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CFPS Commencement Ceremony 2017

In her speech given at the Commencement Ceremony on 29 July 2017, Prof Helen Elizabeth Smith, Professor of Family Medicine and Primary Care, Lee Kong Chian School of Medicine, encouraged trainees to reflect and think logically during their studies and professional practices.



Guest-of-Honour,
Prof Helen Elizabeth Smith

Good afternoon, ladies and gentleman. It is delightful to be with you this afternoon as you set out on your learning journeys in Family Medicine. I wish to thank A/Prof Lee Kheng Hock for his kind invitation to attend this special event. This Commencement Ceremony is a very important ceremony not only for you, but also for the College of Family Physicians and for the future health of Singaporeans.

First I want to congratulate you as trainees on selecting Family Medicine as the branch of medicine you wish to study further. It has so much variety, it is estimated that a Family Physician looking after one thousand

patients will in one year make 2500 diagnoses, treat 450 conditions and prescribe over 200 different drugs. Family Medicine is a broad discipline and therefore has great potential to influence people's health and wellbeing. I believe, and I am only slightly biased, that Family Medicine is one of the most exciting branches of medicine - very few other specialties can compete with such diversity in their patients and the problems they present.

Not only is Family Medicine varied, but when well developed and organised it can be a major contributor to health of the population. Based on Kerr White's classical work on the ecology of health care, we know that when moving from self-care, through primary care to specialist, and then super specialist care, the volume of patients decreases. In a health care system with strong Family Medicine, less than 1 in 10 patients presenting to their family doctor will be referred elsewhere for care. If, and when, a referral to another doctor is required, in over

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CEREMONY & AGM 2017

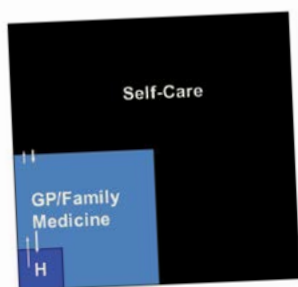
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PRESIDENT'S
FORUM

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The relative importance of Family Medicine



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Maintaining Relationships, Transforming Primary Healthcare

by Dr Irwin Clement A. Chung Wai Hoong, MCFP(S), Editor

My granny was recently admitted into an acute hospital after a “near fall” during which she sustained a Colle’s fracture to the left wrist while trying to avoid hitting the ground, quite fortuitous in a sense as she is severely osteoporotic in the hips. The fracture was splinted and she was admitted as she had complained of frequent fainting spells and anorexia. She subsequently went through 2 weeks of rehabilitation at the adjoining community hospital before being sent home.

Naturally, at times like these, my relatives would turn to the only doctor in the family (alas, that’s me) with every conceivable query at every opportunity and whenever her condition changed (for better or worse). “Oh, granny is still feeling faint. Why like that?”. “She does not seem to eat as much today as she did yesterday; is she sick?”. “The doctors say her potassium level is low; is she having kidney problems?”. “Her feet are a little swollen; the doctors say she is not moving them enough, but I think it is organ failure. What do you think?”. “I don’t think mum will live beyond 2 weeks...” (Flabbergasted) “Her fingers seem less swollen now after changing the cast. Is that to be expected?” (Dumbfounded) The burden of relationships... I need to give my ocular muscles a break from eye-rolling.

Anyway, granny is at home now, her usual perky self, frequently admonishing her helper for not doing the chores exactly the way she would have done them, complaining about the living aids we installed for her – grab bars, ramps, non-slip mats, extra lighting, the works – and hitherto showing no signs of heading into another realm either above or below. And she is also very stubbornly refusing any more interventions other than what is considered basic and necessary, which she can get by going back to “her polyclinic doctor”. Okay, so there is a silver lining to this. I am quite glad that she recognises the polyclinic as her “medical home” (to borrow American terminology) to which she can turn for basic but accessible and holistic person-centred healthcare.

That good primary care is the bedrock of any successful and sustainable healthcare system in any kind of economy is undeniable. But it is not just about building healthcare that is “better, faster, safer, cheaper”, as what makes primary care tick is really that opportunity for and culture of delivering person-centred healthcare that is squarely centred on building a relationship of trust between provider and recipient. It is this

relationship base that can traverse and at the same time support any gain in medical knowledge, process improvement, efficiency in delivery and evolution of healthcare modelling. Take away that opportunity for relationship building and primary care will crumble to the ground. This is a value of primary care that all, from policy makers to funders to practitioners, ought to safeguard and preserve with great fortitude and sometimes heroic effort. And realistically, it does not always come “cheap”. Primary care that is not a production line for seeing cough and cold cases, or issuing medical certificates, needs significant investment.

One of my current projects at work now revolves around upping the ante on primary care delivery to the community, by bringing back elements of primary care that have so woefully migrated over the years into secondary and even tertiary care. I am speaking of managing people with metabolic risks, with the need for better weight management. I am also speaking of women across all ages that have the need for regular gynaecological risk screening, post-delivery care and essential sexual health. It could also looking at care for children with common allergic conditions that do not require or benefit much from extensive (and expensive) allergen testing. Not forgetting the elderly who simply are living with great inconvenience from poor vision and hearing, who need simple visual assessment with a view on cataract surgery, screening for those at risk of medically manageable glaucoma, and audiology assessment for hearing aid fitting. Yes, a plethora of roles that (surprise, surprise) a GP would be doing in a good number of healthcare systems around the world.

The Ministry of Health has renewed its push for more care to be delivered outside of tertiary institutions in and by the community. It behoves primary care to step up to this challenge, be it in private sector or public service. We find ourselves once again in the limelight, shifting paradigms and changing established norms to meet the increasing need for affordable and accessible care. It’s a mission we can ill avoid, because many times when our patients run out of options, or are absolutely perplexed by the complexities of specialty care, they simply turn around back to the comfort primary care. “My GP will know what to do.”

Let’s hope we do.

■ CM

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(continued from Cover Page: CFPS Commencement
Ceremony 2017)

four-fifths of cases the referring GP will have already made the diagnosis and is referring for specific specialist investigations or procedures. Much less frequently are the referrals for help with diagnosis or advice on management.

You may be thinking well that is all about process, but does not address patient outcomes. But I can reassure you, strong Family Medicine also has great impact on patient outcomes. Family Medicine can improve the quality of patient care; countries with strong primary care systems have lower all-cause mortality, lower all-cause premature mortality, and lower death rates from common chronic disorders, such as respiratory and cardiovascular problems. There are similar data relating to morbidity, but this afternoon I do not have time to present this to you. But what I would like to emphasise is that these benefits are maintained after controlling for determinants of population health such as wealth, number of doctors, tobacco consumption, et cetera.

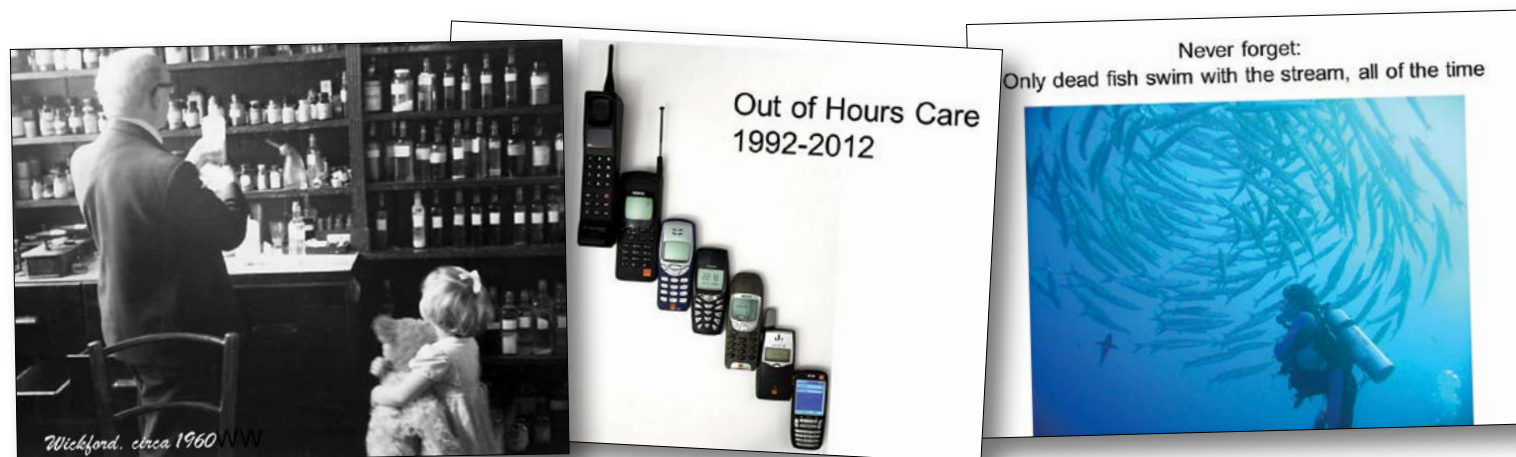
Adjustments to the organisation of health care in many countries is driven by financial considerations and we have robust evidence from these comparative studies across many nations, that strong Family Medicine helps reduce the cost of health care. There is nowhere in the world where there is infinite resource for health care and most countries, just like Singapore, are now challenged with a growing need for health care as the proportion of elderly in the population grows.

