Respiratory Medicine 2018; 141-195-206 3. Relayer (fluticesone furcate/vilanterol) Hong king prescribing information (HK032018053942/EMA201803). Batteleys (E.) Assurate P, Baines A, Kempetor R, Williams M, Mallon T, et al. Anti-inflammatory duration of action of fluticesone furcate/vilanterol inflames are reserved as a reserved resonance occurrence over single flutinessors. Part of the control of the cross-over single flutinessors for control of the cross-over single flutinessors for control of the cross-over single flutinessors. dose study of the bronchodilator duration of action of combination fluticasone furoate/vilanterol inhaler in adult asthma. Besoir Med 2016: 119:115-121. 6, Svedsater H., Jacques L., Goldfrad C., Bleecker ER, Ease of use of the ELLIPTA dry powder inhaler: data

NAME OF THE PRODUCT RELVAR ELLIPTA QUALITATIVE AND QUANTITIVATIVE COMPOSITION Pre-dispensed dose of 100 mcg or 200mcg of fluticasone furgate and 25 mcg vilanterol (as trifenatate), inhalation powder, INDICATIONS <u>Astima</u> Relvar Ellipta 100/25mcg & 200/25mcg is indicated for the regular treatment of asthma in adults and adolescents aged 12 years and older where use of a combination medicinal product (longacting beta, agonist and inhaled corticosteroid) is appropriate \*patients not adequately controlled with inhaled corticosteroids and 'as needed' inhaled short acting beta, agonists. \*patients already adequately controlled on both inhaled corticosteroid and long-acting beta<sub>3</sub>-agonist. DOSAGE AND ADMINISTRATION Asthma Adults and adolescents aged 12 years and over. One inhalation of Relivar Ellipta 100/25mcg or 200/25mcg once daily. Patients usually experience an improvement in lung function within 15 minutes of inhaling Relivar Ellipta. A starting dose of Relvar Ellipta 100/25mcg should be considered for adults and adolescents 12 years and over who require a low to mid dose of inhaled corticosteroid in combination with a long-acting beta<sub>2</sub>-agonist. If patients are inadequately controlled on Relvar Ellipta 100/25mcg, the dose can be increased to Relvar Ellipta 200/25mcg, which may provide additional improvement in asthma control. The maximum recommended dose is Retvar Ellipta 200/25mcg once daily. Children aged under 12 years. The safety and efficacy of Reliver Ellipta in children under 12 years of age has not yet been established in the indication for asthma. Elderly patients (>65 years) & renal impairment No dose adjustment. Relivar Ellipta is for inhalation use only. After inhalation, the patient should rinse their mouth with water without swallowing. Patients should be made aware that Relvar Ellipta must be used regularly, even when asymptomatic. Patients should be regularly reassesed by a healthcare professional so that the strength of **Relvar Ellipta** they are receiving remains ontimal and is only changed on medical advice. CONTRAINDICATIONS Hypersensitivity to the active substances or to any of the excipients WARNINGS AND PRECAUTIONS Deterioration of disease Fluticasone furoate/vilanterol should not be used to treat acute asthma symptoms or an acute exacerbation in COPD, for which a short-acting bronchodilator is required. Increasing use of short-acting bronchodistors to relieve symptoms indicates deterioration of control and patients should be reviewed by a physician. Patients should not stop therapy with fluticasone furcate/vlianterol in asthma or COPD, without physician supervision since symptoms may recur after discontinuation. Asthma-related adverse events and exacerbations continue treatment but to seek medical advice if asthma symptoms remain uncontrolled or worsen after initiation of treatment with Relvar Ellipta. Paradoxical bronchospasm Paradoxical bronchospasm may occur with an immediate increase in wheezing after dosing. This should