What does Family Medicine bring to the care of patient care that makes it so favourable for patients wellbeing and budgetary issues? There are many things that contribute to Family Medicines effectiveness; our rapport with our patients and familiarity with their problems (often referred to as continuity), our style of practice (with a patient-centred, holistic approach), our strong emphasis on history taking, our use of time as a diagnostic tool, and repeated opportunities for anticipatory care... the list continues, but I now want to move on to discuss change.

In whatever branch of medicine we work, nothing is more consistent than change. For example, when I was a medical student, ‘obesity’ was dealt with in one paragraph in our core

(continued on the next page)

(continued from Page 3: CFPS Commencement Ceremony 2017)



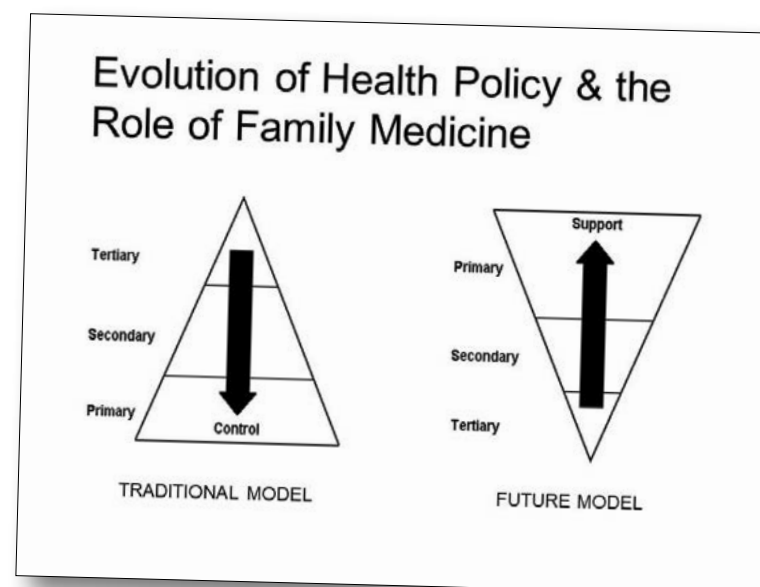
medical textbook. I was reminded of further changes as I sorted through some boxes of slides that I had used in various lectures during my early career. I found examples reflecting changes in knowledge, technology, therapeutics, organisations and patient's problems. There was a picture of my GP from childhood working from a room in his own home, mixing his own lotions and potions to dispense. Another captures the sequential reduction in size of the mobile phones I had carried over twenty five years of doing home visits at night. Why do I share these images? Partly to amuse, but more importantly to illustrate that the studies you are commencing today, will not end with passing your exams. Your inquisitiveness and learning must continue throughout your professional life, this will enable you to be proactive and to embrace change.

The role of Family Medicine is currently undergoing major changes in the way it is being represented in health care strategy, policy and planning. This change is illustrated by these two pyramids. The one of the left illustrates a traditional model of health care with hospitals at the top of the pyramid, controlling what happens in primary care. On

the right is the future, an inverted pyramid with hospitals and specialists now working from the bottom to support primary care. The recognition of the need for Family Medicine to take centre stage is currently evolving here in Singapore. With greater recognition of the importance of Family Medicine you will be able to create services to deliver even better care for your patients.

During your studies and your professional practice, please reflect constantly on what you are doing; think logically, question and be critical when appropriate; it is possible to challenge elegantly! Within the last few weeks, two very common 'beliefs' have been challenged, the need for soap and hot water for effective hand washing and the desirability of completing the course of antibiotics to reduce antibiotic resistance. As George Bernard Shaw said 'Those that cannot change their minds cannot change anything.'

So in closing there are three things I would like to recommend to you: maintain your curiosity, ensure your learning is patient-centred just like your clinical care, and look after yourselves by working hard and playing hard. I hope your journeys are happy and fulfilling.



Throughout your Family Medicine journey:

- Maintain your curiosity & passion
- Work hard & play hard
- Remember you are studying
 - for your patients' benefit
 - not just for the curriculum

CM



Advancing Best Care through Education & Research

6th Asia Pacific Primary Care Research Conference

in conjunction with Family Medicine Symposium

21 - 23 September 2017 | 8.30am - 4.30pm
The Academia (Singapore General Hospital)

An excellent platform for:

- Education and research in primary healthcare
- Learning about the latest clinical development and practices
- Networking among local and regional primary healthcare researchers and other healthcare professionals

Pre-Conference Workshop Highlights

- Research championship
- Medical psychometrics workshop
- Experience – based co – design workshop
- Quality improvement workshop
- Study visit to polyclinic

Speaker Highlights

Eminent academics and experts from the three Singapore Medical Schools and Family Medicine departments from regional universities



Main Conference Highlights

- Keynote lectures by overseas and local speakers
- Education and Residency showcase
- Family medicine research with medical students
- Pushing the boundaries of family medicine
- Conducting complex intervention trials
- Scale development and validation
- Behavioral economics
- Oral and poster presentations

Family Medicine Symposium

Specialists from SGH, CGH, NUH, TTSH, GP sharing a diverse range of topics including:

- Obesity and Diet Management
- Geriatrics
- TCM – Pain Management
- Medical Mission
- Psycho-Geriatrics – Dementia
- Sports Medicine
- Paediatrics – Fussy Eating

REGISTER

APPCRC 2017 Fee Structure (Include GST)

Category	Early Bird Rate before 31 st Jul 2017 (S\$)	Regular Rate (S\$)	On-site Rate (S\$)
Open Delegates (Doctors)*	500	600	750
Open Delegates (Nurses, Allied Health Professionals, etc.)*	380	490	650
Staff or members of CFPS, SingHealth Duke-NUS FM ACP and SHP	220	330	500
Trainees (HO/MO/Residents/Registrars, regardless of local or overseas)	200	300	450
Medical Students	50	100	250

* Fee includes Conference Dinner (Participants to RSVP for dinner at point of registration)

Research Championship & Pre-Conference Workshops Fees (Include GST)

Early Bird Rate before 31 st Jul 2017 (S\$)	Regular Rate (S\$)
110	160

Half-Day Pre-Conference Workshops Fees (Include GST)

Early Bird Rate before 31 st Jul 2017 (S\$)	Regular Rate (S\$)
55	80

Family Medicine Symposium Fees (Include GST)

Early Bird Rate before 31 st Jul 2017 (S\$)	Regular Rate (S\$)
FREE	FREE

a. Participants will have to pay separately for the main conference
b. The above fee does not include conference dinner. Tickets for conference dinner can be purchased separately.

www.appcrc.sg • 12 CME points will be accredited for the 3-day conference

6th Asia Pacific Primary Care Research Conference in conjunction with Family Medicine Symposium
Organised by College of Family Physicians Singapore and SingHealth Duke-NUS Family Medicine Academic Clinical Programme

21 - 23 September 2017 | The Academia (Singapore General Hospital)