be treated immediately with a short-acting inhaled bronchodilator. Relvar Ellipta should be discontinued immediately, the patient assessed and alternative therapy instituted if necessary. <u>Cardiovascular effects</u> Cardiovascular effects, such as cardiac arrhythmias e. supraventricular tachycardia and extrasystoles may be seen with sympathomimetic medicina products including Relver Ellipta. Therefore fluticasone furoate/vilanterol should be used produce incoming nater chings, intended inducation function transportant shadow do used with caution in patients with severe cardiovascular disease, or heart right abnormatives, thyrotocoxis, uncorrected hypokalaemia or patients precisposed to low levels of serum potassium. <u>Systemic contribusteroid effices</u> systemic effects may occur with any inhelied contribustry at high disease prescribed for long portiods. These effects are much less likely to occur then with oral controductions. Possible systemic effects include Cushing's syndrome. Cushingoid features, adrenal suppression, decrease in bone mineral density growth retardation in children and adolescents, cataract and glaucoma and more rarely, a grown retardation in clinical and addressing, catalog and gracelog and more rately, a range of psychological to behavioural effects including psychomotor hyperactivity, sleep disorders, anxiety, depression or aggression (particularly in children). Fluticasone furgate violated should be administered with caution in patients with pulmonary tuberculosis or in patients with chronic or untreated infections. The incidence of pneumonia in patients with asthma was common at the higher dose. The incidence of pneumonia in patients with asthma taking Relvar Elipta 2007/Smcg was numerically higher compared with those receiving Relvar Ellipta 100/25mcg or placebo. No risk factors were identified. INTERACTIONS Interaction, with beta-blockers Seta, advenergic blockers may weaken or antagonise the effect of beta-adrenergic agonists. Concurrent use of both non-selective and selective beta;—adrengic blockers should be arcided unless there are compelling reasons for their use. Interaction with CYP3A4 inhibitors Caution is advised when co-administering with strong CYP 3A4 inhibitors as there is notential for increased systemic exposure to both fluticasons furcate and villanterol. Co-administration should be avoided unless the benefit outwelght the increased risk of systemic corticosteroid side effects, in which case patients should be monitored for systemic corticosteroid side effects. PREGNANCY AND LACTATION Pregnance Administration of flut casone furcate/wianterol to pregnant women should only be considered if the expected benefit to the mother is greater than any possible risk to the foetus. <u>Breast-feeding</u> A decision must be made whether to discontinue breast-feeding or to discontinue fluticasone A occasión inicio de indus que interes de socionidad de la constitución de la descripción por la descripción entra del fundador fundador fundador de la descripción de la constitución de la descripción del descripción de la descr OVERDOSE There is no specific treatment for an overdose with fluticasone furgate/vilanterol. If overdose occurs, the patient should be treated supportively with appropriate monitoring as necessary. Further management should be as clinically indicated or as recommended by the national poisons centre, where available. Abbreviated Prescribing Information based on Relvar Ellipta Hong Kong Prescribing Information HK032018GDS09v2/EMA201803

Full prescribing information is available on request from GlaxoSmithKline Ltd, 23/F, wer 8. The Gateway, 9 Canton Road, Tsimshatsui, Kowloon, Hong Kong or Avenida Infant rique, no.43-53A, Edf. Macau Square 21 andar C, Macau. For adverse events report please call GlaxoSmithKline Limited at (852) 9046 2498 or (853) 6366 7071

and 200 mcg / 25 mcg (100/200 mcg fluticasone furgate and 25 mcg vilanteral)

- Hypersensitivity to the active substances or to any of the excipients is contraindicated to Relvar
   Relvar should not be used to treat acute asthma symptoms, for which a short-acting bronchodilator is required
- Relvar should be used with caution in natients with severe cardiovascular disease, nulmonary
- tuberculosis or in patients with chronic or untreated infections
   Systemic effects may occur with any inhaled corticosteroids, particularly at high doses prescribed for long periods. Possible systemic effects include Cushing's syndrome Cushingsid features, adrenal suppression, growth retardation in children and adolescents and decrease in bone mineral density
- Patients should not stop therapy with Relvar in asthma without physician supervision