Start	End	PRE-CONFERENCE . 21 SEPTEMBER 2017 THURSDAY			
0830	0900	Registration and Light Refreshments			
0900	1030	<u>Workshop 1</u> Research Championship <i>Facilitators from Malaysia and Singapore</i>	<u>Workshop 2</u> Using Psychometrics To Improve Assessment In Medical Education <i>Dr Gominda Ponnamperuma, Senior Lecturer in Medical Education, Department of Medical Education, Faculty of Medicine, University of Colombo</i>	<u>Workshop 3</u> Harnessing Patients’ Experiences To Improve Healthcare: A Workshop On Experience-Based Co-Design <i>1. Professor Helen Elizabeth <u>Smith</u>, Professor of Family Medicine and Primary Care, Lee Kong Chian School of Medicine, Nanyang Technological University 2. Professor Dr <u>Nq</u> Chirk Jenn, Department of Primary Care Medicine, University of Malaya 3. Professor Helen <u>Ward</u>, Professor of Public Health, Department of Infectious Disease Epidemiology, Imperial College London</i>	<u>Workshop 4 *</u> Quality Improvement Essentials <i>Dr <u>Chow</u> Mun Hong, Director and Senior Consultant, Quality Management, SingHealth Polyclinics</i>
1030	1100	Tea			
1100	1300	<u>Workshop 1</u> Research Championship <i>Facilitators from Malaysia and Singapore</i>	<u>Workshop 2</u> Using Psychometrics To Improve Assessment In Medical Education <i>Dr Gominda Ponnamperuma, Senior Lecturer in Medical Education, Department of Medical Education, Faculty of Medicine, University of Colombo</i>	<u>Workshop 3</u> Harnessing Patients’ Experiences To Improve Healthcare: A Workshop On Experience-Based Co-Design <i>1. Professor Helen Elizabeth <u>Smith</u>, Professor of Family Medicine and Primary Care, Lee Kong Chian School of Medicine, Nanyang Technological University 2. Professor Dr <u>Nq</u> Chirk Jenn, Department of Primary Care</i>	<u>Workshop 4 *</u> Quality Improvement Essentials <i>Dr <u>Chow</u> Mun Hong, Director and Senior Consultant, Quality Management, SingHealth Polyclinics</i>

			Medicine, University of Malaya 3. Professor Helen <u>Ward</u> , Professor of Public Health, Department of Infectious Disease Epidemiology, Imperial College London			
1300	1400	Lunch, Exhibitions and Registration				
1400	1530	<u>Workshop 1</u> Research Championship <i>Facilitators from Malaysia and Singapore</i>	<u>Workshop 5</u> Providing Feedback To The “Difficult” Learner: Where Do We Start? <i>Dr <u>Gan</u> Han Nee, Senior Consultant, Accident & Emergency, Changi General Hospital</i>	<u>Workshop 3</u> Harnessing Patients’ Experiences To Improve Healthcare: A Workshop On Experience-Based Co-Design <i>1. Professor Helen Elizabeth <u>Smith</u>, Professor of Family Medicine and Primary Care, Lee Kong Chian School of Medicine, Nanyang Technological University 2. Professor Dr <u>Nq</u> Chirk Jenn, Department of Primary Care Medicine, University of Malaya 3. Professor Helen <u>Ward</u>, Professor of Public Health, Department of Infectious Disease Epidemiology, Imperial College London</i>	<u>Workshop 4 *</u> Quality Improvement Essentials <i>Dr <u>Chow</u> Mun Hong, Director and Senior Consultant, Quality Management, SingHealth Polyclinics</i>	Study Visit To Polyclinic ^
1530	1630	Semi-Finals RC	Workshop 5 closure	Workshop 3 closure	Workshop 4 *	
END OF PRE-CONFERENCE PROGRAMME						

* For **Workshop 4 on Quality Improvement Essentials**, registration will start at 8am. The workshop will start at 8.30am and end at 5pm, with tea and lunch breaks in between.

^ The **Study Visit To Polyclinic** will end at 5pm instead.

4 CME points will be awarded for each day of the conference
12 CME points will be awarded for participation of the full 3-days conference.

Note:
Programme is subjected to changes.

The Mommy Returns

by Dr Lim Peng Peng, Homecare Doctor, St Luke's Eldercare (SLEC)

when I hanged up my stethoscope back in 2008, I never imagined it would be a good eight years before I picked it up again. At that time, the important decision my husband and I made for me to stop work temporarily stemmed from our unwillingness to leave our two year-old toddler daughter and newborn baby in full-day child/infant care. We were also convinced that it was paramount that one parent to be there for our children in their formative years as far as possible. I had intended to return to practice after three or four years when both my children would be a little older, but along came my third child and I continued to stay away from practice for a few more years.

During my third year stint as a full time stay-at-home mum (FTSAHM), I had the opportunity to delve into a project completely unrelated to the medical field. Along with another mummy friend, we started and operated a small swim school for babies and toddlers. Armed with zero background knowledge and training in business management, the endeavour was a formidable one. Nonetheless, the myriad of practical MBA lessons garnered, ranging from negotiations for lower rental, staffing issues to public relations, amongst many others, was priceless. These were coupled with some truly amazing friendships formed with people from an industry as far removed from the medical circle as could be, in the form of swimming instructors, aunties and students on the administrative team. Altogether, they added much colour and glitter to my world during my break from being a doctor.

Time flew by, and in the blink of an eye the youngest of my brood was joining his older siblings in primary school. Thoughts of returning to medical practice surfaced as I realised that all my mornings would be freed from child-minding. The desire grew stronger as I began to ponder anew where and how I could re-enter the workforce. It was then that I had a serendipitous meeting with a medical school classmate J one evening. Over our quick catch-up while settling dinner for our children, she shared that she was working part-time at an eldercare organisation – St Luke's Eldercare (SLEC) – as a homecare doctor. Her work arrangement was an ideal match for what I was hoping to do then – mornings only so that I could still attend to my children's needs in the afternoons, namely being a glorified driver and tuition teacher. Coincidentally, SLEC was looking at hiring more homecare doctors, so I decided to give it a try; sent in my resume, went for the interview and before I knew it, I was excited to receive a back-to-work start date!

I began the preparations for returning to work such as

getting my medical malpractice indemnity back in force and ensuring that my practicing certificate was renewed and valid. Fortunately, I had kept pace with practice certification requirements all the time while away from medical work by attending CME lectures and doing long distance learning courses. Then, there was the ultimate excuse for a lady to go shopping – for work-clothes – and undertake a wardrobe makeover!

I tagged along a few home visits with my friend-now-colleague J before I started work officially, but I was still filled with trepidation when I made my first solo visit. I was worried that I would be stumped for a diagnosis or forget the dosages of medication to be prescribed or be unable to help the family in any way. However that first patient encounter went just fine, to my great relief. I realised thereafter that I had been missing having meaningful interaction with a patient and his family all the time I was away from practice. It was good to know that I could very tangibly bring some comfort and care to him and his caregivers.

I also discovered that I had missed being part of a multi-disciplinary team; it felt wonderful working once again alongside a dynamic team of like-minded health care workers.

Transiting back to practice definitely has its challenges - filling the gap on medical knowledge for eldercare being one of them. I made a couple of trips to the medical bookshop to procure books on Geriatrics and started paying attention to countless newspaper articles on the silver industry and the country's ageing population, all of which now became relevant to my work. Another challenge is that there is now an additional hat to juggle – that as a doctor – on top of being a mother, wife and daughter. However, being part of an organisation that allows flexibility and family-friendly work arrangements has really helped and I am immensely thankful for that.

As the saying goes, there is a time and season for everything and I believe that now is the season for me to return to the workforce again with my children happily in primary school. I have no regrets taking that pause in my career to take care of the family; the children needed me in their early years and the amount of time spent with them was extremely fulfilling and very much treasured. Those years were definitely not wasted as many people saw it. The ability to multi-task and organise a household as a FTSAHM certainly are useful skills to carry into the workplace; they aid me in my scheduling of patient appointments and managing workload in a time-efficient manner. The patience cultivated in the care of my

children is also much needed in the care of the elderly. Dealing with challenging customers previously in the swim school business has also honed my interaction skills and boosted my confidence in approaching and conducting delicate conversations with family members and patients.

A little courage definitely needs to be in place for a FTSAHM returning to medical practice after so long. However, it is not quite as daunting as it had seemed to be, and today I find myself thoroughly enjoying my work in my capacity as a homecare doctor. Indeed, the extra wisdom gained from my life experiences as a person in my years away from work have helped me to be a better doctor than when I had just left the workforce. ☺

■ CM

FAMILY PRACTICE SKILLS COURSE

Managing Complex Patients in Family Medicine Settings

The College of Family Physicians Singapore would like to thank the Expert Panel for their contribution to the Family Practice Skills Course #70 on “Managing Complex Patients in Family Medicine Settings”, held on 22-23 July 2017.

Expert Panel:

A/Prof Lee Kheng Hock
Dr Low Sher Guan Luke
Dr Xu Bangyu
A/Prof Goh Lee Gan
Dr Agnes Koong
Dr Tay Wei Yi
Dr Matthew Ng

Chairperson:

Dr Pang Sze Kang Jonathan
Dr Yeo Cheng Hsun Jonathan

Photo Quiz

Contributed by Dr Nicholas Foo Siang Sern, Editorial Board Member

A 50-year-old gentleman, with no prior medical history, comes for a seemingly routine consultation with symptoms of an acute upper respiratory tract infection. However, the clinical findings on chest examination prompt the doctor to retake the history, examine the patient's hands and order a chest X-ray.

QUESTION

Describe the findings seen on:



1. Examination of his hands



2. Chest X-Ray

(continued on Page 19)

Hey, I Just Met You...

Chatbots & The Family Physician

by Dr Phua Cheng Pau Kelvin, FCFP(S), Editorial Board Member

Introduction

It is Monday morning and the clinic is packed. Henry, who needs to see a family doctor, registers from home and talks to Florence on the way to the clinic.

Henry says, "I have diarrhoea". Florence asks, "How many days has it been?"

Henry replies, "Five days," and the next response is, "Was there blood in your stools?"

Henry says "No," to which, Florence asks, "Did you have fever? Did you travel out of the country recently?"

Henry arrives in the clinic 15 minutes later and has the entire history already populated in the medical records. The red flags have been highlighted in the text. From their earlier "conversation", Florence has also determined that the patient may be depressed. She has also "discussed" with Henry on screening for colon cancer as he has just turned 50. The doctor goes on to examine and manage Henry accordingly while Florence helps to collate the bill and confirms Henry's credit card details before he collects his medications.

Henry is satisfied and feels good that there is Florence around to assist him. The doctor is also happy that he gets more time to interact with his patient.

The doctor trusts that Florence is well-trained to take clinical history like a consultant and asks the right questions every time. More importantly, she never goes on sick leave. Not only can Florence speak more than 37 languages, she is also able to sense patient's moods from the words they use.

Welcome to the world of Florence – the Chatbot – just come to a clinic near you. Here's her number. Call her. Maybe.

A Chatbot is a computer programme that mimics conversation with users. The system that powers this Chatbot can range from a simple programme with rule-based responses to that of a more complex Artificial Intelligence (AI) system which is capable of pattern recognition, learning and formulating algorithms for managing different needs and behaviours.

Chatbots in Action

As it is, the commercial applications of Chatbots range from the provision of online customer service to product searches. Whilst not yet sophisticated enough to replicate a clinician, Chatbots have been used in healthcare in the following areas:

1. Mental Youth Health: The moderated online social therapy (MOST) projectⁱ
2. A virtual dietician for diabetic patientsⁱⁱ
3. An educational system for studentsⁱⁱⁱ

Woebot is the Chatbot that is being tested in a trial to help depressed college students. ^{iv}70 subjects, of ages 18-28 years, were recruited online and randomised to receive either two weeks (up to 20 sessions) of self-help with cognitive behavioural therapy content in a conversational format with a text-based conversational agent (Woebot) or directed to an online resource as an information-only control group. Compared to the control group, the subjects who were under the Woebot group had a significant reduction in symptoms of depression over the study period.

Woebot can "sense" the mood of the subjects (via analysis of text input) and deliver empathetic messages. It can also tailor assistance to anxious events, provide customised encouraging messages as well as allow goal setting. At the end of the week, it provides a chance for the subject to reflect on which days of the week their moods have been low or high, and so possibly help modify behavioural response or plan trigger avoidance.

Considerations for the use of Chatbots in Healthcare

While a relatively low-cost Chatbot can be touted to increase productivity, decrease reliance on clinicians' manpower and improve patient experience and outcomes, the healthcare administrators should expect a longer wait before there can be more widespread use of this technology for healthcare.

(continued on the next page)

The key considerations for Chatbots in healthcare are:

1. **Privacy and safe guarding of information collected.** Sensitive data will be collected and analysed. These data should only be made available to the patient's care team.
2. **Safety of the Chatbot programmes.** What happens if the patient commits suicide after using the bot? What happens if there is a delay in treating life-threatening illnesses like meningitis after using a bot? Who is responsible if the bot fails?
3. **Interface of the Chatbot.** A text-based interface will tend to exclude seniors who may shy away from keyboards or smartphones. A conversation-based interface will be more helpful to reach out to a wider community.
4. **AI behind the Chatbot.** A more intelligent AI can obviously solve more complex issues. It can even learn the habits and preferences of the patient.
5. **Integration with the electronic health records systems.** With different clusters using different systems, it is likely to be a long-drawn and expensive affair to customise a solution for Chatbots to input data to the current systems.

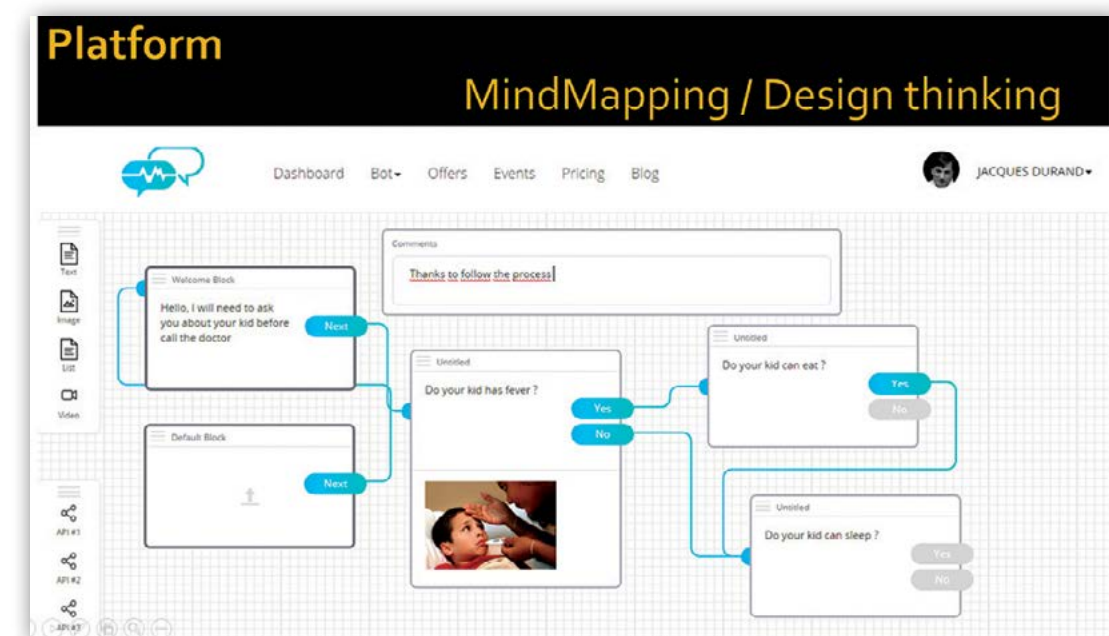
knowledge to create customised Chatbots for their own application. It may make the use of Chatbots so versatile that it can be used in everyday clinical practice. For example, if CDC reports that a new respiratory virus has 3 criteria for diagnosis including travel history to a certain country, the clinician can programme the Chatbot to ask these specific questions. (Above image is provided by Pastel Health)

Future

I see great potential for the use of such Chatbots in healthcare locally.

In the hospital, many P3 patients are waiting to be seen in the Emergency Department. They can "talk" to an interface and their history can be taken. It can even highlight red flags and even escalate to P2 status if deemed necessary. In the general inpatient wards, again the "history" can be taken even before the busy houseman comes to see the patient. Similarly, this can be applied in our ever-busy polyclinics, where patients can complete a health screening questionnaire and submit basic clinical information prior to consultation.

In the patients' homes, the Chatbots can assist in monitoring mood and motivation. When linked to devices like BP sets, it can even provide instant feedback. "Your BP is slightly high today! Please go easy on the salt." Chatbots on the



Platforms for Design of Chatbots

Pastel Health, a French-based company, has created a software that acts as a platform for the creation of new Chatbots. It supports third-party Application Programming Interface (API), multiple messaging platforms as well as multi-language. It can allow clinicians with little programming

phone can be geo-tagged and remind the patient that he is near a cake shop and tell him "Do not choose the sweet cakes, watch your sugars!"

In the busy polyclinics, a Chatbot may optimize the registration process and assign queue numbers based on

(continued on Page 16)

Family Medicine

COMMENCEMENT CEREMONY & AGM 2017

29 July 2017 ■ College of Medicine Building

Addressing the audience...



On 29 July 2017, prospective trainees of College's academic programmes - Graduate Diploma in Family Medicine (GDFM), Master of Medicine (Family Medicine) [MMed(FM)] and Family Medicine Fellowship Programme [FCFP(S)] - came together for the Commencement Ceremony held at the auditorium of the College of Medicine Building.