Frequency Category	Number of Subjects	Adverse reaction(s)
Very common	≥1/10	Headache, nasopharyngitis
Common	≥1/100 to <1/10	Pharyngitis, rhinitis, candidiasis of mouth and throat, pneumonia, arthralgia, pyrexia
Uncommon	≥1/1,000 to <1/100	Extrasystoles
Rare	≥1/10,000 to <1/1,000	Hypersensitivity reactions including anaphylaxis, angloedema, rash, and urticarial, Palpitations



### Prolia® (Denosumab) Abbreviated Prescribing Information

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Reference: 1. Henry G Bone, Rachel B Wagman, Maria L Brandi, et al. The Lancet Diabetes & Endocrinology 2017;7(Vol 5):513-523.

se read the full prescribing information prior to administration and full prescribing information is available upon request. This material is for the reference and use by healthcare professionals only. For medical enquiries and adverse event reporting, e contact Medical Information at 800961142 [English only]. Prolin® and 博力加爾中國語彙中國語彙中國語彙中國語彙中國



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withor without look. No dose adjustment is required for patients with eCFR addm/min/17.37m. or Crit (45mL/min. Rame hereditary, conditions of any of the excipients of age. Contraindication: Hypersensitivity to empagification or any of the excipients. Patients on dialysis, eCFR 430mL/min/17.37m. or Crit (45mL/min. Rame hereditary, conditions of any of the excipients of the stable in the contraints of the c



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## **Background**

According to a study, about 10% of the elderly population in Hong Kong have depressive symptoms<sup>1</sup>. Elderly depression is a neglected problem affecting our entire society with grave consequences and high societal costs. Early intervention and prevention can be effective in addressing the problem. However, there are different challenges in providing support services in relation to early intervention and prevention in Hong Kong, for instance, fragmented community services, low awareness on elderly mental wellness, and the stigma of depression in the community.

## JC JoyAge: Jockey Club Holistic Support Project for Elderly Mental Wellness

The Hong Kong Jockey Club Charities Trust has donated over HK\$87 million to initiate the three-year "JC JoyAge: Jockey Club Holistic Support Project for Elderly Mental Wellness" (JC JoyAge), in order to raise public awareness of mental health literacy and to prevent elderly depression for Hong Kong. The Project aims to develop a viable and sustainable best practice model to promote elderly mental wellness and prevent elderly depression, also provide support services to vulnerable and depressed elderly. The Project will adopt a three-pronged approach, improve existing elderly mental health service; emphasise on productive ageing for active outreach and engagement; and build up mental health literacy for professional and non-professional. In the four representative pilot districts of Kwai Chung, Kwun Tong, Sham Shui Po and Tseung Kwan O, a collaborative stepped-care model is developed to align community mental health and elderly services, which adopts a holistic approach in prevention and early intervention of elderly depression.



### Vulnerable and depressed elderly

Reduce participants' risk or severity of depression through peer support, groups and case work, so as to enhance their resilience towards adverse life events, reduce social isolation and other modifiable risk factors and ultimately improving their mental wellbeing and quality of life.



Raise mental health literacy among family members and community stakeholders; enhance social support and cohesiveness in the neighbourhood.



#### **NGOs / Service units**

Improve the competence and confidence of the social services staff in handling elderly depression. Systematic training curriculums and materials on elderly mental wellness will be developed for the welfare sector.

**Objective** 

#### Number of beneficiaries<sup>2</sup>

4,227

at-risk or depressed elderly people have received the JC JoyAge prevention and intervention services **82%** 

among the depressed elderly people at discharge have shown reduction on symptoms of depression

<sup>1</sup>Tsang, E. (2016, Jan 31). Over 10 per cent of Hong Kong elderly persons show signs of depression, survey finds. South China Morning Post. Retrieved from http://www.scmp.com/news/hong-kong/health-environment/article/1907974/over-10-cent-hong-kong-elderly-persons-show-signs <sup>2</sup>As of 1\* October 2019, while discharge evaluation is still ongoing

Initiated and Funded by:



香港賽馬會慈善信託基金 The Hong Kong Jockey Club Charities Trust PAND PRE RIDING HIGH TOGETHER Partner Institution:





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