Emcee Dr Vincent Chan gave a warm welcome and invited A/Prof Lee Kheng Hock, College President (25th Council) to stage for his welcome address. Following which, Guest-of-Honour Prof Helen Smith spoke and related her experiences of the transitional changes in Family Medicine and firmly encouraged trainees to stay inquisitive throughout their professional lives. Dr Paul Goh, Censor-in-Chief went on to give an interesting overview of the College academic programmes.

The Programme Directors of the 3 programmes - Dr Ng Lee Beng [FCFP(S)], Dr Julian Lim [MMed(FM)] and Dr Kwong Kum Hoong (GDFM) - took to the stage to introduce the faculty members respectively.

It came as a pleasant surprise for Dr Xu Bang Yu when Dr Julian Lim presented him with the "Best Tutor of the Year" award, based on the nominations from previous year's MMed(FM) trainees.

As the trainees then proceeded separately for their induction sessions, invited guests mingled and had their tummies lightly satisfied with refreshments at the tea reception.

A/Prof Lee Kheng Hock and Dr Paul Goh also hosted a brief meet-up session with Residency Faculty Members and first-year Residents.

Introducing the teaching faculty ...



(top left and right) Dr Ng Lee Beng — Programme Director for Fellowship Programme [FCFP(S)] and Dr Julian Lim — Programme Director for Master of Medicine (FM) College Programme with their supportive teams of tutors.

(above) A sizable group of tutors makes up the teaching faculty of the Graduate Diploma in Family Medicine (GDFM) as headed by Programme Director, Dr Kwong Kum Hoong (not in picture).

And the "Best Tutor of the Year" award goes to ...



Dr Julian Lim (right) presents the "Best Tutor of the Year" award to Dr Xu Bang Yu. Dr Xu was nominated for the award by MMed(FM) trainees from the 2016-2017 intake.

(clockwise from top left) Emcee Dr Vincent Chan, A/Prof Lee Kheng Hock — President of CFPS (25th Council), Prof Helen Smith — Guest-of-Honour, Professor of Family Medicine and Primary Care, LKCSOM and Dr Paul Goh — Censor-in-Chief of CFPS (26th Council)

Induction sessions for trainees



1., 2. & 3.

Tutors and trainees from the Fellowship programme getting to know one another in their groups

4.

MMed(FM) Programme Director Dr Julian Lim giving an interesting presentation to the trainees

5.

GDFM trainees preparing for their induction session

6. & 7.

A/Prof Lee Kheng Hock meets up with Singhealth Residency Faculty Members and Year 1 FM Residents

At the Annual General Meeting ...

Guests and members of the College were invited to stay on for the Annual General Meeting, also held at the College of Medicine Building auditorium.

In the President's Address, A/Prof Lee Kheng Hock thanked the past presidents for having laid a strong foundation for College. He expressed confidence that the new Council will lead College to greater heights.

Members of the Executive Committee took turns to update the House on the respective reports and audited statements found in the Annual Report.

The Elections was certainly the highlight of the event as Returning Officer A/Prof Cheong Pak Yean declared Dr Tan Tze Lee the President of the 26th Council (2017-2019). Although voting was not necessary, the House cheered on as the following Office Bearers and Council Members were announced:

Vice-President

A/Prof Lim Fong Seng

Honorary Secretary

Dr Subramaniam Surajkumar

Honorary Assistant Secretary

Dr Lim Hui Ling

Honorary Treasurer

Dr Low Sher Guan Luke

Honorary Assistant Treasurer

Dr Ng Lee Beng

Council Members

Dr Chan Hian Hui Vincent

Dr Goh Lay Hoon

Dr Koong Ying Leng Agnes

Dr Lim Ang Tee

Dr Seah Ee-Jin Darren

Dr Tan Hsien Yung David

Dr Wong Tien Hua

Dr Xu Bang Yu

Ending the event on a happy note, A/Prof Lee Kheng Hock congratulated Dr Tan and the new Council.

The new President shall look forward to an interesting term with the support of a strong Council and College members.



(continued from Page 10: Hey, I Just Met You... Chatbots & The Family Physician)

how many doctors are available that day. Another Chatbot can be used for screening of mental illness. One can be created for diabetic patients asking them about their eye and foot screening as well as any hypoglycemic symptoms. These are automatically captured in the electronic medical records with the appropriate interventions suggested for the doctors. A nurse may create one with appropriate screening tests and vaccinations recommendation for each age group and profile. The best part is that all these Chatbots can be

combined in voice and language, and individualised to each user's comfort and linguistic ability, and the patient will not even realise that he is "talking" to a different Chatbot.

Chatbots can and will be used in a wide range of services in healthcare. The challenges are not insurmountable. How well we can embrace the technology will decide how soon and how much of the daily grind can be placed in the hands of these bots.

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■ CM

The State of Managed Care in Singapore

by Dr Lim Khong Jin Michael, Editorial Board Member

Concern regarding how Managed Care operates in Singapore is not new. As we look at the ideas and expectations expressed in publications as early as 1994, we can sense the concerns of various stakeholders regarding the way Managed Care was developing in Singapore even at that time, and which called for legislation to monitor and control this new healthcare delivery model.

A certain Dr Chern who was then with the Ministry of Health pointed out in an article published in the *Singapore Medical Journal* (SMJ) in 1994 that the rise of the HMO (Health Maintenance Organisation) model in the United States was a result of escalating healthcare costs and the indiscriminate use of healthcare services by the insured. In other words, Managed Care grew in the United States as a strategy against the failure of the insurance system to control utilisation and cost. He then pointed out that within primary care in Singapore, the access to polyclinics and private general practitioners was widely available and at reasonable cost. Likewise in hospital care, he noted that domination by the government as public healthcare provider had been cost-conscious and effective in keeping prices

affordable. Dr Chern contended that Singapore needed more time to establish legislation for the monitoring and controlling of these new healthcare financing products and also address potential ethical issues involved.

Fast forward to 2001, concerns and important take home points on Managed Care were again raised at the Practice Management Seminar and reported by the SMA News. One of the concerns surfaced was that certain HMOs had been offering doctors contracts with unreasonably low payments. The speaker asserted that the payment to the doctor had to be adequate for delivery of sustainable care with reasonable quality that would not put both the doctor and the patient at risk of maltreatment. He went on to caution that the risk of being complained against and charged for poor quality care was a very real danger. Secondly, he pointed out that doctors needed to unite in rejecting participation in schemes that were clearly exploitative and so put both the doctors and patients at risk. A proposal was also made by seminar participants to set up an SMA Standing Committee on Managed Care to unite doctors and provide professional guidelines.

(continued on Page 18)

President's Forum

by Adj Asst Prof Tan Tze Lee, President, 26th Council, College of Family Physicians Singapore

It has been 46 years since the College was established in 1971. We held the 46th Annual General Meeting on 29th July 2017 at the College of Medicine Building, and it was very well attended. Many thanks for all those who took time from their busy schedule to attend the AGM!

Our heartfelt thanks to our retiring members of Council, namely our immediate past president A/Prof Lee Kheng Hock, A/P Tan Boon Yeow, Dr Doraisamy Gowri, Dr Alvin Ong, Dr Valerie Teo and Dr Jonathan Pang. A special word of thanks must go to A/Prof Lee Kheng Hock, who has served selflessly for over two decades on the council and as President for the last six.

We would also like to give a warm welcome to our six new Council members who have joined us for this new term. They are Dr Darren Seah, Dr David Tan, Dr Xu Bang Yu, Dr Lim Ang Tee, Dr Wong Tien Hua and Dr Agnes Koong. The names of the new Council can be seen on Page 2. This new team brings together family physicians from diverse backgrounds and experiences, bringing their skills and networks to continue to effect the transformation of Family Medicine.

Family Medicine is now entering a new phase of the development as we work towards better integration and networking. It started in the last decade, much has been said about this, and much time and resources have been invested to achieve these goals. We are hopeful that, with good engagement and consultation, good quality cost effective solutions can be found and implemented. General Practitioners (GPs) and Family Physicians (FPs) working in the community understand the ground situation best, and their contribution to finding a workable solution cannot be downplayed.

Our fraternity has had many challenges over the years. One of the issues the past few months has been that of the third party administrators (TPAs). With the new ethical guidelines from the Singapore Medical Council, many doctors who provide care through these TPAs found themselves in an ethical dilemma. The three professional bodies, the Singapore Medical Association (SMA), the Academy of Medicine Singapore (AMS) and the College sought to



Adj Asst Prof Tan Tze Lee (standing) gives his heartfelt thanks to the audience, retiring council members and the immediate past president at the AGM on 29 July 2017. With him are (from left) A/Prof Lim Fong Seng, Dr Paul Goh, Dr S Suraj Kumar and A/Prof Lee Kheng Hock.

provide some guidance through a couple of joint advisories to our members. These advisories we hoped would help our members to make their own decisions on how they could engage with the TPAs.

In September, the College will be holding the 6th Asia Pacific Primary Care Research Conference, and this will be the third time the College has organised the event. This year, we are co-organising the conference with the SingHealth Duke-NUS Family Medicine Academic Clinical Programme (FM ACP). We have a fruitful programme over three days, and there is a Family Medicine symposium held on the Saturday afternoon. The symposium covering many topics including TCM, Sports Medicine, Paediatrics and Geriatrics. This is an excellent opportunity for GPs, FPs and budding researchers to meet, network and enhance their research skills!

Although our health care system is often the envy of the world because its cost-effective hybrid system, it has also been called "fragmented" and "disintegrated" in how care is delivered. The focus now to build up primary care to address the needs of the nation is timely. We need to remember that family medicine revolves around the family, the patient's family, the wider communal family, and even the family of health care providers. In the words of a dear colleague Dr Elaine Tan of MOH: "As a family physician, I am glad that the promise of primary care is being recognised. Family doctors play a unique role in empowering, caring for and journeying with patients through life, and there is power of the doctor-patient relationship and trust that underpins this, for better patient outcomes."

I couldn't agree more.

■ CM

(continued from Page 16: The State of Managed Care in Singapore)

In the SMA Managed Care Survey 2003 published in the SMA News it was noted that more than half the respondents were dissatisfied with the Managed Care schemes that they were on, and 69% of respondents felt that Managed Care should not continue to operate in Singapore. In the same issue of the SMA News, a writer highlighted the problem of Managed Care setting low consultation rates in order to build market share, and the lack of transparency over how the Managed Care providers conducted their business.

In the same survey 3 years later in 2006, “Managed Healthcare Singapore 2006: Report and Reflections” noted that the percentage of respondents who were dissatisfied with the Managed Care schemes dropped from about 50% in 2003 to about 30-35% in 2006, and the percentage of respondents who felt that Managed Care should not continue to operate in Singapore dropped from 69% in 2003 to 55% in 2006. In addition, the survey found that Managed Care entities in Singapore charged their doctors an administrative fee of between 10-15% of the doctor’s bill. In that same article, the writer expounded on some lessons that could be learned from the experience of Singapore and the United States. He recommended that, firstly, enough must be given to the healthcare provider to provide a service without undue risk, and secondly, the appetite of the end-user for services needs to be moderated by co-payments. In addition, the premium that Managed Care needed to collect per capita to cover primary care, specialist outpatient care, and hospital expenses was at least S\$450, and advised that doctors needed to be cautious of Managed Care providers that only exercised cost control with scant regard for the quality of patient care.

Concerned with the underpayment of the doctors in the Managed Care schemes, he urged the medical profession to support the SMA in pushing for regulators such as the Ministry of Health (MOH), Singapore Medical Council (SMC) and the Monetary Authority of Singapore (MAS) to re-examine the terms and conditions of Managed Care schemes so as to allow for a more equitable, ethical and flexible delivery of medical services. Another contributor emphasised that the GP Task Force Committee had proposed that an independent authority was necessary to balance the needs of all parties and provide a platform for quality control, audit, as well as arbitration when required.

In her speech published in the SMA News that same year, then Permanent Secretary for Health, Ms Yong Ying-I mentioned that Managed Care had not been a key thrust in the MOH’s national strategy for healthcare, and that the Singapore Government had been firm in not authorising Medisave contributions for such payments. Ms Yong instead introduced her ministry’s national effort [Chronic Disease Management Programme] to enable General Practitioners

(GP) to better manage chronic diseases with large-scale adoption of treatment protocols to improve quality of patient care.

In the SMA News in 2008, it again surfaced that many Managed Care companies often passed most, if not all, of their business risk to doctors, and that doctors still bore all the professional risk and duty of care owed to the patients despite whatever rules and restrictions that Managed Care providers imposed on them. He expressed concern that the Managed Care providers were not subjected to the ethical and legal requirements of healthcare professionals or licensed healthcare institutions, although they had all the powers of a healthcare entity or professional to affect the standard of patient care through financial incentivising and disincentivising.

Simonet noted in “Managed Care Expansion to Asia: a critical review” (2009) that Managed Care in Singapore had so far been competing on costs, functioning as agents, processing claims and offering fee-for-service payment with caps on consultations and procedures, rather than truly managing care. He noted that Managed Care in Singapore had too few employed clinical directors and disease management programmes to confer credibility and efficacy.

In the SMA Managed Care Survey done in 2015 and published in 2016, it was noted that the percentage of respondents that were dissatisfied with the Managed Care schemes had increased again to 56%, and the percentage of respondents who felt that Managed Care should not continue to operate in Singapore increased to 60%. In addition, the report noted that 66 % of respondents felt that the payment received from the Managed Care was not commensurate with the standard of care provided to patients. In 2 decades, it seemed that privately funded healthcare in Singapore had gone a full circle, with a whole lot more disillusionment and bitterness in the practice community.

For Managed Care to continue operating in Singapore, it should not be simply driven by profit and concerned only with the interests of the payers at the expense of doctors and patient care. It needs to reinvent itself to add value to the healthcare system at large and to individual doctors and patients, and to be seen as such. There is also room for Managed Care in Singapore to improve its relationship with doctors and highlight its role in rationalising healthcare expenditure by moderating consumption. Finally, it may be timely for the Ministry of Health to look into the regulation of Managed Care in Singapore so that ethical issues and the challenge of maintaining standards are sufficiently studied and addressed and enforced by an appropriate authority.

■ CM

(continued from Page 9: Photo Quiz)

ANSWER

The following findings are seen:

- Clubbing of the fingers
- Reticular infiltrates on bilateral lower zones of the Chest X-Ray

WHAT IS THE DIAGNOSIS?

Diffuse Parenchymal Lung Disease (DPLD)

LEARNING POINTS

- DPLD is a heterogeneous group of disorders, which may be idiopathic (Idiopathic Pulmonary Fibrosis - IPF) or related to occupational, environmental, drug, radiation exposure, as well as systematic illness such as collagen vascular disease.
- Other categories of DPLDs include granulomatous forms like Sarcoidosis, Hypersensitive Pneumonia, or very rare forms like Pulmonary Langerhans Cell Histiocytosis.
- It is thought that these disorders begin with acute injury to the pulmonary parenchyma, leading to chronic interstitial inflammation, fibroblast activation and proliferation, with progression to pulmonary fibrosis and tissue destruction.

- Dyspnoea is the most frequent symptom, followed by chronic cough, wheezing, haemoptysis and chest pain.

- Digital clubbing is common with some diagnosis (IPF, Sarcoidosis) and may be first noted by the patient. However, if clubbing develops in a patient with known interstitial lung disease, it usually indicates advanced fibrosis or may point to an underlying bronchogenic carcinoma.

- Fine end inspiratory rales (velcro rales) are a common physical finding.

- Reticular and nodular interstitial infiltrates are the hallmark findings on chest X-ray. Honeycombing is a late finding and correlates with severe histopathologic findings.

- Chest X-ray findings may be normal in 10% of patients with histologically proven disease. Other modalities for diagnosis include pulmonary function testing and high resolution chest computed tomography (HRCT).

References

1. Medscape

■ CM

Of Plastics and Practice

by Dr Nicholas Foo Siang Sern, Editorial Board Member

Four years ago, while browsing the shelves in the library, I came across a book which intrigued me. “Awareness through Movement” was written by Moshe Fekdenkrais in 1972, and promised “easy to do health exercises to improve posture, vision, imagination, and personal awareness”.

At that time, I was facing some physical restrictions which impacted my health in a bad way. As a schoolboy, I had developed a love for running. Nearing my 40s, I could not run as much as I would have liked, having accepted that my limitations were here to stay. I had reached an uneasy truce with my body and was afraid to go beyond it.

I borrowed the book and started doing the exercises as instructed. As the months passed, I found myself getting much better and being able to run more; the pain which

troubled me soon disappeared. I’m in a much healthier state today, finally able to once again enjoy the sport which I have always loved.

The exercises described were something I had never come across and I could not understand how they worked to make me better. My scientific mind struggled to grasp the basis of these exercises; I would have easily dismissed them as hocus pocus on first reading. They were certainly imaginative but perhaps not all that easy as I had to put in quite a fair amount of time and effort.

I recently came across another book, titled “The Brain’s Way of Healing” by Norman Doidge, a psychiatrist. It is a book about the neuroplasticity of the brain, describing stories of

(continued on the next page)

(continued from Page 19: Of Plastics and Practice)

healing and explaining how these take place based on latest neuroscience research.

He writes in the introduction:

“Neuroplastic approaches... require the active involvement of the whole patient in his or her own care: mind, brain and body. Such an approach recalls the heritage not only of the East but of Western medicine itself. The Father of scientific medicine, Hippocrates, saw the body as a major healer, and the physician and patient work together with nature to help the body activate its own healing capacities.

In this approach, the health professional not only focuses on the patient's deficits, important as they may be, but also searches for healthy brain areas that may be dormant, as well as for existing capacities that may aid recovery. This focus does not advocate naively replacing the neurological nihilism of the past with an equally extreme neurological utopianism – replacing false pessimism with false hope. To be valuable, discoveries of new ways of healing the brain do not have to guarantee that all patients can be helped all the time. And often, we simply don't know what will happen, until the person, with the guidance of a knowledgeable health professional, gives the new approaches a try.”

I bought the book because a whole chapter was devoted to the work of Moshe Feldenkrais. Neuroscience research had finally caught up with what Feldenkrais intuitively developed decades ago and I gained a much greater understanding on how his exercises had healed me. The word heal comes from the Old English haelan and means not simply “to cure” but “to make whole”... What followed were stories of people who had “transformed their brains, recovered lost parts of themselves, or discovered capacities within that they never knew they had.” I found that the common thread in them was that these were not miraculous healings which took place overnight. Novel approaches were required but a lot of hard work and persistence went into effecting the healing.



Moreover, having worked as a medical officer in Neurosurgery 17 years ago, this other passage in the book caught my eye:

“In the years before we realized that the brain is plastic, physicians would examine their stroke patients at six weeks to see what mental functions they still had. Since it was believed that the brain couldn't “rewire” itself or develop new connections, all the physician could do was wait and see what cognitive abilities remained after the shock wore off. They assumed that this represented 95 percent of the patient's eventual recovery. Perhaps the patient would make additional progress over the course of the next six months or year.” (Page 86)

Relatives would always want to know the prognosis of the patient who had suffered a traumatic brain injury or intracranial bleed. In those days, we gave a prognosis by telling them that whatever function the patient regained by 3 months post injury/stroke would likely be 90 percent of whatever function he would ever regain. Now that we have learnt that the brain is neuroplastic, this is no longer the case.

I reflected that much has changed in medicine since the time I was a medical student. A great change has also come about in the practice landscape, as our health system undergoes yet another realignment exercise with the hope of streamlining services and ensuring better continuity and ownership of care. Even the norms of practice are changing, and some recent events are testament to that. No doubt it has created a degree of anxiety among doctors and also in our healthcare colleagues. But change is inevitable, and all of us would do well to be a little bit more “plastic”. Fundamentally, the professional ethos has not changed; what has changed and is continuing to change is the compact between regulation and practice. What I do know is that if I want to continue practising medicine, which is something I love as much as running, the same hard work and persistence is required, as well as a dollop of openness. A fresh approach will be necessary for healing to take place in order to make whole again, for ourselves and for our patients.

■ CM

Co-managing Heart Failure in the Community

Interviewed by Dr Lim Khong Jin Michael, Editorial Board Member

We are glad to have the opportunity to interview Dr Gerard Leong, a cardiologist who subspecialises in the management of heart failure and cardiac transplant.

Dr Gerard Leong demonstrating 3-D cardiac function assessment to a patient (hidden from view) ►



Image courtesy of Dr Gerard Leong

College Mirror (CM):

What is Heart Failure (HF)?

Dr Gerard Leong (GL):

Clinically HF is a syndrome complex that results from cardiac function impairment. HF is divided into 3 categories based on cardiac left ventricular ejection fraction (LVEF): HF with reduced Ejection Fraction (HFrEF), HF with mid-range Ejection Fraction (HFmrEF) and HF with preserved Ejection Fraction (HFpEF).

In HFrEF, LVEF is $\leq 40\%$; it is predominantly due to abnormal cardiac pump (systolic) function. In HFpEF, LVEF is $\geq 50\%$; it is predominantly due to abnormal cardiac relaxation (diastolic) function. HFmrEF straddles the border with LVEF 41-49%; they exhibit characteristics, treatment patterns and outcomes similar to those of patients with HFpEF.

There is no single diagnostic test for HF. Very important in the diagnosis of HF is the search for the underlying aetiology and precipitant(s) for HF.

CM:

What are the common causes and precipitants of HF?

GL:

Common causes of HF are coronary artery disease (CAD), which includes acute coronary syndrome (ACS), chronically poorly controlled HTN, atrial fibrillation (AF), cardiac valve disease (e.g. significant aortic stenosis), and thyro-cardiac disease. These common causes of HF are also prevalent in the community. Diabetes mellitus (DM) is also commonly linked to HF via CAD or directly as diabetic cardiomyopathy. Diabetic cardiomyopathy insidiously causes abnormal cardiac relaxation, and if unchecked, progresses to pump weakness and then failure.

Up to 35% of patients presenting with HF may have ACS as a precipitant. Other common HF precipitants are infections, non-compliance to medications, diet or fluid restrictions, and gout flares in chronic HF.

CM:

What are the common presentations of HF and what are the differential diagnoses?

GL:

The cardinal manifestations of HF are dyspnoea and fatigue, which may reduce effort tolerance, and fluid retention, which may lead to dyspnoea, abdominal distension and leg swelling. They can present in different combinations. Differentials to consider in HF presentation include lung disease (e.g. asthma, lung fibrosis) in event of dyspnoea, and kidney and liver disease in abdominal or leg swelling presentations. Fatigue has very broad differentials.

CM:

What are the investigations for a patient suspected of having HF?

GL:

ECG and serum NT Pro BNP biomarker are important investigations in the diagnosis of HF. In an appropriate clinical context, if the ECG is normal and serum NT Pro BNP is not above a rule-out diagnostic threshold, the likelihood of HF as the cause of presenting symptoms is low. Important investigations also include those needed to exclude lung, renal, liver and haematological causes of HF symptoms. It is very important to identify the cause (aetiology) and trigger (precipitant) for the HF episode. Red flags will need to be excluded. Subsequently an echocardiographic evaluation and further investigations will be needed to stratify and assign aetiology and precipitant of the HF.

CM:

What are the stages of HF and how do they affect management?

GL:

The American College of Cardiology (ACC) and American Heart Association (AHA) has classified HF into 4 broad stages, with asymptomatic Stage A and B, and symptomatic

(continued on the next page)

(continued from Page 21: Co-managing Heart Failure in the Community)

Table 1: Stages of HF and Management in the Community

ACCF/AHA HF Stages and Definitions		Management in the Community
A	Patient at high risk for HF but without structural heart disease or HF symptoms. Eg: Those with low physical activity, HTN, DM, CAD, obesity, family history of cardiomyopathy	Primary prevention of HF risk factors. ACEi or ARB as appropriate. Statin as appropriate. For all in all stages of HF: <ul style="list-style-type: none">Heart healthy lifestyle-Safe physical activity and moderation in dietAppropriate vaccinationsMotivate patient to comply with management plans
B	Patient with structural heart disease but without signs or symptoms of HF. Eg: Hypertensive heart disease, Previous heart attack, asymptomatic heart valve disease	More aggressive management of HF risk factors. ACEi or ARB as appropriate. β - blocker as appropriate. In asymptomatic LVEF $\leq 40\%$, ACEi or ARB, β - blocker as appropriate. In asymptomatic LVEF $\leq 30\%$, discussion of ICD or CRT-D deemed appropriate.
C	Patient with structural heart disease (e.g. ischemic cardiomyopathy) with prior or current symptoms of HF, with symptom functional classification into NYHA I to IV.	Optimize evidenced based therapies in HFrEF. Eg: ACEi or ARB or ARNI, β - blocker, aldosterone antagonist, ivabradine as tolerated, even if asymptomatic. Optimize fluid management to aim improve NYHA class. Continue management of HF aetiology. Avoid precipitants. Discussion of advanced therapy, e.g. ICD / CRT-D / LVAD / Cardiac transplant as deemed appropriate. Assess and manage co-morbidities of HF, eg anemia.
D	Patient with refractory HF. There is marked HF symptoms at rest, recurrent HF admissions despite optimal therapy.	As in Stage C plus Greater focus on symptom relief. Discussion of advanced care measures and planning.

Stage C and D. For symptomatic HF patients, their functional status is further classified according to the New York Heart Association (NYHA) system. These different stages, together with LVEF stratifications, have their specific management strategies. The ACC/AHA staging with their broad management outlines are shown in Table 1 (see Page 22).

The vast wealth of evidenced-based therapeutics with medications or devices resides in the HFrEF cohort (see Table 1). Relative risk reduction of mortality or morbidity is 15-40%. However, evidenced-based therapeutics is sparse in the HFmrEF cohort, but it is emerging in the HFpEF cohort, with many studies on-going.

In the community, we must reinforce heart healthy lifestyle and safe physical activity, together with moderation in diet, as well as provide appropriate vaccinations and motivate our patients to comply with management plans. We also need to avoid medications that may tip patient with ACC/AHA Stage C or D HF into decompensated HF. Common culprits are NSAIDs and Verapamil.

CM:

Can you share with us a suggested workflow for GPs to co-manage HF patients with cardiologists in the community?

GL:

Family physicians have an important role in the management of HF patients in the community. A suggested outline of this role is shown in Figure 1 (see Page 23). It is important to recognise HF, identify the precipitant(s), and aetiology, and assess the patient's volume status, before proceeding to specific management.

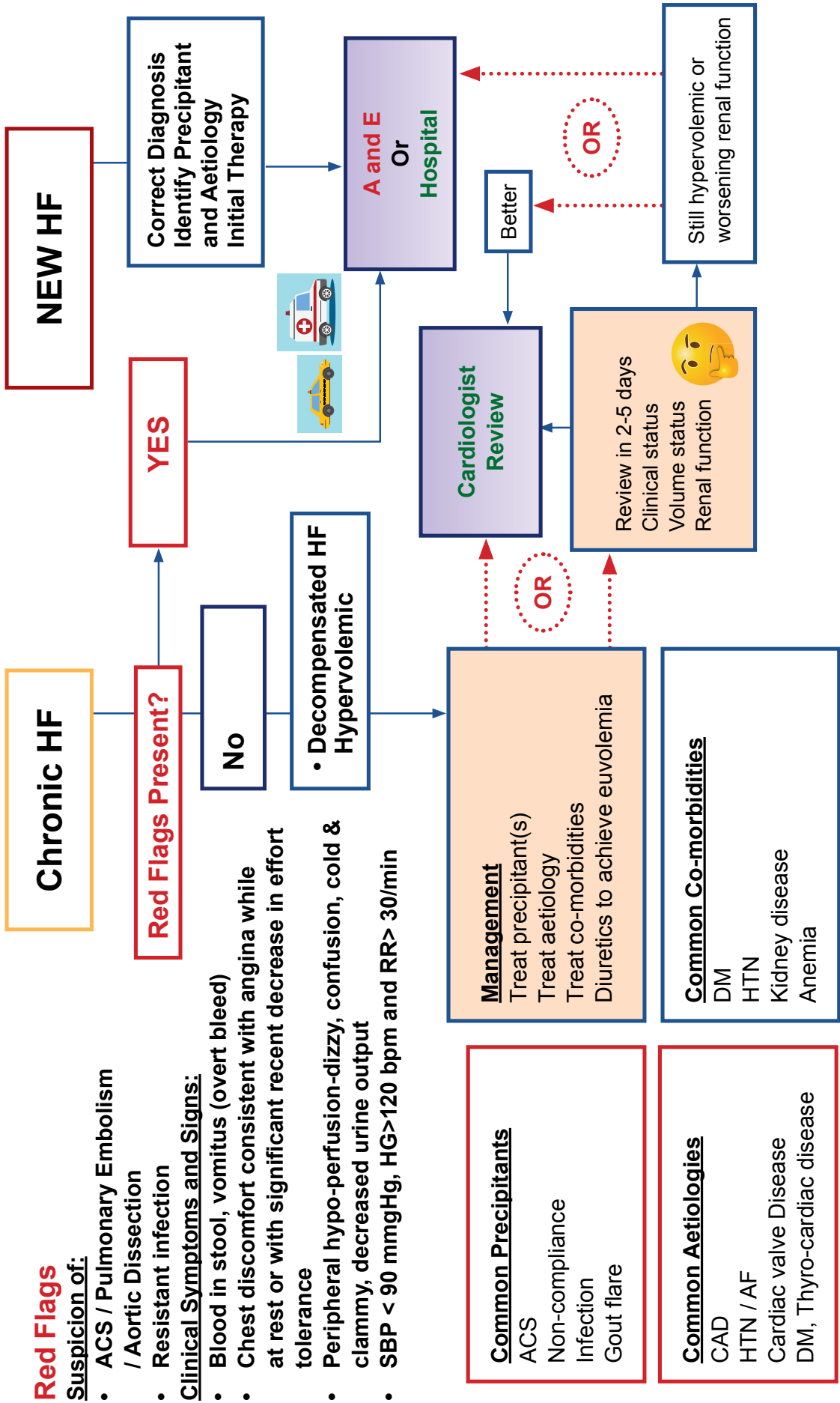
In new HF cases, it is most prudent to refer to the hospital for expeditious management. In chronic HF cases, the family physician can manage a fair proportion of decompensated HF. However, when there are red flags, do refer to the Accident and Emergency for prompt management. Working with the cardiologist is important. Early reviews may be needed.

CM:

Thank you, Dr Gerard Leong for sharing with us on Heart Failure and its co-management in the community.

(continued on the next page)

Figure 1: Suggested Management Workflow in the Community





Family Practice Skills Course #71 (1 Day)

Laboratory Medicine

Sat, 21 Oct 2017: 2.00pm - 5.30pm

Health Promotion Board, Auditorium Level 7,
3 Second Hospital Avenue, Singapore 168937

TOPICS

Unit 1: Pre- and Post-analytical factors affecting laboratory results

Unit 2: Tuberculosis in the community –
Quantiferon-TB Plus

Unit 3: Updates on thyroid function tests

WORKSHOP

Day 1: Point-of-care testing for infectious diseases

SPEAKERS

A/Prof Robert Hawkins

Senior Consultant, Chemical Pathology, Department of
Laboratory Medicine, Tan Tock Seng Hospital

Dr Cynthia Chee

Senior Consultant, Tuberculosis Control Unit, Department of
Respiratory and Critical Care Medicine, Tan Tock Seng Hospital

Dr Sharon Saw

Scientific Officer, Clinical Chemistry, Department of Laboratory
Medicine, National University Hospital

SEMINAR (2 Core FM CME points)

Seminar • Unit 1 - 3: Sat, 21 Oct (2.00pm - 4.00pm)

WORKSHOP (1 Core FM CME point)

Sat, 21 Oct (4.30pm - 5.30pm)

* Registration is on first-come-first-served basis.

Seats are limited.

Please register by 17 Oct 2017 to avoid disappointment.

DISTANCE LEARNING MODULE

(3 Core FM CME points upon attaining a minimum pass grade of 60% in online MCQ Assessment)

• Read 3 Units of study materials in The Singapore Family Physician journal and pass the online MCQ Assessment.

This Family Practice Skills Course is organised by **College of Family Physicians Singapore** and sponsored by **Quest Laboratories Pte Ltd.**



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All information is correct at time of printing and may be subject to changes.

REGISTRATION

Laboratory Medicine

Please tick (✓) the appropriate boxes

**FREE
REGISTRATION
for College
Members!**

	College Member	Non-Member
Seminar (Sat)	<input type="checkbox"/> \$21.40 FREE	<input type="checkbox"/> \$21.40
Workshop (Sat)	<input type="checkbox"/> \$21.40 FREE	<input type="checkbox"/> \$21.40
Distance Learning (MCQ Assessment)	<input type="checkbox"/> \$42.80 FREE	<input type="checkbox"/> \$42.80
TOTAL		

All prices stated are inclusive of 7% GST. GST Registration Number: M90367025C

☐ I attach a cheque for payment of the above, made payable to: **College of Family Physicians Singapore** *

Cheque number: _____

Signature: _____

*Registration is confirmed only upon receipt of payment. The College will not entertain any request for refund due to cancellation after the registration is closed OR after official receipt is issued (whichever is earlier).

Name: Dr. _____

MCR No: _____

(For GDFM Trainee only) Please indicate: _____ intake

Mailing Address: (Please indicate: ☐ Residential ☐ Practice Address)

_____ E-mail: _____

Tel: _____ Fax: _____

Note: Any changes to the course details will be announced via e-mail. Kindly check your inbox before attending the course. Thank you.

Please mail the completed form and cheque payment to:

College of Family Physicians Singapore

16 College Road #01-02, College of Medicine Building, Singapore 169854

Or fax your registration form to: 6222 0204